

A PROCESS MODEL OF KNOWLEDGE-WEALTH CREATION:
THE PROCESSES OF KNOWLEDGE CREATION AND
STRATEGY INNOVATION AMONG SUCCESSFUL
MALAYSIAN CHINESE ENTREPRENEURS FROM ZHUĀNG
ZĪ'S PERSPECTIVE

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February 2021

**A PROCESS MODEL OF KNOWLEDGE-WEALTH CREATION: THE
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INNOVATION AMONG SUCCESSFUL MALAYSIAN CHINESE
ENTREPRENEURS FROM ZHUĀNG ZǏ'S PERSPECTIVE**

By

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A thesis submitted to the Department of International Business,
Faculty of Accountancy and Management,
University Tunku Abdul Rahman,
in partial fulfillment of the requirements for the degree of Doctor of
Philosophy
February 2021

DEDICATION

To my mother, Ang Choon Cheng. Your dedication, motivation and passion for your work are what I want to follow.

To my brothers, Tan Jui Kwang and Tan Jui Meng. Your encouragement has motivated me throughout the research process.

To my sisters, Tan Ee Yong and Tan Ee Lan. I want to thank you for your support.

ABSTRACT

A PROCESS MODEL OF KNOWLEDGE-WEALTH CREATION: THE PROCESSES OF KNOWLEDGE CREATION AND STRATEGY INNOVATION AMONG SUCCESSFUL MALAYSIAN CHINESE ENTREPRENEURS FROM ZHUĀNG ZǏ'S PERSPECTIVE

Tan Jui Aik

This exploratory, process-oriented, constructivist, theory-building multiple-case study investigates how successful Malaysian Chinese entrepreneurs create and use knowledge in strategy-making to generate new wealth consistently in organizations by leveraging on the teachings of Zhuāng Zǐ's philosophy. Knowledge underpins dynamic managerial capabilities that are arguably needed to be more effective in making new strategies for creating wealth. In the search for the origin of firm performance, dynamic managerial capabilities literature finds that knowledge is a source of differences of firm strategies that lead to different firm performances. However, there is a lack of research on the process of creating knowledge underpinning the making of a new strategy for generating wealth effectively.

Since the research gap emerges predominantly from the focus of Western literature on explicit knowledge, this constructivist research overcomes the shortcomings by drawing upon Zhuāng Zǐ's philosophy on tacit knowledge and excellent skill development by individuals to construct a strategic knowledge creation framework to direct the investigation of the process of creating

knowledge that underlies the making of a new strategy for generating wealth effectively. The main research objective is to fill the research gap by developing a process-oriented rather than variance-based conceptual model to reveal an underlying pattern of progressions of knowledge creating activities in the strategy-making that an entrepreneur undergoes. As dynamic managerial capabilities are entrepreneurial, this research observed the phenomenon of heterogeneity in an entrepreneur's knowledge and its processes of creation that are linked to different strategy-making and wealth creation performance. The research outcome is important to add vital knowledge on the emergence of dynamic managerial capabilities and strategic change initiated by individual entrepreneurs.

Using a process-oriented, constructivist theory-building multiple-case design, this research contrasted and identified commonalities among in-depth qualitative data collected from four specially selected Malaysian Chinese entrepreneurs. These entrepreneurs are the four cases chosen in accordance to the theory-building multiple-case design, which develop the grounded theory with data from cases. The entrepreneurs were selected as they were influenced by Zhuāng Zǐ's philosophy that exists within the Chinese culture in developing their personal competencies in order to generate financial wealth. The constructivist approach is applied so that Zhuāng Zǐ's philosophy can be used in uncovering and interpreting the process of creating rather than discovering knowledge in the strategy-making by individual entrepreneurs. The researcher conducted semi-structured interviews with four Malaysian Chinese entrepreneurs to collect primary data. Secondary data was collected from

multiple sources, such as annual report, autobiography and news reported by mass media. The data analysis was on-going and intertwined with data collection until a theoretical saturation was achieved. Data analysis was administered by means of analyzing within-case data, looking for cross-case patterns, comparing the emergent concepts with the existing literature and Zhuāng Zǐ's philosophy, and contrasting the emergent concepts with the strategic knowledge creation framework. Open coding, axial coding and selective coding are applied to build a new conceptual model.

As a result, this research proposes a process model of knowledge-wealth creation in which the processes took place. The process model refined the strategic knowledge creation framework and increased the understanding on Zhuāng Zǐ's philosophy. This research also introduces "great knowledge" as a new concept in the context of strategic management, extends Zhuāng Zǐ's philosophy to the dynamic managerial capabilities field and contemporary context. As an actionable knowledge for practitioners, the process model of knowledge-wealth creation offers guidance on a way of moving from generating the novel know-how towards making a living. Overall, this constructivist, theory-building multiple-case study achieved the research objective by proposing a new process model that showed that the process of creating knowledge underpinning the making of a new strategy for generating wealth effectively involves a four-stage process. The four-stage process consists of the empowerment of an entrepreneur's natural ability to know, self-cultivation for possibility development, enactments of breakthrough, and survival and growth. The four-stage process involves an entrepreneur

increasing his self-knowledge to identify and develop his natural ability to know, so that he becomes effective in creating great knowledge for the transformation of critical events into opportunities and application in forming innovative strategies, and to make him motivated to generate wealth consistently to attain the meaning of work.

ACKNOWLEDGEMENTS

I most gratefully thank my supervisor, Dr. Lim Yet Mee, for her invaluable guidance, constructive comments and patience. Her dedication is very important for the improvement of this research.

I would like to especially thank my co-supervisor, Dr. Law Kian Aun. He is helpful for making the research process running smoothly.

I sincerely thank the four research participants. Their time and stories are essential to the completion of this research.

I would like to express my gratitude to Dr. Ho Chye Kok, who provided valuable feedback to this study.

APPROVAL SHEET

This thesis entitled “A PROCESS MODEL OF KNOWLEDGE-WEALTH CREATION: THE PROCESSES OF KNOWLEDGE CREATION AND STRATEGY INNOVATION AMONG SUCCESSFUL MALAYSIAN CHINESE ENTREPRENEURS FROM ZHUĀNG ZǏ’S PERSPECTIVE” was prepared by TAN JUI AIK and submitted as partial fulfillment of the requirements for the degree of Doctor of Philosophy in at Universiti Tunku Abdul Rahman.

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SUBMISSION OF THESIS

It is hereby certified that Tan Jui Aik (ID No: 12UKD00013) has completed this thesis entitled “A PROCESS MODEL OF KNOWLEDGE-WEALTH CREATION: THE PROCESSES OF KNOWLEDGE CREATION AND STRATEGY INNOVATION AMONG SUCCESSFUL MALAYSIAN CHINESE ENTREPRENEURS FROM ZHUĀNG ZǏ’S PERSPECTIVE” under the supervision of Associate Professor Dr. Lim Yet Mee (Supervisor) from the Department of Building and Property Management, Faculty of Accountancy and Management, and Associate Professor Dr. Law Kian Aun (Co-Supervisor) from the Department of International Business, Faculty of Accountancy and Management.

I understand that the University will upload softcopy of my thesis* in pdf format into UTAR Institutional Repository, which may be made accessible to UTAR community and public.

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DECLARATION

I _____ Tan Jui Aik _____ hereby declare that the thesis is based on my original work except for quotations and citations which have been duly acknowledged. I also declare that it has not been previously or concurrently submitted for any other degree at UTAR or other institutions.

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Date _13/2/2021_

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CHAPTER 1

INTRODUCTION

1.0 INTRODUCTION

Leveraging on Chinese philosophy and Zhuāng Zǐ's philosophy in particular, this qualitative research explores into the process of strategy innovation from the aspect of knowledge creation. The exploration focused on the development of managerial capabilities that lead to innovative strategic changes for the purpose of generating financial results. Such focus is consistent with the concept of dynamic managerial capabilities, which is used to clarify the connections between the quality of managerial decisions and actions, strategic change and organizational performance in a dynamic environment (Helfat & Martin, 2015b). In this research, the definition of dynamic managerial capabilities is "the capabilities with which managers create, extend, and modify the ways in which firms make a living" (Helfat & Martin, 2015b, p.1281). More importantly, the dynamic managerial capabilities concept suggests that managers who possess superior dynamic managerial capabilities allow organizations to adapt and change more effectively than organizations

which managers possess little dynamic managerial capabilities (Helfat & Martin, 2015b). This research may improve the understanding on the knowledge creation that leads to the development of dynamic managerial capabilities, and strategy innovation that happens as part of a strategic change (Helfat & Martin, 2015b).

Knowledge creation is central to wealth creation. In this research, knowledge refers to the “capacity to act” (Sveiby, 1997, p.37). Dynamic managerial capabilities researchers suggest that the development of new knowledge is needed in identifying and producing opportunities (Teece, 2007), reacting to environmental changes (Argote & Ren, 2012) and generating strategic change so as to create wealth, such as firm revenue and profit (Helfat & Martin, 2015b). On one hand, the wealth-creating strategic changes such as the launches of new ventures and new product development (Bhave, 1994), are decided mostly by individuals rather than organizations (Devinney, 2013). On the other hand, the dynamic managerial capabilities that effectuate decision making and strategic change are supported by managerial social capital, managerial cognition and managerial human capital (Adner & Helfat, 2003).

The three underpinnings of dynamic managerial capabilities are important to increase knowledge and develop dynamic managerial capabilities. In this research, managerial social capital refers to “the goodwill derived from relationships, both formal and informal, that managers have with others and can use to obtain resources and information” (Helfat & Martin, 2015b, p.1286). As suggested by the definition, information deriving from managerial social

capital can be used to generate new knowledge. This is especially important when the information is not available elsewhere, and thus can provide an advantage to differentiate itself from that of the competitors. For analytical purpose, managerial human capital in dynamic managerial capabilities literature is considered as skills acquired from education, training or other learning activities (Adner & Helfat, 2003). It is also worth noticing that knowledge and skill are perceived as part of the cognition in the human capital literature (Ployhart & Moliterno, 2011). Managerial cognition is an umbrella term that covers mental models and beliefs, mental processes, managerial cognitive capabilities, and emotions (Helfat & Martin, 2015b). Therefore, the development in managerial human capital and managerial cognition involves the process of creating knowledge.

For the purpose of this research, knowledge creation is different from learning where the process generates new knowledge with creativity, which is not necessary in the process of learning an existing knowledge from other individuals. This is consistent with the distinctive characteristics of dynamic managerial capabilities to be able to produce managerial and entrepreneurial actions that are creative (Helfat & Martin, 2015b; Teece, 2007). To commensurate with the knowledge creation processes, the strategy-making process that involves the application of creativity constitutes an innovation process. According to Baregheh, Rowley and Sambrook (2009), creativity is essential to drive and underpin innovation. Hence, strategy innovation is a process of using creativity in making a new strategy.

Malaysian Chinese entrepreneurs are important as they explore the processes of knowledge creation and strategy innovation from Zhuāng Zǐ's perspective for five reasons. Firstly, the exploration may shed light on the micro-foundations of learning and their integration by focusing on an individual instead of an organization. Individual human being is where strategy (Gavetti & Rivkin, 2007) and tacit knowledge (Hatch & Dyer, 2004) reside. Tacit knowledge refers to “intuitions, apprehensions, or feelings that cannot be stated in words but are somehow “known” by the subject” (Guba & Lincoln, 1981, p.70). Tacit knowledge has distinctive characteristics of being non-transferable (Nonaka, 1994), subjective, difficult to share, bodily (Gourlay, 2006), intuitive, personal, contextual and hard to communicate (Lam, 2000). Therefore, new insights may emerge from investigating individuals and their cognition, the actual place that new knowledge comes into existence.

Secondly, an individual level of analysis can offer key insights that are not available in an organizational level of analysis (Powell, Lovallo & Fox, 2011) and only related to individuals within or around the organization (Salvato, 2009). As dynamic capabilities of organizations are determined by dynamic capabilities of individuals (Salvato, 2009; Schilke, Hu & Helfat, 2018), an individual level of analysis may provide a better understanding on the origin of dynamic capabilities, the cognitive underpinning of dynamic capabilities and the process of knowledge creation underpinning dynamic capabilities. This is especially important because differences in firm performance may be influenced more by the differences in individual judgment than organizational level construct like the monopoly status of the firm (Powell, Lovallo & Fox,

2011). The individual level of analysis may also overcome the problem of assuming organizations as homogeneous black boxes under the management of managers who are opportunistic (Teece, 2017b) and uncover the differences among top decision makers of organizations.

In addition, knowledge is primarily created by individual human beings (Grant, 1996; von Krogh & Grand, 2002). Rothaermel and Hess (2007) found that non-star scientists influenced the innovative performance of organizations directly while star scientists affected the innovative performance of organizations indirectly. As scientists are knowledge creators, their study and the impacts of different individuals imply that the individual level of analysis is required to understand the process of knowledge creation that contributes to the emergence of dynamic capabilities and organizational performance (Rothaermel & Hess, 2007).

Furthermore, this research may help understand the emergence of dynamic capabilities for sensing and seizing opportunities by focusing on the cognition of an individual. These dynamic capabilities rest chiefly on a considerable mental effort of an individual to identify cognitively distant opportunities (Gavetti, 2012). Cognitively distant opportunities are superior and more rewarding compared to cognitively proximate opportunities (Gavetti, 2012). This is because cognitively distant opportunities are less contested in light of the processes of sensing, and seizing requires an individual's superior ability to alter the worldview and manage problems in mental processes, such as myopia (Gavetti, 2012).

Thirdly, entrepreneurs are unique sources of information when it comes to the processes of knowledge creation and strategy innovation. Entrepreneurship is a core element of dynamic capabilities as it identifies the requirements of change (e.g. sensing new opportunities) in response to uncertainty in the business environment and implements adaptive activities (e.g. seizing new opportunities) that commensurate with the requirements (Teece, 2016). An entrepreneurial manager senses opportunities by conducting knowledge creation activities, such as scanning business environment, learning, interpreting and synthesizing information, and applying creativity (Teece, 2016). An entrepreneurial manager seizes the opportunities by implementing strategy innovation activities, such as building a novel business model and crafting a new strategy (Teece, 2010).

In addition, entrepreneurs, instead of other organization members (e.g. professional CEOs), have the greatest influence on firm's decision making related to strategic changes. Entrepreneurs are the primary actors in establishing new ventures, which involves strategic changes that can overcome uncertain situations, such as determining entrepreneurial actions that are effective and ineffective, deciding and forming a new business while various options of action and venture are available (Felin, Foss & Ployhart, 2015). Due to the ownership or possession of larger equity stakes, entrepreneurs have greater impacts on important decision making conducted inside the firm than professional CEOs (Wasserman, 2003). Besides, entrepreneurs are more likely to spend more time and resources to safeguard survival of their firms, and

adopt a long term approach, if compared to professional CEOs who face restrictions from CEO tenure (Deb & Wiklund, 2017). A long term approach may not only serve as an indicator of greater amount of managerial impact, but also provide an opportunity to understand a way of creating wealth that is sustainable over the long run.

Fourthly, Malaysian Chinese is the only Chinese educated community outside the Greater China region. The presence of Chinese education leads to a higher extent of Chinese cultural influence (Siah, Ong, Tan & Sim, 2015). As noted in the Chinese management literature, Malaysian Chinese entrepreneurs are influenced by the Chinese culture (Rae & Witzel, 2008; Redding, 1993), and its underlying Chinese philosophy (Storz, 1999), which is Zhuāng Zǐ's philosophy in particular. The processes of knowledge creation and strategy innovation from Zhuāng Zǐ's perspective emphasize more on tacit knowledge rather than explicit knowledge, and thus are different from those in the West, which are dominant in extant research.

Fifthly, Malaysia is a multi-cultural society compared to the Greater China region, where its culture is relatively homogeneous. A multi-cultural context places higher demand for dynamic managerial capabilities because the variation in cultural differences requires a larger number and extent of strategic changes. In the Malaysian context, ethnic and cultural backgrounds are key factors that influence strategic change (Sim, 2009). A detailed discussion of this issue was provided in Section 3.1. Thus, investigating Malaysian Chinese entrepreneurs may yield richer and deeper insights about the process of

knowledge creation contributing to the dynamic managerial capabilities and process of strategy innovation leading to a novel strategic change.

In addition, a multi-cultural environment may help an individual to better understand the importance of Chinese philosophy (Siah et al., 2015). This implies that Malaysian Chinese entrepreneurs may provide richer information about the importance of Zhuāng Zǐ's philosophy and its application in the processes of knowledge creation and strategy innovation. Taken together, the Malaysian context is unique that it provides an opportunity to understand the application of Zhuāng Zǐ's philosophy in an environment where Western culture, Islamic culture and Indian culture co-exist.

Despite the foregoing rationales of studying Malaysian Chinese entrepreneurs, this research is needed as there is a lack of knowledge and research on the micro-foundations of learning and their integration. The research gap exists largely due to the dominance of the Western culture among extant literature and research. The epistemological priorities of the Western culture are mastery of language, justification, and compelling explanation of the underlying causes of events, of which are explicit or seen as 'codifiable' knowledge (Chia, 2003). According to Dreyfus (2009), explicit knowledge from the detached information consumption can only be used to assist an individual to develop from a novice status to an advanced beginner status and up to a competence status. In contrast, tacit knowledge from personal intuitive involvement is useful for an individual to progress from a proficiency status to an expertise status and up to a mastery status (Dreyfus, 2009). In addition, Teece (2014a)

pointed out that dynamic capabilities are tacit and come from higher level orchestration skills of senior managers at the top of the firm. Furthermore, an individual's knowledge and skills are more likely to remain tacit than organizational capabilities (Teece, 2014a).

Tacit knowledge is more appropriate than explicit knowledge for sustaining firm performance. Specifically, tacit knowledge is a strategic resource that matches almost all of the following criteria, valuable, rare, inimitable, and non-substitutable criteria (Teece, 2014a), and it is especially challenging to be imitated and replicated (Teece, Pisano & Shuen, 1997). In comparison, explicit knowledge is readily accessible and transferable, which can be conducted through the Internet (Teece, 2014a).

This research draws on Zhuāng Zǐ's philosophy to study processes of knowledge creation and strategy innovation for its unique insight that helps understand these processes and their critical implications on different performance. Due to the strategic importance of tacit knowledge, the Eastern thought on knowledge creation and strategy innovation from the Eastern culture that prioritizes tacit knowledge (Chia, 2003) appear to be more relevant and insightful to the development of dynamic managerial capabilities.

For the Eastern culture, becoming a master of the art of management requires an individual to outstrip the technique and grasp the ultimate reality by achieving the field of *Dào* (Chia, 2003). *Dào* is something that exists metaphysically (Nán, 2003), which is real and permanent that lays "behind the

everlasting change and sufferings of life” (Jensen, 1987, p.220). Achieving the field of *Dào* is the “moment of the sublime where the knower, the actor and the acted-upon are fused in a moment of spontaneous action that transcends time, space, individuality and performance” (Chia, 2003, p.972). To be in a state of Absolute Nothingness, the field of *Dào* affords rich and pro-generative potentiality for primordial knowing to stimulate consciousness, understanding and intervention (Chia, 2003). The potentiality is analogous to the emptiness of a container like a house or a glass, which allows people to stay or water to be poured in. Arriving at the field of *Dào* is a central tenet of Daoism (Cheng, 2003), a dominant ancient Chinese philosophy that influences Chinese culture no less than Confucianism (Pas, 1998). Hence, Zhuāng Zǐ’s philosophy is needed in this research to study knowledge creation and strategy innovation so as to address the research gaps as discussed earlier.

Zhuāng Zǐ’s philosophy is appropriate for three reasons. First, his essay on “Seeing Things as Equal” is the second most influential text of early Daoism (Graham, 1969). Zhuāng Zǐ’s philosophy is especially relevant as Kirkwood (1995) concluded that the main objective of Zhuāng Zǐ’s writing is to expose the mind of the sage, a place where micro-foundations of knowledge creation reside. Mair (2000) highlighted that the impact of Zhuāng Zǐ’s thinking on Chinese culture and people is overwhelming.

Secondly, Zhuāng Zǐ’s writing emphasizes more on personal spirituality and insight than the most influential text of early Daoism, the *Lǎo Zǐ* (Ames, 1998). The *Lǎo Zǐ*, also named as *Dào Dé Jīng*, emphasizes more on the social and

political effects brought by the spirituality and insight (Ames, 1998). This means that Zhuāng Zǐ's text may provide more insight on how an individual can attain mastery that is relevant to the research's focus on knowledge creation and strategy innovation.

Thirdly, Zhuāng Zǐ's writing offers unique concepts that reflect the master level of knowledge creation and strategy innovation for wealth creation. This research proposes that Zhuāng Zǐ's idea of appropriate usage is related to strategy innovation, while his concept of the fasting of the heart is a form of knowledge creation. An example of appropriate usage is a novel application of a recipe for salve for chapped hands in wealth creation, which is to attain financial gains by winning a war in contrast to its initial application in washing silk (Lin, 1942). Therefore, the novel application of the recipe is a new strategy and also an outcome of strategy innovation for creating wealth.

The connection between appropriate usage and knowledge creation can be found in Cook Ting's ox cutting and his learning experience (Chen, 2005). An example of appropriate usage in Cook Ting's ox cutting experience is his use of knife. After ox cutting over thousands of times for nineteen years, the condition of Cook Ting's knife was like a new one because of the way he was using it (Watson, 1968). In comparison, a good cook had to replace his knife every year and a mediocre cook had to replace his knife every month (Watson, 1968). An example of knowledge creation in Cook Ting's ox cutting experience is an epistemic process, which leads to his appropriate use of knife (Chen, 2005). This epistemic process is discussed in detail in Section 2.9.1.

In addition, Zhuāng Zǐ's ideas of knowledge, creation and knowledge creation are different from the West, and this suggests that these areas are under-researched.

Von Krogh and Grand (2002) hinted that different views of knowledge have different relationships to action, and thereby leading to different consequences. More specifically, the perception of knowledge as the justified true belief is the lack of incentive needed to take an action (von Krogh & Grand, 2002). In comparison, the perception of knowledge as the capacity for action treats knowledge as a means to attain an intended end (von Krogh & Grand, 2002). Due to the various ideas of knowledge, the origin of knowledge remains an under-researched area (von Krogh & Grand, 2002). As a result, different concept of knowledge and creation may lead to different ideas of knowledge creation. These areas are still under-explored. Therefore, Zhuāng Zǐ's ideas of knowledge, creation and knowledge creation are adopted in this research to close the research gaps and this is discussed extensively in Chapter 2.

In overall, this research focuses on the Chinese philosopher Zhuāng Zǐ's perspective on knowledge creation as a process that supports the making of emergent strategy for organizations in Malaysia. It assumes strategy innovation and knowledge creation to constitute a single process that brings out new strategy. The research shall examine knowledge creation through strategic thinking as characterized by the teachings of the Chinese philosopher, Zhuāng Zǐ.

The shortcoming of extant literature in strategic management, strategic cognition, and knowledge creation, especially knowledge that is not explicable (Polanyi, 1966), is motivated the research's key question: "How do successful Malaysian Chinese entrepreneurs create and use the knowledge in strategy-making to generate new wealth consistently in organizations by leveraging on the teaching of Zhuāng Zǐ's philosophy?" Investigating the question involved comparing in-depth data from four Malaysian Chinese entrepreneurs, who have demonstrated effective knowledge creation and strategy innovation. By knowledge, it means the "capacity to act" (Sveiby, 1997, p.37). Insights from these data inform a process model of knowledge-wealth creation that shows how Malaysian Chinese entrepreneurs empower their natural ability to know through the process of self-cultivation, and develop the possibility of giving rise to enactments of breakthrough with the purpose to survive and grow under various conditions of change.

1.1 Problem background

The distinctive focus of the strategic management field is to provide an understanding on the drivers of different firm performances (Bergh, Aguinis, Heavey, Ketchen, Boyd, Su, Lau & Joo, 2014; Teece, 2014b; Wilden, Devinney & Dowling, 2016). The most notable firm performances include "survival, growth, time to market, long-term financial performance, change in sales, income/profit, employment, productivity, market share, and Tobin's q " (Helfat & Martin, 2015b, p.1291). This shows that wealth creation is central to firm performance because survival, growth, long-term financial performance

and change in sales, income and profit essentially demand the generation of firm's financial wealth.

Despite its importance, there is little understanding on the origin of wealth within firms and how wealth is created (Teece, 2014b). This happens because the extant literature that dominates the strategic management field has omitted the functions of an individual manager in the firm, and managerial actions within the manager's responsibilities (Eggers & Kaplan, 2013). Much of the attention of strategy scholars has been devoted to macro factors (Felin, Foss & Ployhart, 2015). With the belief that firm heterogeneity is the key question in the field of strategic management, researchers consider a firm or business unit as the most important unit of analysis in strategy (Powell, Lovallo & Fox, 2011). However, wealth creation activities are largely depending on the effort of individual entrepreneurs or entrepreneurial managers, such as in terms of the technology development and commercialization, knowledge discovery and creation as well as opportunities identification and exploitation (Teece, 2014a). Hence, such a belief in macro level analysis demands a paradigm development in strategy research (Powell, Lovallo & Fox, 2011). Using different perspectives and Chinese ideas of the mental activities of the strategist appear necessary to close this research gap.

In the existing knowledge about wealth creation, the two dominant casual mechanisms in the strategic management literature are resource-picking and capability-building, which have been codified into a 'resource-based view' and a 'dynamic-capability view' respectively (Makadok, 2001). Just like selecting a

stock in the stock market, the resource-picking mechanism generates wealth with the superior skill of creating precise anticipation about the future value of resources better than other potential buyers (Makadok, 2001). In contrast, a capability-building mechanism suggested by Makadok (2001) generates wealth from the development of capability that can strengthen the productivity of non-capability types of resources owned by the firm. By capability, it means “the capacity to utilize resources to perform a task or an activity, against the opposition of circumstance” (Teece, 2014a, p.14).

The underlying assumption of the two mechanisms is wealth creation which depends more on human actions than the value of resources. In the resource-picking mechanism, the possession of valuable, rare, inimitable, and non-substitutable (VRIN) resources essentially requires the managerial skill of selecting and acquiring such resources, as well as actualizing the resource value (Barney, 2001). An example of the value of resources depend on human actions can be found in a study conducted by Cham, Lim, Cheng and Lee (2016). Their study (Cham et al., 2016) finds that although knowledge management system is a resource that is valuable for sustaining firm’s competitive advantage, managerial actions of knowledge refinement and evaluation processes are required to increase reliability and usefulness of knowledge management system.

In the capability-building mechanism, resources are subject to the influence of capability for producing financial gain (Makadok, 2001). Given the primary role of capability in wealth creation, it is this research’s focus on understanding knowledge creation that gives rise to capability in order to uncover the origins

and approaches of wealth creation. In addition, knowledge creation is likely the only option available to firms because a distinctive capability is not available in a market to be purchased, but can be developed internally (Teece, Pisano & Shuen, 1997).

To identify the origin of wealth creation, this study investigates the process of knowledge creation implemented by individual founder-managers, and thus situating the research in the domain of dynamic managerial capabilities literature. The level of analysis of dynamic capabilities is organizational while the level of analysis of dynamic managerial capabilities is individual (Adner & Helfat, 2003; Schilke, Hu & Helfat, 2018; Wilden, Deviancy & Dowling, 2016). According to Teece, Pisano and Shuen (1997, p.516), dynamic capabilities denote “the firm’s ability to integrate, build, and reconfigure internal and external competences to address the rapidly changing environments”.

Dynamic capabilities are entrepreneurial, which can be divided into the capacity to sense, to seize and to reconfigure (Teece, 2007; Augier & Teece, 2009). Sensing capabilities involves locating and shaping new threats and opportunities to satisfy customer needs (Teece, 2007). Seizing capabilities entails deploying resources and assets to capitalize on the identified opportunities (Teece, 2007). Re-configuring capabilities involves the renewal of firm assets and structure to attain evolutionary fitness (Teece, 2007).

On the other hand, attempts to understand the dynamic capabilities of individual managers have invoked the concept of dynamic managerial capabilities (Adner & Helfat, 2003; Helfat & Martin, 2015b; Teece, 2016). Helfat and Martin (2015b, p.1281) referred to dynamic managerial capabilities as “the capabilities with which managers create, extend, and modify the ways in which firms make a living”. An example of dynamic managerial capabilities is the management skills of Steve Jobs, the former CEO of Apple (Teece, 2012). Particularly, Jobs greatly improved Apple’s performance by dynamically transforming the company from a computer firm into a conglomerate that is involved in many different businesses, such as mobile phone, personal computer and media distribution (Teece, 2012).

The importance of Jobs to Apple indicates the significance of studying dynamic managerial capabilities and its underlying processes of knowledge creation and strategy innovation. Based on the definition of dynamic managerial capabilities, this research examines the wealth creation processes initiated by the generation of the strategic know-how of making a living by an entrepreneurial manager. This research on the process of knowledge creation is important because there is a lack of knowledge and research on the micro-foundations of learning and their integration (Arndt, Pierce & Teece, 2018).

The origin of wealth creation most likely lies with an individual entrepreneurial manager, who founded a firm and/or is chiefly responsible for the firm’s decision making. In other words, entrepreneurs or principle decision makers of the firm appear to be the strongest influencer on wealth creation and

determinants of firm performance. Research in the past (e.g. Cool & Schendel, 1988; Jacobsen, 1988; Puziak, 2017) confirmed that internal factors are more influential than external factors in determining firm performance, suggesting that the management is more important than selecting a profitable industry. Although the firm level analysis (Cool & Schendel, 1988; Jacobsen, 1988; Puziak, 2017) shows that firms within the same industry varied in their firm performance, the analysis is insufficient to uncover the origin of wealth creation, especially those that can strategically change the firm performance. As a critical shortcoming, the firm level of analysis omits the foundational dynamic capabilities that do not exist in enterprise settings.

An instance of dynamic capabilities that can only be exclusively identified at the individual level of analysis is a manager's ability to locate, develop, integrate and use assets, creating a value that is not possible without these assets complementing each other (Teece, 2007). In comparison to the firm level of analysis, the focus of the individual level of analysis is closer to the origin of wealth creation because the firm level of dynamic capabilities is grounded on the management skills of individual managers (Augier & Teece, 2009; Foss & Pedersen, 2016; Teece, 2007; Von den Driesch, da Costa, Flatten & Brettel, 2015). Furthermore, dynamic managerial capabilities research found that managers are responsible for the differences in the managerial decisions that produce the variance in firm performance (Adner & Helfat, 2003; Sirmon & Hitt, 2009).

Among the individuals within an organization, an entrepreneur has the strongest influence over organizational action and resource decision that affect firm performance (Augier & Teece, 2009). Acting as the principal decision maker of an organization, entrepreneurs commonly hold the position of CEO in the organization. Recent research (e.g. Hambrick & Quigley, 2014; Quigley & Graffin, 2017; Von den Driesch, da Costa, Flatten & Brettel, 2015) studied the managerial impact of the CEO on firm performance (research on CEO effects); their research outcomes affirmed that CEO can affect firm performance substantially. Quigley and Graffin (2017) urged for further research on the drivers of heterogeneity in the impact brought by CEO as the CEO effect research is still at the developing stage. Thus, focusing on entrepreneurs appears to be appropriate for this research to investigate the origin of wealth creation.

To identify methods of wealth creation, this study investigates the process of strategy innovation implemented by individual founder-managers. Knowledge creation may determine the innovation of a new strategy. As one of the two dominant theoretical perspectives of dynamic capabilities (Di Stefano, Peteraf & Verona, 2014; Peteraf, Di Stefano & Verona, 2013; Wilden, Devinney & Dowling, 2016), Eisenhardt and Martin (2000) argued that the learning mechanism directs how dynamic capabilities evolve, which happens in processes like product development and creation of a new strategy. As another dominant theoretical perspective (Di Stefano, Peteraf & Verona, 2014; Peteraf, Di Stefano & Verona, 2013; Wilden, Devinney & Dowling, 2016), Teece, Pisano and Shuen (1997) suggested that learning gives rise to dynamic

capabilities. In turn, Teece (2014b) claimed that dynamic capabilities enable possible alterations for flexibility to be made into strategy, which specifies how the enterprise exploits its rare assets to satisfy market needs.

Dynamic managerial capabilities researchers found that learning is related to the making of a new strategy. Helfat and Martin (2015b) suggested that dynamic managerial capabilities entail strategy-making that leads to strategic change and affects corporate performance. Adner and Helfat (2003) suggested that dynamic managerial capabilities are grounded on managerial human capital, managerial social capital and managerial cognition. Managerial human capital is an outcome of individual's learning processes, which include skills and knowledge coming from prior experience, training and education (Helfat & Martin, 2015b). Therefore, learning brings out the knowledge to be applied in strategy-making and creates managerial impacts to organizational performance.

1.2 Statement of problem

The preceding discussion suggests the need for an ability to innovate strategies in order to sustain long term business success. It demands an understanding of how strategies are innovated, but this is inadequately addressed by current literature. Although extant strategy innovation literature provides guidelines, logic and ways of achieving strategy innovation (e.g., Kim & Mauborgne, 1997; Loewe, Williamson & Wood, 2001; Schoenberg, 2003), few of them uncover how the making of a new strategy happens within the mental process of an individual. An exception is Carlopio's (2009) "strategy by design" approach,

which involves divergent thinking to create infant ideas. In his approach, infant ideas will be tested and refined through a series of iterative trial-and-error processes for which strategy emerges (Carlopio, 2010).

Due to the lack of research on how strategies are innovated within an individual's mind, much is needed to know where strategy comes from, also the mental process and mental activities needed to bring out new strategies. Knowledge is notable as a necessity for making a new strategy (Mintzberg, Ahlstrand & Lampel, 1998). Specifically, knowledge and knowledge structure are the underpinnings of an individual's capabilities for generating a new strategy and it is important to understand why different firms have different strategies (Adner & Helfat, 2003). Despite the importance of knowledge for strategy-making, there is a lack of understanding on the creation of new knowledge within the process of strategy-making that leads to new strategies. By investigating processes of knowledge creation and strategy innovation, this research helps close these gaps.

Despite applying a few creative thinking theories in strategy-making, the literature is uncertain whether or not strategic ideas come from conscious thinking or unconscious thinking. The challenge is that these strategic ideas are likely created from unconscious thinking, which remains a "black box" to researchers (Mintzberg, Ahlstrand & Lampel, 1998). As a result, the literature focuses on the requirements of strategy innovation rather than the strategy innovation itself (Mintzberg, Ahlstrand & Lampel, 1998). Strategies come from the mental process of strategists, and thus shall be the core focus for

understanding the actual strategy innovation (Mintzberg, Ahlstrand & Lampel, 1998).

The most relevant streams of strategic cognition literature concerning the mental process of strategy innovation are interpretative, constructionist (Mintzberg, Ahlstrand & Lampel, 1998) or enacted view (Narayanan, Zane & Kemmerer, 2011). The enacted view assumes that the social interaction process of organizational leaders constructs organizations and environment at the same time (Smircich & Stubbart, 1985). It is this freedom of perceived multiple realities that the enacted view echoes with the strategy innovation in which it implies that there are limitless opportunities for creation. The strategy-making process in the enacted view is sense-making (Narayanan, Zane & Kemmerer, 2011), which refers to “the ongoing retrospective development of plausible images that rationalize what people are doing” (Weick, Sutcliffe & Obstfeld, 2005, p.409). Strategy emerges from a process beginning with trail actions, followed by making sense of those actions in retrospect to select and retain those that are effective (Mintzberg, Ahlstrand & Lampel, 1998). The problem here is that the process remains unclear as to how sensemaking or thinking may be conducted so that it gives rise to novel insights and formulated strategy (Mintzberg, Ahlstrand & Lampel, 1998). Accordingly, the need to understand how knowledge is created prompts an attention to the knowledge creation literature.

Knowledge creation literature has been diverse in their assumptions of knowledge and processes of generating knowledge. Processes of knowledge

creation in the literature involve either conscious thinking (e.g., Nonaka, 1994) or unconscious thinking, specifically intuition (e.g., Chia, 2003; Cook & Brown, 1999; Crossan, Lane & White, 1999). Although the outcome of the knowledge creation introduced in the literature is essentially new, some of the literature address how creativity applies to the processes. Besides, a process that can produce creative insight is required.

Mindfulness is a knowing process (Weick & Sutcliffe, 2006), which enhances the creative ability (Grant et al., 2004), generates insights, wisdom and wise action (Weick & Putnam, 2006) and improves work performance (Bodhi, 2011). Views have been diverse on what mindfulness is (Brown, Ryan & Creswell, 2007; Dane, 2011); the greatest divergent can be found in between Western and Eastern thinking (Schmidt, 2011). Ellen Langer's notion of mindfulness is dominant in Western thinking (Vogus & Sutcliffe, 2012), which is "a flexible state of mind in which we are actively engaged in the present, noticing new things and sensitive to context" (Langer, 2000, p.220). Western mindfulness is a specific form of information processing perspective, which comprises of searching and processing information (Weick & Sutcliffe, 2006). The process involves discriminating subtle cues that are omitted previously, interfering with mindless actions in routines once new cues are noticed and generating void after routines are interrupted (Weick & Putnam, 2006). Void is the state of mindfulness that empowers the ability to see more and more about seeing itself (Weick & Sutcliffe, 2006). As a result, existing categories are refined and new categories are generated- those that are more sensitive to multiple perspectives in context (Weick & Putnam, 2006).

There are shortcomings in the extant literature on Western mindfulness which causes a lack of understanding in how mindfulness leads to high performance. In Langer's work, little attention is given to inner experiences (Baer, 2003) and how mindfulness can be increased (Mikulas, 2011; Weick & Sutcliffe, 2006). The shortcoming in the Western mindfulness literature may be superseded or complemented by the Eastern wisdom on mindfulness (Weick & Putnam, 2006). Western mindfulness is connected with the Eastern mindfulness because the experience of void is identical to the experience of emptiness elicited by meditation (Weick & Sutcliffe, 2006). The works on Eastern mindfulness uncover the inner experiences concerned with mindfulness and offer insights on the fuller development of mindfulness (Weick & Putnam, 2006).

Although the extant literature suggests that further research on Eastern mindfulness is needed to reveal the inner experience related to mindfulness, there is a paucity of research on Chinese ideas of knowledge creation and strategy innovation, particularly from the perspective of Daoism. There are a number of researchers who proposed that the Eastern idea of mindfulness is rooted in Buddhism (e.g., Schmidt, 2011; Weick & Putnam, 2006). The phenomenon implies that there is a lack of research on the idea of mindfulness grounded in Daoism. Daoism is another important source of the Eastern idea of mindfulness (Nan & Wen, 1984).

For a better understanding of strategy innovation, it is essential to understand Daoism, and Zhuāng Zǐ's philosophy. Daoism is the school of thought that is

especially insightful in connecting Eastern mindfulness to strategic thought. This is as opposed to the lack of knowledge on the connection between Western ideas of mindfulness and strategic thought. The ideas in Daoism are largely different from Western ideas of mindfulness and strategic thought. An example of Daoist's work in strategic thinking is Sūn Zǐ's Art of War (Mair, 2007; Yuen, 2014).

There are strong resemblances between key ideas of the Art of War and Lǎo Zǐ (Yuen, 2014), and the Zhuāng Zǐ (Zhuāng Zǐ's philosophical text). First of all, the Art of War emphasizes on winning a war without battle (Mair, 2007). Lǎo Zǐ stresses that taking non-action is the best way of leading (Hansen, 2009). Zhuāng Zǐ proposes that uselessness has important efficacy (Watson, 1968). The efficacy of uselessness can be seen from the oak tree which is worthless to Carpenter Shih, and it survives from being cut off (Watson, 1968). The uselessness of the oak tree is a form of non-action because it does not produce fruits. The production of fruits symbolizes the actions of becoming useful to others. Hence, all these ideas are simply a proposal to achieve goals through effortless means.

The non-action is connected to the Eastern ideas of mindfulness, especially if action (non-action) is directed by the mind (mindfulness). An example of Zhuāng Zǐ's idea of mindfulness is the Fasting of the Heart (Ivanhoe, 1993). The Fasting of the Heart is a meditative method adopted to attain the experience of void (Ivanhoe, 1993). Both the non-action and the experience of void share a commonality, that is the vacancy within the two contains

nothingness. Therefore, the non-action and the experience of void are connected as they are used to exploit the efficacy of vacancy.

Secondly, conveying important concepts in the form of opposing pairs is common in the Art of War and *Lǎo Zǐ* (Yuen, 2014), and the *Zhuāng Zǐ*. Examples of the opposing pair in the Art of War are conventional-unconventional tactics, emptiness-solidity, and relax-fatigue (Mair, 2007). Those in the *Lǎo Zǐ* are yin-yang, weak-strong, and soft-hard (Hansen, 2009). The opposing pairs in the *Zhuāng Zǐ* include useless-useful, little understanding-great understanding, and great benevolence-not benevolent (Watson, 1968).

Thirdly, the idea of the attainment of goals through seemingly contradictory means can be found in the Art of War and both the *Lǎo Zǐ* (Yuen, 2014), and the *Zhuāng Zǐ*. The Art of War suggests that knowing the disadvantages of war is a prerequisite to thoroughly understand the advantageous way of war (Mair, 2007). The *Lǎo Zǐ* claims that the soft (e.g. water) defeats the hard (e.g. rock) (Hansen, 2009). The *Zhuāng Zǐ* hints that the comprehension of the useful can be achieved only after the understanding of the useless is attained (Watson, 1968).

The resemblances between all three texts show that there are distinctive strategic thoughts within Daoism but this is largely ignored in the extant research. Despite the similarities between the three texts, the *Zhuāng Zǐ* is the ideal source for studying knowledge creation and strategy innovation. This is

because the primary focus of the Art of War is primarily military, and the *Lǎo Zǐ* is the social and political effects created by spirituality and insight (Ames, 1998). In comparison, the *Zhuāng Zǐ* focuses more on personal spirituality and insights (Ames, 1998). Due to the distinctive insight of *Zhuāng Zǐ*'s philosophy and the shortcoming of extant literature in strategic management, strategic cognition, knowledge creation and mindfulness, it appears necessary to apply the philosophy to study the knowing processes that involve creative thinking in producing innovative strategy and creating new wealth.

Zhuāng Zǐ's philosophy about strategy innovation and knowledge creation are insightful and especially helpful to close the research gaps. *Zhuāng Zǐ*'s philosophy hints that the process of knowledge creation consists of mental process and mental activities that bring out new strategies. An example is Cook Ting's ox cutting story in *Zhuāng Zǐ*'s text. The concept of dynamic managerial capabilities is employed to search for the reasons for different firms having different strategies (Adner & Helfat, 2003), so that the understanding can be helpful when it comes to innovating new strategies. Similarly, the Cook Ting's ox cutting story highlights that the ox-cutting skills of different cooks are not the same. Specifically, Cook Ting explained his ox cutting performance to Lord Wenhui that the lifespan of a knife is one year if it was used by a good cook and only last for a month if its user was a mediocre cook (Watson, 1968). In comparison, Cook Ting's knife had been used for nineteen years and still remained in good condition like a new one from the grindstone (Watson, 1968). This explanation implies that the ox-cutting skill of different cooks is comparable to the strategies of different firms while the lifespan of a knife

signifies firm performance in wealth creation. In this respect, the Cook Ting's ox cutting story is a lesson not only for Lord Wenhui, but also a lesson about strategy innovation.

In addition, the Cook Ting's ox cutting story offers a complete epistemic process (Chen, 2005) as a lesson on knowledge creation and suggests that this process underpinning strategy innovation. This is evident from Cook Ting who ascribed his ox-cutting skill to this epistemic process, which comprises of three steps (Chen, 2005). Firstly, Cook Ting concentrated on the ox to the extent of him perceiving every single thing as an ox (Nán, 2007a). Secondly, Cook Ting had seen no more oxen after three years of practice (Nán, 2007a), because he “seeks the absolute from the inside rather than from the outside world” (Hao, 2005, p.269). Thirdly, Cook Ting utilized “spirit” in his cutting without looking at the ox, which allowed him to attain master level of skill and perform ox-cutting for Lord Wenhui (Nán, 2007a). A detailed discussion about the epistemic process is provided in Section 2.9.1.

1.3 Research question

The research question of this study is “how do successful Malaysian Chinese entrepreneurs create and use the knowledge in strategy-making to generate new wealth consistently in organizations by leveraging on the teaching of Zhuāng Zǐ's philosophy?” This section provides explanation on two important aspects of the research question that shape the way this research is conducted. The first aspect is the nature of the research question. This section provides a better

understanding on the focus of the research question and the way it helps closing research gaps.

The second aspect is the expected outcome of the research question. This section specifies the process theory as the expected outcome and highlights its differences from the dominant variance theory. The value of the process theory implied in the research question and its connections to research gaps are discussed.

1.3.1 Nature of the research question

This section clarifies the nature of the research question. The research question seeks for the theoretical explanation about the processes of knowledge creation and strategy innovation from Zhuāng Zǐ's perspective rather than Western perspective. As explained earlier, Zhuāng Zǐ's perspective is adopted in this research for his distinctive theory of knowledge related to the development of extraordinary capabilities as illustrated in the Cook Ting's ex cutting story. Using Zhuāng Zǐ's philosophy to understand the processes of knowledge creation and strategy innovation in the Malaysian Chinese context can lead to Chinese theory of management whereas application of theories developed in non-Chinese context will lead to theory of Chinese management (Barney & Zhang, 2009). Since Zhuāng Zǐ's philosophy has significant influence to Chinese culture (Mair, 2000), the philosophy can be much useful than Western theory in investigating processes of knowledge creation and knowledge application in strategy-making experienced by Malaysian Chinese. This is

because Chinese theory can overcome weaknesses of Western theory in uncovering and provide appropriate explanations about phenomena uniquely connected to Chinese thinking and culture (Barney & Zhang, 2009).

Uncovering knowledge creation and knowledge application in strategy-making is important to understand the way an entrepreneur develop dynamic capabilities and generates novel strategies for the purpose of wealth creation. The concept of dynamic capabilities serves the primary purpose of identifying the origins and ways of wealth creation (Teece, Pisano & Shuen, 1997). Empirical research demonstrates that managers have important differences that can lead to differences in strategic change for creating wealth (Helfat & Martin, 2015b). More specifically, this is suggestive that firms managed by managers who possess superior dynamic managerial capabilities are more capable than firms managed by managers who lack of or possess less effective dynamic managerial capabilities in conducting change and adaptation (Helfat & Martin, 2015b). Despite the importance of dynamic capabilities of managers, there is a lack of understanding on the origin and emergence of dynamic managerial capabilities, and their respective application in strategy-making .

The way knowledge is created and applied in strategy-making are under-researched and requires an exploration of these processes, particularly through theory building case study (Eisenhardt & Graebner, 2007). The development of dynamic capabilities rests on knowledge creation, especially when the process involves tacit knowledge that poses challenging effort to understand its underlying structure, and thus limits learning (Teece, Pisano & Shuen, 1997). However, extant perspective assumes that knowledge is a belief, the origin of

knowledge is experience (von Krogh & Grand, 2002) and knowledge creation depends much on external factors (Felin & Foss, 2011). The idea of knowledge is problematic for initiating a knowledge creation process because the possession of beliefs alone does not amount to motivation for taking action (Saidel, 1998). Furthermore, experience is simply an individual's behavioral outcome and contains the lessons learned (Felin & Foss, 2011). This implies that experience is not the actual root of knowledge, so the explanation of knowledge creation based on this assumption may omit important elements of knowledge creation, such as the initial conditions of knowledge creation, the knowledge creator's characteristics, preference, nature and abilities (Felin & Foss, 2011).

To address the research gaps, the research question is appropriate to guide the research process by adopting a two-step process of excavation, which involves, firstly, examining the actual process of creating knowledge, and then investigating the subsequent application of the new knowledge in strategy-making to form new strategies. The research question is consistent with the proposal of the dynamic managerial capabilities concept through which the managers who possess superior dynamic capabilities can increase the effectiveness of the firms in generating strategic changes related to wealth creation (Helfat & Martin, 2015b). The dynamic capabilities of managers may come from the process of knowledge creation (Teece, Pisano & Shuen, 1997). The application of dynamic capabilities of managers in generating the strategic change or new strategies for firms to make a living under a rapidly changing environment (Adner & Helfat, 2003) may be a process of utilizing the

knowledge about wealth creation resulting from the knowledge creation process.

The research question is also consistent with the ideas of creativity and innovation in extant research. As new knowledge is a creative outcome, creativity is essential in the process of knowledge creation (Felin & Foss, 2011). Anderson, Potočnik and Zhou (2014) found that creativity research focuses on ideation, whereas innovation research focuses on the actualization of the new idea that comes from the ideation. Besides, Amabile and Pratt (2016) suggested that creativity is the earlier part and innovation is the later part of the same process. In this research, creativity exists within the process of creating know-how for wealth creation, whereas innovation involves implementing the new knowledge.

The research question helps address the existing research gaps in creativity literature and innovation literature. Anderson, Potočnik and Zhou (2014) hint that there is a lack of research on creativity and innovation in their more integrated form, and theory-building research is needed to develop theoretical advances in these fields. Investigating knowledge creation and knowledge application provides an example of a single process where creativity and innovation exist coherently. Researching the single process helps create a comprehensive understanding of creativity and innovation, which include their interaction and synergistic effect.

Despite that, to further understanding on Zhuāng Zǐ's perspective on knowledge creation and strategy innovation, this research focus on those Malaysian Chinese entrepreneurs who successfully created and used knowledge in strategy-making to generate new wealth consistently in organizations by leveraging on the teaching of Zhuāng Zǐ's philosophy. As highlighted in prior section, von Krogh and Grand (2002) warned that different views of knowledge have different relationships to actions, which may have different consequences. More specifically, different knowledge may come from different processes of knowledge creation. Due to the deficiencies in the perception of knowledge as a belief (von Krogh & Grand, 2002), there is a need to understand knowledge creation based on Zhuāng Zǐ's idea of knowledge to close the research gap. This is important since tacit knowledge is given more emphasis in Zhuāng Zǐ's philosophy than explicit knowledge.

In addition, following Zhuāng Zǐ's philosophy is much appropriate in the Eastern context instead of assuming a universal idea of knowledge coming from the West. Nisbett, Peng, Choi and Norenzayan (2001) found substantial differences existing in between Chinese and North Americans about their ways of seeing and representing external reality due to the cultural influence and its founding of philosophical thinking. Further differences between Western and Chinese system of thinking can be found in Nisbett (2003). Viale and Pozzali (2007) highlight that cultural assumptions, presuppositions and pre-theoretical convictions are a necessary ground for an individual to create the perceptions and representations of external reality.

1.3.2 Process theory as expected outcome of research question

In overall, the research question guides the investigation of this research to examine process of Malaysian Chinese entrepreneurs creating and using knowledge in strategy-making to generate new wealth consistently in organizations by leveraging on the teaching of Zhuāng Zǐ's philosophy. Given that the research question focuses on the process, which is a two-step process consisting of knowledge creation and knowledge application, the intended research outcome is a "process theory", not "variance theory" (Gupta, Chiles & McMullen, 2016; Langley, Smallman, Tsoukas & Van de Ven, 2013; Mohr, 1982). The assumptions of process theory and variance theory are summarized in Table 1.1 below. Section 2.10 in Chapter 2 reviews the differences between the assumptions of methods that are used to produce process theory and variance theory.

Process theory and variance theory are grounded on different paradigms (Welch & Paavilainen-Mäntymäki, 2014). Variance theory (Gupta, Chiles & McMullen, 2016), which is also known as "causal theory", is a type of theory that explains the relationships of constructs that are mutually interacting (Mäkelä & Turcan, 2007). In particular, relationships among dependent and independent variables are used in the variance theory to explain phenomena, such as an increase in independent variable X and an increase in independent variable Y resulting in an increase in dependent variable Z (Langley, 1999).

Table 1.1: Comparison of variance method and process method

	Variance	Process
Modes of theoretical explanation	Explanations are given in terms of the relationships of constructs (Mäkelä & Turcan, 2007).	Explanations are given “in terms of the sequence of events leading to an outcome” (Langley, 1999, p.692).
Unit of analysis	Variable (Poole, 2013; Welch & Paavilainen-Mäntymäki, 2014).	Event (Welch & Paavilainen-Mäntymäki, 2014).
Meaning of arrows on lines in model diagrams	Arrows denote efficient causes (McMullen & Dimov, 2013).	Arrows denote sequences among events (Van de Ven & Poole, 1995).
Focus of research question	How changes in the qualities of an entity occur over time (Langley et al., 2013).	How processes themselves (instead of things) emerge, progress, and wane (Langley et al., 2013).
Research method	Quantitative, statistically based methods (Eisenhardt, Graebner & Sonenshein, 2016; Poole, 2013).	Qualitative, theory-building multiple-case study (Cornelissen, 2017; Eisenhardt, Graebner & Sonenshein, 2016).
Temporality	Sequences among independent variables are unimportant (Payne, Pearson & Carr, 2017).	Sequences are important for understanding the connection between events and patterns (Payne, Pearson & Carr, 2017).
Ways of constitute causality	Constituted via abstract correlations (Langley et al., 2013).	Constituted via chains of events (Langley et al., 2013).
Logic of causal relationship that constitutes satisfactory explanations	Necessary and sufficient causality (McMullen & Dimov, 2013; Poole & Van de Ven, 2010)	Necessary causality (McMullen & Dimov, 2013; Poole & Van de Ven, 2010)

Table 1.1 continued		
Assumption of the world	World as a closed system (Bhaskar, 2008; Poole & Van de Ven, 2010).	World as an open system (Bhaskar, 2008; Poole & Van de Ven, 2010).
Nature of causes	Efficient causes (Mohr, 1982; McMullen & Dimov, 2013).	Final causes (Mohr, 1982; McMullen & Dimov, 2013).
Type of causality	Push-type (Mohr, 1982).	Pull-type (Mohr, 1982).
Mode of knowing	“paradigmatic” or “logico-scientific” knowing (Langley & Tsoukas, 2010)	Narrative knowing (Langley & Tsoukas, 2010)
Philosophical assumptions	Positivism (Shkedi, 2005).	Constructivism (Langley et al., 2013; Shkedi, 2005).

“Process theory” is a type of theory that explains “progressions in the temporal development of how events unfold in a social entity, be it an individual, group, organization, or larger community” (Van de Ven, 2007, p.22). In particular, explanations of the process theory take the form of the sequence of events that affects an outcome, such as implementing action A and followed by action B to attain outcome C (Langley, 1999). In this research, process refers to “ongoing action/interaction/emotion taken in response to situations, or problems, often with the purpose of reaching a goal or handling a problem” (Corbin & Strauss, 2008, p.96-97). This is consistent with the idea of process within the process theory as a developmental event or activities sequence that illustrates the changes of thing (Van de Ven, 1992). Examples of process are observable activities, such as reading, and conceptual actions (Saldaña, 2013) like thinking.

The research question that focuses on the process itself for the purpose of developing a process theory, instead of a variance theory, is consistent with the process-oriented view that is distinctively adopted in the dynamic managerial capabilities literature (Burgelman, Floyd, Laamanen, Mantere, Vaara & Whittington, 2018). The view is evident in the way of studying dynamic managerial capabilities suggested by Helfat and Martin (2015b):

studies of dynamic managerial capabilities can use a two-step process to first trace the impact of the managerial resources that underpin dynamic managerial capabilities on strategic change and then assess the contribution of such strategic change to firm performance (p.1288).

In the research question, the focus is the process of knowledge creation as the first step and the process of knowledge application as the second step. Together, knowledge creation and knowledge application constitute a two-step process. Moreover, making theory contributions through a process-based approach to theorizing is especially valuable and important as a majority of dynamic capabilities that researchers have applied a variance-based approach (Schilke, Hu & Helfat, 2018). A process-based approach is relatively rare, which is an opportunity to produce new insights and which creates a novel research contribution.

As a research outcome of the research question, the process theory is more appropriate than the variance theory. Variance theory explains the relationships between variables, whereas process theory explains the order of discrete events

(McMullen & Dimov, 2013), which brings about some outcome (Payne, Pearson & Carr, 2017). Seeing process as the explanation for variance theory or category of concepts implies that direct observation of the process in action is omitted (Van de Ven, 1992). One reason being is that a variable with reference to a process and the process itself are not exactly the same (Mackenzie, 2000). In effect, there is a lack of direct observation to provide evidence in the variance theory that can accurately describe and explain the actual process of knowledge creation and knowledge application.

In contrast, seeing process as a sequence of events implies that the process in action is explicitly and directly observable (Pettigrew, Woodman, Cameron, 2001). Processes are closer to the behavior under study in comparison to their encapsulation as variables (Mackenzie, 2000). In consequence, the sequence of events can be used to explain the interdependence within the chain of events (Welch & Paavilainen-Mäntymäki, 2014) and generative mechanisms that possess the power to activate the occurrence of events in reality (Tsoukas, 1989). Therefore, examining the process in terms of a sequence of events helps uncover the proverbial “black box” between independent variables and dependent variables in a variance theory (Van de Ven & Huber, 1990). This also implies that process modeling can be used to create theory contributions that are not achievable through variance modeling (Makadok, Burton & Barney, 2018).

The differences between the theoretical explanations of variance theory and the process demonstrate that the two types of theory capture different things. The

theoretical explanations of the variance theory show that the variable is both the building blocks of the explanation and unit of analysis (Welch & Paavilainen-Mäntymäki, 2014). In comparison, the theoretical explanations of the process theory show that the event is both the building blocks of explanation and unit of analysis (Welch & Paavilainen-Mäntymäki, 2014).

As important parts of the model diagrams, arrows have different meanings in the variance theory and process theory. In the model diagrams of the variance theory, arrows denote efficient causes (McMullen & Dimov, 2013). In the model diagrams of the process theory, arrows denote sequences among events (Van de Ven & Poole, 1995).

Due to the meaning of arrows, model diagrams of the process theory have at least two features that are different from the model diagrams of the variance theory. Firstly, the model diagrams of process theory can be cyclical or contain cyclical element, which is suitable to depict the change and developmental processes (Van de Ven & Poole, 1995). Secondly, the model diagrams of process theory can take the form of feedback loop or include the element of feedback loop (Langley et al., 2013). In the feedback loop, the origin of a process may take a long way to reach the end (Langley et al., 2013).

1.4 Objectives of research

This research study examines the knowledge creation and strategy innovation in organizations in Malaysia. Specifically, the present study

1. explores into the knowledge creation processes among successful entrepreneurs from Zhuāng Zǐ's perspective.
2. examines their innovation applications of knowledge in wealth creation from Zhuāng Zǐ's perspective.
3. develops a process model of knowledge-wealth creation.

To achieve its objectives, the extent of the investigation is as follows:

1.4.1 Knowledge creation processes among successful entrepreneurs from Zhuāng Zǐ's perspective

It is of the utmost importance to identify knowledge creation processes that drive corporate growth strategy, given their central role in strategy-making . Existing literature on knowledge creation and Zhuāng Zǐ's thinking is reviewed. Reviews of existing literature dominated by Western thoughts serve to highlight the research gaps. Based on the literature, this research connects Zhuāng Zǐ's notions of knowledge creation that is related to strategy innovation.

Zhuāng Zǐ's notion of knowledge creation is different from the existing literature in the field, which is based on the theory of seeing things as equal. Knowledge creation in Zhuāng Zǐ's perspective involves a person attaining dào, a state in which he or she can be free from the dichotomy of self and non-self (Chang, 1977). This state has to be achieved for “Zhī” or real knowledge to

occur (Chang, 1977). The real knowledge may be the basis of the strategy prevalent in Zhuāng Zǐ's perspective.

Zhuāng Zǐ's idea of real knowledge may encourage effectiveness and innovation in knowledge creation. To examine how effectiveness is incorporated in knowledge creation, this study uses Cook Ting's story as a reference. Cook Ting's story shows the process of expertise advancement over three stages (Lin, 1942). Expertise becomes more advanced as it is developed into a later stage, in which the expertise of stage two is better than that of stage one and the expertise of stage three is better than that of stage two. If expertise strengthens effectiveness, the advancement of the former should generate the improvement of the latter accordingly.

To examine how innovation is instilled in knowledge creation, this study traces its root to Zhuāng Zǐ's concept of creativity. Innovation relies on knowledge creation (Popadiuk & Choo, 2006). Popadiuk and Choo (2006) contended that knowledge creation provides new capabilities, which will be transformed into products and services through the innovation process. For knowledge creation to develop a capability that is novel and useful, it may require creativity.

To examine creativity, its relevant literature consisting of Western thinking and Chinese thinking are reviewed. The Chinese thinking adopted in this research is Zhuāng Zǐ's perspective. In Zhuāng Zǐ's view, creativity comes through the process of a person undergoing the inner apprehension of Dào (Niu & Sternberg, 2006).

Hence, Zhuāng Zǐ's notions of knowledge creation is examined and adapted to develop a conceptual framework scrutinizing how it is applicable to strategic thinking in organizations in Malaysia. This conceptual framework illustrates the theory of seeing things as equal. An example of "seeing things as equal" is explained by Zhuāng Zǐ in the practice of Cook Ting's ox-cutting. The learning process of cutting an ox is explained in three stages. Each stage is described with Zhuāng Zǐ's "Qí Wù Lùn" or theory of seeing things as equal (Graham, 1969).

1.4.2 Innovative applications of knowledge in wealth creation from Zhuāng Zǐ's perspective

The next step towards achieving the research objectives is to explore into Chinese ideas of knowledge application that are related to strategy innovation in organizations. Specifically, Chinese idea refers to the pre-Qin schools that were the dominant thinking in China during that period. Among the pre-Qin schools, Daoism or Taoism and its thinking from one of its most important philosophers, Zhuāng Zǐ are adopted for the purpose of this research.

Chinese ideas of knowledge application may be part of the strategy innovation. According to Nán (2007a) and some Chinese scholars, the key concept of Zhuāng Zǐ's strategy innovation is on Yōng; literally translated as an "Appropriate Usage". The "appropriate usage" comes through a knowledge creation process as suggested by Zhuāng Zǐ's theory of seeing things as equal. An example of "Appropriate Usage" is the strategic application of a recipe for

salve for chapped hands in war to generate wealth (Lin, 1942). It is appropriate as the strategic application generated significantly more wealth than its original utility for washing silk. The strategic application of a recipe for salve for chapped hands in war is a specific way of using an invention. Besides, this strategic application is also an example of knowledge application.

Strategy in Zhuāng Zǐ's perspective is the know-how method or "Fāng Fǎ" (Nán, 2008). Zhuāng Zǐ provided examples of strategies in his writing (Nán, 2008). For instance, a strategy is the action of a great appropriator in stealing his master's state and the regulations of the sages and wise men as described in the story of "On the regulations of wise man" (Legge, 1891). The story is intended to inform the lesson that the regulations of the sages and wise men not only benefitted the master, but it may also be exploited by the great appropriator.

The exploitation of the regulations is an appropriate usage or Yōng, and also an example of knowledge application. Appropriate usage will be investigated for its application in Malaysian organizations as a managerial wisdom. Managerial wisdom in the ancient Chinese literature is widely accepted as being relevant to the modern economic environment (Hsu & Chiu, 2008; Low, 2001).

1.4.3 A process model of knowledge-wealth creation

The final research objective is to develop a process model of knowledge-wealth creation. The process model is important to provide further

understanding on how knowledge creation begins, leading to wealth creation, and resulting in substantial financial wealth. The resulting process model may uncover the origin of wealth creation and the involving processes, which are a central focus of strategic management.

In the research, wealth creation refers to the process of generating new revenue through innovative strategy. In the West, dynamic managerial capabilities research associate different firm performances in the changing environment with distinctive managerial capabilities of individual managers (Helfat & Martin, 2015b). Zhuāng Zǐ had a similar view on the critical influence of individual managerial capabilities. In Zhuāng Zǐ's perspective, what an individual can achieve primarily depends on his or her ability rather than a favorable environment, such as a profitable industry. This is evident from what Zhuāng Zǐ suggested that a more capable person will take a role that holds higher responsibility, which "shows the difference between the small and the great". Thus, it is men, whose wisdom is sufficient for the duties of someone's office, or whose conduct will secure harmony in someone's district, or whose virtue is befitting a ruler so that they could efficiently govern someone's state" (Legge, 1891). Similarly, the performance of wealth creation may commensurate with ability. Following Zhuāng Zǐ's thoughts, the ability of creating a substantial new revenue is deemed to be of great knowledge. If this is indeed the case, it appears necessary to understand how great knowledge can be attained to create new wealth. Wealth creation and great knowledge may be identified by investigating how Malaysian Chinese entrepreneurs create and use great knowledge to create substantial new wealth.

In this research, sustainable wealth creation is understood as the process of generating new revenue stream consistently through innovative strategy. To clarify, the core focus of wealth creation is to generate the largest possible new wealth without taking into consideration the long term benefit while that of sustainable wealth creation is to create the greatest new wealth consistently over the longest possible period of time. Sustainable wealth creation is necessary to overcome problems of focusing solely on wealth creation, which may lead to value destruction and ultimately to the disruption to wealth creation (Hamel, 1998). For instance, engaging in business activities that are destructive to the environment may impede the opportunities to develop and utilize economic resources of the affected area in the future. To counter the negative impacts of these business activities to the environment, society and the organization itself, “sustainability” and “sustainable growth” have received an increasing attention by academics, business people and policymakers (Connelly, Ketchen & Slater, 2011).

For the West, sustainability is “a way of doing business that creates profit while avoiding harm to people and the planet” (Center for Sustainable Enterprise, 2010 as cited in Hult, 2011, p.4). Sustainability is essential to businesses as Drucker (1955, p.382) suggested that the management “has to consider whether the action is likely to promote the public good, to advance the basic beliefs of our society, to contribute to stability, strength and harmony” for any managerial move to be taken. Apparently, the focus of the Western thought on sustainability is the ethical responsibility of an organization to

produce a good society while satisfying its requirement to produce profit. Despite its importance, much is needed to know about how to produce profit through ethical practices (Orsato, 2006).

A viable solution to the problem may be Zhuāng Zǐ's idea on sustainable wealth creation, which is "Wú Yòng" or efficacious uselessness. Zhuāng Zǐ explained the idea of efficacious uselessness in the following anecdote:

“Master Hui said to Master Chuang,

'You speak, Sir, of what is of no use.'

The reply was,

'When a man knows what is not useful, you can then begin to speak to him of what is useful. The earth for instance is certainly spacious and great; but what a man uses of it is only sufficient ground for his feet. If, however, a rent was made by the side of his feet, down to the yellow springs, could the man still make use of it?'

Master Hui said,

'He could not use it,' and Master Chuang rejoined,

'Then the usefulness of what is of no use is clear.'”(Legge, 1891)

In the anecdote, Zhuāng Zǐ implied that efficacious uselessness is the source of usefulness, where the man's uses of the Earth are only the sufficient ground for his feet the moment he is stepping on. It is insufficient for him to move on to the next step. What is stepped on represents the thing that is used for instant need while the ground for the next step reflects upon what is required for the future need.

There are at least two lessons from the anecdote which are relevant to sustainable wealth creation. Firstly, understanding and attaining what is required for the future need may be applied in creating wealth continuously. Secondly, being useful is a core element of being valuable to businesses. Thus, understanding efficacious uselessness may offer an insight on how value is created, especially about the changes of what is previously valueless becoming valuable at a later time. This is typical of a process of wealth creation because what is valuable can be converted into monetary value.

Wealth creation reflects the efficacy of great knowledge in creating substantial new wealth from a particular type of business activity in the short run while sustainable wealth creation represents the effect of great knowledge in generating revenue over the long run. The implication of concentration on sustaining wealth creation is needed to gain a steady stream of revenue and attain greater wealth in the long run. The strategic insights above urge the need to construct a process model of knowledge-wealth creation.

1.5 Research significance

The following highlights the significance of this research:

- To address the research deficiency in the theory of knowledge creation from the perspective of Zhuāng Zi's philosophy.
- To emphasize the use of tacit knowledge rather than explicit knowledge in the knowledge creation.

- To describe an opportunity-based rather than competitor-based entrepreneur success.

1.6 Research assumptions

Constructivism is selected as the paradigm that guides the inquiry of this research. Paradigm refers to a set of basic beliefs, which constitutes the believer's view of "the nature of the "world," the individual's place in it, and the range of possible relationships to that world and its parts" (Guba & Lincoln, 1994, p.107). In other words, a paradigm comprises of ontological, epistemological and methodological assumptions (Guba & Lincoln, 1994). By constructivism, it means "the philosophical belief that people construct their own understanding of reality" (Oxford, 1997, p. 36). The application of constructivism in this research is discussed as follows.

The selection of constructivism as the paradigm of this research is motivated by three reasons. Firstly, individual managers in constructivism, not macro level factors, are accounted for the most significant part in constructing the environment they situated (Mir & Watson, 2000). For example, Simons (1994) found that newly-appointed top managers utilize the management control system in different ways to facilitate firms' renewal of strategic directions and important changes. This perspective is consistent with the assumption of this research that individual entrepreneurial managers are the creators of critical changes to firms and their environment. Specifically, these managers are fully responsible for creating their knowledge and managerial capabilities in order to

introduce new product, enter new market, also generate and exploit new business opportunities. These strategic changes can increase firm revenue (Helfat & Martin, 2015b).

Secondly, constructivism can be employed “to contest existing and established theories of firm actions” (Mir & Watson, 2000, p.947). From the perspective of constructivists, some popular existing and established theories are applied to construct management practices (Mir & Watson, 2000). The failure of these management practices implies that the theories behind these practices need to be challenged, so that similar weaknesses and mistakes can be avoided in new theories and practices. In this research, constructivism is exploited to contest Western ideas of knowledge and creativity. Consistent with constructivism, this research assumes that the ideas of knowledge and creativity are the construction of human beings. This research discusses weaknesses in Western ideas of knowledge and creativity by making comparisons with those from the East.

Thirdly, constructivism can be applied to generate new knowledge by examining how past theories can be applied to the current environment (Mir & Watson, 2000). Specifically, constructivist researchers can connect past theories to context and practice (Mir & Watson, 2000). A resulting new knowledge is the applicability of past theories in a contemporary economic environment (Mir & Watson, 2000). Based on this feature of constructivism, the past theory and context selected in this research are the theory in Chinese philosophy, which is Zhuāng Zǐ’s philosophy in specific, and the Malaysian

context. This research used Zhuāng Zi's philosophy to develop a conceptual framework to define the scope of study. In addition, the Malaysian context is discussed as the research setting. Hence, constructivism's ontological, epistemological and methodological assumptions are adopted in this research.

Ontological assumption is a perspective of the nature and features of the reality to be studied by researchers (Guba & Lincoln, 1994). Constructivists assume that reality is a creation of the researcher (Mir & Watson, 2001). Specifically, the constructivist reality is created by the mind (Schwandt, 1998), and appears only in an idea (Oxford, 1997). This assumption is especially important when the external reality is that the researcher requires the ability to understand rather than to discover (Mir & Watson, 2000). It is important because the reality that exists is unstable, can be shaped and constructed by people in the society (Mir & Watson, 2000). For example, a decline in stock index may be explained by a constructivist researcher as the outcome of the buying and selling behaviors of investors (Mir & Watson, 2001). Therefore, the reality is subject to the researcher's creation (Mir & Watson, 2001).

Constructivist ontological assumptions are especially suitable for this research to examine the changes made by research participants in their managerial actions. These changes include the creation of new knowledge, new product research and development, generation of new business model, reaction to competitive moves and economic crises. These phenomena are unstable and largely constructed by other social actors. Thus, the inquired phenomena are consistent with the constructivist ontological assumptions.

Epistemological assumption is a perspective of the nature of the relationship between the inquirer and the inquired (Guba & Lincoln, 1994) in the process where the external phenomenon being investigated comes into the knowledge of the inquirer (Creswell & Poth, 2018). In constructivism, the inquirer and the inquired phenomena are inseparable (Mir & Watson, 2000). The non-separation is in stark contrast to the assumption that reality exists independent from the researcher, to be discovered by the researcher and knowledge produced by the research is just a mirror to this objective reality (Schwandt, 1998).

In addition, constructivists believe that reality is a creation of the researcher (Mir & Watson, 2001). Therefore, the researcher uses commonly accepted assumptions, suitable concepts, models and theories to interact with the medium of inquired phenomenon in order to produce knowledge (Mir & Watson, 2000). The theoretical lens or theoretical position is needed in the interaction to guide the research process (Mir & Watson, 2000). In this research, Chinese philosophy and Zhuāng Zi's philosophy specifically, is needed to guide the process of exploring an insufficiently researched area. The research objective of creating a conceptual model can be achieved through constructivist epistemological assumptions. Specifically, the conceptual model can be a creation of the researcher, rather than something that he discovered.

Methodological assumption is a perspective of the way research is conducted (Guba & Lincoln, 1994). In constructivism, the way of conducting research

emphasizes more on the ontology and the epistemological assumptions of constructivism than the research techniques (Mir & Watson, 2000), with the rationale being “constructivist methodologies work at the level of assumptions, rather than at the level of technique” (Mir & Watson, 2000, p. 950). This approach of conducting research is essential because constructivists believe that unmediated access to the inquired is the only way to understand reality (Burrell & Morgan, 1979). Direct engagement with the inquired has the advantages of being able to investigate the inquired’s background, life history, and allowing nature and characteristics of the phenomenon being investigated to emerge in the research process (Burrell & Morgan, 1979). Furthermore, the constructivist methodology assumption is evident from a number of methodologies that have been applied in the constructivist manner, such as grounded theory (Charmaz, 2014), theory-building multiple-case study (Carroll & Swatman, 2000), and historical analysis (Mir & Watson, 2000). The methodology of this research is theory-building multiple-case study (Carroll & Swatman, 2000). This is discussed in detail in the research methodology chapter of this study.

1.7 Definition of key terms

There are a number of key terms applied in this research. These terms may be defined differently by researchers, or carry multiple meanings to be applied in various contexts. To avoid readers’ confusion, definitions of these terms in this research are provided in Table 1.2 below.

Table 1.2: Definition of key terms

Key terms	Definition
Chinese spoken language	“Beijing’s pronunciation as standard pronunciation, Northern dialects as the base dialect, and modern vernacular literature as standard structure, vocabulary, and grammar” (Tam, 2016, p.280).
Confucianism	a way (Dào) of realizing the full potential of human nature to be competent, ethical and fully human via moral self-cultivation for the primary aim of establishing harmonious world and society (Koller, 2012).
Constructivism	“the philosophical belief that people construct their own understanding of reality” (Oxford, 1997, p. 36).
Creation	the process of a person undergoing “the inner apprehension of Dào” (Niu & Sternberg, 2006, p.31) for its application in the generation of novel and useful ideas in a domain (Stein, 1974; Woodman, Sawyer & Griffin, 1993; Amabile et al, 1996).
Daoism	“a way of living well by realizing the harmony of heaven, earth, and humanity and by realizing peace and harmony within society and within the individual person” (Koller, 2012, p.217).
Dynamic capabilities	“the firm’s ability to integrate, build, and reconfigure internal and external competences to address rapidly changing environments” (Teece, Pisano, & Shuen, 1997, p.516).
Dynamic managerial capabilities	“the capabilities with which managers create, extend, and modify the ways in which firms make a living” (Helfat & Martin, 2015b, p.1281).
Great knowledge	the type of knowledge that take more comprehensive account of the three dimensions of the thing to be acted upon or understood, namely perspective from the thing’s position, its whole picture, and its changes.
Guanxi	“the concept of drawing on a web of connections to secure favors in personal and organizational relations” (Park & Luo, 2001, p.455).
Human nature	“the characteristics of mankind which generally enable us to distinguish humans from animals, from inanimate objects, and from social abstractions such as society or organizations” (Sullivan 1986, p.535).

Table 1.2 continued	
Knowledge	“capacity to act” (Sveiby, 1997, p.37).
Knowledge creation	the process of a person undergoing “the inner apprehension of <i>Dào</i> ” (Niu & Sternberg, 2006, p.31) for its application in the generation of new and useful capacity to act in a domain.
Meaning	“the thoughts, ideas, and experiences that actors have in their mental processes” (Li, 2017, p.521).
Mental models	“representations of knowledge that contain and organize information” (Schneider & Angelmar, 1993, p.349).
Perception	“the mental activities or processes that organize information (in the sensory image) and interpret it as having been produced by properties of (objects or) events in the external (three dimensional) world” (Helfat & Peteraf, 2015, p.14).
Phonocentrism	“the view that orality is equivalent to language itself and that writing is merely a reflection of oral expression not requiring special attention” (Macaulay, 1990, p.3).
Self-knowledge	“the amount of information the person possesses about” oneself (Holland, 1959, p.40).
Spirit	“a state of mind with superior cognitive abilities transcending the ordinary human sensory and cognitive processes” (Vávra, 2017, p.204).
Strategic	“that which relates to the long-term prospects of the company and has a critical influence on its success or failure” (Argarwal & Helfat, 2009, p.281).
Strategy	method (Nán, 2008). By “method”, the concept encompasses tactic and stratagem.

1.8 Chapter summary

This research utilizes Chinese philosophy and Zhuāng Zǐ’s philosophy specifically, process method, constructivist theory-building multiple-case design and qualitative research method to investigate strategy innovation from

the aspect of knowledge creation. This research seeks to answer “how do successful Malaysian Chinese entrepreneurs create and use the knowledge in strategy-making to generate new wealth consistently in organizations by leveraging on the teaching of Zhuāng Zǐ’s philosophy?”. It is in line with the distinctive focus of strategic management field to understand the origin and process that lead to different firm performances in wealth creation. In summary, this chapter suggests the following:

- This research is situated within the dynamic managerial capabilities field as it assumes the origin of wealth creation that stems from an individual’s (e.g. the late Steve Jobs who co-founded Apple) managerial capabilities.
- This research assumes that the wealth creation process involves the application of an individual’s managerial capabilities in forming new strategies.
- Zhuāng Zǐ’s philosophy is selected instead of the Western thinking in this research because of its distinctive emphasis on tacit knowledge. According to Dreyfus (2009), explicit knowledge can only be used to assist an individual to attain a competence status whereas tacit knowledge can be employed to help an individual achieve a mastery status. Therefore, tacit knowledge should be prioritized since it is a stronger support for higher level of managerial capabilities. Explicit knowledge and its transmission are a major focus in extant research.
- Zhuāng Zǐ’s philosophy is adopted for the research because of its focus on uncovering the mind of the sage (Kirkwood, 1995), unique insight on personal spirituality (Ames, 1998), especially on how an individual can

attain mastery, and unique concepts that signify the master level of knowledge creation and strategy innovation for wealth creation.

The “problem background” section explains that the investigation of processes of knowledge creation and strategy innovation in this research is situated in major lines of inquiry of dynamic managerial capabilities research to identify the origin of wealth within firms and how wealth is created (Adner & Helfat, 2003; Augier & Teece, 2009). Dynamic managerial capabilities studies are conducted to discover most important contributors of differences in firm performance (Adner & Helfat, 2003; Sirmon & Hitt, 2009). As Dynamic managerial capabilities research hint that knowledge stems from an individual’s learning process and it needs to be applied in strategy-making to create novel strategies (Helfat & Martin, 2015b), the investigation of the process of creating new knowledge in this research is important to further the lines of inquiry about the origin of wealth and ways of wealth creation.

The “statement of problem” section discusses the shortcoming in the extant literature related to processes of knowledge creation and strategy innovation. There is a lack of understanding on the strategy-making activities happening in the mind of a strategist in strategy innovation literature, strategic cognition literature, knowledge creation literature, and mindfulness literature. Chinese ideas of knowledge creation and strategy innovation may be helpful to overcome the problems because of their unique insight on the mind of a strategist.

The “research question” section clarifies the nature and expected outcome of the research question. The research question seeks to understand the processes of knowledge creation and strategy innovation in the Malaysian Chinese context from Zhuāng Zǐ’s perspective. Using Zhuāng Zǐ’s ideas about processes of knowledge creation and application in strategy-making can lead to the Chinese theory of management, which is different from employing the theories developed in the non-Chinese context that will lead to the theory of Chinese management (Barney & Zhang, 2009). The research question is process-oriented and demands an application of the process method to produce a process theory as an outcome of this research. Features of process theory are explained and contrasted with the variance theory. Process theory in this research is different from a variance theory for its focus on the sequence of events rather than the variables leading to wealth as an outcome.

The “objectives of research” section discusses what the research aspires to do. There are three objectives of research, which are 1) identify knowledge creation processes among successful entrepreneurs from Zhuāng Zǐ’s perspective, 2) examine their innovative applications of knowledge in wealth creation from Zhuāng Zǐ’s perspective, and 3) develop a process model of knowledge-wealth creation. The research objectives are grounded on Zhuāng Zǐ’s philosophy.

The “research significance” section shows the importance of this research study to advance the knowledge in prior research. There are three research points of significance namely solutions to the research deficiency in the theory

of wealth creation, emphasis on tacit knowledge, and opportunity-based entrepreneur success.

The “research assumptions” section specifies constructivism as the paradigm of this research. Its ontological assumption considers reality as the creation of an individual. Constructivism epistemological assumption is that the relationship between the inquirer and the inquired is non-separable in the process of creating knowledge. The constructivism methodological assumption is that a variety of research techniques can be used in conducting research, but greater emphasis is placed on the assumption level when a research technique is applied.

Chapter 2 will focus on the literature review. It presents theories of knowledge creation, Confucian theory of knowledge creation, Daoist theory of knowledge creation, comparison between Confucian and Daoist theories of knowledge creation, comparison between Western and Daoist concepts of knowledge, comparison between Western and Daoist concepts of creation, the connection between knowledge creation and strategy innovation, justification for Zhuāng Zǐ’s philosophy, and the research framework.

2.0 LITERATURE REVIEW

This chapter is the outcome of the literature review. For a start, theories of knowledge creation in the West and the East, as represented by Confucianism and Daoism, are presented to reveal the current status and shortcomings of the extant literature. Then, comparisons are made between Confucianism and Daoism as well as their concepts of knowledge creation, Western and Daoist concepts of knowledge, and Western and Daoist concepts of creation to uncover the rationales of using Zhuāng Zǐ's philosophy in the research. Next, the connection between knowledge creation and strategy innovation is discussed to specify the type of knowledge creation in the domain of making new strategies. After that, the justification for Zhuāng Zǐ's philosophy is provided to explain why the philosophy may be useful for further understanding about knowledge creation and strategy innovation. Then, a research framework is constructed to specify the scope of investigation of this research study. Lastly, the comparison between the variance method and process method is made to show the process orientation of the research framework that is consistently followed and implemented in the investigation and this leads to a process theory.

2.1 Theories of knowledge creation

There are different foci in literature that are related to knowledge creation. In the Western literature, the SECI (Socialization, Externalization, Combination, and Internalization) model emphasizes on the communication between

individuals or organization members as the primary source of knowledge creation (Nonaka, 1994). In this organizational knowledge creation theory, an individual creates knowledge through the interaction with another individual (Nonaka, 1994). The 4I (Intuiting, Interpreting, Integrating, and Institutionalizing) model focuses on the learning processes that happen in the individual, group, and organizational levels (Crossan, Lane & White, 1999). Based on the model, an individual creates knowledge through intuiting (Crossan, Lane & White, 1999). Cook and Brown (1999) suggested that dynamic affordance and knowing are necessities for knowledge creation. They illustrated that an individual creates knowledge through dynamic affordance and knowing (Cook & Brown, 1999). Both individual and group create knowledge by extracting specific shapes and meanings from their organizational contexts through action and practice (Cook & Brown, 1999).

In Eastern literature, theories of knowledge creation can be found in Confucianism and Daoism. Confucianism and Daoism are the two most influential Chinese philosophy thoughts among the pre-Qin schools (Fung, 1948; Koller, 2012; Needham, 1969). Pre-Qin schools are ancient Chinese philosophies that originated in China before the Qin dynasty, such as Legalism, Logician and others (Xu, 1997). For the purpose of the research, only the teachings of early Confucianism and early Daoism are adopted for their core status in the respective schools of thought. One of the most comprehensive and influential theories of knowledge creation in Confucianism is the Great Learning (Nuyen, 2011; Sim & Bretzke, 1994). Great Learning emphasizes on the cultivation of self-awareness by an individual on authentic human nature in

order to be able to utilize the knower (Nán, 2008). The knower is the part of human nature that is responsible for generating knowledge (Nán, 2008). In Daoism, one of the most comprehensive and influential theories of knowledge creation is Zhuāng Zǐ's the Fasting of the Heart (Ivanhoe, 1993). The fasting of the heart emphasizes attaining Dào via meditation (Nán, 2007a). The inner apprehension of Dào will give rise to spiritual intelligence, which creates knowledge (Nán, 2007a). The distinct emphasis of theories of knowledge creation have different implications to their domains, application and effectiveness. The varied implications prompt the need to examine each of these theories according to their expected outcomes, assumptions and processes as follows.

2.1.1 Socialization-Externalization-Combination-Internalization (SECI) model

As the outcome of the knowledge creation process, the knowledge to be created in the SECI model is "justified true belief" (Nonaka, 1994, p.15). As an assumption, knowledge conversion is the logic of how knowledge is created in Nonaka's dynamic theory of organizational knowledge creation (Nonaka, 1994). The idea of knowledge conversion is based on Anderson's ACT model (Anderson, 1983). The model presumes that transmuting declarative knowledge into procedural knowledge is necessary to develop cognitive skills (Anderson, 1983). For Nonaka (1994), declarative knowledge is similar to explicit knowledge and procedural knowledge is identical to tacit knowledge.

In his theory, knowledge conversation happens between explicit and tacit knowledge (Nonaka, 1994).

There are four modes of knowledge conversion in the SECI model as depicted in Figure 2.1 below, namely internalization, socialization, combination and externalization. Internalization is the conversion of explicit knowledge into tacit knowledge (Nonaka, 1994). Internalization may be conducted through “action” and conventional idea of “learning” (Nonaka, 1994). An instance of internalization is the process where an individual learns from explicit knowledge (e.g., books and manuals) and applies it in practical situations (Nonaka & Toyama, 2003).

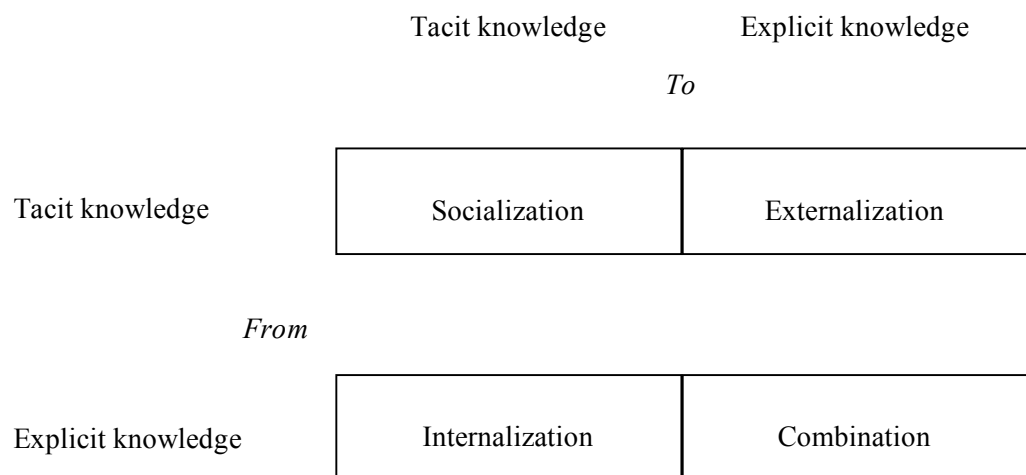


Figure 2.1: Modes of the knowledge creation (Nonaka, 1994, p.19)

Socialization is the transformation of tacit knowledge into tacit knowledge, which occurs within the interaction among individuals based on shared direct experiences (Nonaka, 1994). Socialization can be achieved through the acts of

spending time together and empathizing with other people like customers and suppliers (Nonaka & Toyama, 2003). An example of socialization is a traditional apprenticeship where apprentices acquire their masters' skills by practicing the tacit knowledge themselves (Nonaka & Toyama, 2003).

Externalization is the explication of tacit knowledge into explicit knowledge (Nonaka, 1994). Externalization can be applied by using metaphor and analogy (Nonaka, 1994). Nonaka (1994, p.21) specified metaphor as “two contradicting concepts incorporated in one word.” Knowledge may be created by contrasting the two concepts of a metaphor, recognizing and understanding the level of imbalance, contradiction or inconsistency entailed in their association (Nonaka, 1994). On the other hand, analogy reveals the functional operation of new concepts or systems by referencing to similar things among them that are known beforehand (Nonaka, 1994). An instance of externalization is prototyping because prototypes can be used as metaphors to product concept (Nonaka, 1994).

Combination is the transfiguration of explicit knowledge into explicit knowledge (Nonaka, 1994). Methods of combination include using exchange mechanism and rearranging information that is available via adding, re-categorizing, and re-contextualizing explicit knowledge (Nonaka, 1994). An example of combination is synthesizing and editing information in a document electronically with the word processing software in the computer system.

There are problems in Nonaka's (2009) dynamic theory of organizational knowledge creation. Nonaka's descriptions on the difference between tacit knowledge and explicit knowledge are debatable (McAdam & McCreedy, 1999; Tsoukas, 2003; Gourlay, 2006) as Polanyi (1969, p.144) argued that "all knowledge is either tacit or rooted in tacit knowledge", and "explicit knowledge must rely on being tacitly understood and applied." This implies that explicit knowledge is no longer knowledge once it is separated from an individual's understanding of mentality. Obviously, mentality and cognition activities are only embodied within an individual. Without tacit knowledge creation, knowledge conversion is simply the changes of knowledge form rather than knowledge content. In the situation of skill learning, it means that knowledge learned from the master is simply repeated in the apprentice's actions and explicit knowledge like books. In this respect, knowledge content or its meaning is the same before and after knowledge conversion, and it just existed in different forms and not in the form of new knowledge.

For this reason, individual is the prime mover of organizational knowledge creation (Nonaka, 1994). According to Nonaka (1994), individuals acquire tacit knowledge from their personal experience. The quality of such tacit knowledge is affected by the variety in experience, relevance of experience and an embodiment of knowledge through a deep personal commitment into bodily experience (Nonaka, 1994). Nonaka (1994) equated the phenomenon of embodiment with "the oneness of body-mind" and provided examples of related knowledge creation methods such as the interaction with customers and by personal bodily experience. Nevertheless, Nonaka did not explain much

about how “the oneness of body-mind” can be attained and applied in the knowledge creation. Rather, Nonaka (1994) posited that “the oneness of body-mind” is similar to “experientism” and denied “the oneness of body-mind” as an important way leading to higher level concepts. This seems problematic and is biased on the accounts that the theory prevails the assumption of knowledge having a “logical” or “discursive” character, and a systematic structure (Chia, 2003). Chia (2003) argued that pure experience is “the ultimate ground of knowing”. Pure experience can be attained through “the oneness of body-mind” (Nonaka, 1994; Chia, 2003).

2.1.2 Grey SECI (G-SECI) model

The outcome produced from the knowledge creation process of a grey SECI model is explicit knowledge, which consists of “technical files, data sets and program code sets” (Li, Liu & Zhou, 2018, p. 893). The SECI model was extended by Li, Liu and Zhou (2018) in their proposal of the grey SECI model to explain the knowledge creation process in the development of a complex technology. In the grey SECI model, knowledge is created through the knowledge conversion in between explicit knowledge, tacit knowledge and “grey knowledge” (Li, Liu & Zhou, 2018). In the model, explicit knowledge is assumed as the know-what knowledge or fact, whereas tacit knowledge is assumed as the know-how knowledge or skill (Li, Liu & Zhou, 2018). Grey knowledge is assumed as the know-why knowledge or principle (Li, Liu & Zhou, 2018). Grey knowledge is “a type of half-tacit, half-explicit “tacit

knowledge”, is extractable from individual knowledge through expression and communication” (Li, Liu & Zhou, 2018, p.890).

As depicted in Figure 2.2 below, there are six knowledge creation modes in the grey SECI model, namely 1) knowledge socialization, 2) knowledge externalization, 3) knowledge combination, 4) knowledge internalization by reflection, 5) knowledge internalization by practice and 6) knowledge systematization (Li, Liu & Zhou, 2018). Knowledge socialization is the process of converting tacit knowledge into grey knowledge (Li, Liu & Zhou, 2018). Knowledge socialization can be achieved through fragmental expression and direct observation of an individual’s tacit knowledge, which serves as means of communication with other individuals (Li, Liu & Zhou, 2018). An example of knowledge socialization in the CoPS innovation process is when an R&D team observes and communicates with customers to construct a “know-why knowledge perception” set, which concentrates on understanding their actual demands and developing a preliminary understanding of principles or grey knowledge (Li, Liu & Zhou, 2018). The know-why knowledge perception set is a type of knowledge set. A knowledge set is a composition of knowledge units, which fosters knowledge creation (Li, Liu & Zhou, 2018).

Knowledge externalization is the process of transforming grey knowledge into explicit knowledge (Li, Liu & Zhou, 2018). Knowledge externalization can be applied by utilizing language and semiotic methods to explicate grey knowledge (Li, Liu & Zhou, 2018). In the CoPS innovation process, an instance of knowledge externalization is the writing of a textual demand

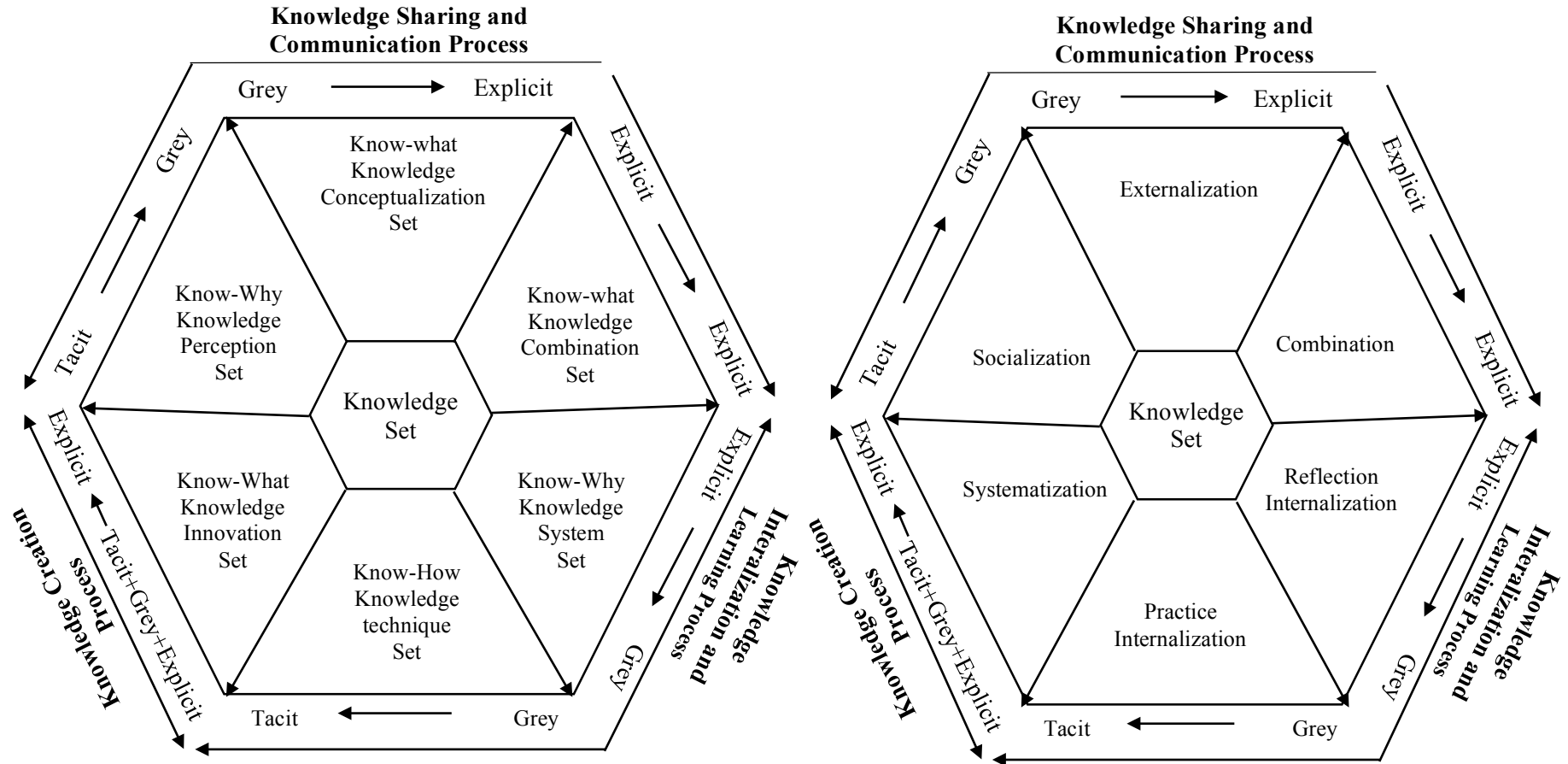


Figure 2.2: Grey SECI model (Li, Liu & Zhou, 2018, p.891)

analysis report (explicit knowledge) to explicate customer requirements in the thoughts (grey knowledge) of an analyst (Li, Liu & Zhou, 2018). The outcome of knowledge externalization is a “know-what knowledge conceptualization” set, which comprised of conceptually represented documents (Li, Liu & Zhou, 2018).

Knowledge combination is the process of converting individual explicit knowledge into organizational explicit knowledge (Li, Liu & Zhou, 2018). Knowledge combination involves standardized and institutionalized repositied organizational knowledge (Li, Liu & Zhou, 2018). The outcome of the standardization and institutionalization is a “know-what knowledge combination” set, which is comprised of the organization’s current technical files, data and information (Li, Liu & Zhou, 2018).

Knowledge internalization by reflection is the process of transforming explicit organizational knowledge into grey individual knowledge (Li, Liu & Zhou, 2018). Knowledge internalization by reflection can be achieved through reading and apprehension, in a way that the principles of finance are acquired by perusing relevant literature (Li, Liu & Zhou, 2018). In CoPS development, an example of knowledge internalization by reflection is the action of perusing demand analysis documents to understand the actual customer needs (Li, Liu & Zhou, 2018). This understanding of actual customer needs constitutes a “know-why knowledge system” set (Li, Liu & Zhou, 2018).

Knowledge internalization by practice is the process of converting grey knowledge into tacit knowledge (Li, Liu & Zhou, 2018). Knowledge internalization by practice can be conducted through the application of grey knowledge in practical ways like experiments, simulations and analogy (Li, Liu & Zhou, 2018). In CoPS development, an instance of knowledge internalization by practice is the application of knowledge of technologies in practice by CoPS designers to learn other designers' skills (Li, Liu & Zhou, 2018). A "know-how knowledge technique" set will be produced as the learning outcome, which encompasses product system development techniques (Li, Liu & Zhou, 2018).

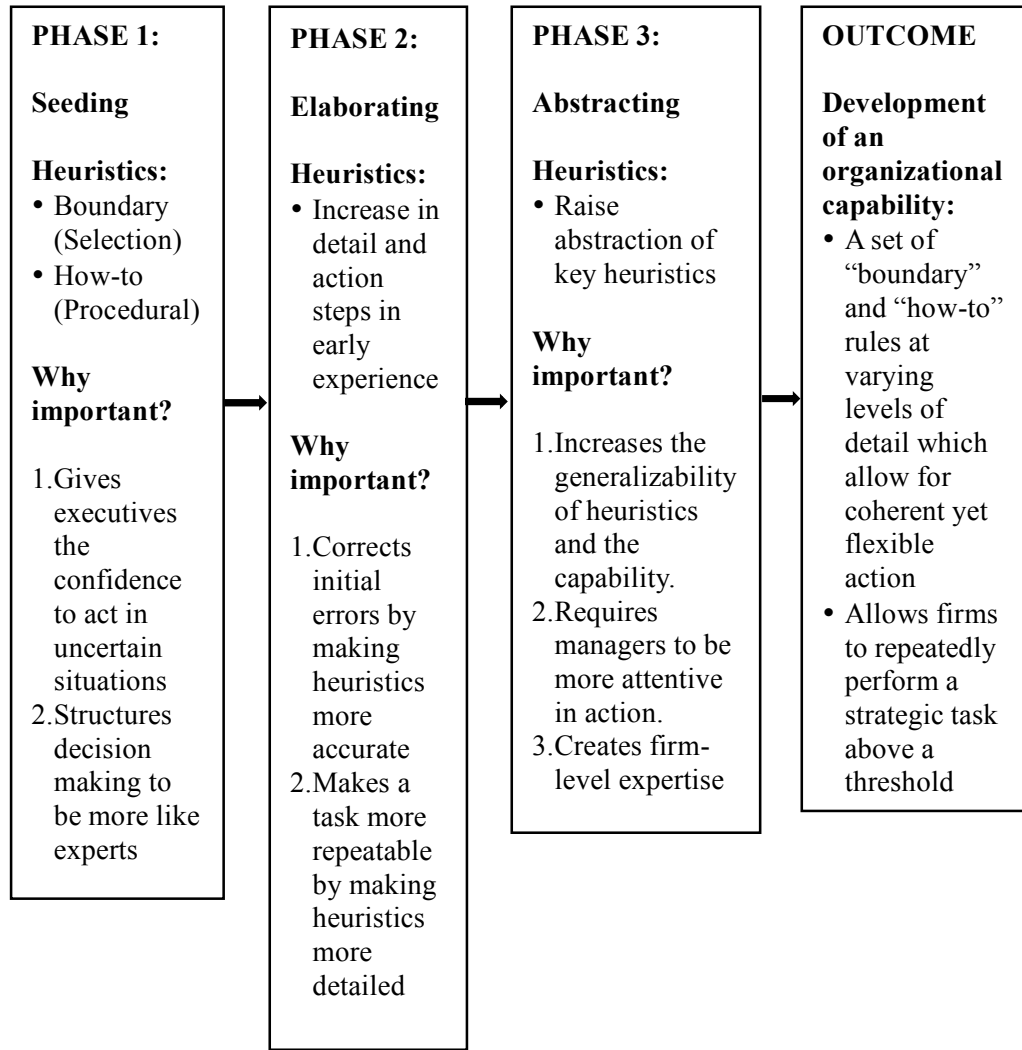
Knowledge systematization is the process of using individual tacit knowledge to combine grey knowledge and existing explicit knowledge so as to create novel explicit knowledge (Li, Liu & Zhou, 2018). In CoPS development, a "knowledge innovation" set that consists of data sets, technical files and program code sets is produced from knowledge systematization (Li, Liu & Zhou, 2018).

The grey SECI model may not be suitable to explain dynamic managerial capabilities building and the emergence of differences in strategic decisions leading to strategic changes. The outcome of the grey SECI model is explicit knowledge (Li, Liu & Zhou, 2018), which is codifiable and easy to imitate (Meso & Smith, 2000). As explicit knowledge can be easily copied, it may not contribute differences in strategic decisions. In addition, dynamic managerial capabilities are tacit (Martin & Bachrach, 2018).

2.1.3 Bingham, Howell and Ott's process model for developing a capability

The outcome produced from the knowledge creation process of Bingham, Howell and Ott's (2019) process model for developing a capability is explicit knowledge. As depicted in Figure 2.3 below, the explicit knowledge is a final set of efficient, and yet flexible heuristics in terms of rules to be received and followed by individual organization members in conducting internationalization activities, such as selecting choices of new country entry (Bingham, Howell & Ott, 2019). Bingham, Howell and Ott's (2019) process model explains a process of creating a capability, which involves the development of individual-level heuristics into a firm-level internalization capability to conduct internalization activities. The process model presumes that new explicit knowledge is generated from the update, combinations and refinements of the existing rules of running internationalization activities based on relevant experiences communicated and shared by individual organization members (Bingham, Howell & Ott, 2019).

Bingham, Howell and Ott's (2019) process model of capability creation consists of three sequential processes, namely seeding, elaborating and abstracting. Seeding is a firm's process of developing an internationalization capability that involves forming and using initial rough heuristics in its initial country entry (Bingham, Howell & Ott, 2019). The initial heuristics were formed by founders using logical reasoning, prior experience and managerial foresight (Bingham, Howell & Ott, 2019). These heuristics take the form of



The transition from the individual level to the firm level

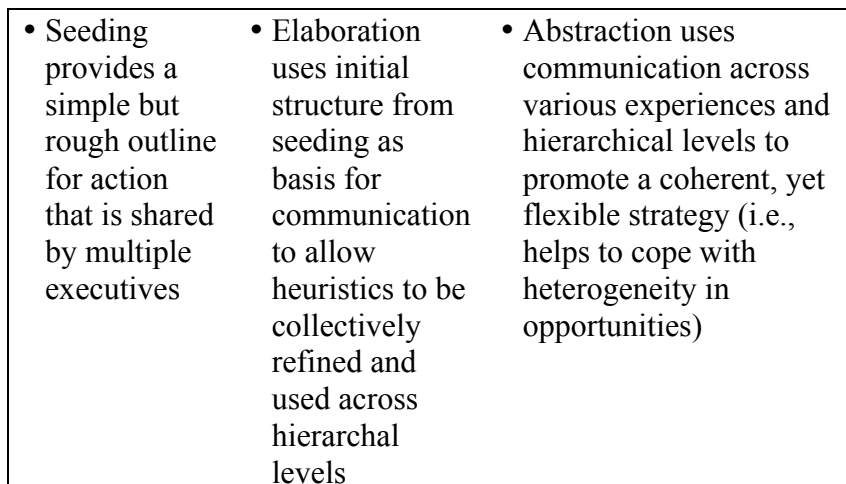


Figure 2.3: A model for developing a capability (Bingham, Howell & Ott, 2019, p.130)

few specific and simple rules for selecting opportunities (“boundary” rules) and a few rules for operating (“how-to” rules) internationalization activities to be commonly understood by executives and followed by organization members (Bingham, Howell & Ott, 2019).

Elaborating is a firm’s process of developing an internationalization capability that involves refining and extending the initial rough heuristics (Bingham, Howell & Ott, 2019). In the elaborating process, new rules or details were added to the existing rule according to the lessons learned by organization members across hierarchical levels from errors in the previous process of using the initial rough heuristics in internationalization activities (Bingham, Howell & Ott, 2019). As the outcome of the elaborating process, the heuristics were improved, more precise and complete (Bingham, Howell & Ott, 2019).

Abstracting is a firm’s process of developing an internationalization capability that involves generating “a broader, more general conceptualization of a heuristic that disassociated it from a particular instance” (Bingham, Howell & Ott, 2019, p.139). In abstracting process, heuristics produced from elaborating process were made more general by the executives of an organization to afford robustness and flexibility to organizational actions (Bingham, Howell & Ott, 2019). As the outcome of the abstracting process, the generalized heuristics enable internationalization capability to respond to different requirements of different internationalization opportunities (Bingham, Howell & Ott, 2019).

In overall, Bingham, Howell and Ott's (2019) process model of capability creation omits differences of individual managers that lead to different strategic decisions. The process model focuses on the knowledge creation process that communicates and uses commonalities among individual organization members' experience of internationalization to produce explicit simple rule for coherent, and yet flexible internationalization activities (Bingham, Howell & Ott, 2019). Although the codified rules are the same to all members of an organization, a variation may emerge among different receivers during internalization and learning process due to individual idiosyncrasy (Li, Liu & Zhou, 2018). In addition, codified knowledge can easily be copied (Meso & Smith, 2000). As dynamic managerial capabilities are tacit (Martin & Bachrach, 2018), the process model does not explain the way dynamic managerial capabilities are created.

2.1.4 Intuiting-Interpreting-Integrating-Institutionalizing (4I) model

Crossan, Lane and White (1999) assumed that organizational learning is identical to knowledge creation in their 4I model. They proposed the 4I model as a complement to March's (1991) study on the strategic renewal of an organization. The study examined the actions of exploring new possibilities and exploiting what the organization has already known. March (1991) implicitly assumed that knowledge is "justified true belief", while Crossan, Lane and White (1999) discussed the intuiting process as an individual knowledge creation with the implication that the process output is tacit

knowledge. Intuiting process involves only tacit knowledge because such process is unable to be expressed by a person (Crossan, Lane & White, 1999).

The 4I model follows sequential stages of intuiting, interpreting, integrating and institutionalizing (Crossan, Lane & White, 1999). An individual's knowledge creation contributes to his or her organization in the feed-forward processes and affected by the feed-back processes among these 4I (Crossan, Lane & White, 1999). As an individual knowledge creation activity, Intuiting is "the preconscious recognition of the pattern and/or possibilities inherent in a personal stream of experience" (Crossan, Lane & White, 1999, p.525). Crossan, Lane and White (1999) suggested two perspectives of intuition, namely expert intuition and entrepreneurial intuition. Expert intuition is a critical process of (past) pattern recognition that affords insight (Crossan, Lane & White, 1999). This type of knowledge creation reinforces exploitation (Crossan, Lane & White, 1999). Entrepreneurial intuition is the capability of generating distinct connections and identifying possibilities and new or emergent relationships (Crossan, Lane & White, 1999). Entrepreneurial intuition reinforces exploration and deals with innovation and change (Crossan, Lane & White, 1999).

Interpreting, Integrating and Institutionalizing are processes that emphasize on knowledge dissemination, group and organizational knowledge creation rather than individual knowledge creation. Interpreting is the process of communicating and clarifying an insight or idea to a person himself or herself and to others verbally and/or by execution (Crossan, Lane & White, 1999).

Thus, interpreting is similar to the Externalization of the SECI model. Integrating involves establishing a shared understanding between individuals and carrying coordinated action via reciprocal adjustment (Crossan, Lane & White, 1999). Institutionalizing serves the function of assuring that routinized executions are conducted (Crossan, Lane & White, 1999).

It appears that Intuiting is the most important knowledge creation activity in the 4I model. Particularly, it is the starting point of the knowledge creation processes (Crossan, Lane & White, 1999). Nevertheless, their explanations of how the intuiting process can be conducted and developed are restricted to the scholarly work done by Neisser (1976), Koestler (1976), and Prietula and Simon (1989). It seems that those explanations are insufficient to address how the intuiting process can be conducted and developed. Crossan et al. (1999) even suggested that the theory of learning is required to understand the subconscious which is important for learning about new things. Besides, Cook and Brown (1999) rejected the notion of explicit knowledge and tacit knowledge that can be transformed from one to another. The reason is that, even when an explicit knowledge is produced, the producer still possesses the tacit knowledge from which the explicit knowledge comes (Cook & Brown, 1999). In other words, tacit knowledge is not being converted, but it serves as a tool (Cook & Brown, 1999) or source in generating explicit knowledge.

2.1.5 Bridging epistemologies

There is an alternative view on what a person knows. Cook and Brown (1999) contended that what a person knows consists of knowledge and knowing. The differentiation is needed because knowledge is deemed to be something that a person owns while knowing is an aspect of action (Cook & Brown, 1999). The implication is that such ownership does not enable the owner to perform competently in the absence of knowing (Cook & Brown, 1999). Therefore, their theory of knowledge creation aims at generating both knowledge and knowing (Cook & Brown, 1999).

For knowledge, Cook and Brown (1999) proposed that there are four types of knowledge, namely individual's tacit knowledge, individual's explicit knowledge, group's tacit knowledge and group's explicit knowledge. The knowledge is the possession of the individual and group (Cook & Brown, 1999). Each form of knowledge is unique and carries an equal footing with the other three and has special functions different from others (Cook & Brown, 1999). The rationale of classifying knowledge as the perception of all knowledge is identical (e.g. March, 1991) leading to the theoretical deficiency in appreciating that differences exist in knowledge from the dimensions of explicit and tacit, and individual and group (Cook & Brown, 1999). It also leads to practical deficiency, which constrains one's ability to determine and strengthen these competencies (Cook & Brown, 1999). Nevertheless, Cook and Brown (1999) believed that all four types of knowledge are an instrument of

knowing because knowledge alone does not enable knowledge creation and acquisition.

For knowing, Cook and Brown (1999) suggested that it is the epistemic activity that happens and accompanies action or practice (Cook & Brown, 1999). Knowing is a part of action while action shapes or influences the physical and social world. The emphasis of knowing is on an individual's interaction and appreciating the world by using knowledge as a means (Cook & Brown, 1999). It is the base of the premise that for an individual to acquire knowledge is by doing it himself or herself (Cook & Brown, 1999). The action of doing is deemed to be the interaction between the individual and his or her world. In the action, the individual not only inter-plays with the world, but also encounters the properties of his or her interaction with the world. One type of properties that only appears in the interaction with the world is "affordance". Based on the seminal work of Gaver (1991; 1996), Cook and Brown (1999) perceived affordance as characterizing the connections between features of the world and things that inherently matter to people. For an illustration of the connection, affordance intrinsically indicates the meaning of whether something can or cannot be done (Lakowski, 2009) and also the way how it can or cannot be done by an individual. Cook and Brown (1999) developed the idea of affordance further as "dynamic affordance". The dynamic sense of affordance reflects that dynamic affordance arises as a portion of the action of doing (Cook & Brown, 1999). The action of doing may dynamically afford knowledge acquisition, knowing, new methods of applying knowledge and even "bridging epistemologies" (Cook & Brown, 1999). This has the

implication that developing the capability of performing a task requires knowledge interacting with the activity in the motion (Cook & Brown, 1999).

In Cook and Brown's view, knowing and dynamic affordance are only parts of the knowledge creation requirement (Cook & Brown, 1999). Their theory of knowledge creation is "bridging epistemologies" (Cook & Brown, 1999). Bridging epistemologies are the "reciprocal interplay between knowledge and knowing" (Cook & Brown, 1999). In the reciprocal interplay, knowing and knowledge have their own functions. The function of knowing is that it utilizes knowledge (individual tacit knowledge, individual explicit knowledge, group tacit knowledge and group explicit knowledge) as a means in an individual's interaction with the world (Cook & Brown, 1999). The function of knowledge is that it provides the shape and discipline to knowing (Cook & Brown, 1999).

Cook and Brown's (1999) assumption of knowledge as a possession of individual and group is questionable. Lakomski (2009) rejected the notion of an individual possessing cognition and that cognition lies in the brain. According to the theory of distributed cognition, cognition is diffused throughout humans, artifacts, 'the world', and the relationships held between them (Lakomski, 2009).

The theories of knowledge creation discussed previously paid different degrees of attention on individual's knowledge creation. It seems that the SECI model provides the least emphasis on individual knowledge creation. The theory assumes that an individual accumulates tacit knowledge parallel with their

experience or through interaction with others. Crossan's explanation on individual knowledge creation is largely central to intuiting. Cook and Brown focused on individual's action and knowledge. Previous personal experiences may limit the ability of an individual to create knowledge about a novel product and its application (von Hippel, 1986).

There is a lack of attention given on the impact of the perspective on knowledge creation. Evidence from the study of user innovation demonstrates that perspective can influence knowledge creation significantly (von Hippel, 1986). This is in line with Zhuāng Zǐ's opinion that all knowledge and action are shaped by perspectives (Soles & Soles, 1998). Given that the shortcomings exist in these influential theories of knowledge creation, a new concept of knowledge creation is needed.

2.2 Confucian theory of knowledge creation

In the Great Learning, knowledge is the ethic-centered "capacity to act" (Sveiby, 1997, p.37). The knowledge acquired from the way of Great Learning essentially enables an individual to be excellent in handling things for the welfare of his/her self, other people and the state (Cheng, 1974). These include the competencies of order in his/her own nations and regulate his/her family (Legge, 1893). Equipping an individual with competencies through self-cultivation is one of the requirements to achieve the main objective of teaching in the Great Learning. The main objective is to guide a person on how to be a Dà Rén or a profound person. Dà Rén is an individual, who aspires to learn,

achieves high standard of self-cultivation capability and possesses an advanced level of practical knowledge (Nán, 2008).

The author of the Great Learning, Zēng Zǐ (505-435 BCE) (Koller, 2012) assumed that knowledge is created by the knower. The knower in the Great Learning does not refer to an individual, but the nature of illustrious virtue that performs the function of knowing (Nán, 2008). The illustrious virtue is the function of Dào, which is the psychological state and its resulting behavior of the human being started from the body of Dào (Nán, 2008). In other words, the illustrious virtue is human nature (Nán, 2008). Zēng Zǐ believed that morality is the actual human nature, which shall be termed illustrious virtue (Nán, 2008). The knower performs knowing within the illustrious virtue in order to generate knowledge (Nán, 2008).

The Great Learning teaches a way of cultivating self-awareness on the illustrious virtue in order to master and utilize the knower for creating knowledge (Nán, 2008). The way consists of seven steps in sequence, namely Zhī or known, Zhǐ or rest, Dìng or determination, Jìng or calmness, Ān or repose, Lù or deliberation and Dé or attainment (Legge, 1893). Firstly, Zhī involves observing what has already been known (Nán, 2008). Secondly, Zhǐ entails identifying the point of where to rest upon reflecting on what has already been known (Nán, 2008). Thirdly, Dìng is an action of being determined on the point of where to rest. Fourthly, Jìng is a practice of arriving at a calm unperturbedness from being determined (Legge, 1893). Next, Ān is an effort which one strives to get to a tranquil repose from the calmness (Legge,

1893). As the sixth step, Lù involves conducting a thoughtful deliberation in that calmness (Legge, 1893).

In the final step, Dé entails attaining the illustrious virtue through deliberation (Nán, 2008). Attaining the illustrious virtue means that human nature is fully understood (Nán, 2008). Understanding human nature thoroughly is the first of two requirements of knowledge creation in the Great Learning (Nán, 2008).

To create knowledge that is excellent for handling things, the second requirement of knowledge creation in the Great Learning is to understand the nature of things thoroughly (Nán, 2008). Understanding the nature of things completely starts from the investigation of things (Nán, 2008). The investigation of things is the conduct of ‘dwelling’ in things that are to be investigated and become part of the investigator (Nán, 2008). Things and the investigator becoming one entity is an enabling condition to know the root of the knower (Nán, 2008). When the root of the knower is known, the nature of things and events will be understood thoroughly at the same time (Nán, 2008). The reason being the root of the nature of things and the root of the knower are simply two sides of the same coin (Nán, 2008).

2.3 Daoist theory of knowledge creation

One of the main aims of Daoism and Zhuāng Zǐ’s philosophy in particular is to create great knowledge (Lai, 2008b). Great knowledge is the performance-centered “capacity to act” (Sveiby, 1997, p.37), which may be created from the

completion of “the fasting of the heart”. The fasting of the heart is a well-known Daoist way of creating knowledge, which is recorded in the writing of Zhuāng Zǐ (Allen, 2010; Ivanhoe, 1993). The fasting of the heart is a Daoist way of self-cultivation to attain the vacancy within the heart for creating knowledge (Allen, 2010; Ivanhoe, 1993), which assumes that the vacancy “allows fullness to fulfill its effect... [in other words], the full is effective through the emptiness of the empty” (Allen, 2010, p.465).

Zhuāng Zǐ provided an example of great knowledge that is created with the fasting of the heart, which is the carving skill of woodcarver Ch’ing (Kjellberg, 1994). Ch’ing made a bell stand that was deemed to be the work of gods by everyone who saw it (Watson, 1968). Ch’ing explained that he fasted his heart before he carved a piece of wood to make the bell stand (Watson, 1968).

The fasting of the heart served at least three functions to Ch’ing. In his preparatory stage, Ch’ing can focus his attention in order to maintain a high level of concentration (Watson, 1968). After his heart fasted, Ch’ing was able to observe the heavenly nature of wood and select a tree with the superlative form (Watson, 1968). From the superlative form, he could see a bell standing within the tree and carved the wood by matching up the heavenly nature of Ch’ing with the heavenly nature of wood (Cline, 2008). The skill of Ch’ing shows that the great knowledge created from the fasting of the heart is not only effective, but also innovative.

The fasting of the heart is conducted based on the assumption that knowledge is created by spiritual intelligence (Nán, 2007a). Spiritual intelligence is the inner ability to understand, to apprehend, practice and attain *Dào* (Nán, 2003). The fasting of the heart is a meditative way of self-cultivation to attain *Dào* (Nán, 2007a). Spiritual intelligence emerges after enlightenment is achieved (Nán, 2007a).

Creating knowledge through the fasting of the heart requires the accomplishment of six stages of exercise, which are connected to each other sequentially. The first stage of the fasting of the heart is “losing oneself”. Losing oneself is the state of heart in which a meditator may experience upon successfully practicing the steps as provided in this stage. The first step of this stage demands that the meditator has to be concentrating (Lin, 1942). To be concentrating, one needs to start listening with the heart rather than with ears (Lin, 1942). Then, the concentration can further be improved by listening with the breath rather than with the heart (Nán, 2007a).

There are important rationales behind these practices. The reason is that it is difficult to concentrate since thoughts are flowing continuously from the heart and are not stoppable with ease (Nán, 2007a). The phenomena are common and especially true during meditation (Nán, 2007a). Listening with the breath is needed to encounter the problem by focusing on dwelling in the breath towards the moment between exhaling and inhaling the air (Nán, 2007a). As the moment between exhaling and inhaling the air is in the state of emptiness, the state of heart may become vacuous (Nán, 2007a). When vacuity is attained,

ears will listen to no external sound while the heart will have no thoughts (Nán, 2007a).

The second stage of the fasting of the heart is “alienating heart from the external environment”. The stage of “alienating heart from the external environment” has the purpose of developing the vacuity attained in the previous stage for it to stay still in a meditator. The reason being is that the meditator may be influenced by external environment and unable to sustain vacuity even though he or she is able to lose him or herself (Nán, 2007a). “Alienating heart from the external environment” involves entering vacuity and encountering disturbances without the need for any techniques (Nán, 2007a). At this stage, the meditator should feel that the heart is like a person staying in an empty apartment and the apartment is his or her own human body (Nán, 2007a). The feeling shows that there is nothing in the meditator’s heart (Nán, 2007a).

The third stage of the fasting of the heart is “keeping prejudice-free”. “Keeping prejudice-free” is conducted by avoiding from holding still any perception, especially those arising from self-esteem and emphasizing on the differences between the self and non-self (Nán, 2007a). Holding a perception may lead to prejudice as this action may be a preference generated by an individual in favor of certain perceptions and which causes him to remove other perceptions. This was evident in the case of a man who held a perception when his axe was stolen by a neighbor, an incident which was recorded in the chapter of “explaining conjunctions” in Liè Zi’s text (Graham, 1990). The text is an

important book of philosophical Daoism, which shares a number of passages that can be found in Zhuāng Zǐ's text (Graham, 1990). In the case, the man was influenced by the wrong perception and perceived the behavior of the suspected neighbor as indicative of a thief whose axe was stolen (Graham, 1990). However, the behavior of the suspected neighbor was no longer suspicious to the man after he found the axe in his garden (Graham, 1990). It is evident that the recover of lost axe is a knowledge, which alters the perception of the man. This perception-changing capacity of knowledge is still relevant to current business context. For example, Cham, Lim, Sia, Cheah and Ting (2020) discover that the knowledge about Malaysia possessed by the tourists from China considerably affects the image of Malaysia in the perception of these tourists to be a preferred choice for medical tourism.

Next, the thought of avoiding the act of holding still of any perception needs to be realized and reflected through practice in real life (Nán, 2007a). the resulting outcome from practice may justify whether a perception is real (Nán, 2007a). It is honesty if one is not fooled by false perception, be it from the person himself, herself or other people (Nán, 2007a).

The fourth stage of the fasting of the heart is “becoming wise with not-knowledge”. “Becoming wise with not-knowledge” entails creating wise knowledge by casting away knowledge (Chang, 1977). Non-knowledge is the wise knowledge created by casting away knowledge and unmediated inner awareness (Chang, 1977). Hence, the relationship between non-knowledge and knowledge is similar to those between Lǎo Zǐ's Wú Wéi or non-action and

action (Allen, 2010). As non-action is free from action and is more effective for getting everything done, non-knowledge is free from knowledge and is more effective for producing true insights (Chia, 2003).

The fifth stage of the fasting of the heart is “attaining fixity”. At this stage, the meditator begins to observe the state of absolute nothingness (Nán, 2007a). Although the eyes are closed, there is a bright light that shines in the empty apartment, where the heart resides (Nán, 2007a). Then, the meditator attains fixity by having determination in repose (Nán, 2007a). Fixity is the state of heart when wild perceptions cease to emerge (Nán, 2007a).

The final stage of the fasting of the heart is the “emergence of the spiritual intelligence”. This is the stage in which the meditator arrives at enlightenment and attains *Dào*. In this stage, the meditator’s ears hear inwardly rather than the voices from the environment that is external to the human body regardless of its loudness (Nán, 2007a). At the same time, the meditator’s eyes see inwardly rather than the environment that is external to the human body (Nán, 2007a). Then, the meditator keeps the perceptions, thought, the knower and what is known out of the heart in order to attain *Dào* (Nán, 2007a). After that, spiritual intelligence will emerge and enable the meditator to know everything (Nán, 2007a).

2.4 Comparison between Confucian and Daoist concepts of knowledge creation

There are differences in the views of knowledge and knowledge creation between Confucianism and Daoism. This section provides systematic comparisons of the two most important Chinese philosophies to examine appropriate ideas for studying strategy innovation rather than arguing for the superiority of either philosophy. Table 2.1 below provides a summary of the comparisons. In the following discussion, the comparisons begin from the central tenet of each philosophy and followed by its notion of knowledge creation working as an appropriate way of how the philosophy's main idea may be achieved. For the last comparison, knowledge may be viewed as an outcome of the philosophy's knowledge creation process, which shows an ideal state that the philosophy strives for. These three differences between the two philosophies shall demonstrate the rationale of selecting Daoism in the research for studying strategy innovation.

Confucianism is a way (Dào) of realizing the full potential of human nature to be competent, ethical and fully human via moral self-cultivation for the primary aim of establishing a harmonious world and society (Koller, 2012). Confucian thinkers believe that equipping each individual with morality is essential for the society and its members to thrive (Koller, 2012). The requirement may be complied by cultivating human-heartedness, which is the central tenet of Confucianism (Cheng, 1974). Confucius defined human-heartedness as “subdue oneself and return to ritual” (Hsu, 2000, p.331).

Confucius is the founder of Confucianism (Shen, 2014). “Subdue oneself and return to ritual” means purify one’s thinking by overcoming unethical thoughts, negative emotion and personal bias, so that he or she is developing toward the state of being fully occupied by right-thinking (Nán, 2003). Such state of being fully occupied by right-thinking is ritualistic (Nán, 2003).

Table 2.1: Comparisons of Western, Confucian and Daoist notions of knowledge creation

	Western	Confucian	Daoist
Theories of knowledge creation	SECI model 4I model Bridging epistemologies	The great learning	The fasting of the heart
Knowledge is created by	Knowledge conversion (SECI model) Intuition (4I model) Interaction between knowledge and knowing (Bridging epistemologies)	The knower	The spiritual intelligence
Concept of knowledge	Justified true belief	Ethic-centered capacity to act	Performance-centered capacity to act
Emphasis of knowledge creation	Ability to explicate for the justification of being true belief	Purification of thinking	Attain the highest knowing capability

“Subdue oneself and return to ritual” is similar to cultivating self-awareness on the illustrious virtue in the Great Learning (Nán, 2003). Although purifying one’s thinking is a great challenge, it is imperative as both right and wrong

thoughts are flowing constantly in a common person (Nán, 2003), with the challenge being that the controlling flows of thought are not feasible to a common person, especially for the purification of thinking (Nán, 2003). The purification of thinking requires a state of heart that is calm and repose (Nán, 2003). In other words, “subdue oneself and return to ritual” may be achieved by practicing known, rest, determination, calmness, repose, deliberation and attainment in the Great Learning. The seven steps of self-cultivation in the Great Learning can be served as a practical guide of how “subdue oneself and return to ritual” can be achieved (Nán, 2003). As discussed in the previous section, self-cultivation in the Great Learning enables an individual to master the knower in order to create knowledge.

The Confucian concept of knowledge is identical with the Great Learning, which is the ethic-centered capacity to act. Pragmatic (Stephens, 2009) and ethical elements are core to the Confucian concept of knowledge as does its emphasis on the ability to perform and morality; “Tzu-hsia said: I would grant that a man has received instruction... who exerts himself to the utmost in the service of his parents... and who, in his dealings with his friends, is trustworthy in what he says, even though he may say that he has never been taught” (Lau, 1979, p.60). The comment shows that although an individual has never pursued academic activities, he or she is deemed to be equipped with knowledge by Confucian for his or her competency in the service and moral quality. Confucius shared a similar idea of knowledge: “The master said: The gentleman is ashamed of his word outstripping his deed” (Lau, 1979, p.128). The assertion demonstrates that Confucius praised exemplary actions over

words and it also signifies the conception of knowledge is in line with Confucianism's primary purpose and serves as a critical means for establishing a harmonious world and society.

Daoism is “a way of living well by realizing the harmony of heaven, earth, and humanity and by realizing peace and harmony within society and within the individual person” (Koller, 2012, p.217). The central tenet of Daoism is to place actions in accordance with *Dào*, which is the way of living in tune with the whole universe (Koller, 2012). The belief is based on the premise that the unseen order regulating the universe naturally is the ultimate guide for ideal human actions (Koller, 2012). Intuition is required in referring to *Dào* as it is only accessible through inner apprehension (Hall, 1978).

A better understanding of Daoism can be made by comparing this philosophy with Confucianism (Lai, 2015). There are various views on the connections between Daoism and Confucianism, such as competing school of thoughts, a criticism from one to another, and a reinforcement to commonalities between the two (D'Ambrosio, 2020a). Daoism and Confucianism are complementary to one and another as there are commonalities between their core ideas (D'Ambrosio, 2020a; Lai, 2015). Both philosophies share a deep concern about the correspondence between names and actualities, self-cultivation in accordance to natural human dispositions for a better self and to influence other people, conceptions of the person (D'Ambrosio, 2020a), political theory of non-action and virtuosity, morality, virtues, human nature and *Dào* (D'Ambrosio, 2020b; Lai, 2015). The most representative example of

Confucianism and Daoism that complements each other can be found in the topic of morality because it is the most complex, regularly explored, and contested topic within and among the two philosophies (D'Ambrosio, 2020b).

In Daoism's criticism and within the awareness of Confucius, Confucianism's morality advocacy may lead to the institutionalization of virtues into abstract and rigid rules to be followed by people and do not correspond to the proper feelings (D'Ambrosio, 2020a). Although these moral rules are devised by the sages, they can be stolen and exploited by unethical rulers who are comparable to robbers to secure their position and remain in power (Chong, 2016). The Daoism's criticism implies that the moral teachings of Confucianism may only promote inauthentic virtues or superficial virtuous behaviors. The direction of the Daoism's criticism is therefore leaning more towards the institutionalization of the virtues (D'Ambrosio, 2020a). This shows that the purpose of Daoism's criticism is to raise the awareness of limitations of Confucianism rather than to replace Confucianism.

Daoism does not reject Confucian virtues (Lai, 2015), but advocates for superior virtue (Culham, 2015). In Daoism, superior virtue is a first-rate virtue, which is evident from its notion of "great humaneness is not humaneness" (D'Ambrosio, 2020a, p.8). In comparison to normal humaneness, great humaneness is impartial and beneficial to everything without restricting its beneficiary to humanity alone (Lai, 2015). Therefore, great humaneness is superior and a first-rate virtue for the equality in its treatment of all things.

Acting as a complement to Confucianism, Daoism's promotion of superior virtue is a way to overcome the limitations of Confucianism. The practice of superior virtue is a solution to Confucianism's potential problem of disjunction between the names of virtues and actualities of virtues leading to inauthentic virtues or superficial virtuous behaviors. Superior virtue is innate within people and requires the cultivation to emerge un-selfconsciously (Culham, 2015). Superior virtue is a genuine virtue because emergent virtuous behavior comes naturally rather than artificially as in the case of self-conscious virtuous behavior, which contains the consciousness of self-benefit (Culham, 2015). As the emergent virtuous behavior corresponds to the innate quality of an individual, superior virtue can remedy Confucianism's potential problem of disjunction between the names of virtues and actualities of virtues.

Despite the shared concerns and similarities between Confucianism and Daoism, the two philosophies have key differences. The key differences emerge from the distinctive focus of each philosophy. Confucianism focus on an individual's well-being resulting from the individual's harmonious relationships with other people and behaviors as a member of a group of people, such as family, neighborhoods (Lai, 2015) and society (Chinnery, 1996). As priority is given to human relationships, Confucianism becomes a moral philosophy and advocates for moral transformation to establish the harmony between humans to overcome all societal problems (Liu, 2006).

Due to its focus on human relationships, Confucianism has three most important characteristics that reflect its key differences from Daoism. Firstly,

Confucianism uses its single most prominent term “Dào” to denote “the way primarily of humans” (D’Ambrosio, 2020b, p.9). Secondly, Confucianism’s major method of self-cultivation is learning through studying texts and emulating rolemodels (Lai, 2015), which require regular practices to be able to utilize and apply the result of self-cultivation (D’Ambrosio, 2020a). In Confucianism, studying texts is complemented by thinking to learn about appropriate things, apply what is studied, avoid confusion and dangerous thoughts (D’Ambrosio, 2020a). Emulating role models is a way of develop and uncover the value of ideal or ethical behaviors of role models by imitating these behaviors (D’Ambrosio, 2020a). Thirdly, the result of Confucian cultivation is an increase in an individual’s competency in having meaningful engagements with different people and leading others to do so (Lai, 2015).

In comparison to Confucianism, Daoism focuses on an individual’s well-being resulting from the individual’s harmonious relationships with nature, which includes the natural environment, all life and human as a member of the nature (Lai, 2015). As priority is given on the relationship between humankind and nature, Daoism suggests that an individual’s actions should be in alignment with Dào, which is the way for living in harmony with the whole universe (Koller, 2012). The harmony between humankind and nature can be achieved through the alignment with Dào because Dào is “the underlying unity of all things as well as the underlying source of the life of all things” (Cheng, 1986, p.356).

Due to its focus on relationship between humankind and nature (Kohn, 2020), Daoism has three comparable characteristics that reflect its key differences from Confucianism. First, “Dào” is also the single most prominent term in Daoism, which refers to the ultimate origin of all things that exists metaphysically (Cheng, 1986; Kohn, 2020). Therefore, the Dào of Daoism is comparatively naturalistic or cosmic whereas the Dào of Confucianism is comparatively humanistic (D’Ambrosio, 2020b, p.9). Secondly, Daoism’s major method of self-cultivation is an inner experiential grasp of Dào through intuition (Lai, 2008a; Roth, 1991). An inner experiential grasp of Dào is achievable through the avoidance of all deliberate actions and the stilling of thought to empty the mind so that metaphysical knowledge about Dào can emerge (Roth, 1991). There are many techniques of Daoist cultivation that offer various specific steps toward the inner apprehension of Dào. The fasting of the heart is an example of Daoism’s self-cultivation to attain Dào (Nán, 2007a). As the fasting of the heart involves attaining fixity and entering vacuity that are consistent with the stilling of thought to empty the mind, the example signifies that mental tranquility and emptiness are the essential and defining features of Daoist cultivation.

Thirdly, the result of Daoist cultivation is the advancement of an individual’s creativity in the application of the individual’s skills (Lai, 2015). These differences between Daoism and Confucianism show that they come from different focus of the two philosophies.

With respect to knowledge creation, the inner apprehension of *Dào* is a process of creating knowledge (Hall, 1978). The process involves a way of breathing exercises in order to control the body and mind, which leads to the liberation of the spirit and appearance of knowledge (Shien, 1953). The process shows that Daoist's knowledge creation requires three types of exercise, namely biological exercises, the psychological exercises and spiritual exercises (Shien, 1953).

These exercises can be found in Zhuāng Zǐ's theory of knowledge creation or "the fasting of the heart". Firstly, the biological exercises may correspond to the "listening with breath", which can be found in the first stage of the fasting of the heart. The stage is the starting point of the fasting of the heart that involves breathing exercise.

Secondly, the psychological exercises may correspond to "alienating heart from the external environment", "keeping prejudice-free", "becoming wise with not-knowledge" and "attaining fixity". These stages of the fasting of the heart entail mental activities.

Finally, the spiritual exercises may correspond to the "emergence of the spiritual intelligence" as both suggest the liberation of spirit. Overall, the fasting of the heart may be representative of a theory of knowledge creation of Daoism.

Zhuāng Zǐ's thinking is representative to Daoism. Zhuāng Zǐ's text is one of the two main resources that give rise to Daoism (Xie, 2000). It is also one of

the two “founding” Daoist classics (Møllgaard, 2007) that teaches philosophy and practice related to *Dào* to provide guidance on the way to attain it (Cleary, 1993). The central tenet of Zhuāng Zǐ’s philosophy is the cultivation of oneself to become a perfected person and perfecting this individual’s actions in accordance with *Dào* (Mair, 2000). In Zhuāng Zǐ’s text, the fasting of the heart is suggested as a way to become a perfected person (Mair, 2000). Section 2.3 describes specific steps of the fasting of the heart and how these steps lead an individual to the attainment of *Dào*. This shows that the central tenet of Daoism and Zhuāng Zǐ’s philosophy is the same, which is to use *Dào* to guide their practices.

The knowledge to be created by Daoists is great knowledge; the performance-centered “capacity to act” (Sveiby, 1997, p.37), which is essential in attaining their primary aspiration of a harmonious life (Allen, 2010). Great knowledge provides great effectiveness in achieving the desired efficacy, a way of nourishing life and function that is constant (Allen, 2010). In being effective, great knowledge is grounded on the understanding of natures of events, not extrinsic characters of events constituting activity to be pursued (Hall, 1978). The understanding of natures of events conceives possible orders of nature (Hall, 1978). With the virtual possibilities, great knowledge throws light on the incipient, where transformation is incepting, and thus capable of collaborating with the virtual potentials of a condition (Allen, 2010). Collaboration functions continuously by which the Daoists inter-fuse with all things and situating as a felt unity (Hall, 1978).

The Daoist's concept of knowledge is identical to that of Zhuāng Zǐ's. In the opening passage of "Nourishing the lord of life" chapter, Zhuāng Zǐ warned that it is perilous for a person to exhaust his or her limited life to pursue knowledge that is limitless (Legge, 1891). A need to overcome the potential perilous outcome provides a strong reason in Zhuāng Zǐ's philosophy to strive for knowledge that offers great efficacy, a way of nourishing life and functions constantly. Following the warning, Zhuāng Zǐ illustrated an image of great knowledge with the story of "Cook Ting" as a metaphor:

"Cook Ting was cutting up an ox for Lord Wen-hui. At every touch of his hand, every heave of his shoulder, every move of his feet, every thrust of his knee - zip! zoop! He slithered the knife along with a zing, and all was in perfect rhythm, as though he was performing the dance of the Mulberry Grove or keeping time to the Ching-shou music.

"Ah, this is marvellous!" said Lord Wen-hui. "Imagine skill reaching such heights!"

Cook Ting laid down his knife and replied, "What I care about is the Way, which goes beyond skills. When I first began cutting up oxen, all I could see was the ox itself. After three years I no longer saw the whole ox. And now - now I go at it by spirit and don't look with my eyes. Perception and understanding have come to a stop and spirit moves where it wants. I go along with the natural makeup, strike in the big hollows, guide the knife through the big openings, and

follow things as they are. So I never touch the smallest ligament or tendon, much less a main joint.

"A good cook changes his knife once a year-because he cuts. A mediocre cook changes his knife once a month-because he hacks. I've had this knife of mine for nineteen years and I've cut up thousands of oxen with it, and yet the blade is as good as though it had just come from the grindstone. There are spaces between the joints, and the blade of the knife really has no thickness. If you insert what has no thickness into such spaces, then there's plenty of room - more than enough for the blade to play about it. That's why after nineteen years the blade of my knife is still as good as when it first came from the grindstone." (Watson, 1968)

The great knowledge in the story lies in Cook Ting's ox carving skill, which allowed him to maintain his knife sharp like a new one even though it was used for nineteen years. Cook Ting's ox carving skill is great in terms of the fact that there is no answer for the limit of his knife's life span while knives used by average and good cooks only last for one year and one month respectively. As a metaphor, the knife may represent human life in the story to hint that Cook Ting's ox carving skill is a way of nourishing life (Cook, 1997). It means Cook Ting's ox carving skill is not just applicable in preserving the usage of the life time of his knife, but the knowledge behind it may also be applied in nourishing human life (Cook, 1997).

A key to Cook Ting's skill is that he was utilizing spiritual intelligence rather than sensing in his ox carving (Cook, 1997). Cook Ting revealed that the spiritual intelligence functions continuously for his marvelous ox carving while senses ceased at their boundary (Cook, 1997). Living according to the nature is needed for nourishing human life (Cook, 1997). It is the spiritual intelligence that grasps the nature of things in the virtual depth (Cook, 1997).

In comparison with Confucianists' method, the Daoist way uses the highest knowing capability for creating knowledge. In their knowledge creation, Confucianists use the knower while Daoists employ spiritual intelligence. The knower is the function of illustrious virtue, which is another term that represents the heart (Nán, 2008). This means Confucianists' knowledge creation is the utilization of the function of the heart. In contrast, Daoists empty the function of the knower as part of their effort in the fasting of the heart to call forth the emergence of spiritual intelligence (Nán, 2007a). The spiritual intelligence is the highest knowing capability and superior to the knower in terms of creating great knowledge (Nán, 2007b). The spiritual intelligence emerges from absolute nothingness, which serves as the essential ground for the birth of all creation, including the knower, knowledge and action (Chang, 1977; Nán, 2007b; Shien, 1951). The functioning of human nature needs space provided by the emptiness of absolute nothingness rather than knowledge, thought and emotion that may brim over the heart (Nán, 2007a; 2007b). Thus, it may be suggested that Daoists focuses on using the very source of human power to know about the knowledge creation.

Great knowledge created from the Daoist way has great efficacy and is more appropriate to be applied in strategy innovation to generate new wealth. As Confucianists focus on generating knowledge that enables an individual to perform well with what is complied with morality, Daoists stress on producing knowledge that has a high level of greatness. In the perspective of Daoism, small knowledge is unable to achieve what can be accomplished with great knowledge (Watson, 1968). In the context of management, performance is deemed to be determined by knowledge (Chia, 2003). It implies that new wealth may be created with great knowledge, while average wealth may be generated with small knowledge. A metaphor of great knowledge was given by Zhuāng Zǐ:

“In the Northern Ocean there is a fish, the name of which is Kun, – I do not know how many li [1 li = ca. 500 m] in size. It changes into a bird with the name of Peng, the back of which is (also) – I do not know how many li in extent. ...When the Peng journeys to the Southern Ocean it flaps (its wings) on the water for 3000 li. Then it ascends on a whirlwind 90,000 li, and it rests only at the end of six months... (so it is with) the accumulation of wind; if it is not great, it will not have the strength to support great wings. Therefore (the Peng ascended to) the height of 90,000 li, and there was such a mass of wind beneath it; thenceforth the accumulation of wind was sufficient. As it seemed to bear the blue sky on its back, and there was nothing to obstruct or arrest its course, it could pursue its way to the South.”
(Legge, 1891)

In the metaphor, great knowledge is represented by the whirlwind, which enables the Peng to ascend 90,000 li (Nán, 2007a). The accumulation of wind is analogical to the development of knowledge with respect to achieving sufficient strength to support great achievement (Nán, 2007a). The stronger the strength, the greater the achievement, and the greater new wealth will be generated. There are at least three dimensions of great knowledge implied in another three metaphors given by Zhuāng Zǐ. Firstly, great knowledge requires a large capacity (Nán, 2007a). Much like whirlwind supports great wings, deep water is required to carry a big boat:

“If water is not heaped up deep enough, it will not have the strength to support a big boat. Upset a cup of water in a cavity, and a straw will float on it as if it were a boat. Place a cup in it, and it will stick fast; – the water is shallow and the boat is large.” (Legge, 1891)

If the heart is the seat of knowledge, its capacity must be sufficiently big in order to accommodate great knowledge (Nán, 2007a). This is consistent with an assumption of the fasting of the heart. The assumption is to cultivate a heart that is completely empty, so that it offers the greatest room for great knowledge.

Secondly, great knowledge needs foresight (Nán, 2007a). This need may be identified from an observation that foresees a long distance in an upcoming trip

which is important for making sufficient preparation to cater for the travel need of food:

“He who goes to the grassy suburbs, returning to the third meal (of the day), will have his belly as full as when he set out; he who goes to a distance of 100 li will have to pound his grain where he stops for the night; he who goes a thousand li, will have to carry with him provisions for three months.” (Legge, 1891)

The food preparation is part of a plan for long distance travel, which is a big move, and hence may represent a great action. It means that foresight is needed to support great action, at least by providing a sense of direction for how preparation should be done and for the co-ordination of little actions.

Thirdly, great knowledge requires living experience. The longevity of life provides a living experience on the changes that happen within its time frame:

“(the experience of) a few years does not reach to that of many. How do we know that it is so? The mushroom of a morning does not know (what takes place between) the beginning and end of a month; the short-lived cicada does not know (what takes place between) the spring and autumn. These are instances of a short term of life. In the south of Ku, there is the (tree) called Ming-ling, which spring is 500 years, and its autumn the same; in high antiquity there was one called Ta Khun, which spring was 8000 years, and its autumn the same. And

Master Peng is the one man renowned to the present day for his length of life: if all men were (to wish) to match him, would they not be miserable?" (Legge, 1891).

The example of the short-lived cicada shows that its life is too limited for it to experience the changes of four seasons. The metaphor implies that changes beyond the scope of the living experience of the inquired person may not come into the knowledge of the inquired person. It would be miserable for any individual to ground his or her belief on a limited scope of living experience, and holds what he or she knows is true. He or she may fall under the situation faced by the short-lived cicada as what is known may change as time goes by until its finite years remain unknown while the life of an individual is limited.

On the other hand, those who know the shifts of four seasons should be able to understand the changes of daytime and nighttime. It means that a large scope of living experience is able to access both big and little changes, while a small scope of living experience is able to identify the latter only. Hence, great living experience is required in order to accommodate big changes. Knowing the shifts of four seasons implies understanding changes to be adopted as a lesson to be applied in handling future conditions.

An example of how the three dimensions of great knowledge work together would be in the farmers of ancient China starting their plantation in spring and storing up grains in their barns with sufficient capacity during autumn to prepare for the winter. Like the ancient farmers generating considerable grains,

strategy innovation that creates new wealth may be realized through the high effectiveness of these dimensions of great knowledge.

2.5 Comparison between Western and Daoist concepts of knowledge

The essential outcome of strategic learning and capturing experience is knowledge. To identify the definition of knowledge adopted in the research, this section compares the concepts of knowledge from the Western and Daoism perspectives. A summary of the comparisons has been provided in Table 2.1 in Section 2.4.

Daoism concept of knowledge is different from the Western philosophy (Hansen, 1985). In the Western culture, knowledge is widely accepted as “justified true belief” (Hansen, 1985; Chia, 2003). Knowledge is a kind of belief about fact (Hansen, 1985). Fact has the characteristic of either being clarified as true or false which requires justification (Hansen, 1985). In effect, justification creates the priority on making knowledge explicit to communicate a statement of fact effectively (Chia, 2003).

Explicit knowledge is transferable through language (Nonaka, 1994), codifiable, articulable, and tractable (Lam, 2000). A feature of managing explicit knowledge for organizational purposes is the usage of information system that can store, retrieve, record, transfer, rearrange and process this type of knowledge. Nevertheless, explicit knowledge that is separated from the human body may best be seen as information (McDermott, 1999). The reason

being is that the target recipients must rely on their tacit dimension (Polanyi, 1966) to grasp the meaning of explicit knowledge for it to be understood (Polanyi, 1969). The relationship between meaning and explicit knowledge is similar to the relationship between the prey and tool in Zhuāng Zǐ's perspective (Watson, 1968).

For Zhuāng Zǐ, making a valid justification on the fitness of language with reality is problematic (Lai, 2006; Soles & Soles, 1998). Zhuāng Zǐ claimed that the judgment about reality and truth is perspective-bound (Chan, 1963; Wu, 1991; Soles & Soles, 1998; Zhang, 1999; Hao, 2005; Lai, 2006). Since every person is perspective-bound, there is an absence of an independent position in which others may be arbitrated (Graham, 1969). Furthermore, Lai (2006) argued that the debate in the "reality" itself cannot be correctly resolved by referring to the "facts" of the matter. In addition, justifying the theory against reality is based on the assumption that reality is stable and universal (Lai, 2006). Hence, the premise of justification as the basis of knowledge is questionable and impossible to be free from bias (Graham, 1969; Lai, 2006).

To overcome personal bias, Zhuāng Zǐ claimed that one should inhibit the predetermined mind (Cook, 1997). This is done by adopting Zhuāng Zǐ's theory of seeing all the things as equal (Graham, 1969; Chen, 2005). The theory suggested that "all the things are equal and all the things are one in essence" (Chen, 2005). To clarify, Zhuāng Zǐ illustrated the differences between a little stalk or a great pillar, a leper or the beautiful Xī Shī (a lady being famous for her beauty in Chinese history), things ribald and shady or

things grotesque and strange to explain all of the differences in things perceived by the common person as phenomena (Chen, 2005). Irrespective of the differences in phenomena, size and quantity, they are actually one (Chen, 2005). The reason is that everything owns the same essence, *Dào* (Chen, 2005). Accordingly, the knowledge of the difference or ‘dividedness’ among all things is just the knowledge of the phenomena of all things, while the knowledge of the essence of all things is the knowledge of the nature and the sameness of all things (Chen, 2005).

Zhuāng Zǐ’s perception of knowledge is implicitly expressed in his meeting with the duke Âi of Lu (Legge, 1891). In the meeting, Zhuāng Zǐ (Legge, 1891) illustrated that knowing the times of heaven, knowing the contour of the ground and being capable of solving dispute are the examples of knowledge. As practiced by the duke, to determine whether an individual has the knowledge is to assess whether he is able to perform what he knows. In this respect, Zhuāng Zǐ perceived knowledge as the “capacity to act” (Sveiby, 1997, p.37).

Consistent with the perception, Zhuāng Zǐ highlighted that knowledge is tacit in the conversation between duke Hwan and the wheelwright Phien (Legge, 1891). Phien pointed out that he was unable to express his skill and was unable to teach his son (Legge, 1891). This feature of inarticulable is tacit in nature as what Lam (2000) stated that “tacit knowledge is intuitive and unarticulated”. Secondly, Phien emphasized on skills over books and words, which show that Zhuāng Zǐ assumed that knowledge is embedded in practice (Hislop, 2005).

Thirdly, Phien claimed that knowledge is gone when the ancients were dead (Legge, 1891). This implied that knowledge is embodied in people (Hislop, 2005). Fourthly, Phien contested that knowledge in a person is more important than words in books and articulation (Legge, 1891). Phien's rationale is that the knowledge in a person is the key that enables him to perform his task (Legge, 1891). In sum, tacit knowledge is non-transferable (Nonaka, 1994), subjective, difficult to share, bodily (Gourlay, 2006), intuitive, personal, contextual and hard to communicate (Lam, 2000). Tacit knowledge relies on knowing the subject and emerges from an individual's direct unmediated action (Cook & Brown, 1999; Chia, 2003).

The distinct view of knowledge between Eastern and Western thoughts has an implication on achieving mastery knowledge. According to Dreyfus (2009), proficiency and mastery can be achieved only when assimilating direct experience in an 'embodied, theoretical way' from unmediated involvement. In contrast, explicit knowledge solely enables a person to develop from a novice status to a competence status (Dreyfus, 2009). Since knowledge is often the basis and paradigm of both the strategy theory and knowledge creation theory, the different view of knowledge indicates that respective differences may lead to a distinct strategy theory and knowledge creation theory. Thus, a knowledge-based corporate strategy from Zhuāng Zi's perspective appears necessary.

2.6 Comparison between Western and Daoist concepts of creation

Knowledge creation is part of organizational creativity (Woodman, Sawyer & Griffin, 1993). There is lack of clarification and definition for the concept of “creation” in the early work on knowledge creation (e.g. Cook & Brown, 1999; Nonaka, 1994). To understand creation, it is important to examine the concept of creativity. In the knowledge creation, the creation is the activity that yields new knowledge. Hence, the activity is an example of creativity because it involves the production of a new and useful thing. The following sections examine creativity from the perspectives of the ancient Western culture, modern Western culture and ancient Chinese culture as summarized in Table A1 in the appendix.

2.6.1 Concept of creativity in the ancient Western culture

The root of creativity in the Western culture can be traced back to the Western philosophical inquiry into the origins of new entities and new ideas (Weiner, 2000). Ancient Westerners believe that creativity comes from a divine force outside humans, which may be referred as the theory of divine creativity (Niu & Sternberg, 2006). The first cultural root for the theory of divine creativity comes from Christian theology, which emphasizes that all entities are the creation of God (Neville, 1980). The second cultural root comes from the ancient Greek culture (Shien, 1951). The ancient Greek culture did not have the concept of “God’s creation” but ancient Greeks believed that all human activities are subject to the discretion of gods (Niu & Sternberg, 2006). Ancient

Greek philosophers have a wide range of philosophical speculations on the origins and nature of things that the review requires hundreds of pages (Niu & Sternberg, 2006). In short, both of the two cultural roots believed that people are just the mediator of Gods in creativity activities.

2.6.2 Concept of creativity in modern Western culture

The emergence of new theories in the nineteenth century hugely influences the way modern Westerners perceive creativity (Becker, 1995). Modern Westerners and contemporary scholars are more likely to adopt the belief that creativity originates in the human mind and in the human's ability to bring something new into being (Wight, 1998). Nevertheless, contemporary scholarly researchers have a diverse view of the standard definition of creativity. Table A2 in the appendix presents a list of varied creativity definitions. The contemporary dominant view on the definition of creativity suggests that creativity should include the criteria of novelty and appropriateness (value or usefulness) (Hennessey & Amabile, 2010). Therefore, the concept of creativity probably has multi-facets. Since creativity is multi-dimensional, theories of creativity overcome the problem of understanding creativity by focusing on the sources of creativity. In other words, theories of creativity imply that uncovering the sources of creativity is essential to understand creativity.

Theories of creativity can be categorized according to the sources of creativity they propose. The most influential theories of creativity seem to be cognitive

theories, psychometric theories (e.g. Guilford, 1950) and unconscious thinking (e.g. Poincaré, 1913; Freud, 1953; Hadamard, 1954; Koestler, 1976; Csikszentmihalyi, 1997). The theories of creativity can be divided into theories suggesting that creativity requires the ordinary thinking process and the theories that suggest creativity requires special thinking processes. These theories are referred to in knowledge creation and knowledge management literature as presented in table A3 in the appendix.

2.6.2.1 Cognitive theories

Cognitive theories on creativity assume that creative thinking processes, ordinary thinking processes and thinking for solving ordinary problems are identical (Newell, Shaw & Simon, 1962). The ordinary thinking processes refer to the fact that the mechanisms that are applied to produce innovative outputs are common (Weisberg, 2006). Thus, cognitive perspective regards creativity as the outcome of ordinary thinking rather than the process of ordinary thinking (Weisberg, 2006).

Based on the assumption that creative thinking is ordinary thinking, the characteristics of creative thinking are the same with ordinary thinking (Weisberg, 2006). According to Weisberg (2006), ordinary thinking has at least four important characteristics:

- (1) Ordinary thinking is structured on the ground that the emergence of the new concept comes after or is related to another concept.

- (2) Ordinary thinking relies on the past experience.
- (3) Knowledge and expectation guide ordinary thinking.
- (4) Ordinary thinking is easily affected by environmental events.

Ordinary thinking is structured on account of contiguity, similarity and logical reasoning (Weisberg, 2006). Contiguity refers to events that happen shortly from one to another in time (Weisberg, 2006). Ordinary thinking corresponds to the approximation among those occurrences to create the connections among the thoughts that reflect those events (Weisberg, 2006). Similarity refers to the sameness that exists among the events' content or structure (Weisberg, 2006). Analogous relationship is a type of similarity for those events or objects that have an identical structure (Weisberg, 2006). As noticed by Aristotle, similarity may induce or stimulate ordinary thinking to relate one thought to another (Humphrey, 1963). The association of thoughts that is based on similarity is not restricted to time and space where events occur (Weisberg, 2006). Logical reasoning is applied in ordinary activities occasionally (Weisberg, 2006). Ordinary thinking is structured because logical reasoning process leads one conception to another (Weisberg, 2006).

Ordinary thinking relies on the past experience, especially in daily activities (Weisberg, 2006). Accumulating past experience improves task performance over time, which can be seen as a contribution to creative advance in two aspects (Weisberg, 2006). Firstly, it is likely to find antecedents for creative outcome (Weisberg, 1986). Certain essential elements of innovation come from the past (Weisberg 2006). Secondly, incremental advancement from the

knowledge in the past may result in successful innovation (Weisberg, 2006). Incremental advancement may involve gradual change into the right direction for innovative development and also improvement in domain-specific knowledge development (Weisberg, 2006). Hayes (1989) discovered that the ability to create important contributions to the field requires ten years to develop.

It seems that knowledge and expectation guide ordinary thinking and all kinds of people's activities, which is also known as concept-driven processing or top-down processing (Weisberg, 2006). Knowledge directs ordinary thinking in recognizing an event, "having storage and recalling information from memory, selectively attending to stimuli in the environment, forming images, problem solving, and developing language comprehension and production" (Weisberg, 2006). Information is actively involved in cognition; the more relevant information an individual possesses, he or she will be more capable to: (1) extract information from the situation, (2) focus on events or information in the situation, (3) capture the goings-on of events, and (4) reminisce the events or information afterwards (Weisberg, 2006). Planning is one component of the processing, where it directs the actions in handling a condition (Weisberg, 2006).

Ordinary thinking simply alters the direction of thought and action due to environmental events (Weisberg, 2006). Environmental events supply the information which triggers the alteration (Weisberg, 2006). It seems that it is true that many innovative and environmentally friendly products are invented

in response to sustainability issues. From the cognitive view, creativity requires no extraordinary thinking process but deep familiarity of existing knowledge and it is built upon the existing knowledge, which serves as the basis for creative output.

Nevertheless, the cognitive view of creativity may not be able to answer questions about creativity, such as “why a creative person like Steve Jobs is relatively rare compared to ordinary people while ordinary thinking is commonly possessed by any ordinary person?” It might be that cognitive view only explains part of creativity.

2.6.2.2 Psychometric theories

Opposing to cognitive view, Guilford (1950) argued that creativity requires a special type of thinking that is different from ordinary thinking. In this respect, creativity is related to the process of such thinking. Psychometric theories as represented by Guilford (1950) focus on the creation of ideas in the creative thinking process. Guilford (1950) suggested that the process involves three important components of creativity, which are sensitivity to the problem, divergent thinking and convergent thinking.

Sensitivity to problems is the ability to notice a problem occurring in some areas, being constantly conscious of what is unknown and retaining curiosity (Weisberg, 2006). Guilford (1950) argued that sensitivity to problem is required for initiating creativity. In the first place, an individual must identify

inadequacies in certain aspects of the world. Then, he or she will begin contemplating potential solutions to remedy the situation. Even the most creative thinker will produce nothing if he or she does not think that there is any potential difficulty, threat and problem with the present situation.

Sensitivity to problem may not be the mandatory requirement for creativity (Weisberg, 2006). Creativity may be initiated when creative people wish to achieve something that might be possible but no one else has done in the past (Weisberg, 2006). It may also be due to the creative persons being curious about the consequences of some actions conducted (Weisberg, 2006).

Divergent thinking is a unique thought process that enables the thinker to generate abundant and varied ideas (Weisberg, 2006). The function of divergent thinking is to allow a person to create ideas that break away from the past (Weisberg, 2006). Divergent thinking consists of the fluency of thought, flexibility and originality (Weisberg, 2006). The fluency of thought is the capability to generate a considerable quantity of ideas related to matters in question within a specific duration (Weisberg, 2006). Flexibility is the ability of an individual to change from one way of thinking to another that is in a novel direction, while originality is the capacity to produce an idea that is new to the world and hardly thought of by other people (Weisberg, 2006).

Convergent thinking involves converging the ideas generated by divergent thinking to reduce them into an applicable solution (Weisberg, 2006). In the aspect of using information and knowledge for creativity, convergent thinking

is a form of top-down processing and similar to cognitive perspective (Weisberg, 2006). In sum, psychometric theories assume creativity as a multi-component process which consists of the sensitivity to problem, divergent thinking and convergent thinking.

2.6.2.3 Unconscious thinking: An associative unconscious view

Another stream of creativity theory that assumes that creativity requires extraordinary thinking processes is unconscious thinking. Unconscious thinking is important in the theories of creativity because it is assumed to be able to establish connections among ideas that ordinary conscious thinking is unable to achieve (Weisberg, 2006). It seems that there are two components of unconscious thinking, namely associative unconscious and unconscious processing (Weisberg, 2006).

Associative unconscious stresses on unconscious linkages among ideas (Weisberg, 2006). The theory contends that the linkages emerge from causes which are out of awareness (Weisberg, 2006). In associative unconscious, an individual will be informed that he or she is unable to inform how and where the idea has been formed (Weisberg, 2006). From the aspect of creative thinking, the unconscious can connect ideas that conscious thinking cannot (Weisberg, 2006). During creative activities, unconscious connections become active and give hidden directions (Weisberg, 2006).

Associative unconscious originated from Freud (Weisberg, 2006). Freud differentiated two modes of mental functioning, namely secondary-process thinking and primary-process thinking (Holt, 1967). Secondary-process thinking is ordinary thinking that is rational and logical, which can be developed through learning and training (Weisberg, 2006). Thus, secondary-process thinking works in a realistic manner whenever an individual tackles problems and the world (Weisberg, 2006).

Primitive-process thinking may be useful for creativity (Weisberg, 2006). Unlike secondary-process thinking, primitive-process thinking utilizes non-verbal imagery rather than language-based logical thinking as its medium (Weisberg, 2006). This feature enables primitive-process thinking to be flexible, breaking away from previously made association and accelerating the exploration of new associations for a novel idea (Russ, 2001).

2.6.2.4 Unconscious thinking: An unconscious processing view

Another aspect of unconscious thinking is unconscious processing, which is originated by Poincaré (1854-1912) (Miller, 1996). Unconscious processing is deemed to be the basis of how a person can engage in multiple tasks at one time, where even one task involves consciousness while another involves unconsciousness (Weisberg, 2006). The role of unconscious processing in creative thinking has been illustrated in two approaches (Weisberg, 2006). The first approach is the idea that suggests that unconscious processing and ordinary processing are identical, particularly in terms of their nature and

associative links (Weisberg, 2006). The second approach is the idea that suggests that unconscious processing and ordinary processing are different, particularly with their nature and associative links (Weisberg, 2006).

The first approach is initiated by Poincaré, who assumed that connections among ideas in unconscious thinking are the same with those in conscious thinking (Weisberg, 2006). From Poincaré's perspective, the capacities of unconscious and conscious thinking are the same, provided there is sufficient time for conscious processing (Weisberg, 2006). The rationale for this is the single distinction between the two processing, in which unconscious processing of unconscious thinking applies parallel processing while conscious processing of conscious thinking applies serial processing (Weisberg, 2006). The source of creative leaps comes from the phenomenon of an idea suddenly appearing in a person's mind when he or she is thinking about a matter (Weisberg, 2006).

In studying unconscious processing, Poincaré focused on the phenomena of unconscious incubation and illumination (Weisberg, 2006). Unconscious incubation is the activities of contemplating problems unconsciously while in that moment, the person is contemplating about other matters (Weisberg, 2006). It is deemed to be how sudden illumination occurs (Weisberg, 2006). Illumination is the incidental flash in the consciousness of a creative idea while at that moment, the person has not been thinking consciously (Weisberg, 2006). In normal terms, it is referred to as an Aha! experience (Weisberg, 2006).

The ideas of illumination and unconscious incubation correspond to Poincaré's perception of creativity, which entails uncovering a valuable commingle of ideas (Weisberg, 2006). The incubation process seems to be the source of novelty in Poincaré's perception of creativity. In an incubation process, Poincaré (1913) believed that unconscious processing generates the maximum numbers of ideas; irrespective of the ideas' usefulness, although only useful ideas will be brought into awareness by the illumination process. Thus, the illumination process seems to be the source of value creation in Poincaré's perception of creativity.

There are at least two significant features of the unconscious combinatorial process. Firstly, certain ideas tackled by the unconscious combinatorial process come from the initial conscious work when a person starts thinking of a problem (Weisberg, 2006). Meanwhile, the initial conscious work may appear as having no progress, but it actually evaluates these ideas and sets them into motion (Weisberg, 2006). The important function of this process is that it filters out useless ideas and enables subsequent processes to concentrate partly on probable useful ideas (Weisberg, 2006). Secondly, the chosen ideas are unconsciously combined with other ideas which are dull (Weisberg, 2006). The important function of this process is that it creates an opportunity for the many possible combinations to come into form (Weisberg, 2006).

From the many combinations of ideas in the unconscious combinatorial process, only useful ideas become conscious through the illumination process (Poincaré, 1913). Illumination process involves the following mechanism.

Depending on the usefulness of ideas, emotional sensibility evaluates whether an idea is “beautiful” or “harmonious” (Poincaré, 1913). A “beautiful” or “harmonious” idea is a useful idea (Poincaré, 1913). Idea that is the most beautiful has the greatest impact on the thinker’s emotional sensibility (Poincaré, 1913). When emotional sensibility is affected, that idea becomes conscious (Poincaré, 1913).

Modern psychologists are interested in the function of unconscious processing in cognition (Weisberg, 2006). Unconscious processing might be the mechanism of tacit knowing. In supporting the role of unconscious processes in thinking, Hadamard (1954) pointed to the phenomenon of recognizing the face of a friend. In recognizing the face, we use various features, or pieces of information, but we are aware of none of the complexities of the process, and we cannot describe in any way what we are doing. This complex recognition process is referred as tacit knowing by Polanyi (1966). Lakomski (2009) claimed that an individual is capable of processing information and do computation in a parallel manner, because the human brain consists of the whole systems of neural nets that provide extensive interconnectivity.

The second approach is the idea that suggests that the connections among ideas in unconscious processing are distinct from connections among ideas in ordinary processing (Weisberg, 2006). Unconscious processing can collaborate with the associative unconscious, while unconscious processing and associative unconscious are not mutually exclusive (Weisberg, 2006). The second approach perceives that unconscious thinking consists of two components,

which are unconscious processing and associative unconscious. Koestler (1976) concluded that creative breakthrough commonly comes from a combination of two independent streams of association, which entail bisociation rather than association. Csikszentmihalyi (1997) illustrated that unconscious thinking allows ideas to connect freely among themselves which is an incubation process different from the linear and logical conscious thinking process. It seems that the incubation process involves parallel processing where many connections of ideas occur simultaneously while the associative unconscious enables each connection to exceed the limitation of strict logic (Weisberg, 2006).

2.6.3 Daoist concept of creativity

There are many philosophers of ancient China illustrating the process and structure of creativity, such as Zhu xi (1020-1077) (Reese, 1991; Niu & Sternberg, 2006) and Wang Yang Ming (1472-1529) (Cheng, 1973b; 1979). However, for the purpose of this research, ancient Chinese philosophies in this research refer to the pre-Qin schools, such as Legalism, Confucianism, Daoism, Mohism, Logician and other schools (Xu, 1997); the rationale being Daoism, Confucianism and Mohism are the most influential philosophies during the pre-Qin period and these philosophies may represent the major ancient Chinese thought in that time. Daoism is arguably the most influential philosophy of Chinese creative activity throughout the Chinese history (Chang, 2011). As this research focuses on Zhuāng Zǐ's perspective and is a representative to Daoism, discussions about Mohism and Confucianism are omitted in this research.

The conceptions of creativity in ancient Chinese thoughts can be divided into natural creativity and individual creativity (Niu & Sternberg, 2006). The history of natural creativity begins when ancient Chinese around 1200BC believed in a personalized God, called Tiān (Heaven), which was also referred to as Dào (Niu & Sternberg 2006). The word Tiān was then substituted by Dào and depersonalized in important Daoism texts (Cheng, 1991). Niu and Sternberg (2006) contended that Dào is an ultimate force of nature, thus the concept of creativity coming from Dào is referred to as natural creativity.

The origin of Daoism can be traced back to the earliest and most important written record about the Chinese perspective of creativity, the Yì Jīng or the Book of Changes (Hsu & Chiu, 2008). Existed since its founding in the Zhōu Dynasty (1200BC), the Book of Changes is an ancient book consisting of hexagrams and words that symbolize the boundless things of the universe (Cheng, 2008). In the Book of Changes, the universe is fundamentally consisting of yin-yang, which is also the origin of all things (Niu & Sternberg, 2006). In terms of natural creativity, the Book of Changes explains that the world is the creation of the ceaseless movement, interaction and changes of yin-yang (Niu & Sternberg, 2006). In this regard, Hang (1986) termed the concept of an ever-renovating and producing as “Alternating Productive Change” and “Productivity”. The critical characteristics of “Productivity” include incessantly performing change and possessing greater flexibility and greater seminal feature than that of creativity (Hang, 1986).

In the ancient Chinese thought, natural creativity and individual creativity could be identical (Niu & Sternberg, 2006). This idea was clearly stated in the Book of Changes. For the Book of Changes, the universe is the source of creativity which is also referred to as cosmic creativity (Cheng, 2008). The human being has creativity rooted in cosmic creativity and it needs to be cultivated earnestly (Cheng, 2008). Creativity has to be cultivated in accordance to the great way of the world as commented by Confucius in *Xi Ci*:

What does *Yi* suggest to us? It suggests that we explore things in order to form purposive activities (*kāi wù chéng wù*), so that we may integrate with the great way of the world. Thus, the sage uses his knowledge of change to comprehend the feelings and desires of the people under heaven, to achieve the great deeds under heaven and to dissolve the great doubts under heaven (Cheng, 2008).

The cultivated creativity is referred to as the “Spirit” when it was applied in making and using things that are useful for the general populace (White, 2008). In this regard, the Book of Changes suggests that creativity is subject to an individual’s development and his ability in undergoing the development.

A similar notion of natural creativity and individual creativity in the Book of Changes can be found in Daoism. Central to Daoism’s natural creativity concept, the term *Dào* is first founded in the Book of Changes. The Book of Changes explains that *Dào* is something or precisely, a nothingness that consists of one *Yīn* and one *Yáng*: “*Yi Yin yi Yang tzu wei Tao* (Hang, 1986).”

The idea of *Dào* as the unity of Yin and Yang was later adopted by *Lǎo Zǐ* (Niu & Sternberg, 2006). *Lǎo Zǐ* is the author of *Dao De Jing*, the first philosophical Daoism text. *Lǎo Zǐ* (Niu & Sternberg, 2006) explains that the nature of *Dào* lies with its ability to bring everything into being through the mutual change of Yin and Yang from each other:

The Way (*Dào*) gave birth to the One,
The One gave birth to the Two,
The Two gave birth to the Three,
And the Three gave birth to the ten thousand things.
The ten thousand things carry Yin on their backs and wrap their arms
around Yang.
Through the blending of *ch'i*, they arrive at a state of harmony (Lao &
Henricks, 1989).

Hence, *Lǎo Zǐ* pointed out that the creation of everything from *Dào* into being has gone through three stages. *Zhuāng Zǐ* posited the same idea that everything is created from *Dào*:

The knowledge of the men of old had a limit. When was the limit? It extended back to a period when matter didn't exist. That was the extreme point to which their knowledge reached. The second period was that of matter, but of matter unconditioned (undefined) (Lin, 1963).

Based on Lǎo Zǐ's three stages of creation theory, Zhuāng Zǐ explained the similar three stages of universe creation:

If there was a beginning, then there was a time before that beginning, and a time before the time which was before the time of that beginning. If there is existence, there must have been non-existence. And if there was a time when nothing existed, then there must have been a time when even nothing didn't exist. All of a sudden, nothing came into existence. Could one then really say whether it belongs to the category of existence or of non-existence ... The universe and I came into being together; I and everything therein are One. If then all things are One, what room is there for speech? On the other hand, since I can say the word 'one', how can speech not exist? If it does exist, we have One and speech—two; and two and one—three from which point onwards even the best mathematicians will fail to reach (the ultimate) (Lin, 1963).

This idea of three stages shows that the Book of Changes, Lǎo Zǐ and Zhuāng Zǐ shared the view that the ultimate principle must exist before everything else, because its order needed to be followed before everything comes into being (Shien, 1951). As everything comes from Dào, Zhuāng Zǐ claimed that everything came into being at the same time and as a mark of unity (Chen, 2005).

Individual creativity is based on the principle of “the universe and I came into being together; I and everything therein are one”, which ancient Chinese and Zhuāng Zǐ believed that humans and nature are identical (Niu & Sternberg, 2006). The implication to individual creativity is any principles (lǐ) that apply to nature may apply to humans too (Niu & Sternberg, 2006). In this respect, humanity possesses the identity of the universe, or any other being in the universe (Chen, 2005). With the universe itself or any other being in the universe, humanity is able to sense the process of the development of the universe (Niu & Sternberg, 2006).

Creativity or specifically, human individual creativity is the unity of nature with human thoughts (Niu & Sternberg, 2006). The human’s individual creative process is the process of a person undergoing the inner apprehension of Dào (Niu & Sternberg, 2006). The inner apprehension of Dào is a state where every difference between the subject (self) and object (non-self) disappears (Niu & Sternberg, 2006). Zhuāng Zǐ provided an example of an individual called Zi Qi, arriving at human individual creativity via experiencing and interacting with Natural creativity:

Zi Qi of South Wall sat leaning on this armrest, staring up at the sky and breathing—vacant and far away, as though he’d lost his companion. Yan Cheng Zi Yu, who was standing by his side in attendance, said, “What is this? Can you really make the body like a withered tree and the mind like dead ashes? The man leaning on the armrest now is not the one who leaned on it before!

Zi Qi said, “You do well to ask the question, Yan. Now I have lost myself. Do you understand that? You hear the piping of men, but you haven’t heard the piping of earth. Or if you’ve heard the piping of earth, you haven’t heard the piping of Heaven!” (Watson, 1968)

When Zi Qi loses himself, he is practicing the inner apprehension of *Dào*.

According to *Lǎo Zǐ*, “losing oneself” requires one’s access to the sphere of quietude and penetrate into the sphere of non-being:

Emptiness affects to the extreme.

Keep stillness whole.

Myriad of things act in concert.

I therefore watch their return.

All things flourish and each returns to its root.

Returning to the root is called quietude.

Quietude is called returning to life (Muller, 2009).

Access to the sphere of quietude enables an individual to trace back to his or her existence and more importantly the purpose is for him or her to cultivate *Dào* by constantly exercising the practice (Niu & Sternberg, 2006). Cultivating *Dào* means to develop and preserve one’s potentiality for creativity rather than act out this potentiality (Niu & Sternberg, 2006). *Zhuāng Zǐ* and Daoists emphasized on *Dào* as the enablers of creativity rather than the creative action itself to breed creative capability.

The Daoists' thought of attaining high creativity is the highest stage of creativity humanity can aspire after (Niu & Sternberg, 2006). It could be applied via the "invisible ground of sympathy" (Chang, 2011), in which the individual has to release himself or herself from the knowledge he or she had in the past. Then, he or she gets into the condition where all things break through their shell and melt with all other things (Niu & Sternberg, 2006). When an individual possesses the "invisible ground of sympathy", he or she owns the utmost freedom to link with the universe, even if what he or she does is very creative (Niu & Sternberg, 2006).

Berthrong (1998) argued that natural creativity is comparable to the Western concept of divine creativity. Niu and Sternberg (2006) contended that Chinese natural creativity and Western divine creativity shared three similar features in certain theories and certain times. Firstly, the two types of creativity represent the ultimate origin of the universe (Niu & Sternberg, 2006). Secondly, the nature of this ultimate origin is within ceaseless creating and renovating changes (Niu & Sternberg, 2006). Thirdly is the nature of *Dào*/creativity as reflected in its ability of producing all goodness, including moral goodness (Niu & Sternberg, 2006).

However, such notion about the nature of *Dào* is problematic for two reasons. First of all, the nature of *Dào* is value free. According to *Lǎo Zǐ*, *Dào* is free of moral value judgment (Chua, 2005). He based his comments on his observation of Heaven and Earth, treating myriads of things like straw dogs, which are not benevolent (Chua, 2005). This phenomenon implies that *Dào* may produce

goodness and badness at the same time because Heaven and Earth are the product of Dào, and thus representative of Dào.

Secondly, Dào is not god but is considered as the producer of gods. According to Zhuāng Zǐ, Dào creates itself rather than comes into being from other external things (Shien, 1951). Dào is the very beginning of everything that it appears before heaven and earth and generates gods and spirits (Shien, 1951). Thus, Chinese natural creativity and Western divine creativity are not the same (Hang, 1986).

In this research, creation is defined as the process of a person undergoing “the inner apprehension of Dào” (Niu & Sternberg, 2006, p.31) for its application in the generation of novel and useful ideas in a domain (Stein, 1974; Woodman, Sawyer & Griffin, 1993; Amabile et al, 1996). The definition is adopted for three reasons. For the first reason, this research follows Daoism’s perspective. For the second reason, this research is studying the knowledge creation process. For the third reason, the definition reflects the application of Daoism in the modern organization context since it incorporates ideas by Amabile et al. (1996).

2.7 The connection between knowledge creation and strategy innovation

This section clarifies the connection between knowledge creation and strategy innovation. It specifies the knowledge creation in the domain of making new

strategies. Based on the literature in previous sections, this section provides the definitions of knowledge creation.

In the studies of knowledge management, the concept of knowledge creation is vague and ill-defined (Demerest, 1997). Different definitions of knowledge creation are shown in the following table:

Table 2.2: List of knowledge creation definitions

Study	Definitions of Knowledge Creation
(Dretske, 1981)	“Beliefs based on information.”
(Nonaka & Takeuchi, 1995)	“The capability of a company as a whole to create new knowledge, disseminate it throughout the organization, and embody it in products, services, and systems.”
(Nonaka, Takeuchi & Umemoto, 1996)	“The process that organizationally amplifies the knowledge created by individuals and crystallizes it as part of the knowledge system of an organization.”
(Bhatt, 2000)	“Generate new realities.”
(Johnson, 2000)	“New understandings of causal relationships between various technical elements, lead to the successful development of the technology.”
(Nonaka & Toyoma, 2003)	“A dialectical process, in which various contradictions are synthesized through dynamic interactions among individuals, the

Table 2.2 continued

organization, and the environment.”

(Popadiuk & Choo, 2006) “Sharing mental, emotional and active knowledge in such a way that the results lead to aggregated value.”

The diverse knowledge creation definitions above show that the idea of knowledge creation is much affected by the assumption of knowledge. In the list, knowledge is either a belief, reality, or understanding that involves different types of processes like information processing, action of generating, and comprehension. Since the knowledge creation definition must be consistent with its respective idea of knowledge, this implies that each knowledge creation definition only applies its respective assumptions.

For this reason, this research proposes a different knowledge creation definition that is suitable to its knowledge assumption as “the capacity to act” discussed in the knowledge definition section. Drawing on the definitions of creation and knowledge adopted in previous sections, knowledge creation in this research refers to the process of a person undergoing “the inner apprehension of *Dào*” (Niu & Sternberg, 2006, p.31) for its application in the generation of a new and useful capacity to act in a domain.

Knowledge creation is a multi-source phenomenon (McAdam, 2004). Knowledge creation may involve problem solving (Leonard-Barton, 1992b), idea generation (McAdam, 2004) and innovation (Popadiuk & Choo, 2006). To

study knowledge creation, the selected domain in this research is strategy-making. This is due to the reason that this research aims at providing further insight on strategy innovation to increase a company's gross revenue.

Knowledge creation is the core of an organization's strategy creation (e.g. Näsi, 1999; Zack, 1999). Nonaka and Toyama (2007) posited strategy as distributing practical wisdom in the knowledge creation of a company. Burgelman (1988) presented three case studies to show that strategy creation is a social learning process. Shepherd and Johnson (1999) proposed that knowledge creation is a driving force for strategy innovation. Salmador and Bueno (2005) recognized strategy-making as a complex, double-loop process of knowledge creation. In their subsequent study, they (Salmador & Bueno 2007) considered strategy-making as a double-spiral of knowledge creation.

It seems that scholars conceived strategy differently. Drucker (1974) perceived strategy as "purposeful action". Porter (1985, p.45) perceived strategy as "the search for a favorable competitive position in an industry, the fundamental arena in which competition occurs. Competitive strategy aims to establish a profitable and sustainable position against the forces that determine industry competition". Hax and Majluf (1988) reviewed various definitions of strategy suggested by leading authors. The common theme of various definitions appeared as strategy involving "the purposeful management of change so that the firm can achieve competitive advantages in every business in which it is engaged" (Hax & Majluf, 1988). Mintzberg (1987) proposed that multiple

definitions of strategy are required. He (Mintzberg, 1987) argued that strategy is a plan, pattern, position, perspective and concept.

The facts that differentiate strategy from strategy creation only serves the academic purposes (Hax & Majluf, 1988). In real life, they are inseparable (Hax & Majluf, 1988; Mintzberg, 1994). There are two influential classifications of strategy based on the strategy creation process, namely deliberate strategy and emergent strategy (Mintzberg, 1987). A deliberate strategy is designed from intended strategy-making processes (Mintzberg, 1987). The deliberate strategy-making process involves analytical tools and methodology (Hax & Majluf, 1988). The result of deliberate strategy is a formal, forward-looking, well documented plan that forecasts change and initiates actions (Mintzberg, 1994; Newman & Logan, 1971). Mintzberg (1994) argued that strategic planning is not strategic thinking. Strategic thinking entails intuition and creativity (Mintzberg, 1994). In essence, Mintzberg (1994) contended that strategy-making should be capturing and synthesizing the manager's knowledge to establish a vision for the business to move forward. This insight implies that knowledge creation may lead to strategy innovation.

An emergent strategy unfolds from the consistent, everyday behavior of organization members without intention (Mintzberg, 1987; Van de Ven, 1992; Chia & Holt, 2006). The emergent strategy-making involves learning what is effective by implementing an action at a time as an experiment to identify viable patterns (Hax & Majluf, 1988). Chia and Holt (2006) even perceived strategy as a practical coping mechanism that is undergoing a 'dwelling' mode.

The result of emergent strategy is “a pattern in a stream of actions” (Mintzberg, 1987, p.12).

It seems that those learning for emergent strategy are subject to sensitivity to problem, the interpretation of the observed action and its resulting events. Otherwise, the observed action will not have meaning and constitute as learning. Since learning is the increase in knowledge, it implies that knowledge creation is needed for making a new strategy.

Since this research is based on the ancient Chinese’s perspective and philosophy, the concept of strategy from the ancient Chinese perspective is adopted. Nán (2007a) claimed that the writing of *Zhuāng Zǐ* is the major source of strategy study for ancient Chinese. According to Nán (2008), the major task of ancient Chinese strategists is proposing “*Fāng Fǎ*” for their lords. Accordingly, this research refers to strategy as “*Fāng Fǎ*” or “method” (Nán, 2008).

By “method”, the concept encompasses tactic and stratagem. The application of strategy as tactics and stratagem in Chinese history is recorded in well-known ancient Chinese texts that discuss strategy, such as *Zhàn Guó Cè* (Crump, 1996). Rumelt (1979) indicated that the differentiation of tactics and stratagem is determined by a person’s stance. At times, it is arbitrary and misleading to differentiate strategy from tactic because it implies that certain issues are inevitably more important than others (Mintzberg, 1987). Thus, Mintzberg (1987) suggested that strategy is potentially related to anything.

2.8 Justification for Zhuāng Zǐ's philosophy

Among the philosophers of Daoism, Zhuāng Zǐ's philosophy is adopted in the research for its utmost influence to the school of thought, focusing on personal spirituality and insight, and strategic insight on knowledge creation and strategy innovation for wealth creation. To clarify, this section provides further details on Zhuāng Zǐ's philosophy about knowledge creation, strategy innovation and wealth creation. The following describes his root of thinking from Lǎo Zǐ's concept of nothingness, his concept of efficacious uselessness as a specific form of appropriate usage related to strategy innovation, and concept of inner deformity which helps to better understand knowledge creation.

The root of Zhuāng Zǐ's strategic insight can be traced back to Daoism's primary goal to attain nothingness as a way towards the highest state of practical excellence. Lǎo Zǐ suggested that nothingness contains the greatest advantage:

“The most yield in the social world looses past the most firm. That which lacks presence enters into that which lacks space. With these examples, I know the advantage of not acting on constructs. The teaching that is not put in language, the advantages of not acting on constructs, the social world rarely reaches this level.” (Hansen, 2009, p.127)

Nothingness may take various forms according to its application in different domains. These applications of nothingness by Daoists in various domains become the core concept in their respective philosophies. To utilize the advantage of nothingness, Lǎo Zǐ advocated non-action or Wú Wéi as an ideal practice, especially for leadership: “Ways to fix are not acting from constructs. Yet nothing is not assigned a construct. If fief-kings could sustain it, 10,000 natural kinds should self-transform” (Hansen, 2009, p. 113).

In a similar vein, Sūn Zǐ stressed on winning without fighting as his highest guide for military strategy: “Ultimate excellence lies not in winning every battle, but in defeating the enemy without ever fighting” (Minford, 2002, p.14). The comment shows that non-fighting is an example of non-action and ideally offers the greatest advantage to the non-actor.

The application of nothingness in Zhuāng Zǐ’s philosophy is his idea of efficacious uselessness as the greatest way for earning a living:

There was a hunchback named Su. His jaws touched his navel. His shoulders were higher than his head. His neck bone stuck out toward the sky. His viscera were turned upside down. His buttocks were where his ribs should have been. By tailoring, or washing, he was easily able to earn his living. By sifting rice, he could make enough to support a family of ten. When orders came down for a conscription, the hunchback walked about unconcerned among the crowd. And similarly, in government conscription for public works, his deformity

saved him from being called. On the other hand, when it came to government donations of grain for the disabled, the hunchback received as much as three chung and of firewood, ten faggots. And if physical deformity was thus enough to preserve his body till the end of his days, how much more should moral and mental deformity avail!

(Lin, 1942)

The efficacy of uselessness can be seen from Su who utilized his deformity to generate income through suitable jobs, exempted from dangerous duty and received social assistance. From the perspective of strategic management, the story shows that uselessness can be utilized to create wealth and avoid potential threats.

Furthermore, Zhuāng Zǐ claimed that inner deformity has more advantages than physical deformity, and thus is more effective in wealth creation. The deformity that specifically pointed to the inner state of an individual has the meaning of oddness (Nán, 2007a). According to the meaning, deformity can be translated as extraordinary and may be characterized as distinctive and novel at the point of emergence. Inner deformity includes but not limited to extraordinary or innovative knowledge, behavior and morality (Nán, 2007a). It is clear that inner deformity can be found from the wealth creation ability of Su. Unlike many cripples, he did not rely on donation or help from others to sustain his living. On the contrary, he was able to support the living expenses of at least ten persons.

Inner deformity may be achieved through knowledge creation and strategy innovation. Zhuāng Zǐ's idea of inner deformity signifies that innovative knowledge is highly effective for wealth creation. Since creativity is essential for any innovative outcome, the process of making available innovative knowledge seems to be knowledge creation. In the context of strategy innovation, inner deformity can be the outcome of the process as an innovative strategy. Inner deformity in strategy innovation may be seen in Sūn Zǐ's way of warfare engagement that is ever creative: "In warfare, engage directly; secure victory indirectly. The warrior skilled in indirect warfare is infinite as Heaven and Earth...Dies and is born again like the Four Seasons" (Minford, 2002, p.166-167).

The comment hints that indirect engagement is a typical inner deformity acting as the key to victory. Inner deformity is important to the extent that a winning strategist is the one who is able to make innovative strategies constantly. The effectiveness of innovative strategy lies in puzzling the enemy like what Sūn Zǐ suggested, "The way of war is a way of deception. When able, feign inability; when deploying troops, appear not to be" (Minford, 2002, p.6).

Inner deformity from Zhuāng Zǐ's strategy innovation is the enlightened uselessness, which is the appropriate usage and it is different from conventional usefulness. Conventional usefulness may lead to a miserable consequence while enlightened uselessness may provide the greatest utility value. The suggestion that uselessness is useful seems to be paradoxical and raises confusion of either which to cultivate (Major, 1975). The paradoxical

impression may be a perception on an inner deformity characteristic of enlightened uselessness.

The ideas of direct and indirect engagements in Sūn Zi's philosophy may be adopted to clarify the connection between usefulness and enlightened uselessness from the perspective of strategy innovation. Sūn Zi's concept of direct engagement may be comparable to the conventional usefulness as being ordinary while indirect engagement may be analogous to efficacious uselessness as being extraordinary and also an inner deformity. Sūn Zi contended that the alteration of direct and indirect warfare can produce limitless innovative engagements, just like compositions of the five flavors can make countless tastes:

“There are but five flavors, and yet their permutations are more than can ever be tasted. In the dynamics of war, there are but these two, indirect and direct, and yet their permutations are inexhaustible. They give rise to each other in a never-ending, inexhaustible circle.”

(Minford, 2002, p.27)

Although direct engagement is ordinary, it may become an innovative engagement through circular alteration with indirect engagement as a component of each new strategy.

Similar to Sūn Zǐ's idea of composition of direct and indirect engagements, the enlightened uselessness of Zhuāng Zǐ contains and serves the purpose of being useful:

Master Chuang was walking on a mountain, when he saw a great tree with huge branches and luxuriant foliage. A wood-cutter was resting by its side, but he would not touch it, and, when asked the reason, said, that it was of no use for anything, Master Chuang then said to his disciples,

'This tree, because its wood is good for nothing, will succeed in living out its natural term of years.'

Having left the mountain, the Master lodged in the house of an old friend, who was glad to see him, and ordered his waiting-lad to kill a goose and boil it. The lad said,

'One of our geese can cackle, and the other cannot; – which of them shall I kill?'

The host said,

'Kill the one that cannot cackle.'

Next day, his disciples asked Master Chuang, saying,

'Yesterday the tree on the mountain (like you said) would live out its years because of the uselessness of its wood, and now our host's goose has died because of its want of power (to cackle); – which of these conditions, Master, would you prefer to be in?'

Master Chuang laughed and said,

'(If I said that) I would prefer to be in a position between being fit to be useful and wanting that fitness, that would seem to be the right position, but it would not be so, for it would not put me beyond being involved in trouble; whereas one who takes his seat on the Tao and its Attributes, and there finds his ease and enjoyment, is not exposed to such a contingency. He is above the reach both of praise and of detraction; now he (mounts aloft) like a dragon, now he (keeps beneath) like a snake; he is transformed with the (changing) character of the time, and is not willing to addict himself to any one thing; now in a high position and now in a low, he is in harmony with all his surroundings; he enjoys himself at ease with the Author of all things; he treats things as things, and is not a thing to them: where is his liability to be involved in trouble? (Legge, 1891)

There are two examples in the story which contradict the consequences of being useless. Firstly, the tree on the mountain is useless to men, which actually is useful for itself to sustain its life. Secondly, there was a goose killed because the other geese was more useful as they have the ability to cackle and sustain its life.

There are inner deformities in the two examples. It is common that most trees are useful for many usages. For example, they can be manufactured as furniture and weapon. Similarly, geese are more common to be utilized as food than listening to their cackle. Since the useless tree and cackling goose are

extraordinary to their own species, their attributes may be regarded as inner deformities.

A characteristic of inner deformity may be found in a commonality of the two examples, where the usefulness must commensurate with what is required to sustain their lives. If usefulness is not suitable for sustaining one's life or lies with death, it may inflict miserable consequences. The example of the unfortunate goose implies that it was more useful as a food than a cackle performer, which was contrary to the fortunate goose. The contradicting consequences of being useless are not a paradox, but an implication of uselessness requiring appropriateness.

This is consistent with Zhuāng Zǐ's comments on the two examples. The non-fixation on either usefulness or uselessness is a flexible way to encounter changes of time in the environment that generate opportunities or threats. Again, the example of Su demonstrated that the way he generated wealth and avoided threats were commensurations with his personal characteristics. Hence, Zhuāng Zǐ's enlightened uselessness is an appropriate transcendence between utility and non-utility towards great usefulness, which caters for the distinct characteristics of different situations and changes of time.

2.9 Research Framework

This section presents a review of key literature which forms the basis for the development of a research framework of knowledge creation, namely the

“Strategic knowledge creation framework”. This research hypothesizes that knowledge creation can be achieved in accordance with Zhuāng Zǐ’s theory of seeing things as equal (Graham, 1969) or Qí Wù Lùn. Zhuāng Zǐ did not articulate the theory in a specific manner, but to invite readers of his text to understand the theory from the writings in the chapter with the name of this theory as its title. This chapter of “theory of seeing things as equal” contains a number of narratives, arguments and theoretical claims. In summary, the theory of seeing things as equal suggests that it is possible to see a myriad of things as equal if they are observed from the commonalities among them (Nán, 2007a). Discovering the similarities among things is important to identify the differences emerging from these similarities (Nán, 2007a). In the context of this research, this theory is useful to understand the differences in an entrepreneur’s managerial capabilities in generating different firm performances. For instance, differences in managerial capabilities and related differences in firm performance can be identified by making comparisons between competitors and the entrepreneur. The comparisons are feasible as both parties are operating in the same industry, which is a commonality between them.

The research framework to be proposed in the following sections shows how knowledge creation works. It is graphically depicted in Figure 2.4 below. The research framework of strategic knowledge creation adopted Zhuāng Zǐ’s description on the learning processes of cutting an ox as gone through by Cook Ting (Legge, 1891; Lin, 1942).

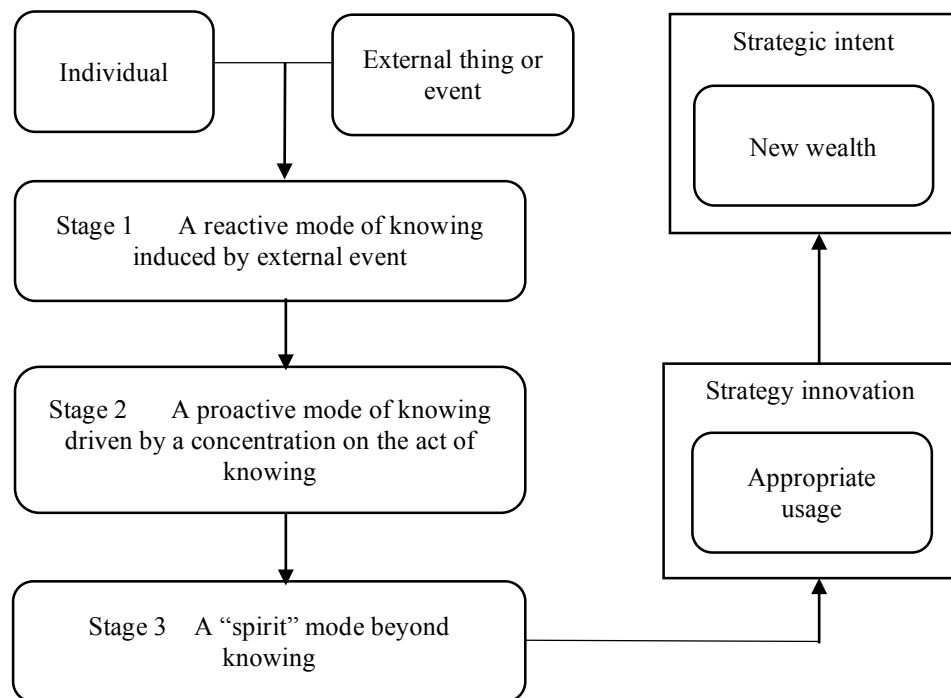


Figure 2.4: Strategic Knowledge Creation Framework

This research infers that Cook Ting’s story is an example of how the theory of seeing things as equal is practiced. From the perspective of the theory of seeing things as equal, the commonality between Cook Ting and the other cooks is the knife. In the narrative, the knife was the standard tool all cooks used for ox-cutting. From the perspective of the theory of seeing things as equal, the difference between Cook Ting and the other cooks is their ox-cutting skill. To draw managerial lessons from this story, Cook Ting is analogous to an entrepreneur with superior managerial capabilities while the knife is similar to a firm.

The story is useful where Cook Ting’s experience and feeling indicate the symptom of applying the theory of seeing things as equal. In essence, Cook

Ting's experience is the result of practicing the theory of "seeing things as equal". Relating Cook Ting to the theory of seeing things as equal is important in the sense that it is similar to utilize the metaphor to illustrate tacit knowledge. The action referred by the theory of seeing things as equal is highly tacit in nature.

The choice of adapting Zhuāng Zǐ's theory of knowledge in this study is driven by Zhuāng Zǐ's story about a recipe for salve for chapped hands (Lin, 1942). In the story of a recipe for salve for chapped hands, an individual bought the recipe to utilize it for winning in the war (Lin, 1942). The innovative application of the recipe caused that individual to gain return of investment many times compared to the original owner of the recipe who simply used it for washing silk (Lin, 1942). Although the recipe and its function are the same, the context of application is different. This research assumes that the capacity to create such strategy is attributed to the theory of seeing things as equal. The strategic knowledge creation framework shows how to develop the knowledge that the stranger already has.

The framework is organized according to Cook Ting's story. Cook Ting's learning process of cutting an ox can be classified into three stages. Each stage is explained with Zhuāng Zǐ's theory of seeing things as equal (Graham, 1969) or Qí Wù Lùn. The explanation discusses the relationship of the Cook Ting story; the theory of seeing things as equal and knowledge creation.

2.9.1 The three stages of epistemic process in the Cook Ting Story

The Cook Ting story contains an elaboration of Cook Ting's experience about how he cut the oxen. From the perspective of the theory of knowledge, the experience is an epistemic process (Chen, 2005). There are a number of commentaries on Zhuāng Zǐ's philosophy written by Chinese authors in the past (Chuang & Fung, 2016), which means that there are diverse understandings on the philosophy. Among these commentaries, the most influential works come from Guō Xiàng (252-312) and Chéng Xuányīng (flourished mid-seventh-century) (Guzowska, 2015; Ma & Brakel, 2019). Together with other important Chinese commentators, their works were collected and compiled by Guō Qìngfān (1961), a Chinese scholar from Qing dynasty. Chinese scholars from the Qing dynasty are notable for their key contributions in making Zhuāng Zǐ's book more readable and intelligible, but it may be omitted by some English translators (Chuang & Fung, 2016).

In addition, the original messages of Zhuāng Zǐ have been translated differently by a number of translators of Zhuāng Zǐ (e.g. Cleary, 1993; Merton, 1965; Zhuangzi et al, 1996; Watson, 1968). The variations in translations imply that there is a lack of consensus on the exact meaning inherent in Zhuāng Zǐ's writing, where the accuracy of the translations of Zhuāng Zǐ is problematic (Jensen, 1987). Due to the various interpretations of Zhuāng Zǐ's philosophy in different translations and commentaries, the variations that are critical to this research will be highlighted in a table by presenting the two

translations. Then, the meaning of Zhuāng Zǐ that is adopted in this research will be presented in the same table to provide comparisons.

This research adopted Nán Huái-Jīn's (2007) interpretation of Zhuāng Zǐ. His interpretation relates to many real life phenomena and experiences. Relating Zhuāng Zǐ to real life might imply that the theories can be practical and useful in the organization context.

The following sections classify Cook Ting's learning experience into three stages. These stages represent different stages of the epistemic process (Chen, 2005). Cook Ting's skill advancement processes are a description of knowledge creation from Zhuāng Zǐ's perspective. The processes show that Cook Ting's skill advanced over different stages. Similar stories of how a person attains mastery can be found in other chapters by Zhuāng Zǐ, such as the cicada catcher (Watson, 1968). The experience of Cook Ting is adopted in this research because the story contains a lot of details about Cook Ting's thinking, technique, feeling and description about his ox cutting performance.

Generally, Cook Ting's knowledge creation process can be divided into three stages. Stage 1 refers to a reactive mode of knowing induced by external event. Stage 2 refers to a proactive mode of knowing driven by a concentration on the act of knowing. Stage 3 refers to a "spirit" mode beyond knowing.

2.9.1.1 Stage 1 A reactive mode of knowing induced by external event

The first stage is the initial three years when Cook Ting began to cut up an ox (Chen, 2005). In this stage, Cook Ting's knowing activities were cognitively reactive as they were induced by Cook Ting's encounter with external event. Lin (1942) and Legge (1891) translated the things that Cook Ting saw in this stage differently as shown in Table 2.3 below.

Table 2.3: Comparison of different translations on stage 1

Translator	Translation
Lin Yutang	“When I first began to cut up bullocks, I saw before me whole bullocks.”
James Legge	“When I first began to cut up an ox, I saw nothing but the (entire) carcass.”
English translation based on the seminal work of Nán Huái-Jīn	“During the period when I first began to cut up an ox, every single thing that I saw is an ox.” (Translated by the author for the purpose of this research)

In this research, Nán's (2007a) interpretation on *Zhuāng Zǐ* is adopted. The reason is that Nán's interpretation provides a consistent view with the theory of seeing things as equal. Most importantly, he is also a master of meditation. According to Nán's (2007a) interpretation, anything that Cook Ting saw is an ox in his first three years of cutting oxen. This means that Cook Ting may have seen a chicken, a house or a tree, but each of these objects is an ox in his eyes.

Nán's view seems to be consistent with the theory of seeing things as equal because this research hypothesizes that the first stage of Cook Ting's story corresponds to the theory of seeing things as equal's notion of "everything has its "that," everything has its "this." (Watson, 1968). This notion is a theory of knowledge underlying the theory of seeing things as equal (Mair, 2000). Based on Nán's (2007a) interpretation, "everything has its "that", which means that every material thing exists as a unique entity. This idea of the theory of seeing things as equal implies that an ox is an ox, a tree is a tree, and an ox is not a tree or anything else. "Everything has its "this", which means that there is nothing that does not belong to my (an individual's) perception (Nán, 2007a). The existence of an entity and a person's perception are two different subjects (Chang, 1977). Hence, an entity may induce many perceptions while the same perception may frame the way a person judges things. From the perspective of associative unconscious theory, it seems that the primary-process thinking of Cook Ting was that he was engaged in a visual pun when he saw anything.

It seems that there are no two persons with the same perception of an entity or an ox. As evidence, no two persons share the equal preference on an ox. The degree of preference could be higher for one person while lower for another. The ordinary meaning of an ox is simply the property representing the relationship between a material thing, an ox and perception of a person. It is also a result of the interaction between that individual and the world he is situated in (Cook & Brown, 1999).

Relating the principle to stage one, all of Cook Ting's perceptions is ox; he would see any material thing as an ox, even when those things are not. This could be happening when the image of an ox is deeply rooted in Cook Ting's perception and it formed his tacit dimension (Polanyi, 1966). Cook Ting used the way he is seeing an ox in seeing everything. The pioneer petroleum geologist Wallace Pratt (1952) insisted that "oil is found in the minds of men".

From the view of knowledge creation, this is an extreme example of how perspective influences cognition. Cook and Brown (1999) argued that it is knowledge that enables people to "honor" the world. In this stage, it is argued that perspective or subjectivity enables people to "honor" the world. Taylor, Hoy and Haley (1996) found that consumers have different perceptions on advertising. Levitt (1960) contended that adopting different viewpoints on a firm's existing business can lead to sustained growth.

2.9.1.2 Stage 2 A proactive mode of knowing driven by a concentration on the act of knowing

The second stage is the time that happened after three years when Cook Ting began to cut up an ox (Watson, 1968). In this stage, Cook Ting's knowing activities were cognitively proactive as they were driven by Cook Ting's effort to concentrate on knowing rather than external event. In this stage, Cook Ting did not see any ox, even when an ox is in front of him or when he stared at the ox. What was actually done by Cook Ting was that he "seeks the absolute from the inside rather than from the outside world" (Hao, 2005, p.269). Lin (1942)

and Legge (1891) translated the sentence differently as shown in Table 2.4 below.

Table 2.4: Comparison of different translations on stage 2

Translator	Translation
Lin Yutang	“After three years' practice, I saw no more whole animals.”
James Legge	“After three years I ceased to see it as a whole.”
English translation based on the seminal work of Nán Huái-Jīn	“After three years' practice, I saw no more ox.” (Translated by the author for the purpose of this research)

In this research, it is hypothesized that the condition of seeing no more oxen complies with the notion of “from the point of view of “that” you cannot see it, but through understanding you can know it. So I say, “that” comes out of “this” and “this” depends on “that” - which is to say that "this" and "that" give birth to each other” (Watson, 1968) in the theory of seeing things as equal. Graham (1969, p.152) translated the sentence as “therefore it is said ‘Other comes out from it, it too adapts to Other,’ the opinion that It and Other are born simultaneously.” The idea may be clearer if compared to stage one. In stage one, it is argued that a perception emerges when a person sees or is in contact with a material thing. In stage two, “from the point of view of “that” you cannot see it” denotes that if a person is influenced by the material thing and guided by the environment of that material thing or epistemic object, he or she will never see Dào (Nán, 2007a). “But through understanding you can know it” denotes that pursuing Dào requires that person to seek for Dào from his or her

heart (Nán, 2007a). It is because the body of Dào is metaphysical (Nán, 2007a). Therefore, Cook Ting did not see an ox, because he was looking into himself or his heart.

In this research, “so I say, “that” comes out of “this”” denotes that a person’s subjectivity creates an idea of the material thing (Nán, 2007a). For instance, it is an idea of an ox perceived by a person in this story. “And “this” depends on “that” - which is to say that "this" and "that" give birth to each other” denotes the creation of an idea about the material thing or epistemic object is triggered when that person comes in touch with an ox (Nán, 2007a). In other words, material thing is the factor of creating perception while subjectivity is the creator of perception. Due to the differences in subjectivity, each individual may perceive “affordance” differently. An example of a thing may give rise to different perceptions can be found in a study conducted by Lim, Cheng, Cham, Ng and Tan (2019). They (Lim et al., 2019) find that larger number of female online shoppers perceive online shopping as enjoyable experience in comparison to male online shoppers. They (Lim et al., 2019) also discover that larger number of male online shoppers perceive online shopping as useful in comparison to female online shoppers.

2.9.1.3 Stage 3 A “spirit” mode beyond knowing

The third stage is where Cook Ting acquired the Dào via ox-cutting (Chen, 2005). Cook Ting’s excellent ox-cutting performance for his master belongs to this stage. In this stage, Cook Ting’s knowing activities were cognitively

driven by Cook Ting’s spiritual intelligence. This is evident from Cook Ting who explained to his master that he used “spirit” in his cutting without looking at the ox (Nán, 2007a). For comparison, examples of other translations from Lin (1942) and Legge (1891) about Cook Ting’s explanation are presented in Table 2.5 below.

Table 2.5: Comparison of different translations on stage 3

Translator	Translation
Lin Yutang	“Now I work with my mind and not with my eye. My mind works along without the control of the senses.”
James Legge	“Now I deal with it in a spirit-like manner, and do not look at it with my eyes. The use of my senses is discarded, and my spirit acts as it wills.”
English translation based on the seminal work of Nán Huái-Jǐn	“Now I deal with it in a spirit-like manner, and do not look at it with my eyes. The physiological functioning of my five organs (mouth, eyes, nose, tongue and ears) wished to stop, but the spiritual condition keeps on the ox-cutting naturally.” (Translated by the author for the purpose of this research)

According to Nán (2007a), the spirit-manner happens when Cook Ting's consciousness, knife, and the ox are melded. Chia (2003) describes the happening of spirit-manner as "moment of the sublime where the knower [the individual], the actor, and the acted-upon are fused in a moment of spontaneous action that transcends time, space, individuality, and performance". Polanyi (1966) described a probe being used to explore things on the outside as an instance of how a tool transforms into a sentient extension of the human body.

Tsoukas (2005, p.149) proposed that humans "dwell in the tools we use, making them extensions of our own body". Meanwhile, Csikszentmihalyi (1988; 1997) suggested that people engage in a mode of "flow" when they are involved in a creative activity and become immersed in the task up to a level whereupon they unintentionally ignore external events or stimuli.

In this research, it is hypothesized that the principle of utilizing "spirit" in ox-cutting corresponds to the following explanation about why the theory of seeing all the things as equal should be adopted from the aspect of a theory of knowledge:

Therefore the sage does not proceed in such a way, but illuminates all in the light of Heaven. He too recognizes a "this," but a "this" which is also "that," a "that" which is also "this." His "that" has both a right and a wrong in it; his "this" too has both a right and a wrong in it. So, in fact, does he still have a "this" and "that"? Or does he in fact no

longer have a “this” and “that”? A state in which “this” and “that” no longer find their opposites is called the hinge of the Way. When the hinge is fitted into the socket, it can respond endlessly (Watson, 1968).

According to Nán (2007a), “therefore the sage does not proceed in such a way, but illuminates all in the light of Heaven” means that instead of adopting an artificial or personal standpoint, the sage refers to the heaven as the basis of knowing. In this sentence, heaven is the same as *Dào* (Nán, 2007a). This is evidence that Cook Ting applied the theory of seeing things as equal during knowledge creation.

There are several reasons why the theory of seeing things as equal should be adopted as a way of knowledge creation. While avoiding an artificial or personal standpoint may seem to free a person of bias, Zhuāng Zǐ argued that using *Dào* as reference point is, in itself, a subjective view (Nán, 2007a). Zhuāng Zǐ posited that “he too recognizes a “this,” but a “this” which is also “that,” a “that” which is also “this”” (Watson, 1968). In the statement, Zhuāng Zǐ indicated that the usage of *Dào* was an assertion, and thus stemmed from a subjective perspective (Nán, 2007a). An implication of this idea is that the situation will be similar to stage two if subjectivity is paramount. If interactions with the world (Cook & Brown, 1999) or an epistemic object does not happen, an individual will not perceive the epistemic object and thus form an opinion. This then indicates clearly that the formation of opinions or perceptions is directly caused by the epistemic object (Nán, 2007a). This phenomenon further implies that if a particular perception of an epistemic object is considered true,

other perceptions of the same epistemic that deviate from the “true” perception will be considered false (Nán, 2007a).

Another reason for adopting the theory of seeing things as equal in knowledge creation is the fact that subjectivity causes every person to have a distinct value judgment system (Nán, 2007a). Zhuāng Zǐ said, “his “that” has both a right and a wrong in it; his “this” too has both a right and a wrong in it.”, and then asked “so, in fact, does he still have a “this” and “that”? Or does he in fact no longer have a “this” and “that”?” (Watson, 1968). Essentially, he calls into question the judgment of true and false perceptions, noting that opposing perceptions are always present.

However, this problem can be solved by referring to *Dào*. Zhuāng Zǐ claimed that “a state in which “this” and “that” no longer find their opposites is called the hinge of the Way. When the hinge is fitted into the socket, it can respond endlessly” (Watson, 1968). He suggested that the characteristics of *Dào* are absolute, not relative (Nán, 2007a), and referred to *Dào* as a journey to a state of being where relativity, right and wrong, good and bad, all no longer existed (Nán, 2007a). Zhuāng Zǐ named this state the hinge of *Dào* (Watson, 1968). He explained further that the acquisition of this hinge would enable an individual to handle the infinite (Nán, 2007a). An example of the infinite may be countless views, according to Chen (2005, p.503), who hinted that “the hinge of *Dào* is one in which opposites no longer exist”. It is important to note that the hinge of *Dào* is only a part, not the entire body of *Dào* (Nán, 2007a).

From the perspective of knowledge creation, the interactions with the world (Cook & Brown, 1999) exist between an individual and the world that the individual inhabits. The individual serves as the knower while the world serves as the known. The opposing relationship vanishes as one arrives at the hinge of *Dào*. In this state, external objects and self subjectivity are forgotten (Nán, 2007a). Chang (1977) comments that Martin Heidegger's concept of "Opening and Presence and the Belonging Together of Being and Thinking" contributes to the principle of "the dichotomy of intuition and intuitable vanishes in the absolute moment".

2.9.2 Outcome of Knowledge Creation

The outcome of knowledge creation from the conceptual framework is an output of innovative nature similar to using newly created salve recipes using chapped hands. In essence, the output refers to *Yōng* or "Appropriate Usage" (Nán, 2007a). It is adopted from *Zhuāng Zǐ*'s (Watson, 1968) explanation about the effects of the successful application of the theory of seeing things as equal, "only the man of far reaching vision knows how to make them into one. So he has no use [for categories], but relegates all to the constant. The constant is the useful; the useful is the passable; the passable is the successful; and with success, all is accomplished".

Here, *Zhuāng Zǐ* explained that those who have attained *Dào* will return to the state where the world is one to acquire appropriate usage (Nán, 2007a), wherein "one" refers to the phrase "the world is one in nature" (Chen, 2005,

p.503). Nán (2007a) contends that appropriate usage means using the world suitably. Appropriate usage is the result of having acquired the hinge of Dào (Nán, 2007a). Similar appropriate usage can be found in the example of how to properly utilize a large calabash and a large useless tree, as suggested by Zhuāng Zǐ.

As the term implies, the concept of appropriate usage corresponds to the domain in which it is used. The domain determines whether something is used appropriately or otherwise. Within the domain of creative literature, appropriate usage is referenced as creative product (Amabile, 1983; Mumford & Gustafson, 1988). In the domain of knowledge management, appropriate usage refers to the usage of knowledge (Sveiby, 1997). For strategy management literature, it is strategy (Zack, 1999). Strategy can be the outcome of knowledge creation as the latent quality of knowledge enables subsequent development of innovative organizational initiatives (Hargadon & Fanelli, 2002). In this study, knowledge creation is conducted in the domain of strategy-making, thus the strategy is defined as the outcome.

From the perspective of strategy innovation, appropriate usage corresponds to the strategic intent of ancient Chinese philosophies in organizational studies. In this study, strategic intent is an aspiration that guides strategy-making, defines the success of a strategy, and significantly affects organizational performance upon its achievement. The strategic intent of ancient Chinese philosophies complements the Western theories of strategic management. For the West, strategic intent is used to attain a competitive advantage over rival groups

(Afuah, 2009; Hamel & Prahalad, 1989). However, a competitive advantage may not lead to higher profitability (Coff, 1999), at least in the presence of discontinuous innovation. An example of this would be the innovation of digital camera and its impact on the usage of film camera. Furthermore, sustainable competitive advantages may vanish, especially when tangible resources are rare and running low. For example, the rare earth mineral industry is dwindling as resources are depleted. Innovation generates new wealth, thus making innovation capability a crucial part of producing innovations that can sustain wealth creation. Hence, it is necessary to shift the focus from gaining competitive advantages to wealth creation, and from sustainable competitive advantages to sustainable wealth creation, especially for the future.

Wealth creation and sustainable wealth creation are some of the major strategic intents of ancient Chinese philosophies. Confucianism and Daoism are the two dominant ancient Chinese philosophies (Čarnogurská, 1998). The Great Learning is a key text of early Confucianism (Zhong & Bao, 2016). It suggested that “the ruler will first take pains about his own virtue. Possessing virtue will give him the people. Possessing the people will give him the territory. Possessing the territory will give him its wealth. Possessing the wealth, he will have resources for expenditure. Virtue is the root; wealth is the result” (Legge, 1893, p.375). This implies that wealth creation should be a strategic intent for a ruler or a leader of organization to develop their state or organization.

At the same time, wealth creation should be based on virtue. The financial crisis of 2008 in the USA led to a surge in demands for ethical practices (Colander et al., 2009), thus showing that the Great Teaching can be adopted to prevent similar occurrences in the future, therein proving that it is still highly relevant to the modern economic environment.

Another key text of early Confucianism, the Works of Mencius, is also highly relevant to the current economic conditions. The Works of Mencius claims that:

If the seasons of husbandry are not interfered with, the grain will be more than can be eaten. If close nets are not allowed to enter the pools and ponds, the fishes and turtles will be more than can be consumed. If the axes and bills enter the hills and forests only at the proper time, the wood will be more than can be used. When the grain and fish and turtles are more than can be eaten, and there is more wood than can be used, this enables the people to nourish their living and mourn for their dead, without any feeling against any. This condition, in which the people nourish their living and bury their dead without any feeling against any, is the first step of the royal government (Legge, 1893, p.130-131).

This passage implies that sustainable wealth creation should be a strategic intent. The rationale behind this is the fact that by protecting the environment, people can sustain life, thus leading to the creation of wealth.

Early Confucianism lacks lessons on the process of wealth creation that are applicable in various contexts or times. Meanwhile, the advice of Mencius is context-specific and lacks theoretical guidance that allows the transfer or application of his teachings in other economic activities, especially in the modern era (Nán, 1996).

Wealth creation is one of the strategic intents of early Daoism, in particular Zhuāng Zǐ's philosophy. Zhuāng Zǐ used a story of catching a big fish with a great hook to indirectly illustrate wealth creation as strategic intent. In the story, the duke of Zān had a son who intended to catch a big fish in the Eastern Sea (Legge, 1891). He prepared suitable tools, which consisted of a big crook, a strong black line, and fifty steers that would serve as bait. After a year without catching anything, the son finally caught the big fish. All people from the Key river to the east, and from Zhang-Wu to the north ate their fill because of this catch. Thus, this story was told by the Story-tellers of small abilities. Zhuāng Zǐ commented that:

If the prince had taken his rod, with a fine line, and gone to pools and ditches, and watched for minnows and gobies, it would have been difficult for him to get a large fish. Those who dress up their small tales to obtain favour with the magistrates are far from being men of great understanding; and therefore one who has not heard the story of this scion of Zān is not fit to take any part in the government of the world; – far is he from being so (Legge, 1891).

There are at least three lessons that can be gleaned from the three comparisons that Zhuāng Zǐ made. First, Zhuāng Zǐ compared the prince to story-tellers. He implied that an individual should aspire to create substantial wealth to benefit social welfare by using strategic intent, just like how the prince caught a large fish and shared it with the people along the river. Secondly, fishing in the sea was compared to fishing in pools or ditches. This signifies that lucrative wealth may be gained from a larger source of wealth, indicating that one has to select the right area to create wealth. Thirdly, a strong black line was compared to a fine line. This hints that larger amounts of wealth may only be created by using greater means that are appropriate for the source of wealth. Through the second and the third comparisons, Zhuāng Zǐ illustrated how to create immense wealth.

Sustainable wealth creation is also a strategic intent of Zhuāng Zǐ's philosophy. From the perspective of Zhuāng Zǐ, sustainable wealth creation may be achieved in accordance with appropriateness. In the writing of Zhuāng Zǐ, there are four dimensions of appropriateness, namely appropriate time, appropriate usage, appropriate skill and appropriate nature (Legge, 1891). For appropriate time, Zhuāng Zǐ made his comments through the mouth of Zo of the Northern Sea:

Formerly Yao and Shun resigned (their thrones), and yet each continued to be Ti; Kih-khwâi resigned (his marquisate) which led to his ruin. Tang and Wu contended (for the sovereignty), and each became king; the duke of Pâi contended (for Ku), which led to his extinction. Looking at the subject from these examples of striving by

force and of resigning, and from the conduct of Yao (on the one hand) and of Kieh (on the other), we see that there is a time for noble acting, and a time for means; – these characteristics are subject to no regular rule (Legge, 1981).

Sustainable wealth creation, according to the passage above, is illustrated by the act of becoming a king, as an owner of a state. The state represents a great wealth since a king can tax his subjects as long as he holds power. Zhuāng Zǐ contended that the success of becoming a king depended on the appropriate time, which implies that the act of achieving sustainable wealth creation is also the same.

Zo claimed that “a battering ram may be used against the wall of a city, but it cannot be employed to stop up a hole; – the uses of implements are different” (Legge, 1891). A battering ram is valuable when it is used against the wall of a city. On the contrary, a battering ram is not valuable when it is used to stop up a hole. This shows that the value of an item lies in how it is used in a befitting manner. Making a thing valuable may lead to wealth creation.

Zo also asserted that “the (horses) Kih-ki and Hwâ-liu could gallop 1000 li in one day, but were not equal to a wild dog or a weasel when it came to catching rats; – the gifts of creatures are different” (Legge, 1981). This means that skills are only valuable when used under the appropriate conditions, thus indicating the appropriateness of skills. The Kih-ki and Hwâ-liu are most valuable when their skills are used for the purpose of transportation, not for catching rats. The

combination of appropriate usage and appropriate skill may lead to sustainable wealth creation.

Zo used the battering ram and the horses as examples to illustrate appropriate usage and appropriate skill respectively. Both the battering ram and the horses were important tools of war. Over the long history of China, individuals used war as a way to transform into kings, thus achieving sustainable wealth creation. Since appropriate usage and appropriate skill are applied in order to win a war, they can also be used to achieve sustainable wealth creation.

On the concept of appropriate nature, Zo stated the following:

The white horned owl collects its fleas in the night-time, and can discern the point of a hair, but on a bright day it stares with its eyes and cannot see a mound or a hill; – the natures of creatures are different (Legge, 1981).

The comment shows that nature is valuable when strengths are utilized in a suitable context. The white horned owl uses its naturally exceptional night vision to collect fleas during the night. The fleas symbolize wealth for the white horned owl, just like how the abundance of food is considered wealth to many human beings. In this context, the owl's nature is valuable as it enables the owl to sustain its life by catching fleas. Like the white horned owl, managers of organizations should learn how to utilize their natural strengths for sustainable wealth creation. The most notable natural advantage that humans

have compared to other creatures on the Earth is our exceptional capability to gain knowledge.

Appropriate usage refers to the actions needed for sustainable wealth creation. The examples set by Tang, Wu and the duke of Pâi show that there is no consistent, sure-fire way to achieve sustainable wealth creation. Although each did the same thing, all resulted in different outcomes. Zhuāng Zǐ hinted that the success of a method is determined by the surrounding environment at that particular time, which means that the ever-changing environment is one of the factors that has to be considered when attempting to achieve sustainable wealth creation.

The environment is complex and dynamic and requires constant consideration in terms of appropriate time, appropriate usage, appropriate skill, and appropriate nature. The four dimensions of appropriateness can be categorized into external dimensions, internal dimensions, and interactional dimensions.

The external dimension refers to appropriate time. Appropriate time, in turn, refers to the moment when changes to an environment favor a sustainable wealth creator and present the largest chance for success. Since the environment is an external factor, appropriate time is categorized as an external dimension. The internal dimensions consist of appropriate skills and appropriate nature, which exist as intrinsic factors within the wealth creator. The interactional dimension is appropriate usage, which refers to the interactions between the external and internal dimensions.

Appropriate usage involves the other three dimensions of appropriateness. A usage is deemed to be appropriate when a sustainable wealth creator has developed skills according to their natural strengths and applies it at the right time. Skill development is an appropriate utilization of natural strength, while skill application at the right time is an appropriate use of skill and an appropriate exploitation of time.

2.9.3 Wealth

It is expected that substantial new wealth will be created through the application of appropriate usage. In the conceptual framework, wealth refers to revenue (Hamel, 1998). Here, revenue is generated from providing new value, instead of increasing profitability by improving operating margins, which is consistent with the desired effect of strategy innovation (Hamel, 1998). New revenue represents new wealth that originates from the development of different income sources, such as novel business models, markets, and products (Schoenberg, 2003). The growth of new wealth can be calculated by identifying the difference in revenue before, and after innovative strategies were implemented. The amount of new wealth created from strategy innovation is significant and above average when compared to other industry players (Hamel, 1998).

2.10 Comparison between variance method and process method

This research strives to investigate “how do successful Malaysian Chinese entrepreneurs create and use knowledge in strategy-making to generate new wealth consistently in organizations by leveraging on the teaching of Zhuāng Zǐ’s philosophy?” As explained in Section 1.3, the research question is process-oriented and its expected outcome is a process theory. Consistent with the assumptions of process theory, the strategic knowledge creation framework discussed earlier is process-oriented because it shows a sequence of events leading to wealth as an outcome. The strategic knowledge creation framework guides the research process to construct a process theory.

Constructing process theory is a research approach that is highly different from the dominant approach of using the quantitative research method, which involves cross-sectional design and complex statistics in data analysis (Spector & Meier, 2014). This section compares the process approach and variance approach to show underlying assumptions of the research questions. The discussion also includes the way a process theory and its scientific value in terms of causality are created in this research.

2.10.1 Variance method

The research approach of building variance theory is termed as variable approach (Mackenzie, 2000) or variance method (Gupta, Chiles & McMullen, 2016; Payne, Pearson & Carr, 2017). Variance method is applied to answer the

type of research question that asks, “what are the antecedents or consequences of changes in organizational forms or administrative practices?” (Van de Ven & Huber, 1990, p.213). Hence, the variance method places greater emphases on the inputs and results of change, while overlooking the process of change (Van de Ven & Huber, 1990). This is incompatible with the research question to investigate the processes of knowledge creation and knowledge application.

Variance method is characterized by using the quantitative research method (Spector & Meier, 2014). In this method, input factors are represented by independent variables (antecedents), which are used to provide the statistical explanation on the variations in dependent variables (consequences) that are acting as outcome criteria (Van de Ven & Huber, 1990). The primary objective of the variance method is to determine whether, instead of how, a change happened (Van de Ven & Huber, 1990).

Variance method is used to construct a type of theory that offers explanations on the grounds of necessary causes and sufficient causes (Mohr, 1982). These two causes in combination may constitute a deterministic causation in terms of independent variables (inputs) that are causally related to dependent variables (outcomes) (Van de Ven & Engleman, 2004). Particularly, every single variable alone is both a necessary and sufficient cause at the same time that accounts for a distinctive part of the variance in the outcome (McMullen & Dimov, 2013).

The requirements of the coexistence of necessary and sufficient cause pose three key consequences to the variance method in explaining causality

(McMullen & Dimov, 2013). Firstly, as each independent variable only raises the amount of explained variance, the removal of one independent variable does not affect the causal relation of other independent variables, if they are not interacting with the variable being removed (McMullen & Dimov, 2013). This implies that an independent variable is constantly causal related to an outcome such that if there is a change in the independent variable, so is the outcome over the same period (Abbott, 1988). This constant causal relation is assumed in the variance method to be existed within short term, so that the time taken for causal relation to take effect and changes, such as fluctuations in external environment, which emerge during this period of time can be ignored (Abbott, 1988). As a result, all independent variables in a variance study are assumed to be situated in one temporal level (Abbott, 1988).

However, the assumptions above rule out important things that exist in between independent variables and dependent variables. The amount of time taken by independent variables for causal relation to be effective is not always the same (Abbott, 1988). This may give rise to errors in the result of variance method and uncertainty that can affect the causal relation, especially if large amount of time is needed (Abbott, 1988).

Secondly, the sequence of independent variables is immaterial to the final outcome under study because all independent variables are assumed to be operated at one temporal level (Mohr, 1982; Poole et al., 2000). In effect, empirical regularities and contingency models are prioritized in the variance method at the expense of evolution and progression of social phenomena, which include the beginning, development, growth and termination of things

over time (Langley et al., 2013). Besides, the time ordering of social practices as well as the uncertainty and urgency inherently involved in the temporal flow of social practices are also omitted in the variance method (Langley et al., 2013).

Omitting the evolvement of social phenomena, uncertainty and urgencies inherently involved in the temporal flow of social practices have limitations and pose problems in studying certain key functions of dynamic managerial capabilities. Changes, uncertainties and urgencies can likely emerge in the dynamic external environment (Ringov, 2017). Overcoming these challenges requires asset orchestration, which is a key function of dynamic managerial capabilities that involves acquiring, choosing, investing in, deploying and re-configuring resources and capabilities (Helfat & Martin, 2015b). Augier and Teece hinted that superior dynamic managerial capabilities are important to entrepreneurs and managers in “orchestrating necessary responses to technological and market changes” (2009, p.411). Therefore, the investigation on the asset orchestration function of dynamic managerial capabilities may become problematic, if the evolvement of social phenomena, uncertainty and urgencies inherently involved in the temporal flow of social practices is ignored.

Thirdly, the causality established with the variance method is causal relationship, not causal explanation (McMullen & Dimov, 2013; Mohr, 1982). As implied in the previous two consequences of the sufficient cause assumption, intervening variables that exist between independent variables and the outcome can be omitted in the variance method since each independent

variable is by itself a sufficient cause, rendering the sequence of independent variables unimportant (McMullen & Dimov, 2013). However, a satisfactory causal explanation is one that describes the mechanism in terms of process, which involves a cause (e.g. a managerial intervention) that exercises a causal influence to the outcome (e.g. resulting changes produced by the managerial intervention) (McMullen & Dimov, 2013). The process cannot be omitted because it is a necessary cause in bringing out the outcome (Mohr, 1982). The second event of a sequence of events might never happen in the absence of the first event of the sequence of events (Mohr, 1982).

Despite these consequences, the coexistence of necessary cause and sufficient cause assumed in the variance method is only possible on the assumption of the world as a closed system (Poole & Van de Ven, 2010). Closed systems are “systems where a constant conjunction of events occurs” (Bhaskar, 2008, p.3). A constant conjunction of events is characterized by the phenomenon of an event of a particular type, which can be a representative of an input factor, which is constantly accompanied by another event of different type, which can be a representative of an outcome of the earlier event (Bhaskar, 2008).

The coexistence of necessary cause and sufficient cause assumed in the variance method may not be applicable to social reality because of its assumption of the world as a closed system (Poole & Van de Ven, 2010). A closed system is artificially established, controlled and isolated from the actual world to form a condition that a constant conjunction of events is possible (Bhaskar, 2008). This is problematic because causes that govern the phenomena in open systems may be omitted in a closed system setting

(Bhaskar, 2008). In addition, experimental results from closed systems may be irrelevant to, unable to persist and not function in open systems due to the differences in the two types of system (Bhaskar, 2008).

In terms of the nature of causes, the variance method employs efficient causes to form causal explanations (Mohr, 1982; McMullen & Dimov, 2013; Poole, 2004). According to Mohr (1982):

an efficient cause is a force that is conceived as acting on a unit of analysis (person, organization, and so on) to make it what it is in terms of the outcome variable (morale, effectiveness, and so on) or change it from what it was (p.41).

The causality that involves an efficient cause takes the form of an immediate and “push-type” manner (McMullen & Dimov, 2013; Poole, 2007). As assumed in the variance method, every single necessary and sufficient cause is acting in this manner of efficient cause (Van de Ven & Engleman, 2004). Without efficient cause, the correlation between a cause and the outcome may be spurious (caused by certain external factors) or a pure coincidence, instead of causal (Mohr, 1982).

The variance method’s exclusive dependence on efficient cause suffers at least two limitations in developing causal explanation. Firstly, the efficient cause assumption may omit critical things that can occur during the time between the cause beginning to function and before the outcome becoming materialized (McMullen & Dimov, 2013). As the time increases, so do these critical events

(McMullen & Dimov, 2013). The omission of these events may affect the validity of the result of the variance method because causal effects are actually brought by these critical events, not the causes under observation (McMullen & Dimov, 2013).

Secondly, efficient cause is not applicable to causes brought by events that appear to be trivial and non-consequential early on, but it is possible to have considerable and coincidental effects for the ultimate outcome later on (McMullen & Dimov, 2013). An instance of trivial and non-consequential events can be found in the process of Microsoft becoming dominant in the PC operating system business, where IBM resists possessing the code developed by others (McMullen & Dimov, 2013). The effects of this kind of events are unlikely to be predictable, whereas efficient cause implies that the importance of these events can be anticipated (McMullen & Dimov, 2013).

To overcome this problem, a suitable explanation can be achieved by using a process explanation, which is based on the assumption of the final cause (McMullen & Dimov, 2013). The assumption of the final cause suggests that “phenomena are influenced by the ends to which they are tending” (Poole, Van de Ven, Dooley & Homes, 2000, p.33). The importance of these seemingly non-consequential events can only be identified in the light of some meaningful eventual outcome (McMullen & Dimov, 2013). Therefore, the final cause is much appropriate to explain this type of phenomena since the outcome influences the importance of these prior events. Similarly, it is Microsoft’s

leading position in the PC operating system that shows that the ownership of code is important.

2.10.2 Process method

In contrast to the variance method, the research approach of constructing the process theory is known as process approach (Mackenzie, 2000) or process method (Gupta, Chiles & McMullen, 2016; Payne, Pearson & Carr, 2017). Process method is applied to answer the type of research question that asks, “how does an organizational change emerge, develop, grow or terminate over time?” (Van de Ven & Huber, 1990, p.213). Hence, the process method focuses exclusively on the process of change so as to describe and explain the temporal sequence of events concerned (Van de Ven & Huber, 1990).

The process orientation of the process method is compatible with the research question to examine knowledge creation and knowledge application, which also pertain to processes of change. Knowledge creation can be seen as a process of enabling and enhancing change to a manager’s dynamic managerial capabilities as knowledge is an underpinning dynamic managerial capabilities (Helfat & Martin, 2015b). Knowledge application can be seen as a process of implementing managerial intervention or a process of strategic change (Pettigrew, 1992) that is reflecting the strategic decisions to cater for the requirements for changes over time (Adner & Helfat, 2003).

The process method commonly utilizes the qualitative research method, such as theory-building multiple-case study (Cornelissen, 2017; Eisenhardt,

Graebner & Sonenshein, 2016). The theory-building method is more suitable than the statistically-based methods for the investigation of process (Eisenhardt, Graebner & Sonenshein, 2016). Firstly, the earlier is better in expounding a process, while the later usually disregards the intervening processes (Eisenhardt, Graebner & Sonenshein, 2016). Expounding a process requires an explaining time ordering of the occurrence of a discrete set of events found in a story or historical narrative (Van de Ven & Huber, 1990). The order of events may reveal a pattern of the process under study that uncovers the causes or effects of the events (Van de Ven & Huber, 1990).

Secondly, a more concrete description of causality can be generated through narrative (Langley & Tsoukas, 2010). This is evident from the comparison between the types of explanation produced with a process method and a variance method, that is “‘this did happen in this way’, versus ‘this should happen if the following conditions hold’” (Tsoukas & Hatch, 2001, p.998). The former explanation is representative of the outcome of the process method as it describes the occurrence of a process, whereas the later explanation is representative of the outcome of the variance method. The description of thing happens in a specific way, where it presents and captures nuances of event, connection, and intention that are discarded in the variance method to give way to categorization and correlation (Tsoukas & Hatch, 2001). Hence, the primary objective of the process method is to uncover how, instead of whether, a change happened (Van de Ven & Huber, 1990).

Thirdly, the process method is much suitable to this research than the variance method because a story is an appropriate research instrument to investigate tacit knowledge (Ambrosini & Bowman, 2001). Processes described in the story can be used to communicate meaning about tacit knowledge (Ambrosini & Bowman, 2001). This is especially valuable as tacit knowledge is not codifiable, and thus is inappropriate to be researched with the survey method that requires respondents to articulate what cannot be explicated (Ambrosini & Bowman, 2001).

Despite that, process method is different from variance method that it enables the process theory to offer explanations based solely on necessary cause (McMullen & Dimov, 2013; Mohr, 1982). Explanations of development and change, such as a process of innovation, in terms of key events and their conjunction permit only necessary causes (Mohr, 1982). Particularly, every event of a process imparts a specific direction and causally drive the developing subject forward so as to achieve a certain outcome (Poole et al., 2000).

The causal influence of an event signifies a necessary cause for development and change progress along a specific path (Poole et al., 2000). In addition, necessary cause exists because each event, conjunction, and confluence affect the subject and may change the direction imparted by preceding events (Poole et al., 2000). As each event contains a necessary cause, all of them are essential in the entire chain of events to bring about the outcome (McMullen & Dimov, 2013). This implies that a single event cannot be a sufficient cause by itself to

explain the outcome in the absence of any other necessary cause (McMullen & Dimov, 2013).

Using a chain of events an entrepreneur may experience as an example, McMullen and Dimov (2013) explained that the sufficient cause implicated in a single event (unlike the sufficient cause implicated in an independent variable in a variance theory) is contradictory to the necessary cause implicated in that event. The chain of events involves an entrepreneur first utilizing human capital to obtain his first customer, then followed by raising venture capital, developing a formal organization, conducting a large-scale market launch, and finally attaining the ultimate outcome (McMullen & Dimov, 2013). Each event is a key milestone to another and the missing of any event can lead to different developments in the entrepreneurial journey (McMullen & Dimov, 2013).

In comparison to the explanations premised on both necessary and sufficient cause employed by the variance method, explanations based solely on necessary cause adopted by process method is more realistic due to two reasons (Poole & Van de Ven, 2010). The first reason is that a majority of social phenomena are actually existing in an open system comprising of things that have an ensemble of causal powers, tendencies and liabilities coming from the nature of these things (Bhaskar, 2008). Open systems are “systems where no constant conjunctions of events prevail” (Bhaskar, 2008, p.2). The causal powers, tendencies and liabilities of things may be used or unused, may be used but unrealized in any particular outcome, and may be realized in the outcome without the knowledge of people (Bhaskar, 2008). The causation in an

open system is manipulative that an input is not a full cause, and it is subject to human manipulation to effectuate its impacts on the outcome under study, otherwise the input may remain unused or unrealized (Poole & Van de Ven, 2010). This is evident as most non-living input factors are passive, whereas human mind is active (Bhaskar, 2008). Since the mere existence of an input is insufficient to exercise the causal influence of the input to the outcome without human actions, the assumed sufficient cause that exists in a closed system is unrealistic in most social phenomena (Poole & Van de Ven, 2010).

The second reason is that only hypothesized variables are included in the experimental setting of a closed system while outside variables or unexpected events may emerge randomly in the actual world and bring out a significant impact to the outcome under study (Poole & Van de Ven, 2010). In the changing environment where uncertainties and turbulence may exist, firms are unlikely to be able to take a complete control or forecast all external variables that have an impact on their business (Bolisani & Bratianu, 2017). These outside variables or unexpected events can be changes that are more likely emerging in an environment that is highly volatile. As dynamic managerial capabilities are employed to address changes in continually shifting environments (Adner & Helfat, 2003), the concept is much compatible with the view of a majority of social phenomena actually existing in an open system. Moreover, the open system view implies that the instabilities of external environment should be overcome with a proactive strategic adaptation (Makkonen, Pohjola, Olkkonen & Koponen, 2014). Since the adaptation is especially important in dynamic environments, the open system view can yield

a distinct research contribution, which is not available if the closed system view and stable environments are assumed.

In terms of the nature of causes, the process method employs final causes to form causal explanations (Mohr, 1982; McMullen & Dimov, 2013). A final cause “is an end point which existence connotes the occurrence of certain prior events” (Mohr, 1982, p.59). As discussed earlier, the assumption of final cause suggests that the ends affect the phenomena as the development of phenomena is directed toward the ends (Poole et al., 2000). Final causes can be found in human goals, natural ends and results following the development of natural processes (Poole, 2013). An instance of the final cause is the decision about reacting to problems or exigencies (Poole, 2007). The decision is a final cause because it shapes the decision-making process with its goal of attaining a viable solution (Poole, 2007). Since the outcome implies the precursor rather than the precursor implies the outcome, the causality that involves a final cause is a “pull-type” causality (Mohr, 1982).

The assumption of final cause is particularly suited to the study of dynamic managerial capabilities. As explained earlier, an example of the final cause is the decision to respond to problems or exigencies (Poole, 2007). This type of decision stimulates the generation and application of dynamic managerial capabilities, especially when the problems or exigencies are frequently resulting from environmental dynamism (Barrales-Molina, Bustinza & Gutiérrez-Gutiérrez, 2013). In addition, the concept of dynamic managerial capabilities is first proposed by Adner and Helfat (2003) as a primary source

for making effective managerial decisions. Dynamic managerial capabilities are helpful for managers to cope with the market changes that are unpredictable (Buil-Fabregà, del Mar Alonso-Almeida & Bagur-Femenías, 2017). All these imply that dynamic managerial capabilities are dealing with final causes.

The value of dynamic managerial capabilities is dependent on the final cause. Zahra, Sapienza and Davidsson (2006) warned that dynamic managerial capabilities may damage firm performance when they are not needed. However, they (Zahra, Sapienza & Davidsson, 2006) also highlighted that dynamic managerial capabilities can improve firm performance when they are needed, such as making decisions to cater for changes in volatile environment.

In overall, the research question, “how do successful Malaysian Chinese entrepreneurs create and use knowledge in strategy-making to generate new wealth consistently in organizations by leveraging on the teaching of Zhuāng Zǐ’s philosophy?” is compatible with the process method rather than the variance method, and thus it is process-oriented. Process method can be used to trace the target phenomenon backward into the past in accordance to outcomes of the phenomenon that are known earlier (Langley & Tsoukas, 2010). In the research question, the outcome is the success of the creation of new wealth achieved consistently in organizations. Therefore, the research question directs the data collection process to trace Zhuāng Zǐ’s perspective of knowledge creation and knowledge application that seem to be directly connected to the outcome.

Employing Zhuāng Zi's perspective is consistent with the narrative knowing, which is a specific form of knowing underpinning the application of narrative explanation in the process method (Langley & Tsoukas, 2010). In compliance with the process method, narrative knowing deals with final causes, which include "human or human-like intention and action and the vicissitudes and consequences that mark their course" (Bruner, 1986, p.13). Narrative knowing is defined as:

a form of knowing that is used to give meaning to particular events drawing on culturally embedded narrative structures (e.g., the comedy, the tragedy, the fairy story, the joke, the moral fable), or any kind of recognizable story that reveals an underlying message, plot, or point (Langley & Tsoukas, 2010, p.7-8).

Therefore, knowledge comes into existence in the narrative knowing by endowing experience with meaning (Bruner, 1986). Narrative knowing is important because human action is created from, and informed by, the meaningfulness of human experience (Polkinghorne, 1988).

Narrative knowing is different from "paradigmatic" or "logico-scientific" knowing applied in the variance method (Langley & Tsoukas, 2010; Tsoukas & Hatch, 2001). Paradigmatic knowing is a form of knowing that applies "the norms of formal scientific and logical reasoning where generalizations are made about causal influences among variables" (Langley & Tsoukas, 2010,

p.7). Paradigmatic knowing draws on the assumptions of positivism (Kramp, 2004) and efficient causes (Richert, 2006). In paradigmatic knowing, knowledge is brought out by identifying the truth, which involves procedures of assuring verifiable reference and testing empirical truth (Bruner, 1986). As a result, knowledge produced from paradigmatic knowing mirrors an ‘objective’ deterministic world, whereas knowledge created from narrative knowing represents a ‘constructed’ world where human being has a discretionary power to make things happen (McLeod, 2011).

In compliance with its definition given earlier, narrative knowing takes culture into account in studying phenomena of interest because human mental activities are conducted based on cultural perspectives (Bruner, 1986). In particular, the assumption of the evolution of human capacities receives selection pressures from cultural influence “links man and his knowledge-gaining and knowledge-using capabilities to the culture of which he and his ancestors were active members” (Bruner, 1991, p.3). In line with narrative knowing, the research question focuses on Zhuāng Zǐ’s philosophy as a cultural perspective, and its ideas of processes of knowledge creation and knowledge application.

Since narrative knowing is followed in the research question, this implies that the research philosophy of the research question is constructivism. Constructivism is “the philosophical belief that people construct their own understanding of reality” (Oxford, 1997, p. 36). Both narrative knowing and constructivism belong to a system for constructing reality and organizing

experience, whereas paradigmatic knowing and positivism belong to another (Shkedi, 2005). Constructivism is consistent with narrative knowing as it assumes that knowledge comes from the interaction between the theory-base of an individual and the medium of phenomena (Mir & Watson, 2000). Since culture can be a theory-base of an individual, this implies that cultural perspective is essential and applied in these mental activities of producing knowledge. Detailed discussions about constructivism is provided in Section 1.6.

2.11 Chapter summary

This chapter describes the literature review of this study. It highlights the gaps in existing research, establishes the foundation for this research, presents the assumptions regarding the major concepts and their relation to superior managerial capabilities. The literature review consists of the following:

- 1) The “theories of knowledge creation” section offers an overview on the literature related to knowledge creation in the West, and highlights the research gaps that exist in available literature. The knowledge creation literature emphasizes the usage of explicit knowledge for its transmission within organizations instead of tacit knowledge that is non-transferable.
- 2) Confucian and Daoist theories of knowledge creation are discussed to illustrate the Chinese ideas of knowledge creation. A representative Confucian theory of knowledge creation is the Great Learning way of

self-cultivation. The Confucian concept of knowledge is the ethic-centered capacity to act. A representative Daoist theory of knowledge creation is the fasting of the heart. The Daoist concept of knowledge is the performance-centered capacity to act.

- 3) Comparisons between Confucian and Daoist theories of knowledge creation show that the latter is selected for its emphasis on attaining the highest knowing capability. In Daoist theories of knowledge creation, the highest knowing capability rests on the spiritual intelligence to generate knowledge.
- 4) Comparisons between Western and Daoist concepts of knowledge indicate that the latter is a better focus for this research due to its emphasis on tacit knowledge and action over explicit knowledge and words.
- 5) Comparisons between Western and Daoist concepts of creation have uncovered that the latter is adopted in this research for its distinctive insight about achieving high creativity, which is the highest stage of creativity people can aspire after (Niu & Sternberg, 2006). The high creativity is achievable through the unity of nature with human thought (Niu & Sternberg, 2006). This Daoist type of creativity is different from the West that it requires the cultivation of *Dào* (Niu & Sternberg, 2006).
- 6) The connection between knowledge creation and strategy innovation is discussed to explain how effective new strategies stem from new knowledge.
- 7) Justifications of using Zhuāng Zǐ's philosophy in this study are explained as the focus of the philosophy rests on the personal spiritual

and insight that may be important for elevating an individual's dynamic managerial capabilities and Zhuāng Zī's unique theory of knowledge about the development of extraordinary skills for performance improvement. Zhuāng Zī's theory of knowledge offers distinctive views on the knowledge creation and strategy innovation. In Zhuāng Zī's perspective, creating extraordinary knowledge or wealth creating capabilities is a type of inner deformity (Nán, 2007a). Zhuāng Zī's philosophy of strategy innovation for effective wealth creation is deemed appropriate usage.

- 8) Based on Zhuāng Zī's philosophy, a strategic knowledge creation framework is proposed as the research framework, which specifies the scope of investigation conducted in this study. The framework shows how the investigation covers the process. The coverage starts from knowledge creation on an individual basis, and ends with successful wealth creation.
- 9) Lastly, the process method is compared with the variance method to explain distinctive characteristics of this research approach and its impacts to the development of the process theory, such as the strategic knowledge creation framework. Process method is different from variance method primarily due to its focus on the process of change rather than variable to provide both the description and explanation about the temporal sequence of events (Van de Ven & Huber, 1990). Process method in this research uses qualitative, theory-building multiple-case study for research investigation (Cornelissen, 2017; Eisenhardt, Graebner & Sonenshein, 2016), chains of events to

constitute causality (Langley et al., 2013), only necessary causality (McMullen & Dimov, 2013; Poole & Van de Ven, 2010) and narrative knowing (Langley & Tsoukas, 2010).

Following this, Chapter 3 will deal with the research methodology. Section 3.0 will present a suitable research design for uncovering the process of knowledge creation and strategy innovation as depicted in the strategic knowledge creation framework. Section 3.1 will demonstrate how rapidly changing research settings give birth to complexity when it comes to collecting data on the entrepreneurs who are influenced by the Chinese culture and have demonstrated dynamic managerial capabilities in fast-changing environments. Section 3.2 will showcase the appropriate research sampling method for recruiting research participants who have created knowledge, applied creativity, and used Zhuāng Zǐ's philosophy in their strategy-making. Section 3.3 will provide details about the data collection meant to elicit tacit knowledge and the processes involved in knowledge creation and strategy innovation. Finally, Section 3.4 will present the qualitative data analysis that leads to the process model of knowledge-wealth creation.

3.0 RESEARCH METHODOLOGY

This chapter outlines a process of inquiry guided by the strategic knowledge creation framework in order to answer the research question of this study. Section 3.0 provides the research design and its justification to investigate the process as outlined in the strategic knowledge creation framework. Section 3.1 describes the research setting and its justification to show a research setting that contains the inheritance of Zhuāng Zǐ's philosophy, and its application in knowledge creation and strategy innovation for a better understanding of dynamic managerial capabilities. Section 3.2 explains the research sampling method about the identification of sample that offers opportunity to uncover the application of Zhuāng Zǐ's philosophy. Section 3.3 presents the data collection from primary and secondary sources. Finally, Section 3.4 outlines the analysis of the qualitative data collected in this research study.

This study shall undertake an exploratory (Yin, 2003), process-oriented (Langley & Tsoukas, 2010), constructivist (Mir & Watson, 2000) theory-building multiple-case study (Carroll & Swatman, 2000; Eisenhardt, 1989). The exploratory case study strategy is appropriate to answer the type of research questions asking “how” (Yin, 2003). Besides, the exploratory research shall employ in-depth process-oriented case study, which is the most suitable methodology to study strategy due to its nature in certain aspects, such as complexity and chronic issues (Cornelissen, 2017; Porter, 1991). The expected result of the exploratory case study is to know how the investigated phenomenon comes into existence (Yin, 2003). Therefore, this research

approach is especially needed to examine an under-explored area, which is the application of Zhuāng Zǐ's philosophy in the process of knowledge creation and strategy innovation.

The research design of the theory-building multiple-case study (Carroll & Swatman, 2000; Eisenhardt, 1989) is adopted in this study to achieve the research objectives, such as creating a theoretical model. Theory-building multiple-case study can be used to uncover emerging patterns within a case, generate creative insights and new theory through comparisons between different cases (Eisenhardt, 1989). For instance, using theory-building multiple-case study is an important response to Wang and Ahmed (2007). They (Wang & Ahmed, 2007) urged for further research to search the similarities of dynamic capabilities between different companies. The similarities between different companies from various industries are useful to form a basis for the theoretical development of dynamic capabilities view, and become mature as a dynamic capabilities theory (Wang & Ahmed, 2007).

Consistent with constructivism, the investigation process of theory-building multiple-case study in this research is guided by a conceptual framework (Carroll & Swatman, 2000). As discussed earlier, constructivist researcher uses commonly accepted assumptions, suitable concepts, models and theories to interact with the medium of inquired phenomenon in order to create knowledge (Mir & Watson, 2000). In this research, Zhuāng Zǐ's philosophy is applied to construct the strategic knowledge creation framework, which is used to guide the research process.

Following constructivism, the knowledge, theory or conceptual model produced with the theory-building multiple-case study is the researcher's understanding of the subjective understanding provided by informants (Carroll & Swatman, 2000). The notion of knowledge is a construction of the researcher; and is consistent with the constructivists' ontological assumption. Specifically, constructivists assume that reality is a creation of the researcher (Mir & Watson, 2001).

Exploratory (Yin, 2003), theory-building multiple-case study (Carroll & Swatman, 2000; Eisenhardt, 1989) is adopted as the research design of this study for three reasons. First, the research design is compatible with constructivism. As highlighted in the foregoing discussion, the exploratory theory-building multiple-case study enables a constructivist researcher to construct a novel conceptual model for understanding an insufficiently researched area. In addition, this research design allows researcher to apply the existing theory in the research process. Therefore, the strategic knowledge creation framework developed from Zhuāng Zǐ's philosophy can be applied to guide the research process.

Secondly, the choice of research methodology is also guided by the recommendation that qualitative methodology is better in examining tacit knowledge and subjective understandings and interpretations (Marshall & Rossman, 2006). Specifically, understanding tacit knowledge creation requires

the examination of human action and its meaning assigned by the actor (Marshall & Rossman, 2006).

Thirdly, the strengths of a case study design lie in describing, understanding and explaining a fact (Tellis, 1997). These strengths are required to describe, understand and explain knowledge creation from Zhuāng Zǐ's perspective in the domain of strategy-making as discussed in this research. As this concept and its application are new to the management in modern environment, it requires exploration. Additionally, a case study can be used to evaluate the process and outcome of knowledge creation (Tellis, 1997). As a result, knowledge creation and its resulting strategy innovation will be demonstrated and reviewed in this research.

3.1 Malaysia as the research setting: From the inheritance of Zhuāng Zǐ's philosophy to dynamic managerial capability of Malaysian Chinese

This section describes the research study setting. The details of the research setting are important for this research study to develop transferability. Transferability exists when rich information of a research setting is made available for others to apply in their situations (Lincoln & Lynham, 2011).

Malaysian Chinese is an ideal target population of this research. In a broader sense, there are two reasons for selecting the population. Firstly, Malaysian Chinese inherited and applied Zhuāng Zǐ's philosophy. This is consistent with Liu's (2015) observation that Zhuāng Zǐ's philosophy is influential to Chinese

thought. There are at least two ways how Malaysian Chinese attain Zhuāng Zǐ's philosophy, which are through Chinese language and other Chinese cultural heritage, such as Chinese cultural values and norms.

A vast majority of Malaysian Chinese is influenced by Chinese culture. Although some of them are comparatively less influenced by Chinese culture, they are a minority of Malaysian Chinese. Malaysian Chinese who are comparatively less influenced by Chinese culture consist of those who received education from the English-language medium school and Malay-language medium school (Chan, 2018) and the “peranakan” Chinese (Tan, 1988). Malaysian Chinese who received a greater influence from Malay culture is referred as the “peranakan” Chinese (Tan, 1988). The term “Peranakan” is a Malay word derived from another Malay word “anak”, which has the meaning of “child” (Teoh, 2016). The peranakan Chinese do not speak Chinese language, dress and cook in a way influenced by the Malay culture (Tan, 1988). On the other hand, the influence of Chinese culture to Malaysia Chinese is comparatively much common. There are about 90 percent of the community of Malaysian Chinese who are Chinese-educated (Chan, 2018). Receiving Chinese-language medium education in Malaysia is an insistence, a cultural root and an inseparable effort of Malaysian Chinese (Xia, Yang & Lee, 2018). A command of Chinese language is an identity marker and is important for culture preservation for Malaysian Chinese (Ng & Lee, 2018). Therefore, the development of Chinese-language medium education in Malaysia is the most important movement to preserve Chinese culture (Matondang, 2016), reflecting a profound influence of Chinese culture to Malaysia Chinese.

Daoism is innate to Chinese culture (Kohn, 2008; Lee et al., 2008). Chinese is influenced by Daoism to make causal attributions by attending to the whole field (Lee et al., 2008). In this holistic view of causality, Daoism is used by Chinese to understand change, contradictory perspective and problem or dilemma that arise from the interrelation between two parties (Lee et al., 2008). Besides, Daoism affects Chinese thinking and reasoning to be more contextual and flexible than Western thinking and reasoning (Peng, Spencer-Rodgers & Nian, 2006). In addition, Cheung and Chan (2005) uncovered that Chinese cultural influence causes Hong Kong Chinese CEOs to lead in the Chinese style, although they did not tell the names of the Daoist doctrines. Xing and Sims (2011) found that Daoism was a cultural root that affected the leadership actions taken by Chinese bank managers.

Secondly, Malaysian Chinese is more appropriate for studying knowledge creation for the development of dynamic managerial capability than the Chinese societies in other countries. Among Chinese educated societies, such as the Chinese society in China, Hong Kong, Macau and Taiwan (these societies are holistically termed as the Greater China region), Malaysian Chinese encounter a condition with higher complexity and velocity of change as compared to others. Chinese educated societies refer to those societies who have selected Chinese as the medium of instruction in their education system, at least in primary schools. Therefore, Singapore is not considered as a Chinese educated society. This is because English is the medium of instruction in their

education system, despite the fact that Singaporean Chinese is the largest ethnic group in the society.

While the Greater China region is culturally homogeneous(Loo, 2011), only Malaysian Chinese inherit and apply Zhuāng Zǐ's philosophy in a multicultural context that is comparatively heterogeneous. A heterogeneous context is more demanding than a relatively homogeneous context for a strategic change. Requirements to accommodate differences between Malaysian Chinese and other ethnic groups, especially the dominant Malay ethnic group in a multicultural society pose higher pressure and needs to create knowledge for the development of a dynamic managerial capability. Therefore, the investigation on Malaysian Chinese offers incomparable insights from the most challenging environment in meeting the research objectives.

In what follows, the research first identifies the acquisition of Zhuāng Zǐ's philosophy through Chinese language. Then, this research discusses in what way the inheritance of Zhuāng Zǐ's philosophy occurred with explanations of the intended design of Chinese character, and formation of Chinese character. In the last section, this research shows the adaptation of ethnic Chinese business in Malaysia's economy supported by the inheritance of Chinese culture.

Chinese language consists of Chinese written language and Chinese spoken language, which are two different ways of transmitting Zhuāng Zǐ's philosophy. First of all, Malaysian Chinese may acquire Zhuāng Zǐ's philosophy through

Chinese written language. The most important source to consult Zhuāng Zǐ's philosophy is the philosophical text titled in his name. The philosophical text was authored by Zhuāng Zǐ in Chinese written language and circulated until today.

Chinese written language is the most ideal means of recording, transmitting and acquiring Zhuāng Zǐ's philosophy due to its distinctive strengths to be discussed in the following. This study does not intend to argue that Chinese language is the best language in the world, but rather to understand the ideal way in acquiring Zhuāng Zǐ's philosophy. Due to the importance of Chinese written language and about 90 percent of the community of Malaysian Chinese are Chinese-educated (Chan, 2018), Malaysian Chinese becomes a valuable source of information with regard to knowledge creation and the innovative applications of knowledge creation in wealth creation because they inherited and applied Zhuāng Zǐ's philosophy in a contemporary context.

Secondly, Malaysian Chinese acquire Zhuāng Zǐ's philosophy through Chinese spoken language. Zhuāng Zǐ's philosophical text has an enormous influence on Chinese spoken language. Malaysian Chinese attained Zhuāng Zǐ's philosophy via communication with Chinese spoken language. Zhuāng Zǐ's philosophy was assimilated in Chinese spoken language as a significant number of important, foundational, and frequently used Chinese spoken words were derived from terms and concepts in Zhuāng Zǐ's philosophy. By accepting, understanding, and using these terms and concepts in their daily speech, Malaysian Chinese inherited Zhuāng Zǐ's philosophy.

There are at least two most important components that make the inheritance of Zhuāng Zǐ's philosophy through Chinese language successful, namely the intended design of Chinese character's structure for continuous use in disseminating message across time and space, and the meaning-centric way of Chinese word formation. In discussing the intended design of Chinese character's structure, this research described the evolution of Chinese characters that is important for the survival and continuous use of Chinese characters, leading to Zhuāng Zǐ's philosophy transmission. The evolution reflects that the design of Chinese character's structure had undergone several stages that involved creation, completion, systemization, standardization, simplification, and regularization of Chinese characters.

As the second component, the meaning-centric way of Chinese word formation explains the six ways of Chinese characters formation as a traditional Chinese approach to recognize and grasp the meaning of each and every Chinese character. This is the key to have a more accurate understanding of the intended message to be delivered through Chinese language.

The last section highlights the adaptation of Malaysian Chinese who inherited and applied Zhuāng Zǐ's philosophy in the Malaysian context. Despite being the minority in Malaysia's population, Malaysian Chinese is the largest player in the Malaysian economy (Jakobsen, 2015). The economic success of Malaysian Chinese is largely attributed to the Chinese culture, especially its deterministic role in decision-making (Gomez, 2015). Zhuāng Zǐ's philosophy

is one of the most important philosophical roots of Chinese culture. Zhuāng Zǐ's philosophy forms the norms and values of Chinese culture that are of particular importance to Malaysian Chinese as the wisdom for adaptation.

Besides, this section expounds the influence of Zhuāng Zǐ's philosophy on Malaysian Chinese through Chinese language by showing that the cultural factor (as embedded in Chinese language) leads to the successful adaptation of ethnic Chinese business in Malaysia's economic environment. The application of Chinese language by Malaysian Chinese exemplifies some of the Malaysian Chinese thoughts. The use of Chinese language must comply with the Chinese philosophy because Chinese language is developed on the grounds of the Chinese philosophy. Such compliance necessitates the adoption of Chinese philosophy inherent in the Chinese language, and thereby justifies the influence of Chinese philosophy on Malaysian Chinese. Zhuāng Zǐ's philosophy is not just a part of Chinese philosophy, but also a part of Chinese language as it enriches and assimilates in Chinese language. Therefore, Zhuāng Zǐ's philosophy may influence the Malaysian Chinese thoughts via Chinese language.

3.1.1 Acquisition of Zhuāng Zǐ's philosophy through Chinese language

Malaysian Chinese acquired Zhuāng Zǐ's philosophy through Chinese language. The transmission of Zhuāng Zǐ's philosophy started from his philosophical text, which was authored with Chinese written language. Subsequently, the philosophical text influenced both Chinese written and

spoken languages. For instance, there are common terms in Chinese language that come from Zhuāng Zǐ's philosophy, such as Zì Rán, which literally means "self-so" and is referred as "nature" in modern Mandarin (Mair, 2000). These Chinese written and spoken languages assimilated terms and ideas of the philosophical text, thereby signifying that Zhuāng Zǐ's philosophy enriches the meaning of the affected Chinese words. This implies that Zhuāng Zǐ's philosophy may be acquired not only from his philosophical text in an intentional manner, but also through Chinese written and spoken languages in a relatively unintended way.

As an effect, the influence of Zhuāng Zǐ's philosophy can be identified by the way the Chinese words were used by Malaysian Chinese in Chinese written and spoken languages, particularly the usage of some important Chinese words which conform to those in Zhuāng Zǐ's text. Although Chinese words are explicit in knowledge, the skill of applying Chinese words in both written and spoken languages is a tacit knowledge, thereby justifying the existence of the tacit acquisition of Zhuāng Zǐ's philosophy among Malaysian Chinese.

In line with the Chinese culture, the research assumes that Chinese language consists of both written spoken languages, which are independent of each other. This is to clarify the concept of Chinese language and to place a distinction from a biased view of language inflicted by phonocentrism. By phonocentrism, it refers to "the view that orality is equivalent to language itself and that writing is merely a reflection of oral expression not requiring special attention" (Macaulay, 1990, p.3).

Phonocentrism was introduced by Sapir (1921, p.19), who asserted writing as “visual speech symbolism”. Sapir’s view was strongly supported by Bloomfield (1935, p.21), who claimed that “writing is not a language, but merely a way of recording language by visible marks”. In a similar vein, DeFrancis (1989, p.50) stressed that “pictographs used as pictographs lead to nowhere. Pictographs used as phonetic symbols lead to full writing”. DeFrancis (1986; 1989) and other phonocentrists (e.g., Boltz, 1994; Du Ponceau, 1838; Qiu, Mattos & Norman, 2000) enthusiastically analyse Chinese written language from the phonocentrism perspective, implicitly assuming that Chinese’s view of language is the same with Indo-European’s view of language. Phonocentrism is influential among sinologists and linguists (Kwan, 2011).

However, phonocentrism is a bias because it places exaggerated primacy on speech and most importantly, it omits the importance of writing instead of making a fair comparison between speech and writing (Biber, 1988). Failure to compare speech and writing objectively hampers the study of language in real life conditions and the identification of variation in language (Macaulay, 1990). In business, legal and political systems, written commitments are given higher formality and obligation over spoken commitments, implying that writing has greater authenticity over speech (Biber, 1988). Such treatments to writing in practice are obviously much more appropriate given that speech is deemed to be unsystematic and there is a lack of accuracy in reflecting the authentic linguistic structure of a language (Biber, 1988).

Chinese language carries exceptional strengths for transmitting Zhuāng Zǐ's philosophy from ancient time to the present. Unlike English, Chinese language is a hybrid in which a variety of Chinese spoken languages (normally translated in English as dialects, but the translation raised disagreement among linguists) share one written form (Hansen, 2000). A Chinese character corresponds to not more than a single pronunciation in one of the various Chinese spoken languages compared to any other (Hansen, 2000).

The disjunction between Chinese written and spoken languages is a purposive design of Chinese language; an outcome of a dynamic cultural capability. For more than two millennia, Chinese written script is still stable, while the sounds of the Chinese spoken word and their respective pronunciations that correspond to individual Chinese characters have changed considerably (Mair, 1996). The tendency of the sounds of the Chinese spoken word to evolve over time dramatically is not unique to Chinese spoken language, but the same happens to all living languages (Mair, 1996). The tendency appears to be a specific nature of all spoken languages and poses a problem for people of later times to carry over and understand the speech as well as the intended message of the former generations. The problem may be worse as there are a variety of Chinese spoken languages, which could potentially lead to the creation of many different Chinese written languages if the disassociation between Chinese written and spoken languages did not happen.

It is evident that a dynamic cultural capability is needed to counter the changes in Chinese spoken language so that the intended message and culture of the former generations can be transmitted to people of later times. In such situation, a unified Chinese written language becomes an appropriate solution. The solution implies that ancient Chinese was well aware of the problem and had applied a dynamic cultural capability in the process of forming Chinese written language. The nature of Chinese written language that has been stable for more than two millennia is coherent and consistent with the functional purpose of the language.

The functional purpose of Chinese language is to transmit the intended message or idea of the former generations to the people of later times in an effective manner (Gu, 2014). For ancient Chinese, “written language is the foundation of classical learning, the source of kingly government. That was what the former generations relied on to transmit culture to later ages. Men of later times will rely on it to understand antiquity” (Thern, 1966, p.17). As such, the successful transmission of Zhuāng Zi’s philosophy today can be partly attributed to the Chinese written language as a useful medium and its design as an effective mechanism.

In the research, Chinese written language (also known as Huá Wén and Zhōng Wén in Malaysia and as Hàn Wén and Guó Wén in China) can be divided into Classical Written Chinese (Wén Yán Wén, also known as the Literary language) and Modern Written Chinese (also known as the Written Vernacular Chinese). The Classical Written Chinese refers to the standard written form of

traditional Chinese instead of the transcription of speech (Gu, 2014). Unique in feature, Classical Chinese written language frequently leaves out the subject and other preverbal nouns in a sentence, while a complete sentence is a must in English (Hansen, 2000). As the most striking feature of Chinese written language, Classical Written Chinese is extremely compact and terse, which expresses richer meaning with minimal numbers of Chinese characters (Chen, 1999; Dong, 2014). Classical Written Chinese uses much lesser characters than Modern Written Chinese to convey the same meaning as it is common that the former utilizes only a single character, while the latter needs two or more characters (Dong, 2014). In Chinese language, a single character is a word, while two or more characters constitute a phrase (Bing, 2013).

Modern Written Chinese refers to the standard written form which existed after China's May Fourth Movement in 1919 and it is readily comprehensible to an ordinary high school graduate or above today (Feng, 2009). From the very beginning, Chinese employed only Classical Written Chinese to write until it was replaced by the Modern Written Chinese due to the Literary Revolution that followed the May Fourth Movement (Bing, 2013). Although there was writing in the vernacular which existed before the May Fourth period, the adoption of Modern Written Chinese as the formal literary style for every style and level of community are unprecedented (Bing, 2013). Based on the definition, the Bái Huà (written vernacular Chinese) that started in Tang Dynasty (CE 618-907) and existed before the May Fourth Movement (Chen, 2001) was not considered as Modern Written Chinese simply because the

written language was not readily comprehensible to an ordinary high school graduate or above as it is today.

The main objective of the Literary Revolution was to unify speech and writing so that the new written language empowers one to write what one says (Chen, 1999). The primary objective of unifying speech and writing is to make Modern Written Chinese readily comprehensible to all levels of society (Chen, 1999). With the introduction of Modern Written Chinese, the May Fourth Movement had successfully instilled a new written language that is readily comprehensible, but the unification of speech and writing has never succeeded in Chinese language (Feng, 2009). Such unification would lead to miscommunication because Chinese speaks a large variety of local dialects, which makes their transcriptions unintelligible to speakers of different dialects (Bing, 2013).

To a large extent, it is by conveying a meaning with two or more characters instead of one that makes Modern Written Chinese readily comprehensible (Chen, 1999). Many characters in Classical Written Chinese are homonymous i.e. various meanings share one character, leading to the extensive presence of homonymy in Classical Written Chinese which could generate confusion and make it challenging to be understood (Chen, 1999; Moore, 2000). Chinese written language which includes both Classical Written Chinese and Modern Written Chinese is monosyllabic, which means each and every character has only one syllable (a single unit of sound which has a different pronunciation in

the variety of Chinese dialects) and is by itself a single word, denoting a single unit of meaning (Hansen, 2000; Hung, 2012; Wenzel, 2010).

Phonocentrists like DeFrancis (1984), Kennedy (1964) and Unger (2004; 2011) strongly object the fact, claiming that there are many Chinese words which contain two or more syllables, such as *Hú Dié* (butterfly) and *Zhī Zhū* (spider). Despite the fact that the term consists of two Chinese characters, *hú* and *dié*, they (DeFrancis, 1984; Kennedy, 1964; Unger, 2004) argue that *hú dié* is a word or morpheme which is the smallest meaningful unit of a language. This is because the two characters are inseparable.

Phonocentrists' argument contradicts the actual uses of Chinese characters. In fact, *dié* and *zhū* are separable and used to form *Dié Yǒng* (butterfly stroke) and *Zhū Wǎng* (spider web), respectively (Yip, 2000). Thus, the compound of two or more Chinese characters or words form a phrase which makes the meaning of a Chinese character comparatively more specific than when it stands alone (Hansen, 2000). Unlike English, Chinese written language does not have inflections and morphology that shows the part of speech roles (Hansen, 2000). A Chinese character is interpreted according to the clues provided by systematic syntactic and semantic structures of the modern compounds, such as verb-object, synonym compound and resultative verb compound (Hansen, 2000). Hence, it works by using modern character compounds or phrases where Modern Written Chinese significantly decreases the homonymy in Classical Written Chinese (Chen, 1999). This shows that Modern Written

Chinese is an evolution rather than a broken link of a Classical Written Chinese, which also signifies that the nature of Chinese written language is dynamic.

Modern Written Chinese inherits Classical Written Chinese and thereby maintains the continuous transmission of Zhuāng Zǐ's philosophy. Such inheritance is observable in the commonalities between Modern Written Chinese and Classical Written Chinese which serve as a basis to both of them. Firstly, the most important commonality is that both Modern and Classical Written Chinese are written with Chinese characters (Bing, 2013). This situation is to be ascribed to the failure of substituting Chinese characters with phonetic alphabets due to the weaknesses of the alphabet in representing Chinese spoken language and the difficulty for an individual to understand all Chinese dialects if such representation was made (Bing, 2013). Besides, Chinese written work would become unintelligible if they are written in the phonetic script (Creel, 1939). More importantly, Classical Written Chinese is the source of Modern Written Chinese (Chen, 1999).

Therefore, it is a matter of survival for Modern Written Chinese to continue using words from Classical Written Chinese (Chen, 1999). On one hand, there was a lack of words in Modern Written Chinese during its inception time (Chen, 1999). On the other hand, Classical Written Chinese has a larger repertoire of words due to its continuous use of Chinese character since the beginning of Chinese written language (Chen, 1999). As a result, Modern Written Chinese inherited Chinese cultural values and ancient Chinese thinking,

such as Zhuāng Zǐ's philosophy that is embedded in the words of Classical Written Chinese.

Secondly, Modern Written Chinese is an extended use of Classical Written Chinese. Classical Written Chinese remains to be presented in and is highly amalgamated with Modern Written Chinese as many classical expressions are frequently used in the latter (Chen, 1999; Feng, 2009). The inheritance is evident as Modern Written Chinese continues using some phrases in Zhuāng Zǐ's text by the same meaning and in the same way as Zhuāng Zǐ did. For example, *jiù huǒ* (fire-fighting), *yǒu yòng* (of use) and *rén xīn* (the human heart) exist in both Zhuāng Zǐ's text and Modern Written Chinese. These Chinese phrases are readily comprehensible and common to Modern Written Chinese users. Besides, many phrases in Modern Written Chinese were developed from words in Classical Written Chinese, which also directly inherit the meaning and philosophical thought embedded in these words (Hansen, 2000).

Thirdly, Modern and Classical Written Chinese share the same presupposition. Sharing presupposition shows that the former does not only inherit characters or words and phrases from the latter, but it also associates the system of logic, assumptions and thinking involved in utilizing these characters or words and phrases. The syntactic and lexical features of Classical Written Chinese are largely maintained in words, phrases, sentence patterns and proverbs such as *sì zì chéng yǔ* (four-character set expressions) that are commonly utilized in Modern Written Chinese (Chen, 1999).

In Chinese written language, a sentence is made up of words (Huang, Li, & Li, 2009). The arrangement of words in a string and sentence is determined by the word order instead of grammar, and thus rendering superfluous inflectional system (Wenzel, 2010). Chinese words have no grammatical numbers, cases, persons, declensions, tenses and conjugations (Cheng, 1973a), which exist in morphology-rich languages like Latin to specify the explicit connection between the words of a sentence or between words of different sentences without the deterministic impact on the meaning of each of these words (Wenzel, 2010).

Grammar (inflections) is intentionally omitted by Chinese to avoid any inessential factor in conveying a meaning (Wenzel, 2010). Therefore, Chinese character has no grammatical function (Rosemont, 1974). Instead, word order is more effective than grammar to determine the syntactical and grammatical roles of the Chinese words in a sentence because each and every Chinese word has various meanings and potential to realize itself as numerous word-classes (Rosemont, 1974). For instance, in Zhuāng Zi's text, the "word" *shēng* (to give life) appears three times in a sentence, whereby each acts as a different word class: *shēng shēng zhě bù shēng* (life \ life \ - \ not \ life), "what gives life to what is living does not live itself" (Wenzel, 2010, p.466). Based on the word order of the sentence, the first *shēng* acts as a transitive verb, which means "to give life"; the second as a noun, which means "what is living"; the third as an intransitive verb, which means "to live" (Wenzel, 2010). The example shows that word order does not only determine the grammatical role of the "word" *shēng*, but also its meaning in the sentence. Hence, word order is more

effective than grammar (inflections) in the sense that it is capable of specifying a word's meaning in a sentence from the multiple meanings that a word could represent (Hansen, 2000). Besides, grammar emerges from discourse, which is largely driven by functional considerations (Huang, 2013).

Based on similar logic, assumptions and thinking, Modern Written Chinese inherits word order, which is evident from its employment of Chinese words in the manner identical to those in Zhuāng Zǐ's text. For instance, Modern Written Chinese continues using the first "word" *shēng* in the above example as a transitive verb and means "to give life". It results in a common phrase in Modern Written Chinese: *shēng huǒ* (life \ fire), "make a fire". Similar to the first "word" *shēng* in previous example, the *shēng* in the phrase is located before a noun, which is *huǒ* (fire) in this case.

In a similar vein, Modern Written Chinese continues using the second "word" *shēng* in the above example as a noun and means "what is living". It results in a common phrase in Modern Written Chinese: *jiù shēng* (save \ life), "lifesaving". Similar to the second "word" *shēng* in previous example, the *shēng* in the phrase is located after a transitive verb, which is *jiù* (save) in this case. Consequently, these shows that Chinese written language, in its most advanced form tends to be the simplest through the simplification of conveying meaning with fewest possible words and thereby becomes terse and compact in meaning. The detailed use of Chinese words in Modern Written Chinese further proves that Chinese written language is an important means to transmit

Zhuāng Zǐ's philosophy, contributing to its presence in the contemporary Malaysian Chinese community.

For the purpose of this research, Chinese spoken language is generally referred to by Malaysian Chinese as Huá Yǔ (Du, 2015) which is conventionally translated in English as Mandarin (Li, 2016) and also known as Pǔ Tōng Huà (common speech) in China (Chen, 2015). Pǔ Tōng Huà was given a formal definition in China as “Beijing’s pronunciation as the standard pronunciation, Northern dialects as the base dialect and modern vernacular literature as the standard structure, vocabulary and grammar” (Tam, 2016, p.280).

In anamnesis, each and every Chinese character is a word which has one syllable and is pronounced differently in the variety of Chinese dialects (Hansen, 2000; Wenzel, 2010). Chinese written language represents meaning with Chinese characters, while Chinese spoken language denotes meaning with syllables (Wenzel, 2010). In the direction of recognizing words from speech, a syllable of Chinese spoken language corresponds to a Chinese character. However, it should be noted that many Chinese characters share a pronunciation despite the fact that the structure of these characters largely differs. Besides, there are some syllables of Chinese dialects that do not have their corresponding Chinese characters. In the opposite direction, there are a large number of Chinese characters that have more than one pronunciation in Chinese spoken language, but each of them also corresponds to various syllables of Chinese dialects. The reason is that Chinese characters do not

signify or associate with any specific or fixed pronunciation — at least not in a direct manner (Dong, 2014).

The phenomenon gives rise to the lack of a standard way of pronouncing Chinese character before Pǔ Tōng Huà was assigned as the national spoken language (Bing, 2013). After the assignation, Pǔ Tōng Huà becomes the first standard pronunciation for Chinese written language, which includes both Modern Written Chinese and Classical Written Chinese for nationwide adoption (Bing, 2013). Mandarin is referred to as Chinese spoken language for the purpose of this research because it is the standard pronunciation for Chinese written language and the most popular spoken language among Malaysian Chinese communities.

Malaysian Chinese inherit Zhuāng Zǐ's philosophy much more from the vocabulary, word order and internal grammar (not external grammar like grammatical inflections, numbers, cases, persons, declensions, tenses and conjugations) of Chinese spoken language than the pronunciation of Chinese spoken language. The pronunciation of what Malaysian Chinese currently speaks differs considerably from the one Zhuāng Zǐ spoke. Spoken languages adopted by Zhuāng Zǐ and Malaysian Chinese are most likely of different Chinese dialects.

Since ancient time, there are a variety of Chinese dialects in which most of them are mutually unintelligible (Dong, 2014). Dong (2014) claims that spoken language used by Zhuāng Zǐ is the dialect of the State of Song, which is

presently known as Henan; and Lǎo Zǐ (the author of the most influential Daoism text) is the dialect of the State of Chu, which is located in South China; Confucius is the dialect of the State of Lu, which is presently known as Shangdong (Dong, 2014).

In 1937, Li Fang-Kuei suggested the first scientific classification of the Chinese dialects, but was later modified from nine categories into seven groups in 1961 (Norman, 1988). They are: 1) the Mandarin or Northern dialects used in Northern and Southwestern China; 2) the Wu dialect used in Shanghai, Zhejiang and Southern Jiangsu; 3) the Xiang dialect used in Hunan; 4) the Gan dialect used in Jiangxi; 5) the Kejia dialect or Hakka used in Fujian, Guangdong, Guangxi and Taiwan; 6) the Min dialect used in Fujian, Taiwan and Hainan and 7) the Yue dialect or Cantonese used in Guangdong, Guangxi and Hong Kong (Dong, 2014).

The existence of a myriad of Chinese dialects and accents may be attributed to China's rangy territory and huge population size (Bing, 2013). Malaysian Chinese are descendants of people from various parts (mostly in southern regions) of China, which include Hakka, Hainan, Cantonese, Teochew, Foochow, Hokkein and Heng Hua (Ting & Pua, 2015). Like people in China, Malaysian Chinese generally speak the Chinese dialect of their ancestors' place of origin (Ting & Pua, 2015). Before the introduction of Mandarin in the early twentieth century, the medium of instruction in Chinese schools in Malaysia was determined by the dialect of the founders of the schools (Wang, 2014).

Today, Mandarin has become the dominant language among Malaysian Chinese communities (Ting & Pua, 2015). Proficiency in Mandarin is now deemed as one of the core symbols of the Chinese identity by Malaysian Chinese (Wang, 2015b). Mandarin is replacing other Chinese dialects as a mother tongue of the Malaysian Chinese with its increasing use in private settings — such as the home domain — and as a lingua franca used in public settings — such as religious practice (Wang, 2015a). The language shifts from other Chinese dialects to Mandarin are particularly obvious among the younger generation of Malaysian Chinese who prefer to speak Mandarin (Wang, 2015b). The popularity of Mandarin among Malaysian Chinese community is driven by the Chinese education, language attitude, economic and cultural values of Mandarin (Wang, 2015b).

On the other hand, using Mandarin allows the Malaysian Chinese to inherit Zhuāng Zǐ's philosophy from the vocabulary, word order and internal grammar (not external grammar like grammatical inflections, numbers, cases, persons, declensions, tenses and conjugations) of Chinese spoken language. The official definition of Pǔ Tōng Huà shows that Chinese spoken language inherits Zhuāng Zǐ's philosophy from the vocabulary, word order and internal grammar of Modern Written Chinese, which is simply an evolution of Classical Written Chinese as discussed previously. Specifically, this is where Mandarin refers to “modern vernacular literature as standard structure, vocabulary and grammar” (Tam, 2016, p.280).

Furthermore, there are notable differences of the Mandarin spoken by users of Mandarin from the Beijing area and from outside of the Beijing area (Chen, 1999). For instance, the former is inclined to utilize rhotacized or weakly stressed syllables (Chen, 1999). Reason being is that most users of Mandarin from outside the Beijing area are highly dependent on printed materials in learning to speak Mandarin (Chen, 1999). Obviously, Malaysian Chinese may inherit Zhuāng Zǐ's philosophy through Mandarin. There is no intention of discussing the sound of Chinese character in this research because there is a large variety of Chinese dialects and their respective pronunciation may have been changed considerably over a long period of time since the past. Based on these facts, the present pronunciation used by Malaysian Chinese is unlikely the same with that of the spoken one by Zhuāng Zǐ.

To have a precise understanding of Zhuāng Zǐ's philosophy, it is essential to master Chinese language, especially the written language, as it is the original language used by the author in his philosophical text. The accuracy of translations of Zhuāng Zǐ's philosophy is questionable in that the original message may be misunderstood by translators, especially when other languages do not have any comparable words and concepts. There are a large number of sinologists who had translated Zhuāng Zǐ's text into different Western languages, such as English, French and German (Merton, 1965). In English translations alone, Zhuāng Zǐ's text was translated by Burton Watson (1968), James Legge (1891), Thomas Merton (1965), Victor Mair (1997) and many others. The extensive number of translations in English is growing out of need for there is a lack of consensus in the interpretation of Zhuāng Zǐ's philosophy

and achieving full accuracy is challenging (Merton, 1965). For instance, Merton (1965) discovered that translators had different interpretations of Zhuāng Zǐ's philosophy, which comprised of a great deal of guessing.

The lack of accuracy in these interpretations was partly due to the language barrier in translating Zhuāng Zǐ's text from the classical Chinese written language into English and the complexity of the actual messages and meaning of what the text intended to convey. Hence, mastering Chinese written language is essential in order to read Zhuāng Zǐ's Chinese text and to have a more accurate understanding of his philosophy. Most Malaysian Chinese have good command of Chinese language because Chinese-medium education is an important part of the education system in Malaysia. As the current section discusses the ways Zhuāng Zǐ's philosophy is transmitted through Chinese written language in the selected research setting — for Chinese in Malaysia — discussion about the ways Zhuāng Zǐ's philosophy is transmitted through Chinese-medium education will be taking place in the next section.

To master Chinese written language in Zhuāng Zǐ's text, it is essential to understand Chinese characters. Chinese written language is the foundation of classical Chinese as it is based on any interpretation of classical Chinese (Thern, 1966). Xǔ Shèn, the author of *Shuō Wén Jiě Zì* (a text widely known as the first dictionary of Chinese written language) hinted that the key problem in understanding classical Chinese is the presence of numerous erroneous and misleading interpretations of Chinese characters (Thern, 1966). An example observed by Xǔ Shèn is that some vulgar Chinese scholars in his time asserted

that the graph for leader (*zhǎng*) is the addition of the graph for man (*rén*) with the head of the graph for horse (*mǎ*) (Thern, 1966). In another instance, the character for worm (*chóng*) was claimed to be the crooked form of the character for middle (*zhōng*) (Thern, 1966).

These interpretations are erroneous as they are incompatible with the classical Chinese written language and the treaties of the grand scribe Chou (Thern, 1966). In turn, the misconception of Chinese characters leads to the misinterpretation of classical Chinese (Thern, 1996). For instance, the vulgar Chinese scholar in Xǔ Shèn's time had misinterpreted the sentence, "the younger son received the imperial mandate" in the Cāng Jié Treatise as proof that an ancient emperor authored the treatise in which it implies that its expressions carry the magic powers of god and immortals (Thern, 1996). The logic behind the misunderstanding is the belief that the Cāng Jié Treatise is the ancient emperor's teaching of acquiring the magic powers of god and immortals for his younger son who received the imperial mandate to succeed his place upon mastering the lessons in the treatise.

In Chinese myth and legend, there were at least two ancient emperors who were both godly (Chen, 2011). The existence of a person as both god and emperor is not strange among the Chinese because it is believed in Chinese culture that ordinary people have the potential to transform themselves into gods in Heaven (Chen, 2011). However, the actual author of Cāng Jié Treatise is Lǐ Sī, the Counsellor-In-Chief for the First Emperor of Qin (O'Neill, 2016).

Hence, the assertion of the expressions of carrying the magic powers of god and immortals in Cāng Jié Treatise is misleading.

There were at least two reasons which contributed to the presence of numerous erroneous and misleading interpretations of Chinese characters. Firstly, the vulgar Chinese scholars exercised bias toward what they know (Thern, 1996). They were over-confident with what they know because they perceived their knowledge as their own secret ingenuity and thorough understanding of the sage's ideas (Thern, 1996).

Secondly, their knowledge had made them blind from reasonable scholarship (Thern, 1996). Their access to key scholarship was limited, which in turn had caused their knowledge to be vaguely learned (Thern, 1996). For instance, they had never seen the principles of the rules of graphs, thus creating numerous misunderstanding of Chinese characters and classics (Thern, 1996). From these points, it can be hinted that the biasness from both the vulgar Chinese scholars and the phonocentrists is detrimental to the reasonable understanding of classical Chinese, such as Zhuāng Zǐ's philosophy.

To avoid biasness and attain reasonable scholarship, examining the nature and characteristics of Chinese language and Chinese written language in particular appears to be necessary in understanding Zhuāng Zǐ's philosophy accurately and the way it was transmitted and diffused without deviating from its original thought for more than two millennia until recent times. In addition, understanding the nature and characteristics of Chinese written language sheds

light on how it empowers language adopters through reading and apprehension of the Zhuāng Zǐ's philosophy without being affected by the time gap.

3.1.2 The intended design of Chinese character

The design of the Chinese character's structure is critical for its survival and continuous usage, leading to the dissemination of Zhuāng Zǐ's philosophy across time and space effectively. The creation of Chinese characters carries intended purposes of the ancient sages to disseminate their message not only across space or throughout the society of their time, but also across time, from generation to generation (O'Neill, 2013). Such purposes remain consistent from the development of two proto-writing systems to the subsequent writing system, which is commonly used in modern times. The origin of Chinese writing system can be traced back to the two proto-writing systems, namely the eight trigrams and knotting cords (Thern, 1996).

First; proto-writing system started from the sage in ancient time, Páo Xī who invented the eight trigrams of the Changes for the purposes of handing down the regular patterns in the world to other people, which includes other members of the community and from generation to generation (Thern, 1996). The eight trigrams are the basis of the Book of Change which constitute the hexagrams in the Book of Change (Wilhelm, 1971). The Book of Change was written solely in hexagrams until the Chinese characters were used by King Wen — the progenitor of the Zhou dynasty — to include brief judgments to the hexagrams; his son — the Duke of Chou — to author the text pertaining to each and every

single line of the hexagrams; and Confucius to write commentaries of the Book of Change (Wilhelm, 1971). Therefore, the eight trigrams were reasonably qualified as the proto-writing system of the Book of Change.

Second; another ancient sage, Shén Nóng who came in later time developed knotting cords to guide and regularize activities (Thern, 1996). The utilization of knotting cords led to the multiplication of all types of trades and professions (Thern, 1996). As the knotting cords carried the messages of Shén Nóng to his people and also the information concerning activities, it is thus a method of disseminating information and it is reasonably qualified as a proto-writing system.

Third; a scribe for the Yellow Emperor, Cāng Jié's first developed writing, thereby marking the beginning of the writing system (O'Neill, 2013). The utilization of writing generated the effects of regulating all types of professions (Thern, 1996), which can be seen as a complement to the function of the knotting cords in multiplying all kinds of professions; and discriminating a myriad of things, which serves as a solution to overcome the weakness of the knotting cords that brought forth artifice (O'Neill, 2013). Cāng Jié's creation of writing was inspired by the vestiges of the footprints and trails of birds and animals (O'Neill, 2013). The inspiration came not only to discern the patterns and forms of the footprints and trails (Thern, 1996), but also to discern the permanence of the them. Although birds and animals will be gone, their footprints and trails remain unless damage happens, which signifies the permanence of them both.

Similar to birds and animals, writers will be gone or not directly accessible, but their written works remain unless damage occurs, which implies the permanence of the Chinese writing system. This permanence allows Chinese written works and their messages to be disseminated across space and time. Through these features of discernibility and permanence, the Chinese writing system serves the intended purposes of the ancient sages.

The structure of the Chinese character is designed for the purpose to disseminate messages across space and time. From the archaeological findings that had been excavated in China, serving as scholarly accepted credible evidence, Lu and Aiken (2004) suggested that major evolutions of Chinese characters had started from pottery inscriptions (appearance can be traced dating back to at least 4000 BC) to oracle bone and shell inscriptions (appeared in Shang dynasty 1766-1122 BC), bronze inscriptions (dominant in Western Zhou dynasty 1100-771 BC), small seal script (official style in Qin dynasty 221-206 BC), clerical script (official style in Han dynasty 206 BC-221 AD) and ended in regular script. These Chinese characters are the most important inscriptions and scripts in the evolution of Chinese characters.

Pottery inscriptions mark the creation stage of Chinese writing in which the invention of the Chinese characters was initiated. In the evolution of Chinese characters, the pottery inscriptions are the earliest inscriptions that have been discovered on the Neolithic pottery in China (Lu & Aiken, 2004). As the earliest inscriptions that appear in the Neolithic period (dating back to at least

4000 BC), the existence of the pottery inscriptions leads to the assumption that they are where the Chinese writing system emerged and developed (Lu & Aiken, 2004).

Oracle bone and shell inscriptions signify the completion stage of Chinese writing in which the creation of Chinese characters became complete. Following the pottery inscriptions, Chinese scripts have been recorded in the form of oracle bone and shell inscriptions as a fully developed writing system during Shang dynasty (1766-1122 BC; Tseng, 1993). Oracle bone and shell inscriptions denote inscriptions that were cast on animal bones and tortoise shells (Tseng, 1993). Oracle bone and shell inscriptions are qualified as a mature writing system for their capabilities of recording the contemporary Chinese language in a complete and unambiguous form (Norman, 1988). In terms of physical structure, the oracle bone and shell inscriptions have a formation established by thin and rugged lines, and possesses a special long shape which has the feature of sharp shoulders (Zhao & Baldauf, 2008).

From the aspect of the evolution of Chinese characters, the oracle bone and shell inscriptions are a direct inheritance of the pottery inscriptions, evidenced from the fact that they share at least three commonalities (Zhao & Baldauf, 2008). Both oracle bone and shell inscriptions and pottery inscriptions are obviously pictorial and most of them differ from each inscription itself in a wide range of irregular shapes and varying numbers of strokes (Zhao & Baldauf, 2008). As a development in the evolution of Chinese characters, the oracle bone and shell inscriptions are different from pottery inscriptions in that

they change into a fuller linear form (Zhao & Baldauf, 2008). Such change is especially needed to utilize a few summary lines to replace the elaborated drawing that was frequently discovered in pottery inscriptions for simplicity (Zhao & Baldauf, 2008).

Bronze inscriptions symbolize the systemization stage of Chinese writing in which a more mature organization of Chinese characters emerged. For analysis purpose, it is noteworthy that systemization is ongoing in the evolution of Chinese characters, but the extent of systemization is the greatest in this period of time. Bronze inscriptions became the most popular Chinese scripts in Western Zhou dynasty (1100-771 BC; Lu & Aiken, 2004). Bronze inscriptions refer to inscriptions that were cast on bronze vessels and produced in the Shang dynasty and the Western Zhou dynasty (Tseng, 1993). The basic structure and style of bronze inscriptions are closely identical to oracle bone and shell inscriptions, but the form of bronze inscriptions, especially those in latter period of the Western Zhou dynasty has a greater extent of regularity (Norman, 1988). As a part of the evolution of Chinese characters, the increase in the regularity of bronze inscriptions is conspicuous through the comparison between the bronze inscriptions in the Shang dynasty (roughly before 1100BC) and the Western Zhou dynasty (roughly after 1100BC; Tseng, 1993).

Small seal script marks the standardization stage of Chinese writing in which a unified writing style of Chinese characters is starting to form. In comparison to other writing styles of Chinese characters, the writing style of small seal script marks the largest extent of standardization in the evolution of Chinese

characters. At the end of Zhou dynasty, followed by the founding of Qin dynasty, the Qin court decreed the small seal script as the official script for the Qin empire — the first standardized written style that was mandated nationwide (Tseng, 1993). The standardization of the written style was an effort in offering an official substitution for the many local variations of scripts adopted by former provincial feudal lords who were defeated by the Qin state (Tseng, 1993). These provincial feudal lords created their own local scripts as their power increased and the central control of the Imperial House of Chou decreased in between the Middle Chou and Late Chou periods (Tseng, 1993). As a sign of direct inheritance, the small seal script preserves the designed sense of the bronze inscriptions of the Late Chou period (Tseng, 1993).

As an indication of the evolution of Chinese characters, the small seal script is the result of the development in the size of Chinese characters and the writing style of Chinese characters. The small seal scripts differ from the bronze inscriptions in that the size of small seal scripts was unified (Tseng, 1993). Despite the change in size of the Chinese characters, the small seal script also shows that there was an alteration in Chinese characters that involves the development in their writing style. The writing style of the small seal script shows that such changes in the writing style of Chinese characters decrease the pictorial element and thus, it becomes an abstracted script (Tseng, 1993).

Clerical script represents the simplification stage of Chinese writing in which Chinese characters were simplified significantly to increase the ease of writing. As a replacement of the small seal script in Qin dynasty, the clerical script is

the official script for the entire Han empire during Han dynasty (Li, 2009). In terms of the physical structure, clerical script uses strokes and square elements frequently (Zhao & Baldauf, 2008). The modification of the seal script into the clerical script is regarded as a ‘clerical change’, which is the greatest modification of the Chinese character structure in the evolution of Chinese characters (Yin, 2016).

There are at least four most important alterations in the clerical change. Firstly, the rounded strokes in the small seal script were made straighter or replaced by dots in the clerical script (Zhao & Baldauf, 2008). Secondly, the circle in the small seal script became square in the clerical script (Zhao & Baldauf, 2008). Thirdly, the overall number of strokes decreased in the transformation from the small seal script to the clerical script (Yin, 2016) and finally, consolidation took place where some varied character components of the small seal script were merged into one in the clerical script (Yin, 2016).

These developments show that the clerical change is motivated by the pragmatic needs of writing. On one hand, there are shortcomings in the small seal script that require refinement to increase the efficiency in the writing process. Given its lengthened and rounded strokes, the small seal script was time-consuming and laborious to write (Yin, 2016). On the other hand, development in the clerical script improves writing convenience and word recognition. Simplifications and changes in the clerical script facilitate and ease the speed of writing as well as improve its tidiness (Yin, 2016).

A standard script signifies the regularization stage of Chinese writing in which a model style for writing Chinese characters starts to form. In contrast to the writing style of other writing style of Chinese characters, the standard script is unique that it shows the most significant regularization in the evolution of Chinese characters. In English, the standard script is also translated as a “regular script” (Li, 2009; Yin, 2016) and “square script” (Zhao & Baldauf, 2008).

The standard script emerged during the Eastern Han period and began to be dominant during the Northern and Southern dynasties (420-581; Zhao & Baldauf, 2008). Then it became fully matured during the Sui (581-618) and Tang (618-960) periods and represented the last major change in the physical shape of Chinese characters (Zhao & Baldauf, 2008). The standard script became the standard form of Chinese writing and substituted the clerical script for all ordinary purposes since the Northern and Southern dynasties (Norman, 1988).

The standard script is a direct descendant of the clerical script. The structure of the standard script remains the same with those of the clerical script (Yin, 2016). As a development in the evolution of Chinese characters, there are two major alterations to the strokes of Chinese characters in the transition from the clerical to the standard scripts. Firstly, strokes with a swallow-tail-like end in the clerical script were replaced by smooth level strokes in the standard script, which implies that a signature feature of the clerical script was transformed in the standard script (Yin, 2016). Secondly, certain thick curvy strokes in the

clerical script were turned into hooks in the standard script, which is a distinctive feature of the standard script (Yin, 2016).

The transition from the clerical script to the standard script overcame weaknesses in certain structural conventions of the clerical script, such as strokes with a swallow-tail-like end that slows down the writing process (Zhao & Baldauf, 2008). In contrast, the standard script is more convenient to read and write than the clerical script because the strokes in the standard script are smoother, straighter and clearer (Yin, 2016). Until today, the standard script remains dominant in official use because it offers a full set of rules and standards of Chinese writing (Li, 2009).

Chinese characters empower the inheritance of Zhuāng Zǐ's philosophy across space and time. The evolution of Chinese script is critical to be retained and preserved, as opposed to all the other ancient languages. On one hand, the evolution makes original elements of Chinese character's structure sustainable as it preserves these elements like the pictorial and the semantic elements (radicals) of the Chinese character to an extent. On the other hand, the evolution enhances Chinese character's usefulness by altering Chinese character's structure to cater for pragmatic needs, such as increasing the convenience of writing and reading. As a result, Chinese characters are the only writing system that has been used for more than three millennia until the present (Schmandt-Besserat & Erard, 2008). Hence, the design of Chinese characters' structure satisfies the intended purpose of its creation to serve as a tool that is capable of disseminating messages across space and time.

3.1.3 The ways of Chinese character formation

Knowing how Chinese characters were formed is when one starts to learn to recognize and understand Chinese characters. The Chinese characters' formation essentially complies with the intended purpose of the ancient sages, that is, to create a tool for disseminating messages across space and time. The compliance is attained by forming Chinese characters in a way that signifies what the ancient sages meant in their words rather than what they spoke about. Hence, recognizing and understanding Chinese characters can be achieved by knowing the methods applied by the ancient sages to create Chinese characters that signify their meaning. The Rites of Zhou reports that children started to learn Liù Shū, or literally the 'six [classes of] script' at the age of eight (O'Neill, 2013). The 'six script' is a classification of six ways of Chinese characters' formation (Kwan, 2011) which consists of Zhǐ Shì (indicating the matter), Xiàng Xíng (representing the form), Xíng Shēng (forming the sound), Huì Yì (conjoining the sense), Zhuǎn Zhù (redirected characters) and Jiǎ Jiè (borrowed characters; Boltz, 1994).

Meaning is the central focus of Chinese characters because the message to be delivered serves the primary purpose of providing important guidance of activities that benefits all the other members of the society from one generation to another. Hence, the nature of Chinese writing is necessarily ideographic which represents meaning (Hansen, 1993) instead of phonetic (represents sound) as insisted by DeFrancis (1986) and it is definitely not logographic (representing word) as claimed by Li (2009) and Liu (2015). As discussed in

the previous section, the purpose of the ancient sages persists among the creation of hexagrams in the Book of Changes, knotting cords and Chinese characters. The persistence can be observed from the Chinese characters designed for the main function of carrying guidance to activities. The Book of Changes is the origin of Chinese philosophies, science and statecraft (Wilhelm, 1971). The knotting cords were used to guide and regularize activities (Thern, 1996). In the early days when the writing was invented, it was used to regulate all types of professions (Thern, 1996) and discriminate various things (O'Neill, 2013).

Subsequently, the writing system was recognized by Xǔ Shèn in his influential text in Chinese philology, *Shuō Wén Jiě Zì* as the basis of the classics, which plays the role of the origin of 'kingly administration' (this term seems to be more precise than the original translated term 'kingly government') in order to have what the former generations had passed down to the later generations (O'Neill, 2013) for them to acquire the knowledge of antiquity (Thern, 1996). Kingly administration which literally means benevolent administration is a better translation of *wáng zhèng* because it stands for the administration of *wáng dào* (kingly way). The kingly way emphasizes virtues of a person who practices the moral virtue of benevolence (Yeung & Fung, 2011). Therefore, it involves the society at large rather than only the government who needs the kingly way for noble practices, thus justifying the selection of the term 'kingly administration' over 'kingly government'.

As a result of using the writing system to disseminate messages, a large number of classical Chinese were passed down since ancient time. An instance of Chinese classic strategy is the Sūn Zǐ's Art of War that was authored during Zhou dynasty. Despite the huge time gap between the author's time and the modern time, the book is deemed highly relevant to the contemporary context (Mintzberg, Ahlstrand & Lampel, 1998). According to Sūn Zǐ, the ideal way of war is winning a victory without fighting (Minford, 2002). This idea is congruent with the original meaning of Chinese character *wǔ* (martial). 'Martial' is a combination of two pictographs, *gē* 'spear' and *zhǐ* 'stop' which indicates the meaning of 'to cease all forms of fighting, including warfare' (Boltz, 1994). To stop fighting is the ultimate and common objective of Sūn Zǐ and the creator of 'martial'. Hence, it is important to know how Chinese characters were formed.

The most authoritative record about the Chinese character's formation is *Shuō Wén Jiě Zì*, a Chinese dictionary authored by Xǔ Shèn during Han dynasty (206 B.C.-220 A.D.). The book title has an important meaning. It implies that there are only two types of Chinese characters, namely *wén* or 'figure' and *zì* or 'compound word' (Wieger, 1965). The figures refer to Chinese characters with a single graphical component (Thern, 1966) such as *niú* 'cow'. Compound word was considered as the birth child of 'figure' as the former was composed of the latter (Thern, 1966). The most notable difference between the two is that figure cannot be deconstructed, while compound word can. When combined, the book title *Shuō Wén Jiě Zì* means commenting on the figure and interpreting the compound word. The meaning is consistent with Xǔ Shèn's

assertion of *Shuō Wén Jiě Zì* in his comment on some ancient Chinese scholars' misinterpretation about the meaning of certain Chinese characters (Thern, 1966). A serious consideration of the dictionary's title is especially important because the author is a Confucianist who wrote the dictionary for the purpose of establishing a proper name (Thern, 1966)

Based on the ways of Chinese character formation, the book author categorized Chinese characters into six distinct classes, which are known as the *liù shū* or literally translated as “six scripts” (Boltz, 1994, p.143). Each class of the six scripts is an outcome of a distinct way in designing and creating Chinese characters. Therefore, each class can also be referred to as the way of Chinese character formation (Kwan, 2011). The first two classes are ‘figures’ and the other four classes are compound words.

The first class is named *zhǐ shì* or ‘indicating the matter’, which is also translated as ideograph (Hsu, 1996). Ideograph comprises some graphics to represent the features of things, — or things that are impossible to be drawn (Tai, 2011). An example of ideograph is *shàng* ‘above’ (Liu, 2015). The oracle bone script for ‘above’ comprised short and long brushes, whereby the former was placed above the latter (Hsu, 1996). The formation of the character provides an indicative meaning of the spatial relationship between the two brushes even though the brushes do not represent any concrete object (Hsu, 1996).

The second class is named *xiàng xíng* or “representing the form” (Boltz, 1994, p.144), which is also translated as pictograph (Hsu, 1996). As its name implies, this class of unit characters is ostensibly the graphic representations of an object (Boltz, 1994). For its simplicity in the writing process, these characters present only the most prominent attribute of an object in question (Hsu, 1996). This is very efficient for writing when it is time-consuming and complicated to draw an object with complex shapes (Hsu, 1996). Normally, readers can easily recognize what a unit of pictograph represents through its visual appearance (Hsu, 1996). An example of a pictograph is *yáng* ‘sheep’ (Hsu, 1996). The oracle bone script for ‘sheep’ shows a similar shape like a sheep’s head with downward curving horns (Hsu, 1996). Obviously, the most notable animal that has a head with a downward curving horn is sheep.

The remaining four classes of characters were categorized as *zì* or compound words. The third class is named as *xíng shēng* or “formulating the sound” (Boltz, 1994, p.144), which is also translated as phonetic compound (Hsu, 1996). Phonetic compound is a pictophonetic character that comprises two types of component (Han, Wang, & Zhou, 2012). One type suggests the meaning of the character, while another suggests the pronunciation of the character (Hsu, 1996). An example of the phonetic compound is the oracle bone script, *méi* ‘river bank’ (Hsu, 1996). The phonetic component for ‘river bank’ is *méi* ‘eyebrow’, which signifies that ‘river bank’ is to be pronounced in an identical way as ‘eyebrow’. The meaning component for ‘river bank’ is *shuǐ* ‘water’ (‘water’ is a radical term for ‘river bank’. ‘Water’ has a single word

form that is different from its radical form), which signifies that ‘river bank’ is related to meanings such as flowing water (Hsu, 1996).

The fourth class is named *huì yì* or “conjoining the sense” (Boltz, 1994, p.144) and translated as compound ideogram (Liu, 2015). It is a combination of two or more pictographs and/or ideographs to represent a new meaning (Boltz, 1994). For example, *wǔ* or ‘martial’ is a combination of two pictographs, *gē* or ‘spear’ and *zhǐ* or ‘stop’, which indicates the meaning of ‘to cease all forms of fighting, including warfare’ (Boltz, 1994).

The fifth class is named *zhuǎn zhù* or ‘revolved and redirected [graphs]’ (Boltz, 1994, p.144). Revolved and redirected graphs were developed by adding new radical characters or modifying parts of characters that exist previously (Hsu, 1996). Revolved and redirected graphs are especially suitable to convey an extended meaning associated with the original characters.

There are at least two types of such association between revolved and redirected graphs and their original characters. The first type of association may be named ‘redirection’. In this association, a redirected character may convey a meaning which is of a later stage of the meaning represented by the original character to the extent that it may result in having an opposite meaning (Hsu, 1996). For instance, the ancient Chinese characters *jué* or ‘to cut off’ and *jì* or ‘to continue’ have opposite meanings, but both of them were developed from the meaning of spinning and weaving (Hsu, 1996). The development appeared to be inspired by the occasion when silk threads must be cut off and

weaved into a continuous thread again in order to overcome the problem of why they are tangled (Hsu, 1996). It is noteworthy that the ancient forms of ‘to cut off’ and ‘to continue’ are very similar in a way where one character is a mirror image of another. All of their ancient forms are identical except that there are two vertical brushes which exist on the left of ‘to continue’ and on the right of ‘to cut off’.

The second type of association may be named ‘injection’. In this association, injected characters were developed by adding their original characters to elements that represent water, fire, wood, man and many others (Hsu, 1996). Each injected character may convey an extended meaning that is connected to its original character (Hsu, 1996). For instance, the oracle bone script of *gòu* or ‘to roof with beams’ may have represented two beams joined together, which was suitable to be extended and applied further to indicate various concepts related to joining and meeting (Hsu, 1996). This is evident from the fact that adding ‘to roof with beams’ to other elements such as *shuǐ* or ‘water’, *nǚ* or ‘female’ and *chuō* or ‘walking’ will create *gōu* or ‘a ditch’, *gòu* or ‘to couple’ and *gòu* or ‘to come upon suddenly’ (Hsu, 1996).

It appears that the opposite meaning of redirected character in its original character is an act of *zhuǎn* or ‘redirection’ or making a turn in the original character’s meaning. Similarly, adding various radicals to a ready-made character reflects an act of *zhù* or ‘inject’. When combined together, ‘redirected characters’ is an outcome of redirection and injection methods. Placing outcomes of the two types of method in parallel to form a single class of

Chinese character indicates that they share an essential commonality, of which the word formation involves borrowing the form of a ready-made character. As a consequence, sometimes the redirected characters borrowed and extended its original character's meaning and/or pronunciation. Hence, the form of character plays a central role and has higher importance over the pronunciation of character, signifying that it is more ideographic than phonetic — at least among redirected characters.

The sixth class is named *jiǎ jiè* or 'loaned and borrowed [graphs]' (Boltz, 1994, p.145). Loaned and borrowed graphs were developed by loaning characters that exist previously with identical pronunciation, but carry different meanings (Han, Wang & Zhou, 2012). Borrowed characters are especially useful to convey a meaning which is challenging to present in a graphical form (Hsu, 1996). An example of borrowed character is *huáng* or 'yellow' (Hsu, 1996), which is a concept of color and is difficult to present in a diagrammatic form. Initially, the oracle bone script of 'yellow' was a pictograph of a jade pendant (Hsu, 1996). After the loaning process of word formation, 'yellow color' replaced 'jade pendant' as the meaning for the character 'yellow' (Hsu, 1996). The character *huáng* was developed further by combining the signfic (component of a Chinese character that signifies its meaning) for *yù* or 'jade' with *huáng* or 'yellow' to form a new phonetic compound character *huáng* in order to represent 'jade pendant' (Hsu, 1996).

The most important commonality among the 'six scripts' is that they explain the association between a Chinese character and its meaning. The commonality

is employed when a Chinese character is identified as a pictograph, whereby readers should discover its meaning by searching for an object that resembles the Chinese character's form. This is useful, especially in reading classical Chinese because the pictograph represents the object. Similarly, ideograph readers are expected to attain an accurate meaning by associating an ideograph with an abstract concept rather than a sound or any particular object.

Knowledge of these two classes of 'figure' is the foundation to understanding compound words as the former constitutes the latter. In simple words, 'figure' acts as a component in compound words. Readers of compound ideogram are expected to first identify it as a compound word, implying that the prerequisite knowledge of its constituent 'figures' is necessary to relate one 'figure' to another so that the meaning of the conjoint 'figures' emerges. This form of Chinese character-meaning link is evident from the previous examples of compound ideogram 'martial' and 'trustworthy'.

Similarly, readers of redirected characters should analyze 'figures' or components that constitute redirected characters. Here, the analysis should differentiate the commonalities and differences between the structure of the redirected character that have been studied and other closely identical Chinese characters. Generally, the commonalities show features of the original character that the redirected character developed upon; while the differences, such as new radical and modified part demonstrate an extended meaning associated with the original character. Therefore, the knowledge of word formation in a redirected character way is a method for the reader to trace and

recognize changes in the components of a Chinese character, and their corresponding changes in a Chinese character's meaning.

Next, readers of borrowed characters are assumed to be able to identify the pronunciation of a pre-existing 'figure', which was loaned to form a borrowed character. The word formation method of borrowed character shows that tracing the meaning of borrowed character involves searching for the meaning of a spoken word that shares a common sound with the borrowed character that has been studied. As the term 'borrowed' implies, no real Chinese character is created to represent the sound of the spoken word.

Readers of phonetic compound are reminded by the name of this word formation method that this class of Chinese characters is constituted of 'figures', whereby each serves one of two different functions. One 'figure' indicates the meaning of the character, while another signifies the pronunciation of the character. The former is known as a radical, while the latter functions as a borrowed character. Phonetic compound is a complement to borrowed character. A 'figure' would become a pictograph or ideogram as well as a borrowed character at the same time and carries two different meanings after it is loaned to relate to a new meaning.

The confusion can be avoided by adding a radical to the 'figure' to form a new phonetic compound so that two meanings are represented by two distinct characters. This is evident from the previous examples that 'yellow' is represented by 'figure', while 'jade pendant' is indicated by phonetic

compound. To understand phonetic compound, readers are expected to search for a spoken word from phonetic component of phonetic compound while identifying a meaning from semantic component of phonetic compound.

3.1.4 Adaptation of ethnic Chinese business in Malaysia's economic environment

This section shows how the Chinese culture is actively preserved by the Malaysian Chinese via the Chinese education system. Chinese cultural values are recognized by scholars who have advocated cultural views as the foundation of the success of Malaysian Chinese business. The dynamic managerial capabilities of Malaysian Chinese entrepreneurs can be observed in the demanding and changing environment of Malaysia.

Malaysian Chinese are an ideal target population for researching Zhuāng Zǐ's perspective of knowledge creation and its innovation application in wealth creation because Malaysia is the only country outside the Greater China region that still has a Chinese education system. Chinese education is widely regarded to be an important part of the preservation and inheritance of Chinese culture, particularly Zhuāng Zǐ's school of thought. Students learn the Chinese language when they enter the Chinese education system. Learning the Chinese language allows students to study Zhuāng Zǐ's texts and indirectly allows them to inherit his school of thought via the language.

Malaysian Chinese are an ideal target population because they live in a multi-ethnic society rather than homogeneous societies like the Greater China region. By comparing the differences between Chinese culture and other cultures in a multi-ethnic society, it is possible to gain clarity on the contributions of Chinese culture, particularly Zhuāng Zǐ's teachings, to successful wealth creation. Despite being a minority in many Southeast Asian countries, ethnic Chinese are frequently regarded as the dominant economic power due to their consistent business success, and superior economic position.

Of all the Chinese educated societies, the Malaysian Chinese community has adapted to the most major changes in their external environment, which suggests that the community is an ideal target population for researching the strategy innovation and knowledge creation that underpin dynamic managerial capability. In their advocacy of dynamic capability, Teece, Pisano and Shuen (1997) claim that new competences and innovative responses (e.g. strategy innovation) are crucial in order to satisfy requirements that arise from change. Eisenhardt and Martin (2000) suggested that newly created knowledge is required for a rapid adaptation to a changing environment, but not essential when it comes to addressing environments that change at a moderate pace. In line with the dynamic capabilities perspective, Helfat and Martin (2015b, p.1282) point out that the concept of dynamic managerial capabilities was developed and employed to understand the “relationship between managerial decisions and actions, strategic change, and corporate performance under conditions of change”. Since other Chinese educated societies are having comparatively more stable conditions, the Malaysian Chinese context can yield

better insights on strategy innovation and knowledge creation that occur to fulfill the requirements of major changes.

The complexity and volatility of the external environment have forced Malaysian Chinese to adapt to more changes compared to the changes faced by other Chinese-educated societies. These changes in the external environment include shifts in customers' tastes, production or service technologies, modes of competition in the firm's principal industries (Karna, Richter & Riesenkauff, 2016, p. 1156), public policies, intellectual property regimes, system of higher education, and national culture (Teece, Pisano & Shuen, 1997). The dimensions of environmental turbulence encompass the quantity, predictability (Karna, Richter & Riesenkauff, 2016), speed (Eisenhardt & Martin, 2000), directions (supportive and threatening), and the extent of change.

Malaysian Chinese face a more complex environment because Malaysia is a multi-cultural society (Embong, 2002; Ibrahim, 2007; Saravanamuttu, 2010), whereas other Chinese educated societies such as China and Taiwan are generally culturally and linguistically homogeneous (with a predominantly Chinese culture and language) by comparison (Chun, 2013). For example, students who attend Malay-medium secondary schools in Malaysia are required to study English and Malay whereas Chinese is considered optional (Ting, 2013). The majority of Malaysian Chinese youth attend Malay-medium secondary schools (Ting, 2013), partially due to the fact that advancement into a government-funded public university requires a minimum score of 'credit' in the Malay language during Sijil Pelajaran Malaysia (SPM), a standardized

exam for all Form 5 students (Ting, 2013). As the exam is intended for native speakers, there are high expectations in place regarding the participants' proficiency in the Malay language. Generally, Malaysian public universities are the most affordable higher education option for citizens; their tuition fees are far lower than those of private higher educational institutions. In Taiwan, only Chinese and English are mandatory for junior high school and senior high school students (Chou & Ching, 2012). A second foreign language is not part of the five subjects in the Basic Competence Test for junior high school students to advance into senior high school (Chou & Ching, 2012). High school students in China are required to take Chinese and English, whereas other foreign languages like Japanese and Russian are optional (Liao, Yang & Shao, 2012).

When compared to the conditions faced by other Chinese-educated societies, the multicultural environment in Malaysia accrues many complex requirements for dynamic managerial capabilities of Malaysian Chinese businesses. The changes in the external environment are complex not only because of the diverse and multi-cultural nature of the environment, but also because the Malaysian Chinese community is considered a minority in Malaysia (Romaine, 2009), which is in contrast with the fact that ethnic Chinese are the majority in the Greater China Region. In 2010, Malaysia's population was 91.8% Malaysian and 8.2% foreign citizens (Department of Statistics Malaysia, 2011). The Malaysian citizens were further divided into 67.4% Bumiputera, 24.6% Chinese, 7.3% Indians, and 0.7% other ethnic groups. 'Bumiputera' is a Malay term, which literally translates into 'sons of the soil' (Yen, 2013). The term is

employed by the government to refer to Malays and other non-Malay aborigines to legitimize their claim on larger shares of employment and the economy (Yen, 2013). Non-Malay aborigines are a minority and encompass ethnic groups such as the Kadazan Dusun, and Ibans (Department of Statistics Malaysia, 2011). Meanwhile, Malays are the largest ethnic group in Malaysia, comprising 54.6% of the total population (Yusof, 2015). Each group has their individual cultures, thus making Malaysia a multicultural nation. Western culture, which can be seen in the common use of the English language, is highly influential in Malaysia because the country is a former British colony. Policy makers also recognize the need to address intensified globalization, and they do so by adopting parts of the Western culture (Romaine, 2009).

Some cultures, such as the Malay culture, Indian culture, and Western culture, are more influential and have created the need for Malaysian Chinese to adapt and adopt dynamic managerial capabilities. Changes in the external environment include shifts in “customers’ tastes, production or service technologies, and the modes of competition in the firm’s principal industries” (Karna, Richter & Riesenkauff, 2016, p.1156), public policies, intellectual property regimes, higher education systems, and national culture (Teece, Pisano & Shuen, 1997). The differences that result from these changes necessitate new business routines, novel capabilities, adjustments, and adaptations, which can only be achieved via dynamic managerial capabilities.

There are important differences between Malay customers and Malaysian Chinese customers that require Malaysian Chinese to adjust their business

practices. According to Article 160 (2) of the Malaysian Constitution, a Malay person is one who “professes the religion of Islam, habitually speaks the Malay language, [and] conforms to Malay customs” (Goh, 2002, p.44). Differences in customer preferences and production technology are the two most important areas that necessitate adjustments to satisfy the cultural needs of Malay customers. With respect to customer preference, the most significant difference is that Malay customers have religious obligations to make purchase decisions that are compatible with the guiding principles of Islam (Lai et al., 2010). For instance, believers of Islam, or Muslims, are only permitted to consume ‘Halal’ food under Islamic law (Mukhtar & Butt, 2012). ‘Halal’ is a Quranic word, which means permitted or lawful (Alam & Sayuti, 2011). According to the Quran, “all foods are halal except those that are specifically mentioned as Haram, which means prohibited or unlawful” (Alam & Sayuti, 2011, p.8). For example, pork is considered Haram (Mukhtar & Butt, 2012), and thus Muslims are forbidden from consuming pork. As such, Malaysian Chinese business owners who wish to retain the patronage of Malay customers have to adapt their business practices in order to adhere to these obligations.

When it comes to production technology, Malaysian Chinese also have to implement technological advancements in their production processes to fulfill the unique demands of Muslims in order to meet Islamic requirements. For example, enzymes are arguably halal, if they are derived from microbial sources or halal-slaughtered animals (Fischer, 2016). However, the same enzymes are considered haram if they have porcine origins. Hence, biotechnology has been used to produce halal enzymes (Fischer, 2016).

Malaysian Indians, the third largest ethnic group in Malaysia, also have unique cultural needs that require business adjustments by Malaysian Chinese. Malaysian Indians are Malaysians of Indian origin, most of which are Malaysia-born (Gill & Gopal, 2010). The first and foremost reason for the existence of different cultural needs is sub-ethnicity. Malaysian Indians consist of the Sri Lankan Tamils, the North Indians, and all the South Indian sub-ethnic groups, such as Tamil, Telegu, and Malayalee (Ganesan, 2010). The second major source of cultural needs is language. Due to the presence of diverse sub-ethnic groups, Malaysian Indians have various mother tongues, such as Tamil, Malayalam, Telugu, and Hindi (Nayak et al., 2016). The third major source of cultural needs is religion. About 90% of Malaysian Indian are Hindus (Ganesan, 2010), while others are Sikhs, Christians, Muslims, or believers of other minor religions (Gill & Gopal, 2010, p.135).

As such, Malaysian Indian customers have different preferences which require the application of new production technologies, which would in turn necessitate Malaysian Chinese business owners to make adjustments in order to cater to their clientele's culture. Like Muslims, Malaysian Indian customers have religious obligations to live a life compatible with the guiding principles of their respective religions. For instance, Hindus are prohibited from consuming beef or using products of a bovine origin (Latiff & Ayob, 2015).

Malaysian Chinese businesses also have to adopt some areas of Western culture. The influence of the Western culture on Malaysia can be divided into

historical and contemporary influences. The historical influence stems primarily from the British colonial period, when Malaysia was a British colony. During that time, the British implemented their political system, legal system, educational policies, health policies, and local administration, all of which Malaysia continued to use after independence (Klerman et al., 2011). Despite subsequent developments in these areas made by the Malaysian government, the influence of British rule remains until today. For example, the British colonial administration implemented the Companies Ordinance of 1940 as the major company legislation prior to Malaysia's independence in 1957 (Walton, 1986). After Malaysia's independence, the Companies Ordinance of 1940 remained in force up until the enforcement of the Malaysian 1965 Companies Act (Mohammad Rizal, 2006). Even the 1965 legislation was developed on the grounds of the Victorian 1961 Act and was obviously influenced by the British 1948 Act (Walton, 1986).

Contemporary Western influence primarily stems from the mass media, and the adoption of technological advancements in education, business, and employment – especially in Western multinational companies, Australia, and New Zealand. Western culture is delivered via various forms of mass media that are popular among Malaysians. For example, Music Television (MTV) – which broadcasts music from Western countries depicting Western Culture – has been well received among Malaysian communities (Seneviratne, 2012).

The greatest impact caused by technological advancement may stem from the adoption of the internet as a convenient source of Western social media,

entertainment, and content. Despite the importance of other cultures and influences in the Malaysian society, the contemporary influence of Western culture is significant, and can be seen in its assimilation into various areas of Malaysian life, such as the usage of English as the dominant language in higher education, the working environment (Wahi, 2014), and businesses in Malaysia (Abdullah et al., 2014; Taliff & Noor, 2009).

The differences in customers' preferences, services, technology, and applications require businesses – such as Malaysian Chinese businesses – to make adjustments to satisfy the rising demand for products and services that contain elements of Western culture. For example, Western universities provide higher education in Malaysia through a variety of business models, signifying the existence of the adjustments made to meet the popular demand for educational service among Malaysians.

These adjustments are crucial because higher education supplied by Western universities is different compared to those offered by public universities. For example, some universities have courses that are taught in Chinese, and some universities provide courses from non-Western foreign universities. While Malay is the main medium of instruction in most public universities (Grapragasem, Krishnan & Mansor, 2014; Ha, Kho & Chng, 2013), some public universities and private higher education institutions sometimes use Chinese as the medium of instruction in their Chinese Studies Department or other departments. Chinese Studies Department can be found in public

universities such as University of Malaya (Tan, 2001), and private universities such as Tunku Abdul Rahman University (Palanca, 2004).

Other departments may also offer academic programs that are taught in Chinese as well. Usually these are offered by private higher education institutions. These academic programs include the Counseling degree program offered by New Era college in conjunction with a Taiwanese university, and the Chinese Traditional Medicine program provided by Tunku Abdul Rahman University and Southern College (See, 2010).

Private higher education institutions and universities influenced by Western culture convey Western concepts using the English language (De Jager & Soontiens, 2009). In 2011, private higher educational institutions in Malaysia included six branch campuses, 53 private universities, 403 active private colleges, 30 polytechnics, and 73 public community colleges (Khairani & Abdul Razak, 2013). Due to popular demand, the number of private higher education institutions is expected to increase continuously, suggesting that privately owned institutions will become the main component of higher education in Malaysia (Jamshidi et al., 2012). This suggests a need for many Malaysian Chinese businesses, especially those involved in private higher education sector, to make changes and adapt, or risk getting left behind.

Important business adjustments can be seen in the various business models used by private higher educational service. The first type of business model is the emergence of branch campuses. Currently, there are six reputable Western

universities operating in Malaysia (Khairani & Abdul Razak, 2013). Three universities are from the United Kingdom: University of Nottingham, Newcastle University School of Medicine, and University of Southampton (Khairani & Abdul Razak, 2013). The remaining universities originate from Australia: Monash University, Curtin University, and Swinburne University of Technology (Khairani & Abdul Razak, 2013). The usage of the branch campus model enables each of these Western universities to offer a wider range of academic courses compared to all the other business models. The diverse selection of academic choices offered is also a critical factor that students consider when selecting an institution for higher education (Sia, 2010).

The second type of business model is the offer of twinning programs, which is conducted by the majority of private higher education institutions here. There are two types of twinning program: 1+2 twinning programs, and 2+1 twinning programs (Tang & Hussin, 2013). The numbers are indicative of the years that a student spends in Malaysia, then in the country of the partner university (Tang & Hussin, 2013). Thus, a 1+2 twinning program allows students to study one year at the provider's Malaysian campus, then two years at the partner university in a Western country (Tang & Hussin, 2013). Meanwhile, the 2+1 twinning programs enable students to study two years at the provider's Malaysian campus, and one year at the partner university in a Western country (Tang & Hussin, 2013). The reduction in time spent overseas makes these programs more affordable, while still allowing students to experience education in a foreign country (Aziz & Abdullah, 2014).

The third type of business model is the 3+0 franchised program (Tang & Hussin, 2013). As with the twinning program, the numbers indicate the amount of time spent in the Malaysian branch followed by the overseas campus. Since the numbers are 3+0, the students will spend the entire period of their studies at the Malaysian campus (Mok, 2012). Among the three business models, the 3+0 franchised program is the most affordable option for attaining higher education from Western universities because Malaysia's cost of living is comparatively lower.

With respect to service technology, Malaysian Chinese businesses are under immense pressure to keep up with, and embrace, new technological advancements to deliver services that contain elements of the Western culture. For instance, business owners of food and leisure premises like restaurants and bars may choose to broadcast European football matches such as those by the English Premier League (EPL) in order to attract patrons (Gilmour & Rowe, 2012). The consumption of European football is made available via new technological innovations like satellite television, and web-based technology (Gilmour & Rowe, 2012). There are over 9.6 million Malaysians who watch the EPL, so the broadcast of such entertainment may convince viewers to become customers (Gilmour & Rowe, 2012). The success of EPL may be attributed to time-zone friendly scheduling and the scope of coverage promoted by media through a variety of media platforms (Gilmour & Rowe, 2012).

Due to complex reasons, Malaysian Chinese encounter a more volatile environment because conditions in Malaysia are comparatively unsupportive

towards the community (Jomo, 2003) Other places with Chinese educated societies, like Taiwan or Hong Kong, are generally supportive of Chinese businesses (Damm, 2012). For example, ethnic Chinese in Taiwan, specifically the Hoklo and the Mainlanders, are permitted to control the Aboriginal's industry. However, this causes dissatisfaction among the aboriginal people because of the lack of equality in terms of the autonomy, hunting rights, language, and self-marketing, also the equal treatment that is commonly afforded to Aborigines in other countries such as Australia and Canada (Damm, 2012).

The external environment in Malaysia is more volatile and accrues higher requirements for dynamic managerial capabilities in Malaysian Chinese businesses. This volatility is largely due to the economic policies, unfair competition, and adverse national economic climates in Malaysia. Economic policies include the New Economic Policy (1971-1990), National Development Policy (1991-2000), the National Vision Policy (2001 -2010), and the New Economic Model that started in 2010 (Chin & The, 2015; Zin, 2014).

Among these economic policies, the New Economic Policy had the biggest impact on Malaysian Chinese businesses (Berma, 2003). The New Economic Policy was implemented in response to the pressure from the Malay middle class who called for a stronger government interference to aid and uplift Malays (Chin & Teh, 2015). Before the introduction of the New Economic Policy, the economic position of Malaysian Chinese was superior to the Malay and Indian communities of Malaysia (Chin, 2008). In Peninsular Malaysia, the

reported monthly household income of Malays, Malaysian Indians, Malaysian Chinese, and other groups were RM276, RM478, RM632, and RM1304 respectively in 1970 (Mokhtar, Chan & Jamir Singh, 2013). That same year, poverty was reported to affect 65.9% of the Malays, 27.5% of Malaysian Chinese, and 40.2% of Malaysian Indians (Roslan, 2001).

Whether or not the economic disparity between the Malay and Chinese communities of Malaysia has generated ethnic tension has been widely contested (Mokhtar, Chan & Jamir Singh, 2013). Although the ideology and elements of the New Economic Policy existed in a small scale prior to the introduction of the policy, the Malay middle class saw the racial riots of May 1969 as a legitimate reason (Chin & Teh, 2015) to extend these initiatives on a large scale, covering education, employment, and asset ownership (Thillainathan & Cheong, 2016).

The large scale intervention caused the external environment to become volatile and vaguely hostile towards Malaysian Chinese businesses. The New Economic Policy was expected to curtail the socio-economic disparities between various ethnic groups, which was in turn expected to reduce inter-ethnic malice and tension, thus bringing about national unity (Aziz, 2012). The policy entails a broad range of initiatives centered around two objectives: to eliminate poverty irrespective of race (ethnicity); and restructure Malaysian society (Torii, 1997). By using ethnicity instead of income as its chief criterion (Thillainathan & Cheong, 2016), the New Economic Policy restricted the expansion of Chinese businesses, constraining their entry into a variety of

industries, and implementing laws demanding the involvement of Bumiputera capital in selected projects (Hara, 1991). One instance of industry entry constraints can be seen via Approved Permits (AP) for imported cars from foreign countries, which is only granted based on the Bumiputera status (Chin, 2009).

Under the New Economic Policy, the law with the greatest impact on Malaysian Chinese businesses was the Industrial Coordination Act. The law created notable volatility as it was abruptly approved in Parliament in May 1975, with only a minimal consultation with the private sector (Jesudason, 1990). During its inception, the Industrial Coordination Act governed companies with more than RM100,000 in capital, and more than 25 employees (Chin, 2012). The act has five extensive requirements that heavily impacted businesses. First of all, all Malaysian manufacturing companies covered under the law had to set aside a minimum equity of 30% for Malay investors (Jesudason, 1990). Secondly, all firms had to employ Malay distributors at a turnover rate of no less than 30% within a reasonable time frame (Jesudason, 1990). Thirdly, firms were forbidden to price ex-factory products sold in Malaysia higher than “the prevailing cost, insurance, and freight (cif) prices of equivalent imported products” (Jesudason, 1990, p.137). Besides that, firms were not allowed to raise ex-factory prices unless approved by the Ministry of Trade (Jesudason, 1990). Fourth, permission from the Minister from the Ministry of Trade was required to change the product types, and the production volumes detailed in the manufacturers’ licenses, thus hindering the businesses’ ability to adjust the production capacity of a particular product line (Jesudason,

1990). Fifth, the elimination of an existing product was subject to prior approval. If no approval was given, a firm had to continue production regardless of its impact on business profitability (Jesudason, 1990).

Aside from the New Economic Policy, the succeeding economic policies and the emergence of new emphases in these policies also created a pressing need for dynamic managerial capabilities. The New Economic Policy remained dominant in the National Development Policy, National Vision Policy (Noor & Leong, 2013; Zin, 2014), and the New Economic Model (Chin & Teh, 2015). However, these new policies were coupled with new emphases, deregulation, and liberalization (Chin, 2012) that brought considerable change to the economic environment of Malaysia.

The National Development Policy included new emphases on upgrading economic activities in terms of industrialization, modernization, economic growth, in both the public and private sectors (Chin & Teh, 2015). In the private sector, one important change to Malaysian Chinese businesses stemmed from the government's attempt to encourage inter-ethnic business partnerships to improve the business acumen of Bumiputera entrepreneurs (Chin, 2012). These inter-ethnic business partnerships were important for Malaysian Chinese businesses because having a Bumiputera partner qualified these business for participation in government projects (Chin, 2012). New emphases in the National Vision Policy included promoting economic knowledge (Azman et al., 2014), adapting to globalization via challenges and opportunities brought by global competition, and improving the competitiveness of domestic industries

and Malaysia when it comes to attracting direct foreign investments (Molla, Murad & Alam, 2011). Adapting to globalization is crucial for Malaysian Chinese businesses because Malaysia's economy is export-oriented and is becoming increasingly integrated with the global economy.

The New Economic Model emphasizes inclusiveness, small and medium enterprises (SMEs), and quality human capital (Chin, 2012). It provides various types of support for SMEs, preserves skilled local human resources and professionals, and attracts those working in foreign countries (Chin, 2012). Inclusiveness was conceived as an objective of the New Economic Model via the initiatives to endow all Malaysians with the opportunity and capability to contribute to, and benefit from, wealth creation (Malaysia, 2009). Inclusiveness is expected to foster national unity by raising a sense of belonging, reducing separation and dissension. It is expected to come in the form of greater equal opportunities in addition to inter-ethnic wealth redistribution affirmative action (Malaysia, 2009). The change brought about by this move towards inclusiveness also affects the external environment for Malaysian Chinese businesses.

However, liberalization and deregulation under the spirit of inclusiveness encountered a strong opposition from parts of the Malay community, especially the Malay nationalist organization, *Pertubuhan Pribumi Perkasa* (PERKASA), leading to the lack of support for amendments in the New Economic Model Part II, which was introduced in February 2011 (Chin, 2012). The lack of consistency in economic policies is part of the reason why Malaysian Chinese

businesses tend to be more conservative when it comes to domestic investments.

Unfair competition is another major force that contributes to the volatility of the external environment. Malaysian Chinese businesses face domestic unfair competition, primarily in the form of state-backed investment institutions, and government-linked companies, such as 1Malaysia Development Berhad (1MDB), and Ekuiti Nasional Berhad (Chin, 2015). After 1969, a large number of state-backed investment institutions, and government-linked companies were set up to manage resources and collect wealth on behalf of the Malay community (Doraisami, 2012). Specifically, these state-backed investment institutions and government-linked companies acquire assets “to be held in trust for the Malays and other indigenous groups until such a time when they [were] in a position to acquire these shares on their own” (Mid-Term Review of the Second Malaysia Plan, as cited in Jesudason, 1990, p.72). It was believed, especially by the policy makers, that limited ownership alterations would occur if such responsibilities rested solely on Malay capitalists (Doraisami, 2012). These public enterprises were expected to rapidly change the economic conditions by accelerating the process of achieving objectives in the New Economic Policy, especially with respect to those involving Bumiputeras in businesses and industries (Chin & Teh, 2015). These public enterprises have continuously acquired a sizeable number of prominent Malaysian Chinese companies in a commercially hostile fashion, thus dominating the private sector (Chin, 2015). These state-backed investment institutions and government-linked companies were given permission to

monopolize various economic sectors (Chin & Teh, 2015), special privileges, and licenses (Chin, 2012), thus leading to the emergence of unfair competition.

The 1985 Mandarin Orange Incident is a good example of how this affected Malaysian Chinese businesses. Although not a strategic sector, the Mandarin orange trade attracted the attention of the Malaysian government and Perbadanan Nasional (PERNAS) because it was a profitable business at the time (Kuo, 1996). The symbolic significance of Mandarin oranges in Chinese culture, especially with regard to Chinese New Year, has generated a steady demand for the fruit, particularly during the Chinese New Year festivities (Kuo, 1996).

The market conditions for the trade of mandarin oranges became uncertain after the Malaysian government detained shipments of mandarin oranges imported from Singapore by Chinese importers at Malaysian customs on 14 and 15 January 1985 (Kuo, 1996). Although the Chinese importer had infringed upon the requirement of having an approved permit to purchase directly from China without going through third countries, this was the first time they were detained (Kuo, 1996). Traditionally, the Mandarin orange trade involved exporters in China, Chinese middlemen in Singapore, Chinese wholesalers in Malaysia, Chinese retailers in urban areas with a high density of Chinese people, and Malaysian Chinese consumers (Kuo, 1996).

The detention was part of the Malaysian government's efforts to displace Chinese traders and monopolize the mandarin orange trade (Kuo, 1996). At the

time, the Malaysian government moved to issue approved permits to two Bumiputera importers, which were affirmed by the Ministry of Trade and Industry on 18 January 1985; a 5% surtax on indirectly imported commodities was imposed; the government attempted to develop trade relations with China by using state-backed enterprises – such as the public enterprise, PERNAS – as the sole agents for trade activities with China; then denied approved permits to Malaysian Chinese businesses (Kuo, 1996).

Measures taken by the Malaysian government and PERNAS created tremendous uncertainty in the market. Although mandarin oranges were available and could be bought from Bumiputera importers, Chinese buyers were uncertain about product quality, potential product price increases, potential loss of livelihood among Chinese buyers resulting from mandarin orange trade displacement, and possible extension of the monopoly to other fruit trades (Kuo, 1996). Furthermore, the detention of these imported fruits happened a few weeks prior to Chinese New Year (Kuo, 1996). All these changes in the environment were challenges faced by Malaysian Chinese businesses and demanded dynamic managerial capabilities.

3.2 Sample

This research studied various strategic processes (Van de Ven, 1992) of innovative corporate growth strategies by investigating four successful Malaysian Chinese entrepreneurs. In line with a theory-building multiple-case study research design, the number of cases was chosen in accordance with the

theoretical saturation (Carroll & Swatman, 2000). Theoretical saturation is the point where accumulated understanding is sufficient to address research questions (Low, 2019). Key indications of theoretical saturation are sufficient new understanding that lead to new categories/themes, which added details to concepts (Corbin & Strauss, 2008), connections between categories or concepts, and development of a new conceptual model (Low, 2019). In addition, the number of four cases is an ideal quantity of cases in multiple-case study (Eisenhardt, 1989; Stake, 2006), which enables an adequate exploration of each individual case (Creswell, 1998). Larger number of cases may greatly increase the risk of complex cases being reduced into a few comparable variables at the expense of the idiosyncrasies and integrity of individual cases (Stoecker, 1991).

This research applied purposive sampling (also termed as purposeful sampling) method to select samples (Patton, 2015; Schreier, 2018), which consist of successful Malaysian Chinese entrepreneurs. By purposive sampling, it means “choosing cases that are linked with the purpose of the study” (Ridder, Hoon & McCandless, 2009, p.159). The purposive sampling method is applied in this research mainly for three reasons. Firstly, the basis of selecting samples in theory-building multiple-case study is to serve the purpose of generating new theory, not for statistical generalization or generating generalizations about a population based on data collected from representative samples (Schreier, 2018; Yin, 2003). The selected cases are used to increase a richer and deeper understanding so as to enrich and refine the conceptual framework (Carroll & Swatman, 2000), which is the strategic knowledge creation framework developed in this research. In effect, data and theory are tightly connected

(Carroll & Swatman, 2000). Therefore, new cases are added to increase a new understanding and incorporate the knowledge to revise the conceptual framework developed earlier to guide the research process and build a new one (Carroll & Swatman, 2000). The selection of new sample ends when the knowledge accumulated is adequate to address the research question (Low, 2019).

Selecting “representative sample” is inappropriate for a case-based research (Siggelkow, 2007). This is because samples in qualitative research and theory-building multiple-case study in specific, are not acting as the representative of a population (Eisenhardt & Graebner, 2007; Schreier, 2018). Randomly selected representative sample may not be suitable samples that provide the opportunity to gain insights needed to meet the research objectives of this research to build new theory (Siggelkow, 2007). For instance, unsuccessful Malaysian Chinese entrepreneurs may be sampled through the random selection method whereas successful Malaysian Chinese entrepreneurs are the focus of this research that contains relevant information needed for theory-building. In addition, Eisenhardt and Graebner (2007) warn that representative samples are not consistent with the theory-building multiple-case study like this research as these samples are used to test theory.

Secondly, purposive sampling is suitable for this research because samples that have rich and relevant information, who are entrepreneurial business elites and are hard to reach can be selected according to the selection criteria specified in this research to investigate the phenomenon of interest and achieve research

objectives, such as generating new theory (Mikecz, 2012). Selecting samples according to the selection criteria is important to gain in-depth understanding and insight (Ridder, Hoon & McCandless, 2009), not empirical generalizations (Patton, 2015). Therefore, the selection of samples is driven by the opportunities provided by these cases to increase the understanding of the phenomenon of interest rather than a population of cases (Stake, 2006). This is consistent with the process method followed by this research to investigate actual processes of rather than to test the abstract constructs of knowledge creation and strategy innovation. In addition, the purposive selected samples are valuable and especially important for obtaining distinctive insights that are not available in other organizations (Siggelkow, 2007). As highlighted by Mohr (1982), the process of bringing out a new outcome in a successful organization is vastly different from the process of bringing out a new outcome in an unsuccessful organization.

Thirdly, the purposive selected samples are cases that serve as very powerful examples of phenomenon of interest (Siggelkow, 2007). The purposive selected samples are important for generating conceptual contributions and powerful arguments about causal forces by showing the way key constructs act in real life (Siggelkow, 2007). This conceptual contribution is critical to complement the abstract speculation of causal forces that is presented in terms of “A leads to B”, which does not provide much details about the way key constructs are acting in real life (Siggelkow, 2007). The abstract statement of “A leads to B” is grounded on paradigmatic knowing (Langley & Tsoukas,

2010). As discussed in Section 2.10.2, narrative knowing is much suitable for this research than paradigmatic knowing.

To choose successful Malaysian Chinese entrepreneurs who are influenced by Zhuāng Zǐ's philosophy, the selection criteria of these entrepreneurs are: 1) entrepreneurs who have successfully generated new wealth from new venture and explicitly acknowledge that they are influenced by the Chinese culture; 2) successful entrepreneurs whose actions are influenced by the Chinese culture; 3) entrepreneurs who have applied creativity in their strategy-making . Consistent with the strategic knowledge creation framework and discussion in Section 2.9.3, new wealth is represented by new revenue generated from the development of new value and novel income sources. The sampling consisted of four successful Malaysian Chinese entrepreneurs from different industries, who are the organizational primary strategy and decision makers.

Chinese culture is an important way of Zhuāng Zǐ's philosophy in influencing Malaysian Chinese entrepreneurs. This happens because Zhuāng Zǐ's philosophy is an inherent part of Chinese culture and its influence to the culture is incalculable (Ames, 1998; Xu, 2011). Furthermore, the dissemination of Chinese philosophies through Chinese culture has been reported in past research. Cheung and Chan (2005) revealed that Hong Kong Chinese CEOs lead in the Chinese style due to Chinese cultural influence in Hong Kong, even though they did not explicate the names of the Daoist doctrines. Xing and Sims (2011) uncovered that Daoism was a cultural root that influenced Chinese bank managers in their leadership activities.

The justification for selecting Chinese firms is because their management practice may be influenced by the Chinese culture. The strategic processes of Chinese firms might be able to provide data on the way Zhuāng Zǐ's philosophy is applied in strategy-making by Malaysian Chinese managers. In contrast, managers of other ethnic groups may follow other ideologies which may not be familiar with the Chinese culture and probably not influenced by Zhuāng Zǐ's philosophy as much as the Chinese.

The successful Malaysian Chinese entrepreneurs were targeted to examine their strategy-making process and its influence, which have contributed to their revenue growth, influential position in respective industries and overcome challenges from business environment changes. In this research, successful Malaysian Chinese entrepreneurs refer to individual ethnic Chinese in Malaysia who have successfully established organizations that consistently generated new wealth, in terms of an increase in revenue and profit, from a new venture, and attain the sense of satisfaction and achievement (Chong, 2012). Consistent with Mir and Watson (2000), low firm performance, especially in terms of created little wealth, is considered as failure. The criteria of being successful in wealth creation serve the research objective to investigate the way wealth is generated, not how failure can happen in the entrepreneurial process.

The sampling frame is limited to successful Malaysian Chinese entrepreneurs for their organization size to provide richer data availability, which serves as

the multiple data source of case study and provides more comprehensive information about the organizations' strategies and context (Dyer & Wilkins, 1991). Existing empirical data sources include archival records like company annual reports and websites (Eriksson & Kovalainen, 2008). Secondary data sources from reputable media, business magazines (e.g., Forbes) and television (e.g., video documentaries) were also collected.

To investigate knowledge creation from Zhuāng Zǐ's perspective under the strategy-making domain, previously successful Malaysian Chinese entrepreneurs with innovative strategies were the study focus. Innovative strategy refers to the method that creatively applies knowledge and generates corporate revenue growth. Screening criteria for leading firms with innovative strategies rest on their characteristics of managerial decisions and actions that involve knowledge creation, as defined in the study.

Four informants were produced from the sampling process, namely Informant 1, Informant 2, Informant 3, and Informant 4. As of 2019, Informant 1 is the Chairman cum CEO of the organization that he co-founded with his partners in Taiwan. Informant 1's organization is a global electronic industry player, active in producing innovative products. Taiwan is where Informant 1 has publicly listed his organization and located his organization headquarters.

Informant 1 is a Malaysian citizen. His hometown is in Selangor, which is located in Western Peninsular Malaysia. During his childhood he became his father's assistant in doing agricultural work to earn a living for the family.

Until today his personal interest in agricultural activities remains. Informant 1 went to Taiwan at the age of 19 to pursue an engineering undergraduate course. At that time his initial aim was to get an ideal employment in either a Taiwanese or Japanese factory in Malaysia.

As a sign of cultural influence, Informant 1's native language is the Chinese spoken language. After he completed primary school, he left his home to study and stayed in a self-funded Chinese independent high school in Malaysia. In terms of educational level, Informant 1 received his master's degree in engineering from a public university in Taiwan. Informant 1 met the other co-founders of his firm in a research program. After graduation, he worked with an electronic company of Taiwan until he started his journey as an entrepreneur. When the organization was established, Informant 1 was at his mid-20s, and he led the organization from then on.

Informant 2 is the second case of this research. He was the Chairman of his organization before he sold its ownership. Informant 2 developed the organization as a multinational engineering company with diversified businesses in building construction and mechanical engineering. Malaysia is the location where Informant 2 public-listed his organization and situated the main office of his organization. Informant 2 started the organization in his mid-30s. As a sign of creativity, Informant 2 invented new civil engineering products, technologies and earned several intellectual properties. As a symbol of cultural influence, Informant 2's native language is the Chinese language.

Informant 2 is a Malaysian citizen. His hometown is in Negeri Sembilan, which is located in South Western Peninsular Malaysia. Informant 2 lost his parents during his early age. At the age of 12, his father fell ill and was unable to work. Therefore Informant 2 had to work to earn a living, and obtained financial support for his education. He set up a food stand at a famous beach near his home to sell food and drink to tourists. As he had to work and study concurrently, Informant 2 took longer than the normal time to earn his undergraduate degree. He completed his secondary education at the age of 19, and undergraduate course in engineering at the age of 26.

After he finished undergraduate course, Informant 2 joined the Public Works Department of a state government in Malaysia. Before he founded his business, Informant 2 worked with a private contractor for five years. The company's core business was in building construction. During his employment, Informant 2 started as an assistant engineer. Later, he became a General Manager before he resigned.

Informant 3 is the third case of this research. He is the Chairman of his organization, which is situated in Malaysia. Informant 3 provides self-developed software and related services to his worldwide customers. The software-related services include training to customer's organizational members, information system integration, and data transfer from the existing to a new information system. Informant 3 has won multiple prestigious international awards as an entrepreneur. He is a fellow of several academic

institutions. In terms of educational level, Informant 3 received his bachelor's degree from an overseas university. He majors in electronic engineering.

Informant 3 is also a Malaysian citizen. His hometown is in Penang, which is located in North Western Peninsular Malaysia. Informant 3 has three elder brothers, three elder sisters, and three younger brothers. Since his parents have many children to care for, Informant 3 had much freedom. One of the most notable activities he did during his free time was reading Chinese martial arts novels. After he completed his study in a Chinese primary school, Informant 3 was able to read in the Chinese language. Mastering the Chinese language enabled him to read more Chinese language books.

This hobby is influential to Informant 3, whereby he saw a commonality between Chinese martial arts novels and mathematics. Reading both of them stimulated his imagination. In the world of Chinese martial arts novels, most characters in the books he read like to practice fighting skills constantly to be the best fighters. In the world of mathematics, mathematicians strive to advance in mathematical knowledge and solve challenging mathematical problems.

Before establishing his business, Informant 3 worked with a multinational company branch in Malaysia . In the first three years, he was assigned to sell the company's software product to corporate customers in Southeast Asia. Later, Informant 3 was promoted to a senior manager. He was responsible for

the development and sales of software and hardware. As of 2018, Informant 3 had more than 30 years of experience in the information technology industry.

Informant 4 is the fourth case of this research. Informant 4 serves as the Managing Director and CEO of his organization. Malaysia is where Informant 4 has public-listed his organization and situated the organization headquarter. Most of his employees are involved in research and development activities. There was a year in which more than 80% of his employees were research and development personnel. Informant 4 offers machines to business customers in Malaysia and other countries. The product helps these customers to automate some of their manufacturing processes. As of 2018, Informant 4 has more than 20 years of experience in the manufacturing industry.

Informant 4 is a Malaysian citizen. His hometown is in Penang. As an example of cultural inheritance, Informant 4's native language is the Chinese language.

Informant 4 believes that the difficulty in life during his early life is beneficial to him. Informant 4 assisted his father to repair electrical appliances after he finished his classes in primary school. This experience enabled him to accumulate valuable electrical knowledge. This knowledge significantly improved his comprehension while studying his engineering undergraduate course. In addition, the benefits of the experience in his difficult life included learning to accept challenging work, being focused even in a noisy and disturbing environment, and being confident in overcoming adverse conditions.

In terms of educational level, Informant 4 received his master's degree in engineering from a public university in Malaysia. Education is important for Informant 4. During his undergraduate course, he had an opportunity to be an intern in a multinational company branch in Malaysia. The internship exposed him to manufacturing industry technologies that induced his personal interest.

During the internship, Informant 4 was assigned to work in the production department. However, he requested to join the research and development department because of his personal interest in new technologies. Later, he was successfully transferred to the new department by demonstrating his technical capabilities. Since then, Informant 4 started to accumulate his experience in the manufacturing industry, particularly in research and the development of new technologies.

3.3 Data collection

Exploiting the exceptional strength of the case studies, primary data and secondary data were gathered from various sources (Yin, 2003) to establish a comprehensive view of the strategic processes and the background for each case (Dyer & Wilkins, 1991). To highlight knowledge creation and its interaction with the dynamics of each case (Dyer & Wilkins, 1991), this study emphasized on qualitative data to reveal an insight into the complex social processes that were unlikely to be provided by the quantitative data (Eisenhardt & Graebner, 2007).

Primary data about strategy-making process were collected via in-depth, semi-structured interviews from individual participants. The objective of semi-structured interview was to capture insights about strategy-making as knowledge creation from Zhuāng Zi's perspective. To identify tacit knowledge, respondents were encouraged to use metaphors to illustrate its meaning where appropriate (Martin, 1982). In the event of facing the difficulty in using metaphors to explain tacit knowledge, respondents were asked to describe the situation when tacit knowledge was applied. From the primary data and review of the current literature, a comparison could verify and validate the proposed conceptual framework.

The process of primary data collection was as follows. Firstly, a pilot study prior to the actual data collection was conducted to refine the interview questions. Secondly, all four informants were contacted by the researcher to obtain the consent for participation in the research interview. After permissions were granted, primary data collection with Informant 3 and Informant 4 was carried out at venues where the sample organizations were located. Primary data collection with Informant 1 and Informant 2 was carried out at the venues suggested by both informants. Therefore, primary data collection was conducted in the form of face-to-face interview with all four informants. Finally, the interviews were conducted through an interviewee's native language, which is the Chinese spoken language. The length of interviewing Informant 1 was about two and a half hours.

The duration of interviewing Informant 2 was around one hour and fifteen minutes. The length of interviewing Informant 3 was about one hour and thirty five minutes. The duration of interviewing Informant 4 was around one hour and ten minutes. Interview results were audio recorded, transcribed, and later translated into English.

The interview process consisted of three major components. Firstly, informants were asked according to interview questions which were refined after the pilot study. Secondly, the interview encouraged informants to tell what they think is important, but was not asked. The interviewer encouraged informants to use story-telling and metaphors to elicit tacit knowledge. Finally, follow-up questions were asked to explore further, clarify and verify key points articulated by informants as well as key issues discovered from the secondary data.

Follow-up questions are important to improve the quality of this qualitative study. Harmonious with constructivism, the verification of key points by using follow-up questions enabled negative evidence to be discovered (Creswell & Miller, 2000), and created consistency between primary and secondary data, and among different data within interviews. Therefore, follow-up questions helped to achieve trustworthiness and credibility (Creswell & Miller, 2000) from the increase in consistency and thereby establishing rigor in this theory building multiple-case study.

Secondary data were collected from multiple sources. They consisted of autobiographies, documentaries, company annual reports, web-sites, recorded public speaking, published interviews, and media coverage. Secondary data collection was focused on cases of contextual, developmental information and details of entrepreneurial process which started from the establishment of the current firm to its current state. The method is deemed to be crucial to affirm the contextual appropriateness of knowledge creation conceptual framework of this study. Details of the entrepreneurial process were used to verify and confirm information obtained from the interviews.

3.4 Data analysis

Data analysis was administered via analyzing within-case data, looking for cross-case patterns, comparing the emergent concepts with existing literature (Eisenhardt, 1989), and contrasting the emergent concepts with the conceptual framework of the study (Carroll & Swatman, 2000), which was the strategic knowledge creation framework as shown in Figure 2.4. Analyzing within-case data entailed the reflection on the meaning of findings (Carroll & Swatman, 2000), case study write-ups (Eisenhardt, 1989) with detailed and rich description which emphasized the phenomena and context (Dyer & Wilkins, 1991). Consistent with constructivism, a thick and rich description can increase the credibility of this research (Creswell & Miller, 2000). Analyzing within-case data serves the aims of understanding the ways actors interpret reality (Suddaby, 2006), supplying a deep description of the social scene, illustration of the context in which strategy-making or knowledge creation take place

(Dyer & Wilkins, 1991) and expose a deep structure of social behavior involvement (Light, 1979). The tactic is likely to enable the research to present a concrete description as the answer for the research question that was specifically asking the answer to “how” (Dyer & Wilkins, 1991). The degree of generalization increased when others found it easier to refer to the same phenomena in their experience with the description of this study (Dyer & Wilkins, 1991).

This study looked for cross-case patterns by comparing informants with two tactics. The first tactic arranged the informants into various categories for comparisons among the categories (Eisenhardt, 1989). Such comparisons will be used to examine the relations between the categories. Besides, the comparisons can be used to identify and examine alternative explanations (Carroll & Swatman, 2000). The second tactic arranged the organizations into various pairs for comparison between each pair (Eisenhardt, 1989). The comparisons were utilized to investigate the relations between them. Cross-case searching increased the probability of a new discovery, and accurate and reliable theory (Eisenhardt, 1989), and generated new understandings related to “patterned relationships between social actors and how these relationships and interactions actively construct reality” (Suddaby, 2006, p.636).

Following Eisenhardt (1989) and Carroll and Swatman (2000), the emergent concepts from the data collected were contrasted with both opposing and identical findings in the existing literature. The purpose of the opposing literature selection was to develop confidence in the research findings, also the

chances to capture deep insights and precision for research generalizability (Eisenhardt, 1989). The purpose of selecting the literature with identical findings was to develop “stronger internal validity, wider generalizability, and higher conceptual level” (Eisenhardt, 1989, p. 544). As the findings of this study depended on limited quantity of cases, relating them to literature is of exceptional importance (Eisenhardt, 1989).

Next, the emergent concepts which resulted from the data analysis were linked with the conceptual framework to create enrichment, revisions, and refinement of the strategic knowledge creation framework (Carroll & Swatman, 2000). This is consistent with the constructivist approach to examine the applicability of past theories in the contemporary economic environment (Mir & Watson, 2000). In addition, linking data from informants to the conceptual framework can reduce the theory-practice gap (Carroll & Swatman, 2000).

The data analysis was ongoing and intertwined with data collection until a theoretical saturation was achieved (Eisenhardt, 1989). In the ongoing process, the research results from the data analysis were systematically coded into theoretical constructs and made comparisons among data, first-order concepts, second-order concepts, aggregate dimensions, strategic knowledge creation framework, and related literature (Gioia et al., 2012). To increase qualitative rigor to this research (Gioia et al., 2012), Table 3.1 below summarizes the systematic procedure processes in coding data.

The procedure of coding data consisted of open coding, axial coding, and selective coding (Creswell & Creswell, 2018). Coding data is a process of the researcher making sense of data to generate codes (Blair, 2015). Codes are labels of data (Blair, 2015). Open coding entails grouping data according to “conceptually similar events/actions/interactions” to create a code for each group of data (Corbin & Strauss, 1990, p.12). Codes generated in open coding are termed “first-order concepts” (Gioia et al., 2012), and are presented in Table 3.1.

Axial coding was applied following the process of open coding. Axial coding involves the uncovering and labeling of commonalities among first-order concepts (Gioia et al., 2012), and the identification of relations between first-order concepts based on the links suggested by the data (Corbin & Strauss, 2008). The labels of commonalities among first-order concepts are “second-order themes” (Gioia et al., 2012), and are displayed in Table 3.1. The sequential connections between first-order concepts were graphically represented by arrows in the process model of knowledge-wealth creation, which are depicted in Figure 4.1.

Selective coding was conducted following the axial coding process. Selective coding involves identifying and labeling commonalities among second-order concepts (Gioia et al., 2012). Commonalities among second-order concepts are “aggregate dimensions” (Gioia et al., 2012). Aggregate dimensions are shown in Table 3.1 below. Second-order concepts and aggregate dimensions are important for constructing grounded theory (Gioia et al., 2012). They were

used to construct the process model of knowledge-wealth creation as presented in Figure 4.1.

Table 3.1: Data structure

Representative Quotes	First-Order Concepts	Second-Order Themes	Aggregate Dimensions
<p>“Definitely, you need the basics of knowledge. Without the basics, how do you know whether a judgment on experience is correct.” (Informant 1)</p>	<p>Obtaining basic knowledge from participation in formal education to understand and discern experience</p>	<p>Learning foundational knowledge</p>	<p>Empower Natural Ability to Know</p>
<p>“During my time in junior high school, I learned to use litmus paper to test acidity and alkaline.” (Informant 2)</p>	<p>Developing skills and life experience since childhood for subsequent goal oriented learning</p>		
<p>“Becoming strong in mathematics needs to start from learning it at a young age. If you do not learn, you will lose the opportunity, even though you have the capability. Remember that mathematics is an accumulation of two, three thousands of years of learning. It is impossible to speak on mathematics after learning for a short time.” (Informant 3)</p>			
<p>“Go working [and treat it] like a practical training in the first place. Find those things you think you can do, and then do it.” (Informant 1)</p>	<p>Identifying personal interest at the time it resonates with a specific thing or external event</p>	<p>Self-identifying personal natural inclination</p>	
<p>“When I have some achievement in my life, I think back. I attribute my ability to innovate to liking these exotic things (a bamboo flute he made by himself with minor assistance from his father to generate holes on the flute’s surface. Flute making was motivating after seeing a</p>			

Table 3.1 continued

senior playing a flute during his primary school years; and a set of magic water, which consists of three jars of water with different levels of acidity he made it during his secondary school years. He named it magic water because mixture of the three jars of water in a sequential order can transform the first jar of water from red color into green, and then become red again by adding the third jar of water. He did this after he learned how to use litmus paper) since an early age.”
(Informant 2)

Uncovering what is needed to know when one is feeling right to do something

“When some people are born, their language differ from the others. Some of them can understand music naturally, competent in music, but incompetent in speaking.” (Informant 3)

“Actually, the language of many autistic children is mathematics, so they are autistic. Because I am unable to communicate with you... In my case, I am a kind of autistic. Just right at the point before entering [deep into mathematics], but has not entered yet. So it is a junction point, where learning language, and language of the others is possible.”
(Informant 3)

“My principle is very simple, to have self understanding. It is the greatest capability of man. Most people do not have self understanding, they only know about the others. I have self understanding. My company is such a big organization. I can capture a significant global market share. It is a great capability, but impossible for me to grow my market share by 150%. Since it is impossible, why should I go for it. I

Applying Chinese moral values

Adopting Chinese way of life

Applying personal principles

Table 3.1 continued

have been successful with company A, and then want to get business from company B. Before I have business from company B, company A will be unhappy and stop our business. In the end, I get nothing from both company A and company B.” (Informant 1)

“If a company wants to be sustainable, successful for a long period of time, they [the company] have to be respectable. [They] got to know propriety, righteousness, honesty, and a sense of shame.” (Informant 1)

“Find various information through different relations to solve problem. I outperform the others because I know the answer earlier than them. If we know the answer at the same time, there is no difference between you and me. My job is to work hard to get answers earlier than anybody, so that I can get what I deserve.” (Informant 1)

Developing distinctive sources of information to gain proprietary information

Accessing sources of information

Self-cultivation for possibility development

“I attended international conferences and visited industry players in other countries to see how they do frequently.” (Informant 2)

Acquiring common sources of information to leverage on great minds

“If a person wants to learn how to judge, analyze, what should he do? I tell you, this water is burning hot, very hot, [but] how hot is it? If you do not know, you can understand how hot it is after you touch it. Isn’t it good if students can fully understand whatever their teacher taught them? Is this possible? This is impossible. I tell you, you probably

Experiencing through personal involvements

Creating tacit understanding

Table 3.1 continued

absorb it and it will be faster when there is a basic. But, it is helpful only if you can understand. If you are not able to understand, it is not helpful. So, you have got to experience everything yourself. Otherwise, whatever you articulated is just a lie. In the past, I did not know and talk about this, because no one else taught me about this. I am not lying to you now, at least this is what I had experienced.” (Informant 1)

Memorizing and
thinking to
comprehend

“The best way [to attain tacit understanding] is memorize. It is because it is easier for a person to find it. [Interviewer: Does it mean when that person encounters an event, he or she can associate it to what is remembered and become understood?] Yes. So, it is wrong when we always talk about the Western style of teaching method. The reason being it sounds like you are born with a high intellectual level, you want to know everything, [but] who do you think you are. The authors spent their entire lifetime to write a book, [yet] you want to understand it within three hours only.” (Informant 3)

“You need to memorize; you need to think. You need to memorize because you don’t know. But memorize it, moving from the unknown to the known is moving up a level.” (Informant 3)

“You go to sleep. Before sleeping, keep thinking on how about A, how about B, A, B, A, B. At the moment you almost get into sleep or wake up, your subconscious will tell you the answer.” (Informant 1)

Conceiving new ideas
to pursue aspiration

Originating
creative
initiatives

Table 3.1 continued

“It used to be a tool (tacit knowledge). Then, you observe for a while, (tacit knowledge) and it becomes a tool box. [Afterward] it becomes an automatic machine. It came from organization (of tacit knowledge within thought).” (Informant 3)

Creating creative insight of what could have the greatest impact

“Advanced level [of capability] is the Union of Heaven and Man, [which means] inside the Heaven there is me [the person who achieves this level of capability]; inside me there is the Heaven (human nature).” (Informant 3)

Adopting the perspective of organization members and non-organization members to make and enjoy a better world

Acting as a great self

Applying Great Knowledge

Enactments of Breakthrough

“How are you going to interact and cooperate with other people? How can we establish an ideal cooperation? We got to have trust and respect... [Only with] trust and respect, we can cooperate.” (Informant 4)

Co-operating with stakeholders and social network as a team to develop and exploit strength as a bigger entity

Table 3.1 continued

“I allocate resources on how to make friends and how to be an upright person. So I say, this is what I depend on to grow big.” (Informant 1)	Developing multi capabilities according to need	Achieving greatness
“Those who used to participate in innovation activities know that important technological innovation requires tremendous financial support, and also need to combine or exploit various technologies and skills.” (Informant 2)	Utilizing multi capabilities to coordinate and combine the work of the great self	
“We alter our approach to do business according to the changes of environment.” (Informant 1)	Preventing and solving threatening changes within environment	Encountering change
“There are two ways of doing business. One is looking for [higher level of knowledge]; another is adapting [to change].” (Informant 3)		
“If what you are really looking for is knowledge, it is very simple. There is nothing going to be changed, because you are looking for advanced technology, at a higher level. What can you change if you can’t even attain that level (advance level of knowledge)?” (Informant 3)	Capturing neutral trends within environment	

Table 3.1 continued

“The customer asked whether we can make it (create an innovative product). He said that there are people who want it.” (Informant 1)	Demonstrating competency to induce latent customer needs	Transforming events into opportunities
“My boss is very confident with me [in solving a tough software problem].” (Informant 3)	Solving tough problems	
“We made the product. We also have made it popular across the world. It is simple. There were other people who made a similar thing before us, but they did it badly. We made the product much more affordable, smaller, but most importantly, I made money. The market was growing big. So, we are the ones who make this happen.” (Informant 1)	Offering novel technologies and products	Implementing innovative strategies
“When customers tell you, “hi, I want this thing”. Firstly, you got to ask why, why [the customer] want to use this thing... When we know the root of customer demand, we got to think about solutions that can help customers overcome the problem by fixing the root causes ... This (the solution that fixes the root cause) can have a huge difference from the product that the customer tell you to do in the beginning. Because the customer started from their perspective. The product requested by customer is based on the customer’s limited understanding of technology. [The product] may not be the best solution [to the customer’s problem]” (Informant 4)	Implementing new business approaches	

Table 3.1 continued

“[My company] is a well-known global player.” (Informant 1)	Significant revenue growth	Great financial wealth	Survive and Growth
	Continuous profit record since inception time		
“I feel it is a responsibility. If you ask me why I keep working, I have enough money, enough for me to spend for the entirety of my life. But my employees need a breakthrough [in their financial status]. New employees also need their financial reward.” (Informant 1)	Contribute to the well being of stakeholders and social network	Meaning as the ultimate working objective	
“I think the first target of young people is to buy a house. Buying a house is very difficult, [it probably takes] twenty years, thirty years. If we can work hard, the company makes money, spends more on bonus, [so that] he or she can buy a house within ten years. I tell you, this is a very good thing.” (Informant 1)	Self fulfillment		

3.5 Chapter summary

This chapter describes the research methodology of the study. The methodology was adopted to cater for the specific requirements in exploring into the process of Malaysian Chinese entrepreneur creation and applying knowledge in strategy-making to generate wealth consistently in organizations by leveraging on the teaching of Zhuāng Zǐ's philosophy. To achieve the research objectives, this chapter explains the way this research was conducted by the following:

- 1) Research study design is an exploratory, process-oriented, constructivist theory-building multiple-case study.
- 2) Research study is set in Malaysia.
- 3) The sampling method of this study is the purposive sampling method.
- 4) Samples are selected from Malaysian Chinese entrepreneurs who are influenced by Chinese culture that contains Zhuāng Zǐ's philosophy and applies creativity in strategy-making.
- 5) Data collection of this study gathers primary and secondary data.
- 6) Data analysis of this research consists of analyzing within-case data, searching for cross-case patterns, coding data and contrasting the emergent concepts with extant literature.

Exploratory, process-oriented case study is especially appropriate to uncover and explain the processes of knowledge creation and application that are complex and involve a chain of causal events.

Malaysia is an ideal choice because Malaysian Chinese inherit and use Zhuāng Zǐ's philosophy due to the significant influence of Chinese culture and presence of the most comprehensive Chinese education system outside the Greater China region. Besides, Malaysia demands higher dynamic managerial capabilities from individual managers because of the additional needs to accommodate the differences between Malaysian Chinese and other ethnic groups in the multicultural society, and the deep influence of the Western culture.

Purposive sampling method is needed to collect data from suitable sources of data that are matched with the research objectives. A suitable sample is a Malaysian Chinese entrepreneur who is influenced by Zhuāng Zǐ's philosophy within the Chinese culture and has applied creativity in strategy-making.

The collection of both primary and secondary data is consistent with the exploratory case study method. Triangulation between primary data and secondary had increased the trustworthiness and credibility of this research. The primary data collection method of study was in-depth, semi-structured interview. The interview method was especially appropriate to elicit tacit knowledge.

Analyzing within-case data provides deep insights about the social scene, the processes and involves social behavior when knowledge creation and strategy innovation takes place. Searching for cross-case patterns is important to create

new categories and relationship among categories for the development of theoretical model. Comparisons of the emergent concepts with extant literature enhance the conceptual level, internal validity and generalizability of the research.

In what follows, Chapter 4 presents the study findings which were derived from the data analysis. Consistent with the research objectives of developing a conceptual model, data analysis leads to a process model of knowledge-wealth creation. As a result of constructing theory from case studies (Eisenhardt, 1989), the process model offers a theoretical explanation (Gioia & Pitre, 1990) on processes of knowledge creation and strategy innovation and further insights to the strategic knowledge creation framework. The purposive selection of Malaysian Chinese entrepreneurs as the research participants for this study also successfully revealed the impact and application of Zhuāng Zǐ's philosophy. Ideas of Zhuāng Zǐ's philosophy can be found in the key processes of the process model of knowledge-wealth creation, such as using human natural ability of knowing, self-cultivation, and great knowledge. Therefore, the research methodology of this study was effective in answering the research questions.

4.0 FINDINGS

Through the lens of Zhuāng Zǐ's philosophy, analysing how Malaysian Chinese entrepreneurs created and used knowledge in strategy-making to generate financial wealth consistently leads to a process model of knowledge-wealth creation. In other words, the process model is an answer to the research question, "how do successful Malaysian Chinese entrepreneurs create and use knowledge in strategy-making to generate new wealth consistently in organizations by leveraging on the teaching of Zhuāng Zǐ's philosophy?".

An overview of the process model of knowledge-wealth creation is presented in Figure 4.1 below. The process model of knowledge-wealth creation starts from empowering the natural ability to know, followed by the self-cultivation for possibility development, enactments of breakthroughs, and ending in survival and sustainable growth. Each stage of the processes in the process model will be reported as follows.

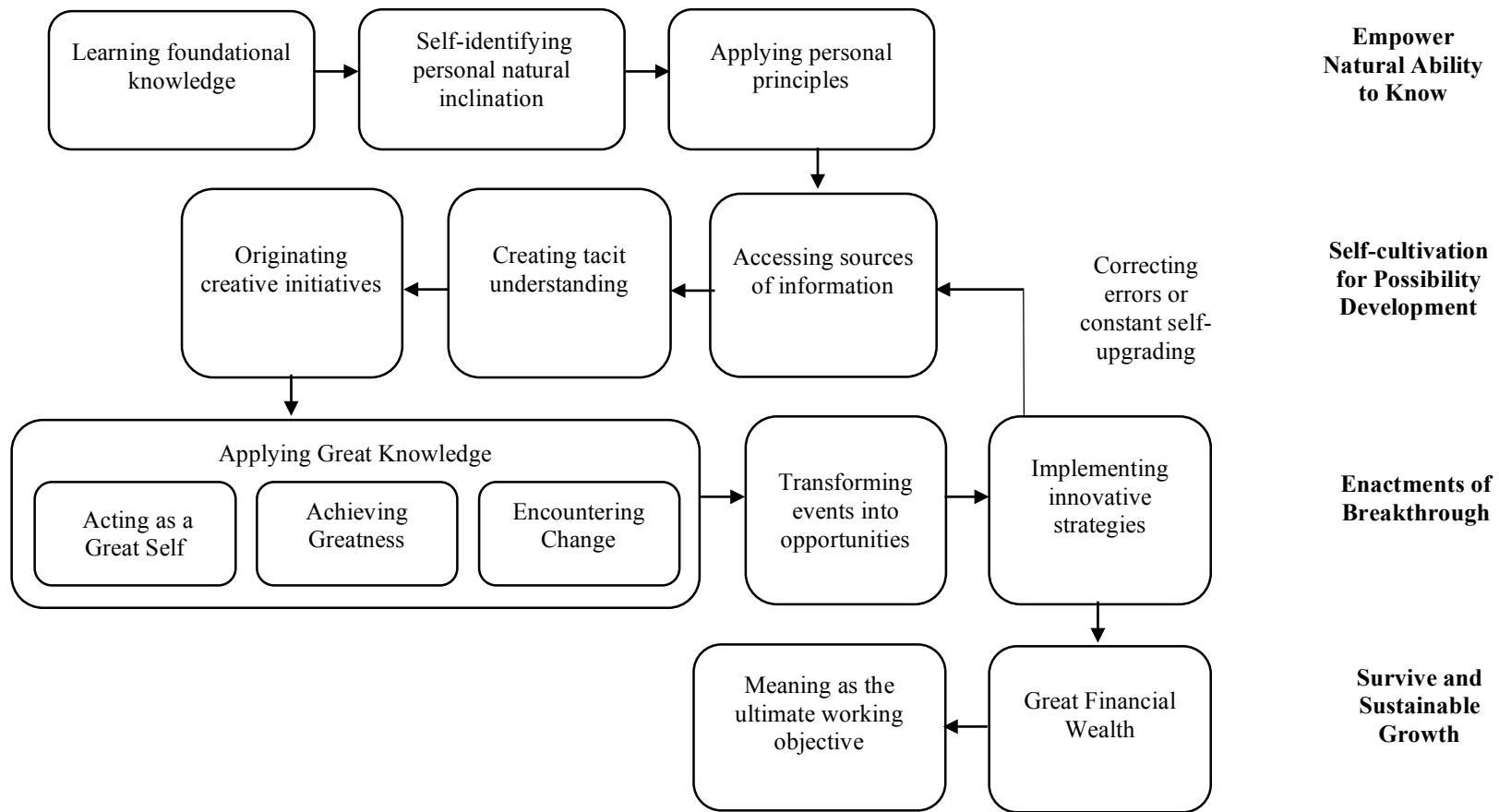


Figure 4.1: A process model of Knowledge-Wealth Creation

4.1 Empower Natural Ability To Know

Empowering the natural ability to know is a process of preparing all four informants with the ability to develop wealth creating competencies. The ability to attain knowledge is a distinctive human nature. The natural born ability is a potential that requires human effort for further development. Empowering the natural ability to know is the process of developing this human nature further into wealth creating competencies, which include dynamic managerial capabilities.

Empowering the natural ability to know consists of learning foundational knowledge, self-identifying personal natural inclination and applying personal principles. Learning foundational knowledge is a process of equipping informants with intellectual tools to empower their human natural ability to know. In this research, the natural ability to know is the informants' personal natural inclination, which reflects upon specific talents that required further cultivation. Then, informants matched their personal natural inclination with foundational knowledge to form their personal principles.

4.1.1 Learning foundational knowledge

Results from the data analysis show that the processes created and the knowledge used by all four informants in strategy-making started from learning foundational knowledge. Foundational knowledge had a profound

influence on their competency development. Basic knowledge is a category of foundational knowledge that all four informants obtained from formal education to understand and discern any experience. Table 4.1 below presents the verbatim of the interviews with respondents that leads to the theme of 'learning foundational knowledge'. As displayed in the table, basic knowledge together with early skill development and early life experiences are two categories of foundational knowledge.

In terms of basic knowledge acquisition through formal Chinese education in Malaysia, the informants absorbed Chinese culture and thinking that is implicit in the way of how the Chinese language is written and spoken. For example, Informant 3 used the Chinese language as a type of thinking aid, "our ancestors created that kind of tool [thinking aid] persistently, [such as] idioms, quips." Furthermore, both Informant 1 and Informant 3 used an idiom originated from the ancient Chinese military strategy, *bèi shu yī zhàn* (fight with one's back to the river, which literally means fighting to win or die) to describe how they dealt with the situations when starting their businesses.

The second category of foundational knowledge is practical skills, which include both social skills and working skills and creativity developed by informants through special experiences. Informant 2 emphasized that his experience of selling soft drinks during his childhood days had inspired him to conduct his construction business based on trust. The purpose of selling soft drinks was to cover part of his family expenses and his education fees during the time his father fell ill.

Table 4.1: Representative quotes that lead to the theme of “learning foundational knowledge”

Representative Quotes	First-Order Concepts	Second-Order Theme	Aggregate Dimension
<p>“Definitely, you need the basics of knowledge. Without the basics, how you know whether a judgment on experience is correct.” (Informant 1)</p>	<p>Obtaining basic knowledge from participation in formal education to understand and discern experience</p>	<p>Learning foundational knowledge</p>	<p>Empower the Natural Ability to Know</p>
<p>“During my time in junior high school, I learned to use litmus paper to test acidity and alkaline.” (Informant 2)</p>	<p>Developing skills and life experience since childhood for subsequent goal oriented learning</p>		
<p>“Becoming strong in mathematics needs to start from learning it at a young age. If you do not learn, you will lose the opportunity, even though you have the capability. Remember that mathematics is an accumulation of two, three thousands of years of learning. It is impossible to speak on mathematics after learning for a short time.” (Informant 3)</p>			
<p>“An individual’s thought is often influenced by the environment he situated, and people, matter and things that going on around him. This is same to me. I came from a very poor family. So I went out to work when I was very small. My father’s job was</p>			

Table 4.1 continued

providing electrical appliance repair service. Sometimes, he brought us together to go to repair, went to other people's house to install televisions, install hi-fi systems. Even when I was studying in primary school, I got to climb onto roofs to install antenna, [so I] knew how to install antenna, climbed very high, dare to climb up as high as the height of several floors of a building. [I] climbed up there to install antenna. [I did these things] that time because of my father was providing repair service, so I knew how to do repairing work since I was very small, [such as] welding, [almost] everything. [I] knew these things at an early age. [I] didn't have to do these things if [my family] was wealthy.”
(Informant 4)

The selling experience was an experience of developing trust. To procure soft drinks without having to pay first, he convinced an owner of a small shop who had been friendly to his father. At the first time, the shop owner allowed him to take two dozens of bottled soft drinks. Then, he sold these soft drinks out within two hours at a famous beach near his home and repaid the shop owner instantly in cash. The shop owner was impressed and he had even asked his son to assist Informant 2 by sending another ten dozens of bottled soft drinks to the beach.

Informant 2 reflected that he learned a lesson from this experience about how to actualize the value of trust: “a single word of ‘trust’, had allowed me to start this small business without financial capital. Not only that it had helped my family to overcome difficulties, but it had also allowed me to complete my education and become an engineer.” Trust is essential to generate great financial wealth and business growth, as Informant 2 noted that: “if not because of trust, I believe there is no way for me to establish Informant 2 Corporation [the name of Informant 2’s organization is rephrased as Informant 2 Corporation] as a multinational engineering company. I would not be able to attain the achievements in my engineering career.”

Similar to Informant 2, living experience had also influenced Informant 4. During his childhood, Informant 4’s family faced a financial problem. After his primary school, Informant 4 acted as his father’s assistant in his father’s own business. His father offered the services to repair electrical appliances.

Informant 4 asserted that, “an individual’s thought is often influenced by the environment he is situated in, and people, matter and things that are going on around him. This is the same to me. I came from a very poor family. So I went out to work when I was very small. My father’s job was providing electrical appliance repair service. Sometime, he brought us together to go to repair, went to other people’s house to install televisions, install hi-fi systems. Even when I was studying in primary school, I got to climb onto roofs to install antenna, [so I] knew how to install antenna, climbed very high, dared to climb up as high as the height of several floors of a building. [I] climbed up there to install antenna. [I did these things] that time because my father was providing repair service, so I knew how to do repairing work since I was very small, [such as] welding, [almost] everything. [I] knew these things at an early age. [I] didn’t have to do these things if [my family] was wealthy.” Therefore, Informant 4 learnt to repair electrical appliances, such as television and Hi-Fi sound system from his father. This practical skill is valuable to his mechanical engineering career in machine development and maintenance.

The condition of Informant 1 was much the same as Informant 4. Helping his father in their agricultural work was Informant 1’s major after-school activity. He could only avoid it when it was raining during the working day. Although the technical knowledge of agricultural work is not related to the business he founded, the social and business skills were influential to Informant 1. Besides, Informant 1 did a lot of reading as a hobby during his free time, especially during those rainy days. Most of the reading materials were Chinese books like Chinese novels. This is the way of how he learnt the Chinese culture. Besides,

the ability to read Chinese literature can be attributed to his Chinese education background.

The result of learning foundational knowledge can be seen from the Chinese cultural impact to informants. In the Malaysian context, it is worth noting that the Chinese culture influences informants in the way that rich or capable people help the poor by sponsoring and supporting the Malaysian Chinese education. A specific form of support is becoming a member of management boards of a Chinese school. Generally, the responsibility is not a financial rewarding position, but a critical role to contribute to the development of the respective Chinese school by solving most of the problems that the education institution faces.

Informant 1's personal experience of the Chinese culture is: "I think the sources of Chinese culture [that have influence on me], I believe they are the books, society, media, newspapers. Oh, yes! It is like the time when I didn't have money while I was studying [in Chinese schools in Malaysia]. Many directors (members of the respective primary and secondary Chinese schools' management board) of the Chinese school had helped [me]. [They] helped to pay for my scholarships, hostel fees, and so on. Slowly, I began to realize that a rich person can do a lot of things... So, when I came across rich people in many occasions, I always told them to donate some of the money that they have made. There is a lack of funds among Chinese education [institutions] throughout Malaysia."

Due to this cultural influence and personal experience, Informant 1 becomes a generous donor to Chinese schools. In his explanation, Informant 1 analogized the financial assistance he received in the past to a relief food. A relief food is usually used to rescue people from hunger in order to keep on living. Similarly, the financial aid was important to Informant 1's survival.

Informant 1 implied that the value of using money as a financial aid was greater than its monetary value. Informant 1 stressed that in the future, the relief food receiver should not return the favor in a way like serving a loan, giving back the same or increasing the amount a bit like a loan repayment with its interest. Informant 1 held the opinion that it may not be sufficient even if the relief food receiver gives back something which is worth more than that a hundred or a thousand times.

The experience had also shown to Informant 1 that financial wealth can be meaningful, especially in the form of donation. Using financial wealth and attaining meaning as the ultimate working objective will be discussed in Section 4.4.2. In this section, learning foundational knowledge shows the informants' root of thinking about adopting meaning rather than wealth as work objective. Overall, this section demonstrates that both living and formal educational experience have a profound Chinese cultural impact to all four informants.

4.1.2 Self-identifying personal natural inclination

Having been exposed to education (i.e., primary and secondary schools and university) and living experience, all four informants became aware that they have a strong feeling toward specific types of things or events they encountered. The feeling was natural, personal, unique and sufficiently strong to motivate them to take actions persistently. Self-identifying personal natural inclination appears to be suitable for labeling the processes, as the onus of identification rests solely on the informants to have such an awareness. Table 4.2 demonstrates how the label can be identified through excerpts of quotes from the respondents' answers.

One type of personal natural inclination is great interest, which emerges when informants resonate with a specific thing or event. Informant 2 has great interest in innovation, whereby he produces special ideas and things. He has won rewards for his innovative outcome, which also help to reinforce his interest in innovation.

Similarly, Informant 3's personal natural inclination is 'great interest'. His interests are on mathematics and philosophy. He articulated that "my situation is very simple. It happened to be a great interest in mathematics and the knowledge of Heaven and Earth from deep within myself."

Informant 4 is another example of a person who notices his personal natural inclination through personal interest. Informant 4 explained how his personal

Table 4.2: Representative quotes that lead to the theme of “self-identifying personal natural inclination”

Representative Quotes	First-Order Concepts	Second-Order Theme	Aggregate Dimension
<p>“When I have some achievement in my life, I think back. I attribute my ability to innovate to liking these exotic things (a bamboo flute he made by himself with minor assistance from his father to generate holes on the flute’s surface. Flute making was motivating after seeing a senior playing a flute during his primary school years; and a set of magic water, which consists of three jars of water with different level of acidity he made it during his secondary school years. He named it magic water because mixture of the three jars of water in a sequential order can transform the first jar of water from red color into green, and then become red again by adding the third jar of water. He did this after he learned how to use litmus paper) since an early age.” (Informant 2)</p> <p>“When some people are born, their language differs from the others. Some of them can understand music naturally, competent in music, but incompetent in speaking.” (Informant 3)</p> <p>“Actually, the language of many autistic children is mathematics, so they are autistic. Because I am unable to</p>	<p>Identifying personal interest at the time it resonates with a specific thing or external event</p>	<p>Self-identifying personal natural inclination</p>	<p>Empower Natural Ability to Know</p>

Table 4.2 continued

communicate with you... In my case, I am a kind of autistic. Just right at the point before entering [deep into mathematics], but has not entered yet. So it is a junction point, where learning language, and language of the others is possible.” (Informant 3)

“During my second year of studying in the university, my mother gave me an old ‘consumer electronic device’ (the device name has been replaced with ‘consumer electronic device’ because the distinctive functionality of the item is related to the signature functionality of Informant 4’s new products, and thus will likely reveal the informant’s identity). So, I was very much interested in the consumer electronic device’s functionality (the distinctive functionality of the item has been replaced with ‘consumer electronic device’s functionality’) at that time.” (Informant 4)

“Go working [and treat it] like a practical training in the first place. Find those things you think you can do, and then do it.” (Informant 1)

Uncovering what is needed to know when feeling right to do something

interest emerged: “during my second year of studying in the university, my mother gave me an old ‘consumer electronic device’ (the device name has been replaced with ‘consumer electronic device’ because the distinctive functionality of the item is related to the signature functionality of Informant 4’s new products, and thus will likely reveal the informant’s identity). So, I was very much interested in the ‘consumer electronic device’s functionality’ (the distinctive functionality of the item has been replaced with ‘consumer electronic device’s functionality’) at that time.” Informant 4 extended his interest on the consumer electronic device to a machine: “during my internship, [I] had the opportunity to see a machine that was attached to a consumer electronic device. The consumer electronic device complemented a row of that kind of machine superbly that it was able to function accurately and swiftly in an amazing way. So, [I] was fascinated with this technology.”

The second type of personal natural inclination is sincerity. Sincerity refers to actions that are taken in accordance to personal feelings on something, but the feelings are not of personal interest. Informant 1 emphasized that he works persistently not for passion, “the beginning of everything is a passion, but it will not last forever.” Instead, Informant 1 would feel uncomfortable if he did not confront a problem in a way like a person who is obsessive about cleanliness. He is inclined to eliminate rather than to ignore the problem. Otherwise, he would “agonize himself with the thought of failure to solve a problem.”

This personal natural inclination rather than interest or passion is the starting point that drove Informant 1 to begin developing his competency in electronic engineering, “I study electronic, [but when I] open to look at its [electronic device] inside, I totally do not know any of the things.” He felt this was a serious problem because “I just know how to study. It is useless when I graduate as I know nothing. I do not know what I can do, but I need to earn money.” Afterwards, he accepted an offer from his lecturer and worked in his lecturer’s laboratory to gain some practical experiences and earn a living at the same time.

4.1.3 Applying personal principles

All four informants had utilized their personal natural inclination by applying personal principles to create ideal human actions in their businesses. Foundational knowledge that matches personal natural inclination was adopted by informants as personal principles. Personal principles must match with informants’ personal natural inclinations because Informant 2 found that the guidance on management practice from the West was unsuitable for him. He asserted, “I read a lot of corporate management books. When I read the first book, I felt [that the book was] very good. [Then, Informant 2 read] the second [book], the third [book], the fourth [book], the fifth [book], and after reading [these books] for a while, [Informant 2 began to feel that] all of them were empty talks. The situation [described in those management books] may be suitable for others, but not for me. Regardless of long or short matters, Chinese culture has many famous quotes, assertions and philosophies of renowned

people that are very useful in guiding us to become an upright person while working.” Thus, personal principles are informants’ guidelines of how to conduct business since the inception of starting their business.

Table 4.3: Representative quotes that lead to the theme of “applying personal principles”

Representative Quotes	First-Order Concepts	Second-Order Theme	Aggregate Dimension
<p>“If a company wants to be sustainable, successful for a long period of time, they [the company] have to be respectable. [They] got to know propriety, righteousness, honesty, and a sense of shame.” (Informant 1)</p>	Applying Chinese moral values	Applying personal principles	Empower Natural Ability to Know
<p>“You have got to innovate and fail, so courage is one [of my personal principles]. As an organizational member of ‘Informant 4 corporation’ (Informant 4’s company name is replaced with ‘Informant 4 corporation’), we must possess that trait. It is a trait that we must have the courage to try. Breakthrough comes only after we have tried. This is the starting point of innovation. So, courage is very important.” (Informant 4)</p>			
<p>“My principle is very simple, to have self understanding. It is the greatest capability of man. Most people do not have self understanding, they only know about the others. I have self understanding. My company is such a big organization. I can capture a significant global market share. It is a great capability, but impossible for me to grow my market share by 150%. Since it is impossible,</p>	Adopting Chinese way of life		

Table 4.3 continued

why should I go for it. I have been successful with company A, and then want to get business from company B. Before I have business from company B, company A will be unhappy and stop our business. In the end, I get nothing from both company A and company B.”
(Informant 1)

“I read a lot of corporate management books. When I read the first book, I felt [that the book was] very good. [Then, Informant 2 read] the second [book], the third [book], the fourth [book], the fifth [book], and after reading [these books] for a while, [Informant 2 began to feel that] all of them were empty talks. The situation [described in those management books] may be suitable for others, but not for me. Regardless of long or short matters, Chinese culture has many famous quotes, assertions and philosophies of renowned people that are very useful in guiding us to become an upright person while working.”
(Informant 2)

“The Union of the Heaven and Man is the utilization of the power of Heaven to help you in doing the thing that you want to do. You have to remember that everything you do, the Heaven contributes a part of it—just that you do not know.” (Informant 3)

The personal principles adopted by informants came from Chinese moral values and way of life. Table 4.3 shows the verbatim that leads to the themes of Chinese moral values and way of life, implying that informants had applied their own set of personal principles in their management practice. Details of the findings that informants had applied their own personal principles are as follows.

Firstly, Informant 1, Informant 2 and Informant 4 adopted Chinese moral values as their personal principles. Informant 1 used Chinese moral values because “if a company wants to do well for a long period of time, [its leaders] people has to be respected, needs to know *lǐ* (ritual), *yì* (righteousness), *lián* (frugality), *chǐ* (sense of shame).” Informant 1 stressed that the exchange of favor is temporal, while these Chinese moral values are long lasting. The relationship will be gone when favor is dismissed, but the Chinese moral values will stay because respect will always be remembered. For example, Informant 1 will definitely offer an unconditional helping hand to suppliers or anyone who asks for assistance. To him, this is righteousness and the only motivation is to help them overcome their difficulty.

Informant 2 had also utilized Chinese moral values as his personal principles. Particularly, Informant 2 gained respect by establishing trustworthiness with his stakeholders. The experience in selling soft drinks successfully and repaying his supplier on time had strongly reinforced his continuous application of trustworthiness as his personal principle in operating his construction business.

Informant 4 is another instance who forms his personal principles based on Chinese moral values. Chinese moral values exploited by Informant 4 as his personal principles included courage, trust and respect. Informant 4 fostered courage to stimulate innovation activities. As he explained, “you got to innovate and fail, so courage is one [of my personal principles]. As an organizational member of ‘Informant 4 corporation’ (Informant 4’s company name is replaced with ‘Informant 4 corporation’), we must possess that trait. It is a trait where we have the courage to try. Breakthrough comes only after we have tried. This is the starting point of innovation. So, courage is very important.” Hence, Informant 4 advocates that innovation begins with courage.

In addition, Informant 4 believed that trust and respect are two important values. Particularly, Informant 4 exploited trust and respect to accelerate the process of innovation. Informant 4 revealed that, “‘Informant 4 corporation’ is not a one-man firm, but a team. How are you going to interact and cooperate with other people? How can we establish an ideal cooperation? We got to have trust and respect... [Only with] trust and respect, we can cooperate. Wherever there is trust, we don’t need to talk about control. Our way is simply, you say one sentence, we trust you, [and then] you just got to work it out. So, that is productivity.” Thus, the process of innovation can be more productive with trust and respect as well as the elimination of considerable control measurements.

Secondly, Informant 3 adopted Chinese way of life as his personal principles. The Chinese way of life utilized by Informant 3 is the Union of Heaven and Man—a key Chinese philosophical concept. According to his interpretation, “the Union of the Heaven and Man is the utilization of the power of Heaven to help you in doing the thing that you want to do. You have to remember that everything you do, the Heaven contributes a part of it—just that you do not know.” In Informant 3’s perspective, human being can exploit the power of Heaven because “self is inside the Heaven, the Heaven is inside self.” It means that human being is born out of nature, and that nature comes along with birth, like children inheriting their parents’ DNA. In practice, Informant 3 interpreted mathematics theories through the principle of the Union of Heaven and Man and its related philosophies from the I-Ching or the Book of Changes. The Book of Changes is the ancient Chinese philosophical book that has commonly been regarded as the origin of Chinese philosophies, including Zhuāng Zǐ’s philosophy.

The Union of Heaven and Man is the ideal state of mind (Peng, Spencer-Rodgers & Nian, 2006) that happens when the knower or subject is unified with the known or object through immediate, spontaneous interaction (Chang, 2011). In this concept, heaven and humanity are assumed “as two sides (xiang fen, meaning separation) of an organic whole (he yi, meaning unity), but not as independent parts of an integrated whole” (Peng, Spencer-Rodgers & Nian, 2006, p.254-255).

The attainment of this mental state will lead to the perfection of an individual's inner nature and skills (Kohn, 2008). An instance of the Union of Heaven and Man is the carving skill of woodcarver Ch'ing as discussed in Section 2.3. By matching up the heavenly nature of himself with the heavenly nature of wood, Ch'ing could see a bell stand within the tree and carve the wood accordingly (Watson 1968).

4.2 Self-cultivation For Possibility Development

Self-cultivation for possibility development is a process where all four informants developed their capabilities to create possible changes in the business environment rather than to accept external conditions that cannot be changed. Self-cultivation is needed because the natural knowing ability is born within an individual's self. The cultivation process involves using the natural knowing ability to develop wealth creating capabilities.

Self-cultivation for possibility development consists of accessing sources of information, creating tacit understanding and originating creative initiatives. Accessing sources of information is a process where informants learn new and relevant information that is required for capability development. Creating tacit understanding is a process where informants grasp the meaning of the information to achieve good command of knowledge. Originating creative initiatives is a process where informants exploit knowledge in their creativity to create new possibilities in their businesses. Hence, the cultivation process supports any possible novel action that can be done by informants.

4.2.1 Accessing sources of information

Motivated by personal natural inclination and attention guided by personal principles, the informants had benefited from prior processes in minimizing the information overload and to be able to concentrate on relevant information better. The sources of information accessed by all four informants can be classified into distinctive and common sources of information. Table 4.4 presents the verbatim of the interviews with respondents that leads to the theme of ‘accessing sources of information’.

Firstly, distinctive sources of information are those unavailable to the public. All four informants had benefited from the information gained in the working environment and the information access empowered by job functions. Information in the working environment is unique because each of the organizations they worked in had different management systems, technologies, nature of businesses, organizational cultures, training and other organizational features. In addition to their ordinary job functions in their former employments, Informant 2, Informant 3 and Informant 4 were involved in special tasks, which were critical to their capabilities development.

Besides, different job functions require different information, leading to access to different information sources. The information received by informants was different from those acquired by their colleagues. For instance, the people whom the informants met were different from those their colleagues met, such as investors. As a leader of their businesses, the informants encountered

Table 4.4: Representative quotes that lead to the theme of “accessing sources of information”

Representative Quotes	First-Order Concepts	Second-Order Theme	Aggregate Dimension
<p>“Find various information through different relations to solve problem. I outperform the others because I know the answer earlier than them. If we know the answer at the same time, there is no difference between you and me. My job is to work hard to get answers earlier than anybody, so that I can get what I deserve.” (Informant 1)</p>	<p>Developing distinctive sources of information to gain proprietary information</p>	<p>Accessing sources of information</p>	<p>Self-cultivation for possibility development</p>
<p>“when I was working for <i>Informant 4 former employer</i> (the company name of his former employer was replaced with “Informant 4 former employer”), I was focusing on <i>Informant 4 machinery technology</i> (the name of the machinery technology Informant 4 was passionate about was replaced with “Informant 4 machinery technology”). At the same time, I had a project (related to <i>Informant 4 machinery technology</i>) in <i>Informant 4 former employer</i>, which was quite difficult. I thought that it would be ideal if [I] got help from university. During that time, I went to talk to a professor [who taught me before when I was studying bachelor’s degree], “can I use this project to pursue my master (a master degree</p>			

Table 4.4 continued

program offered by the university)?” He said, “oh, very well, very well.” This means that he would support me, [by becoming my] mentor.” (Informant 4)

“I attended international conferences and visited industry players in other countries to see how they do frequently.” (Informant 2)

Acquiring common sources of information to leverage on great minds

“I read books to see the things that I want. So, I read. [Informant 3 acted in a motion like flipping a book] I skipped pages that I did not want to read, so I finished reading a book very quickly.” (Informant 3)

information about the identification and emergence of strategic problem.

In their businesses, Informant 1 and Informant 4 explored into distinctive sources of information from customers, suppliers, stakeholders and social network. They increased the number of stakeholders and social network so as to foster co-operation and collaboration with them. Accessing distinctive sources of information in this manner not only enabled them to access critical information in the soonest manner, but also enabled them to make swift reactions possible in critical circumstances. For example, Informant 4 got a professor as his mentor in developing the machinery technology that Informant 4 was passionate about, “when I was working for *Informant 4 former employer* (the company name of his former employer was replaced with “Informant 4 former employer”), I was focusing on *Informant 4 machinery technology* (the name of the machinery technology Informant 4 was passionate about was replaced with “Informant 4 machinery technology”). At the same time, I had a project (related to *Informant 4 machinery technology*) in *Informant 4 former employer*, which was quite difficult. I thought that it would be ideal if [I] got some help from the university. During that time, I went to talk to a professor [who taught me before when I was studying bachelor’s degree], “can I use this project to pursue my master (a master degree program offered by the university)?” He said, “oh, very well, very well.” This means that he would support me, [by becoming my] mentor.” Similarly, Informant 2 invited opinions from experts in diverse areas to transform his creative ideas into a feasible and quality innovative outcome. Informant 3 recruited some of the top

mathematicians in the world in his initiation of business and software development.

Secondly, common sources of information are those readily available to the public, such as business seminars, conferences, books and magazines. Accessing common sources of information had two types of value for informants. First, there are common sources of information, but they are difficult to understand or apply. Informant 3 had read extensively to leverage on great minds, “those words of the wise men—[if] you do not use them, you probably cannot achieve their standard.” This happened when he exploited mathematics theories in software development. Informant 2 accessed common sources of information to understand and utilize the latest technologies in his field. Informant 4 employed these knowledge sources to understand how his innovation may lead to business growth and seek for ways of improving the processes of innovation.

Secondly, the way of accessing common sources of information had made a difference. The way Informant 3 had accessed sources of information was goal oriented: “I read books to see the things that I want. So, I read. [Informant 3 acted in a motion like flipping a book] I skipped pages that I did not want to read, so I finished reading a book very quickly.”

4.2.2 Creating tacit understanding

Following the information acquisition, all four informants made sense of information to create tacit knowledge. The processes are hence labeled as creating tacit understanding. As shown in Table 4.5, there are two ways of creating tacit understanding.

First, informants created tacit understanding by experiencing working processes. Informant 1 developed his tacit business acumen, including the ability to ‘read’ a business condition through his hard work experience. He stated that “only by doing a lot of work can one obtain experience... we depend on working rather than reading books to become who we are today.” Besides, Informant 1 noticed that his problem solving skill improved over time as a result of understanding better how to identify the key factors to solutions.

Likewise, Informant 2 developed his competency in his former employments by requesting for involvements in a large number of civil engineering projects and different job functions in addition to his ordinary job responsibility. Informant 2 understood the civil engineering projects as a whole from different job positions, including business and technical functions. According to Informant 2, “not everyone is able to innovate, [those who innovate] must possess certain characters”. Informant 2 explained that innovators “need to possess some acquired and absorptive (ability to absorb knowledge) characters, such as knowledge. If you want to innovate something in this field, you are totally not familiar with this field, how are you going to think about innovating

Table 4.5: Representative quotes that lead to the theme of “creating tacit understanding”

Representative Quotes	First-Order Concepts	Second-Order Theme	Aggregate Dimension
<p>“If a person wants to learn how to judge, analyze, what should he do? I tell you, this water is burning hot, very hot, [but] how hot is it? If you do not know, you can understand how hot it is after you touch it. Isn’t it good if students can fully understand whatever their teacher taught them? Is this possible? This is impossible. I tell you, you probably absorb it and it will be faster when there is a basic. But, it is helpful only if you can understand. If you are not able to understand, it is not helpful. So, you have got to experience everything yourself. Otherwise, whatever you articulated is just a lie. In the past, I did not know and talk about this, because no one else taught me about this. I am not lying to you now, at least this is what I had experienced.” (Informant 1)</p>	<p>Experiencing through personal involvements</p>	<p>Creating tacit understanding</p>	<p>Self-cultivation for possibility development</p>
<p>“Only by going through education, going through training in actual practice, these characters can be unleashed.” (Informant 2)</p>			
<p>“although I received job offers from other companies, I still selected this (his former</p>			

Table 4.5 continued

employer, the first and the only firm he had worked for before) because I knew that I definitely would have an opportunity to do this thing (the machinery technology Informant 4 was passionate about). So, I joined the company (his former employer) that time, but the opportunity of doing the project (the machinery technology Informant 4 was passionate about) did not come immediately. The company (his former employer) had assigned me to do other things. Everything was dependent on timing. There was a time when the opportunity had arrived. The company (his former employer) assigned me to lead a new department to do this thing (the machinery technology Informant 4 was passionate about). As [I] needed to learn this technology, that MNC (his former employer) sent me to the USA. [I] travelled there to learn again, to talk to our people, learning again and again continuously. During those time I did not take any days off even on Saturdays and Sundays because I was doing things that I was interested in.” (Informant 4)

“The best way [to attain tacit understanding] is memorize. It is because it is easier for a person to find it. [Interviewer: Does it mean when that person encounters an event, he or she can associate it to

Memorizing and thinking to comprehend

Table 4.5 continued

what is remembered and it becomes understood?]
Yes. So, it is wrong when we always talk about the Western style of teaching method. The reason being is that it sounds like you are born with a high intellectual level, you want to know everything, [but] who do you think you are. The authors spent their entire lifetime to write a book, [yet] you want to understand it within three hours only.”
(Informant 3)

“You need to memorize; you need to think. You need to memorize because you don’t know. But memorize it, moving from the unknown to the known is moving up a level.” (Informant 3)

(create a novel outcome in that unfamiliar field).” Therefore, taking different job functions is important for Informant 2 to be knowledgeable about his field of expertise, which is an important to be acquired and to be an absorptive character of innovators. Furthermore, Informant 2 hinted that “only by going through education, going through training in actual practice, that these characters can be unleashed.” This statement implies that being knowledgeable about a field of expertise is a result of creating tacit understanding by way of experiencing working processes.

Informant 4 also placed a similar demand to his former employer to lead a new technology development project, which was conducted out of his ordinary scope of work. Informant 4 articulated an experience of how he developed technical capabilities that led to the innovation of his new machinery products, “although I received job offers from other companies, I still selected this (his former employer, the first and the only firm he had worked for before) because I knew that I definitely would have an opportunity to do this thing (the machinery technology Informant 4 was passionate about). So, I joined the company (his former employer) that time, but the opportunity of doing the project (the machinery technology Informant 4 was passionate about) did not come immediately. The company (his former employer) had assigned me to do other things. Everything was dependent on timing. There was a time when the opportunity had arrived. The company (his former employer) assigned me to lead a new department to do this thing (the machinery technology Informant 4 was passionate about). As [I] needed to learn this technology, that MNC (his former employer) sent me to the USA. [I] travelled there to learn again, to talk

to our people, learn again and again continuously. During those time I did not take any days off even on Saturdays and Sundays because I was doing things that I was interested in.” Therefore, the opportunity to work on the new machinery technology is key to creating tacit understanding. Therefore, it is common to these informants that they improved their understanding on things they were working at via monitoring the reactions or feedback on their actions in the task. This is very much like knowing how a cold or a warm glass of water is by drinking it rather than being informed by others.

Secondly, informants created tacit understanding by memorizing and thinking through the meaning of the information stored in their memory. Informant 3 faced a specific scenario; he found that the words and writings of the great minds are intellectually challenging to understand. To overcome the challenge, achieving tacit understanding begins with memorizing.

Memorizing made available the material for thinking processes, whereby comprehending advances the level of knowledge which can be time-consuming. Informant 3 emphasized that knowledge needs to be learned by memorizing in the first place because “after memorizing for a while, you will repeat it inside your heart, then you will know.” Subsequently, the tacit knowledge is readily available for Informant 3 to utilize it at any time, as a thinking aid.

4.2.3 Originating creative initiatives

In the process of originating creative initiatives, all four informants exploited tacit knowledge to pursue their creative aspirations. Specifically, the previous process of creating tacit understanding served as a preparation for all four informants to originate creative initiatives, which consist of creative idea and insight. In the following Table 4.6, the verbatim of the interviews that describes the process of bringing out creative initiatives is presented.

Based on tacit understanding, all four informants conceived new ideas. Using his experience, Informant 2 identified a void within a category of existing civil engineering products. This void was a latent demand for Informant 2's customers. So, he wanted to create a new product to capture this opportunity. After a persistent thinking process over some time, Informant 2 suddenly got an idea for his new product, while he was taking a break. In other words, his rest time is the moment when creative ideas could emerge automatically. This rest time appears to be a moment of emptiness for Informant 2 to escape from the rigidity of prior knowledge and for him to be able to identify new possibilities of prior knowledge.

Informant 1, Informant 3 and Informant 4 also had the experience of new ideas which emerged automatically. Subsequent to continuous deliberation, Informant 1 got his creative ideas before he fell asleep and after he woke up. In another case, Informant 3 exploited tacit knowledge as a creative thinking aid to make creativity productive, “[if] you do not have tools, your productivity is

Table 4.6: Representative quotes that lead to the theme of “originating creative initiatives”

Representative Quotes	First-Order Concepts	Second-Order Theme	Aggregate Dimension
<p>“You go to sleep. Before sleeping, keep thinking about how about A, how about B, A, B, A, B. At the moment you almost get into sleep or wake up, your subconsciousness will tell you the answer.” (Informant 1)</p>	<p>Conceiving new ideas to pursue aspiration</p>	<p>Originating creative initiatives</p>	<p>Self-cultivation for possibility development</p>
<p>“My company’s vision and mission came into mind while I was sleeping in the middle of a night. Calmness is not necessarily about the environment (a noisy environment may create impetuosity), but also about your state of the ‘heart’ (which is frequently translated as the state of heart-mind as well because Chinese language assumes that the heart has the function of the mind). To me, thinking further ahead only happens at the time when your heart is very calm, without impetuosity. [The mental activities during the time] are the same as tranquil contemplation.” (Informant 4)</p>	<p>Creating creative insight of what could have the greatest impact</p>		
<p>“I brought in one [new civil engineering product to Malaysia market]. I saw this as a new thing. Technical innovation is a different matter. But, bringing in new technology is also a type of</p>			

Table 4.6 continued

innovation. But, the minimum requirement is you must know the condition of this type of foundation engineering [that is related to this new civil engineering product] here (Malaysia). You must know well about the conditions of the layers of soil and rock in this place (Malaysia). Although you know that thing (the new civil engineering product), you bring it in (to Malaysia), you got to know (well about the conditions of layers of soil and rock in Malaysia). But you do not know (well about the conditions of layers of soil and rock in Malaysia), you won't know about bringing in (the new civil engineering product)." (Informant 2)

"It used to be a tool (tacit knowledge). Then, you observe for a while, (tacit knowledge) becoming a tool box. [Afterward] it becomes an automatic machine. It came from the organization (of tacit knowledge within thought)." (Informant 3)

definitely low.” Creative ideas emerged automatically after he accumulated and organized tacit knowledge within his thought.

Similar to the creative thinking processes of Informant 1 and Informant 3, Informant 4 revealed that his creative ideas emerged automatically. As he asserted, “my company’s vision and mission came into mind while I was sleeping in the middle of the night. Calmness is not necessarily about the environment (a noisy environment may create impetuosity), but also about your state of ‘heart’ (which is frequently translated as the state of heart-mind as well because the Chinese language assumes that the heart has the function of the mind). To me, thinking further ahead only happens at the time when your heart is very calm, without impetuosity. [The mental activities during the time] is the same as a tranquil contemplation.”

Informant 4 suggested that tranquil contemplation was central to his creative thinking to function automatically. To clarify the creative thinking process, Informant 4 explained further: “what is tranquil contemplation? You must possess that kind of heart... no competition with other people—this is tranquil... [when] you do not have competition, you will be in tranquil... so, [a state of heart that is] at ease and unrestrained is very important. Contemplation is... to use the heart regularly... in things that benefit all living beings.” Informant 4 revealed how he applied automatic creative thinking: “these (where the ideas came from) are not important— [the key is] your motivation. [It is important that] the thing you do is right. Just do the right things, then [you] are right. Don’t think too much... go and practice meditation. Being tranquil,

[to think creatively is] to actually follow your heart, but your heart must be tranquil.” Hence, in the experience of Informant 4, automatic creative thinking was conducted by following his heart that was in the state of tranquility. The creative thinking was activated by the motivation to do the right things.

Based on tacit understanding, Informant 1 and Informant 2 generated distinct creative insights of what could have the greatest impact. Informant 1 described his working life like debugging a task in a computer programming job. The similarity between his work and computer programming task occurred whenever there is an obstruction in pursuing his aspiration; it is like a ‘bug’ that emerges in his computer program. Hence, ‘bugs’ have the greatest impact in his work. Solving bugs would ensure the well-functioning of the computer program, and analogy means Informant 1’s business would operate as expected. Informant 1 applied tacit knowledge in his analysis to identify the ‘bug’ and ‘debug’.

Similarly, Informant 2 originated the distinct creative insight of civil engineering methods and products that have the greatest impact. Informant 2 employed the example of using a new civil engineering product in a novel way to explain that this distinct creative insight of utilizing new product was generated on the ground of tacit knowledge (on which the foreign seller of the product did not possess and could not easily acquire) any information on the conditions of layers of soil and rock in Malaysia, “I brought in one [new civil engineering products to the Malaysian market]. I saw this as a new thing. Technical innovation is a different matter. But, bringing in new technology is

also a type of innovation. But, the minimum requirement is you must know the condition of this type of foundation engineering [that is related to this new civil engineering product] here (Malaysia). You must know well about the conditions of the layers of soil and rock in this place (Malaysia). Although you know that thing (the new civil engineering product), you bring it in (to Malaysia), you got to know (well about the conditions of layers of soil and rock in Malaysia). But you do not know (well about the conditions of layers of soil and rock in Malaysia), you won't know to bring in (the new civil engineering product).” In his context, the greatest impact of these engineering methods and products is to have a better functionality than the existing methods and products at lower costs. For instance, he invented a popular civil engineering product that has a specific form to make it more useful than the existing products. The cost of the product was also lower because the manufacturing cost was reduced significantly due to its form of design.

4.3 Enactments Of Breakthrough

The enactments of breakthrough involve a process where all four informants took the initiatives to create a breakthrough for their organizations. Enactments of breakthrough encompass applying great knowledge, transforming events into opportunities, implementing innovative strategies and correcting errors or constant self-upgrading. Great knowledge had provided a strong support to these initiatives in transforming events into opportunities and actualizing the value of opportunities with innovative strategies. After the implementation of new strategies, the process of correcting errors may be applied to overcome

unexpected negative consequences. Unexpected consequences are possible due to unexpected factors, such as the rapidly changing market, novel market responses and economic recession.

4.3.1 Applying great knowledge

The findings of this research uncover a new meaning of the ‘great knowledge’ concept. The findings suggest that great knowledge is the type of knowledge that takes a more comprehensive account of the three dimensions of the thing to be acted upon or understood, namely the perspective from the position of the thing, its whole picture, and its changes. The coexistence of the three dimensions is necessary because the absence of one dimension will render the great knowledge incomplete. This happens as great knowledge is not just a kind of knowledge at a higher or broader level (Connolly, 2011). Great knowledge is also grounded on a wider range of perspectives (Sturgeon, 2015). Therefore, great knowledge is essentially multidimensional in order to capture the “multi-faceted foci on various aspects of an issue from different angles and at different levels” (Xinda, 2009, p.251).

Examining the processes of knowledge creation and strategy innovation through the lens of Zhuāng Zǐ’s philosophy leads to the differentiation of knowledge into great knowledge and small knowledge. The knowledge of all four informants is categorized as great knowledge because they hold the greatest responsibility and respective action to their organizations as a whole. In contrast, small knowledge is possessed by other organization members.

They are in charge of the parts in the organizations, such as a department or function in the organizations, or even a single job function within the organizations.

As highlighted earlier, great knowledge has three dimensions. In this research, the first dimension is acting as a great self, which is the informant's competency in mastering the nature of business. The second dimension is achieving greatness, which is the informant's competency in expanding his business. The third dimension is encountering changes, which is the informant's competency in overcoming fluctuations in a business.

4.3.1.1 Acting as a great self

Acting as a great self is informants' competency in mastering the nature of business. In the perspective of the informants, the nature of business is to create a strong interdependence between people so as to establish mutual benefits. Therefore, acting as a great self involves 1) adopting the perspective of organization members and non-organization members to create and enjoy a better world and 2) co-operating with stakeholders and social network as a team to develop and exploit strength in a bigger entity. Table 4.7 below presents the verbatim of the interviews that leads to the theme of 'acting as a great self'.

Firstly, all four informants took the perspectives of their stakeholders in their strategic action. Specifically, they acted as a great self by taking the

Table 4.7: Representative quotes that lead to the theme of “acting as a great self”

Representative Quotes	First-Order Concepts	Second-Order Themes	Aggregate Dimension
<p>“Although this is my idea, [but] put your name as a joint patent.” (Informant 2)</p> <p>“Advanced level [of capability] is the Union of Heaven and Man, [which means] inside the Heaven there is me [the person who achieve this level of capability]; inside me there is the Heaven (human nature).” (Informant 3)</p>	<p>Adopting the perspective of organization members and non-organization members to make and enjoy a better world</p>	<p>Acting as a great self</p>	<p>Applying Great Knowledge</p> <p>Enactments of Breakthrough</p>
<p>“What I want to do today cannot be accomplished by myself alone. I want the whole team to do it.” (Informant 1)</p> <p>“How are you going to interact and cooperate with other people? How can we establish an ideal cooperation? We got to have trust and respect... [Only with] trust and respect, we can cooperate.” (Informant 4)</p>	<p>Co-operating with stakeholders and social network as a team to develop and exploit strength as a bigger entity</p>		

perspective of working as a ‘team’ rather than as an individual. Adopting a perspective of working as a single person means emphasizing on self importance for that particular individual only without much consideration on the collaboration with others—be it other organization members or stakeholders.

All four informants acted as a great self to make an extraordinary accomplishment that goes beyond an individual’s effort because working alone or working in an overly small group has serious limitations. The first limitation is that work will become overloaded for an individual as revealed by Informant 1: “what I want to do today cannot be accomplished by myself alone. I want the whole team to do it.”

The second limitation is that all informants felt that a start-up team might be insufficient to work on fulfilling customer’s requirement. The rationale is that the size of their start-up team is too small, which normally consisted of two persons. Informant 2 insisted that an individual is unlikely to possess the various kinds of expertise that are necessary to the actualization of idea into innovative products or other types of outcome.

Acting as a great self has various values when the ‘team’ is at different levels. There are different levels of ‘team’ the informants were working on, ranging from a project team, each organization of the entrepreneurs, the industry which the organization belongs to, the society, and even *Tiān* (Heaven). The bigger the size of a ‘team’, the greater is the ‘great(ness)’ of a ‘self’.

In the team-level, acting as a great self allows all informants' team members to concentrate on their roles while relying on other members to complete different tasks. As highlighted by Informant 4, “‘Informant 4 corporation’ is not a one-man firm, but a team.” Informant 4 pointed out the importance of having a team: “for us, innovation is... when you have no way (in the situation of work overload) to execute, give freedom to employees.” Hence, employees had reduced the workload of Informant 4 by executing certain tasks of innovation that were not in the Informant 4's focus.

In the organizational level, Informant 2 utilized diverse sets of expertise for different types of activities like research and development, manufacturing and commercialization. As a result, Informant 2's organization produced two to three innovative outcomes each year in average, including products and innovative engineering methods. Sometimes, Informant 2 had even suggested to his co-workers that “although this is my idea, [but] put your name as a joint patent.”

In the industry level, a strategic supplier had rescued Informant 1 twice by supplying a critical component to be used in manufacturing Informant 1's product when such items were in shortage of supply worldwide. Informant 1 would have to close down his business without such assistance because another supplier who normally sold him the items had already declined to do so and there was nowhere else Informant 1 could go to get the things. Subsequently, in return, in the financial crisis of 2008, Informant 1 saved this strategic supplier

who had helped him to the extent that he had almost closed down his own business.

At the society level, there were many strangers who had helped Informant 1 during his critical moments. Informant 1 believed that those strangers had helped him because he had often performed good deeds. Informant 1 explained, “performing good deeds is not just by donating money. Performing good deeds is when there are times that the others suffer, you have connections, and [anyone who has connections] can help. If that person needs something, [use] this resource to support him or her. I did these a lot.”

In the Heaven level, Informant 3 stressed that this is the highest possible level of the commanding height and it is of paramount importance. Informant 3 explained, “you keep on being [customer] oriented, customers do not need you, what you get at the end of the day is hardship only because you can’t meet his or her demand.” Informant 3 hinted that understanding customer’s need is useless unless the entrepreneur is capable of satisfying what is needed. On the other hand, Informant 3 pointed that if there is no demand, the entrepreneur who attained the Heaven level will never be successful. However, Informant 3 utilized the example of hunting for prey to illustrate the importance of the highest level of the commanding height, “if your commanding height is the highest, it is most likely that there will be many animals [an analogy to represent demand] that will come over... This [situation] becomes a kind of fate—the fate of starting a business. This is why you need to have a high level of commanding height.” Based on the analogy, Informant 3 further clarified

that the commanding height and animals are his competency and Asia's economic boom, respectively.

Acting as a great self occurred when the informants transformed the 'team' into 'self'. Instead of viewing the 'team' as a distinct entity, team members applied empathy and treat the team as themselves. Separating informants from other team members—be it organization members, stakeholders, society and Heaven appears to be problematic. As recognized by Informant 3, demand is essential to wealth creation and it rests on a conducive environment for economic activity instead of an environment with military conflict. Hence, constantly improving and acting based on the interest of the environment to create a better world had enabled all four informants to generate great financial wealth.

Secondly, all four informants had created the great 'self' with morality to foster co-operation with stakeholders and social network, and working as a team to develop and exploit strength in a bigger entity. Setting morality as the backbone of the way they conduct business activities had created a positive reaction and consistent collaboration from organization members, stakeholders and the society. They practiced morality themselves and communicated it explicitly.

Informant 1 revealed that his application of righteousness with empathy was the main reason why the strategic supplier had decided to save Informant 1 twice without taking any advantage or taking extraordinary measures. There

was a time when a serious shortage in the component that is essential to Informant 1's production had happened. Due to limited stock, the strategic supplier had to shortlist his customers.

An American customer came first to request for an additional large quantity of units on top of what had already been ordered. This American customer demanded for a lower price to the additional order. It seemed that this American customer had made a bargain based on the logic of bulk purchasing.

Informant 1 visited the strategic supplier shortly after that to place an additional order. Without knowing the presence of each other, Informant 1 told the strategic supplier to set a price and he was willing to accept them at a price that was higher than the normal price. For Informant 1, this was just what he constantly did, which was to empathize.

Under the view of empathy, it was unfair and unwise for the strategic supplier to sell the component at a lower price when the shortage took place worldwide. In addition, Informant 1 was confident to sell his products at even a higher price as long as there was shortage. Thus, Informant 1 insisted that offering a commensurate price to the strategic supplier was the meaning of righteousness. Subsequent twice salvation proved that the strategic supplier had definitely understood the meaning behind Informant 1's action and agreed with the information that it was something of more than just a business.

In other cases, Informant 2 went against selfishness to embrace benevolence to share gains with his co-workers so that they were happy to co-operate with him. For example, Informant 2 shared his intellectual property rights with his co-workers.

Moral values are also important for Informant 4 to create cooperation. Informant 4 had used moral values of trust and respect to generate his cooperation with his team: “in what way are you going to interact and cooperate with other people? How can we establish an ideal cooperation? We need to have trust and respect... [Only with] trust and respect, we can cooperate.”

Further, Informant 4 uncovered that the sense of gratitude is useful to strengthen the team spirit of the team members. He articulated that “we still need to possess the sense of gratitude all the time because as a team, when everyone has the sense of gratitude, [it is] very happy to meet [any one of them]. This is very important... Come to the company (‘Informant 4 corporation’) to thank everyone. That kind of feeling, expressing gratitude to all those who have helped and taken care of you. [When] everyone thinks this way, he or she will not complain, criticize, blame... Just a working environment that is very harmonious.” Thus, Informant 4 applied gratitude to make his team members happy to help each other.

Informant 3 exploited *zhì* (wisdom) to explore and utilize the knowledge of Heaven or the highest level of the commanding height he referred to. To clarify,

Informant 3 gave an example of the knowledge of Heaven: “winning without battle [is Sūn zi’s (Sun Tzu) highest principle of military strategy that] speaks exactly about Heaven. Winning without battle is the greatest art of war... How can you win without battle? Only Heaven can win without battle.”

4.3.1.2 Achieving greatness

All four informants had achieved greatness in terms of multiple capabilities and general management skills to accomplish tasks that contributed directly to significant organizational growth. Specifically, greatness must include the combinations of different skills rather than a single specialized skill. One of the challenges to informants was to actualize an innovative product that required new working methods, but there was no one they could directly learn from (if there was, the product was not an innovative one). All four informants had to independently explore into the method of producing their innovative products, prompting them to develop multi capabilities according to their working needs and personal natural inclination. Hence, achieving greatness consists of 1) developing multi capabilities according to needs and 2) utilizing multi capabilities to coordinate and combine the work of the great self. In Table 4.8, the verbatim of the interviews shows that building and using multi capabilities are important to respondents.

Informant 1 develops multi capabilities in his work. For example, in the early years of starting his business, Informant 1 had to do programming and financial work, solicit customers and manually assemble unique plastic covers for his

Table 4.8: Representative quotes that lead to the theme of “achieving greatness”

Representative Quotes	First-Order Concepts	Second-Order Themes	Aggregate Dimension	
<p>“I allocate resources on how to make friends and how to be an upright person (developing social skills in addition to management skills). So I say, this is what I depend on to grow big.” (Informant 1)</p> <p>“[when you] are hungry for success, [you] need to learn from successful people, whatever they do, how they do, how they think. So, I spent a lot of time understanding how successful people are becoming successful. How Jack Welch run GE... and many, many more. Soft skills, hard skills” (Informant 4)</p>	<p>Developing multi capabilities according to need</p>	<p>Achieving greatness</p>	<p>Applying Great Knowledge</p>	<p>Enactments of Breakthrough</p>
<p>“Those who used to participate in innovation activities know that important technological innovation requires tremendous financial support, and also need to combine or exploit various technologies and skills.” (Informant 2)</p>	<p>Utilizing multi capabilities to coordinate and combine the work of the great self</p>			

Table 4.8 continued

“In my case, I am a kind of autistic. Just right at the point before entering [deep into mathematics], but has not entered yet. So it is a junction point, where learning language, and language of the others is possible. So, you can see that the written language of autistic people is mathematics actually, but he (they) is not able to get out [of mathematics]. Sometimes man can make expressions (what this person intends to tell) through actions. Another kind of language of man is called feeling, [which is] the feeling of having feelings for another person. So, autistic children may also have feelings for another person. Actually, most of this kind of person fall within autism, but yet to be truly autistic, [and] is also not truly an ordinary person, fall exactly under the junction point, that kind of person. ‘Informant 3 friend’ (the actual name of the talented mathematician who assisted Informant 3 in software development was replaced with ‘Informant 3 friend’ because of his relationship with Informant 3 may uncover identity of Informant 3) is also that kind of person. He

Table 4.8 continued

has his own friend. Those three persons are his friends. I did find him. [Interviewer: [Although you looked for his assistance], but you definitely started business alone by yourself?] Because he did not know [how to do business].” (Informant 3)

organization's first successful innovative product.

Similarly, Informant 2 has three most important working roles, which concurrently are a scientist, manufacturing expert and business man. As a scientist, Informant 2 is responsible in researching and developing innovative technology, product and engineering method for his business needs. As a manufacturing expert, Informant 2 has converted a laboratory outcome into functional business offering. As a business man, he has commercialized an innovative outcome to generate income.

In another case, Informant 3 is both a researcher and an entrepreneur. His capabilities are diverse, which consist of technical and business skills. Informant 3 develops multi capabilities through his extensive research in mathematics, computer programming and Chinese philosophies. He demonstrates his multi capabilities by exploiting his extensive research in mathematics to programming and commercializing his software and applying Chinese philosophies in these areas.

Similar to Informant 3, Informant 4 is a researcher and an entrepreneur at the same time. He possesses both technical and business skills. Multi capabilities are important for Informant 4 to start his business with a small number of people, "these three persons have raised the company ('Informant 4 corporation') from the beginning up until today, bringing 800 million (Malaysian Ringgit) market value of the company." Hence, multi capabilities have allowed Informant 4 to save financial resources from employing different

employees to perform diverse tasks. Informant 4 described how he developed multi capabilities as a CEO of the company, “[when you] are hungry for success, [you] need to learn from successful people— whatever they do, how they do it, how they think. So, I spent a lot of time understanding how people become successful. How Jack Welch runs GE... and many more. Soft skills, hard skills... How Toyota started [their business]. Then, [I] learned. I am the type of person, when I want to learn, I only learn from the world class (reputable firms or management gurus of the world).”

In addition, Informant 4 articulated an experience of how he developed multi capabilities: “because I was doing what I like to do, no one asked me to do. When I saw something was needed, I would propose to management (his former employer), “hey, I can help you to automate this thing, solve this problem.” Management said, “*ok*, you do it.” So I worked on these things during Saturday and Sunday. Following the dictum of *gain comes from loss*, I work when other people are not working. I work when other people are taking rest.” Informant 4 was doing different tasks even during holiday in response to the different needs of his former employer. In effect, the experience of doing different tasks allows him to build multi capabilities.

All four informants had utilized multi capabilities to identify their expertise in different areas, appreciate the value of their works, utilize competencies of the great self, attract new members of the great self, enlarge the size of the great self and combine the work of the great self members. Informant 1 started his business together with his partners who were part of the main reasons

Informant 1 had set up a company. These partners were his colleagues while he was working with his former employer. Informant 1 did not think that their start up was going to be successful, but he believed in his team's competencies and collaboration. He had confidence because of his knowledge of the team.

Informant 2 was well aware of the importance of the ability to utilize various competencies. Informant 2 had learned extensively about various knowledge and new technologies to explore into what was possible to improve his work, which is unlikely available to a learner who specializes in a single function. For instance, he recruited an airport designer and a marine engineer even though airport construction and marine engineering were less relevant to his building construction business. However, Informant 2 appreciated the value of their expertise to cater for specific customer requirements in the building construction.

Informant 3 is another case of using multi capabilities. Before starting his business, Informant 3 was a high level marketing manager in a Malaysian subsidiary of a reputable multinational company. Despite his marketing skills, he constantly develops his mathematical knowledge with passion. During the inception of his business, he attracted a number of talented mathematicians to develop an innovative software. These talented mathematicians had some difficulties in communicating their works as their works were very difficult for potential customers to understand. However, Informant 3 was capable of communicating with them and had successfully persuaded important customers to buy their software. Informant 3 asserted that, "in my case, I am a kind of

autistic. Just right at the point before entering [deep into mathematics], but has not entered yet. So it is a junction point, where learning language, and learning the language of the others is possible. So, you can see that the written language of autistic people is mathematics actually, but he (they) is not able to get out [of mathematics]. Sometimes man can make expression (what this person intends to tell) through actions. Another kind of language of man is called feeling, [which is] the feeling of having feelings for another person. So, autistic children may also have feelings for another person. Actually, most of this kind of person fall within autism, but yet to be truly autistic, [and] is also not truly an ordinary person, fall exactly under the junction point, that kind of person. ‘Informant 3 friend’ (the actual name of the talented mathematician who assisted Informant 3 in software development was replaced with ‘Informant 3 friend’ because his relationship with Informant 3 may uncover identity of Informant 3) is also that kind of person. He has his own friend. Those three persons are his friends. I did find him. [Interviewer: [Although you looked for his assistance], but you definitely started business alone by yourself?] Because he did not know [how to do business].” Therefore, using multi capabilities is important for Informant 3 to be an entrepreneur as both business knowledge and mathematics knowledge are needed. This is evident in comparison to his friend who possesses talent in mathematics but lacks the business knowledge that is needed to start and run a new business.

Informant 4 utilized multi capabilities to identify partners and employees so as to recruit them to join his team. For instance, Informant 4 had applied his technical capabilities to solicit a new team member to develop the first

machinery product for his new business: “that was because of this project. As ‘Informant 4 corporation co-founder 1’ (‘Informant 4 corporation co-founder 1’ is used to replace the name of the team member who co-founded ‘Informant 4 corporation’ together with Informant 4) and I felt that [we] couldn’t finish [the machinery product] within three months, there were many [computer] codes to be written. [I] was thinking about the possibility of getting a person to help. [I] thought one, [he] was used to be my intern (at the time Informant 4 was working for his former employer) ... He was going to graduate... [To assign] this programming [task], [we] found him, interviewed him. He accepted [the job], saying that [he] wanted to be my first employee. The working salary I offered him was less than [what had been offered by] MNC (multinational corporation) ... He said that he had already got an offer from Intel, but he chose me in the end because he felt that there would be a difference if this company (‘Informant 4 corporation’) became successful.”

In addition, Informant 4 also utilized soft skills to recruit new team members. Particularly, Informant 4 applied empathy to understand and employ a job applicant with poor academic performance: “when he likes to do one thing very much, he will speak a lot. That is passion. It is very easy to identify. When a person likes doing what he loves to do so much, that is what we want, academic performance becomes unimportant.” It seems that the passion demonstrated by the job applicant had reminded Informant 4 about his passion in researching and developing new machinery technology. Thus, empathy had enabled Informant 4 to understand the job applicant’s passion and it had created confidence in the job applicant.

4.3.1.3 Encountering change

A key feature of the business skills of all the four informants is to take active measures when encountering constant changes in the environment. These changes have a significant impact to their businesses. The measures taken by informants were categorized into solutions to prevent and solve threatening change, and solutions to capture the trend. Representative quotes in Table 4.9 below show that informants encountered changes either by preventing and solving threatening changes in the external environment or capturing neutral (potential for threatening or benefiting) trends in the external environment.

An influential threatening change to Informant 1 was that his competitors brought him to court with frequent intellectual property issues. Although he won, the competitors' primary objectives were to damage his company's reputation, ruin his relationship with his customers and suppliers and exhaust his financial resources. During that period of time, Informant 1's organization is small and new. He invited one of his reputable suppliers to become an important shareholder. The strategic objectives were to show that he is a reliable partner for a reputable company in the eyes of all stakeholders to continue business relationships with him and increase his financial resources.

In another case, Informant 2 encountered changes by taking prevention. He believed that innovators may conceive similar ideas without knowing the existence of each other. Although it may not happen in every occasion, he did not know when this would happen. In response to this issue, he maximized his

Table 4.9: Representative quotes that lead to the theme of “encountering change”

Representative Quotes	First-Order Concepts	Second-Order Themes		Aggregate Dimension
<p>“We alter our approach to do business according to the changes of the environment.” (Informant 1)</p>	<p>Preventing and solving threatening changes within environment</p>	<p>Encountering change</p>	<p>Applying Great Knowledge</p>	<p>Enactments of Breakthrough</p>
<p>“There are two ways of doing business. One is looking for [higher level of knowledge]; another is adapting [to change].” (Informant 3)</p>	<p>Capturing neutral trends within environment</p>			
<p>“This French company started in Singapore. [They] failed to get a construction project after arriving in Singapore. Then, I imported the technology into [Malaysia]. After I completed the first construction project [with the technology], [I] told the person to go to Singapore [to implement the technology again]. This is because even though you have the technology, you know less about the geographical condition in this area. In addition, there are other methods [that can substitute this</p>				

Table 4.9 continued

technology]. At the same time, these designers did not understand [how to apply this technology]... You ask him [the designer] to use [the technology], he dares not to use. But through me, as a middleman, they trusted me... I also brought him to Hong Kong”. (Informant 2)

“If what you are really looking for is knowledge, it is very simple. There is nothing that is going to be changed, because you are looking for advanced technology, at a higher level. What can you change if you can’t even attain that level (advanced level of knowledge)?” (Informant 3)

“I have the technology. Why don’t I help more people to implement this thing? Because my former employer needed [this technology], other companies also needed [this technology] for sure.” (Informant 4)

cooperation with other innovators to accelerate the process of actualizing his idea, so that he could obtain intellectual property right ahead of other competitive innovators.

Informant 3 believed that the lack of competency is the actual cause of organizations being wiped out from the threatening change in the business environment. He constantly challenged himself to attain higher level of competency rather than competitive moves. He analogized business competition to be like a 100-metre dash, where the finishing line is standardized and set by others. Challenging himself means that he redefined the way of winning by hitting higher and higher standard with his improving capability, so “that the [finishing] line is no longer drawn by you [competitors], (it) is drawn by myself.”

Informant 4 raised his customer base to create a diversified source of revenue with the purpose of countering market volatility. Informant 4 noticed that 85% of his revenue came from a single customer, which happened ten years ago. He believed that a narrow customer base is detrimental to his firm. His firm would suffer if they lost a customer who was affected by environmental forces like economic crisis in the country, where the customer was located. As for the year 2018, about 300 customers from different regions in the world contributed to Informant 4 Corporation’s revenue. The contribution of the company’s revenue is divided - 25% from Malaysia, 25% from the USA and Mexico, and 50% from the rest of the world.

In addition to the destructive environmental changes, informants captured trends within the environmental changes, for instance Informant 1 being an ideal example. In the 2008 financial crisis, Informant 1 repaid a debt of gratitude to the strategic supplier who saved him twice before. Although it was a recession, he bought from the strategic supplier a large quantity of a critical component that is essential for his production while the decrease in the market price continued for a period of time. In consequence, Informant 1 ran short of cash, and employees were demotivated and would probably resign. In the dilemma of keeping either cash or employee, Informant 1 chose the latter because he believed that employees were more important for him to recover from loss. However, he could not express his intention to his employees as he knew that when the situation was deteriorating, his employees were not going to believe what he said. Instead, Informant 1 chose to convince his employees to stay when it was the time when he predicted that the recession was coming to the end which was right, and so was his decision. His business grew tremendously when the economy was recovering because many competitors had closed down during recession.

Informant 2 is another case of capturing the market trend. He imported a new civil engineering technology and applied it in construction projects and he is the pioneer who noticed the latent value of the technology. He mentioned, “this French company started in Singapore. [They] failed to get a construction project after arriving Singapore. Then, I imported the technology into [Malaysia]. After I completed the first construction project [with the technology], [I] told the person to go to Singapore [to implement the

technology again]. This is because even though you have the technology, you know less about the geographical condition in this area. In addition, there are other methods [that can substitute this technology]. At the same time, these designers did not understand [how to apply this technology]... You ask him [the designer] to use [the technology], he dares not use it. But through me, as a middleman, they trusted me... I also brought him to Hong Kong”. Therefore, Informant 2 saw the potential of the new technology to be widely adopted with his knowledge about the geographical condition.

A key for Informant 3 to capture the trend is by identifying a common problem faced by most firms within an industry. The problem emerged as these firms were needed to offer services to their customers with information technology that was reliable and efficient. The problems they faced were technical challenges in their information technology infrastructure, which created weakness in their current processes that was comparatively less reliable and efficient. The problem was complicated and sophisticated that Informant 3 believed that all firms had misunderstood it. Even his former employer was not able to understand Informant 3’s approach to solve the problem. However, the trend of better applied information technology appeared necessary to these firms. Therefore, Informant 3 captured the trend by offering an ideal technical solution to the problem. As a result, Informant 3’s firm grew tremendously.

As an instance of trend-capturing, Informant 4 used his experience in developing a new automation machinery technology for his former employer to foresee the possible demand of the technology. He stated that, “I have the

technology. Why don't I help more people to implement this thing? Because my former employer needed [this technology], other companies also needed [this technology] for sure.”. Informant 4 had the confidence that the demand would increase as he noticed that a significant number of companies would need his machinery solution. These companies have the same problem faced by Informant 4's former employer. Informant 4's technology appeared to be an ideal solution to their problems.

4.3.2 Transforming events into opportunities

Great knowledge creates higher possibilities to an extent that an event became an opportunity. When all four informants encountered events, they had higher possibilities to create wealth than those without great knowledge. Transforming events into opportunities can be achieved by way of demonstrating competency to induce latent customer needs and solving tough problems. Table 4.10 below presents representative quotes where the theme of “transforming events into opportunities” emerged, and they are related to induce latent customer needs and solve tough problems.

All four informants demonstrated competency to induce latent customer needs when potential customers had a better understanding of what is doable with their capabilities and expressed their requests. These customer needs were latent because customers assumed that they were satisfied with these needs which might be impossible in the absence of competency, or they felt uncomfortable to communicate with those they had no confidence and trust.

Table 4.10: Representative quotes that lead to the theme of “transforming events into opportunities”.

Representative Quotes	First-Order Concepts	Second-Order Theme	Aggregate Dimension
<p>“The customer asked whether we can make it (create an innovative product). He said that there are people who want it.” (Informant 1)</p>	<p>Demonstrating competency to induce latent customer needs</p>	<p>Transforming events into opportunities</p>	<p>Enactments of Breakthrough</p>
<p>“He (the consultant) had seen a lot of work that I (Informant 2) had completed.” (Informant 2)</p>			
<p>“My boss is very confident with me [in solving a tough software problem].” (Informant 3)</p>	<p>Solving tough problems</p>		
<p>“This opportunity also [came from] ‘Informant 4 corporation co-founder 1’. That friend (Informant 4’s ex-colleague who became his first customer) first told ‘Informant 4 corporation co-founder 1’ to do this thing (the machinery technology sold by Informant 4) [for him]. ‘Informant 4 corporation co-founder 1’ came to find me. [I replied him] Ok, I can do. Because I was the person who led them (‘Informant 4 corporation co-founder 1’ and Informant 4’s ex-colleague) to do this (the machinery technology sold by Informant 4).” (Informant 4)</p>			

For instance, during the founding period, Informant 1 did not sell any main product, but tried to survive by acquiring small projects based on outsourced works. In an occasion, a foreign customer inquired whether or not his company had the capability to create an electronic product, which was non-existent at that time. Informant 1 transformed the event into an opportunity by developing the requested innovative product to meet his customer's order. Subsequently the product became popular worldwide, and Informant 1 attained a monopoly status for one and a half year.

Similarly, in the founding period, Informant 2 was invited to bid for a challenging construction project even though his company was much smaller than competitors and lacked the required financial capability. Informant 2 won the project because the consultant of the project introduced Informant 2's competency to the customer. The consultant made a comment, "if there is any one who can complete [the project] within six months... only Informant 2 (Informant 2's name is rephrased as "Informant 2") can make it." The consultant had confidence in Informant 2 because "he (the consultant) had seen a lot of work that I (Informant 2) had completed." As a result, Informant 2 created a considerable revenue for the first time from this project.

Informant 3 is another example of an entrepreneur who demonstrated competency to induce latent customer needs. Informant 3's former employer specifically assigned him to solve a challenging software problem found in the products they were selling, "my boss (Informant 3's former employer) was

very confident with me.” His former employer approved his applications to transfer to their offices in several countries to search for the solution.

Informant 4 had also demonstrated his competency and he had been widely recognized by his ex-colleagues. This recognition had been converted into fulfilling customer needs. For instance, he revealed that one of his ex-colleagues became his first customer, “I (Informant 4) worked in the *Informant 4 former employer* (the company name of his former employer was replaced with “Informant 4 former employer”) for five years. After five years, there was an opportunity. It was a coincidence. An ex-colleague resigned from *Informant 4 former employer* to join another company, an electronic factory. He (the ex-colleague) knew I (Informant 4) was good in this technology. He was looking for this technology at that time... He asked me, “can [you] help me to develop this thing?” I said can. This seems like something that I can do. I started this business at that time”. If Informant 4 did not possess relevant competency at the time when his ex-colleague needed it, his ex-colleague might search for an alternative elsewhere.

A challenging problem is a unique opportunity only for each of informant who could apply great knowledge to solve it, not for other people who could not. Informant 3 is an ideal example of converting a difficult problem into a unique opportunity with great knowledge. After years of searching, Informant 3 found that there was no readily available solution in the world for this problem. He applied great knowledge in developing a new software to solve the problem.

Thus, the challenging technical problem had been transformed into a new business opportunity.

The ability to solve difficult business problems enabled Informant 1 to attract his friend to ask for assistance and create new opportunities. In the eyes of his friends, Informant 1 is dependable when it comes to overcoming challenging business problems. Therefore, his friends wanted to offer and partner with him to pounce on four new business opportunities, even though Informant 1 did not have sufficient manpower to run these businesses. As Informant 1 said, “currently, I have a team, [they] have to work on four businesses. [We] must do all four businesses, cannot reject all four businesses. Because all four business are [requested by] friends. What to do? [We] keep on adjusting [schedule], adjusting [schedule], adjusting [schedule]. Then work out the schedule every day. Every month needs to schedule priority. Every month has to renew [schedule], renew [schedule], renew [schedule], review [schedule], very painstaking, not enough staff”. Although Informant 1 had the problem of work overload, Informant 1’s friends had the difficulty to replace Informant 1 because of his unique problem-solving skills that cannot be found in others. Hence, these problems become opportunities only for Informant 1.

The case of Informant 2 shows that the demonstration of competency is complementary to problem solving. In the foregoing discussions, Informant 2 was invited to take on a challenging construction project that must be completed within six months. The project became a unique opportunity to Informant 2 because of his civil engineering expertise. The project’s consultant

had no confidence in the capabilities of other industry players except Informant 2. This causes Informant 2 to become the ideal candidate for the project.

Informant 4 converted a technological challenge into new business opportunity and thus was perceived by his former colleagues as the most competent person to address the technological challenge and to sell his first product, “this opportunity also [came from] ‘Informant 4 corporation co-founder 1’. That friend (Informant 4’s ex-colleague who became his first customer) first told ‘Informant 4 corporation co-founder 1’ to do this thing (the machinery technology sold by Informant 4) [for him]. ‘Informant 4 corporation co-founder 1’ came to find me. [I replied him] Okay, I can do. Because I was the person who led them (‘Informant 4 corporation co-founder 1’ and Informant 4’s ex-colleague) to do this (the machinery technology sold by Informant 4).” Although ‘Informant 4 corporation co-founder 1’ was the first person being asked to develop the machinery technology, he knew that Informant 4 was a better person to lead the development process. Therefore, ‘Informant 4 corporation co-founder 1’ needed Informant 4, and they co-founded a company to start selling the machinery technology.

4.3.3 Implementing innovative strategies

Implementing innovative strategies were how the informants realized the value of opportunities. To actualize the value of opportunities, all four informants developed and commercialized innovative products together with their organization members to meet customers’ demand. Table 4.11 below presents

the representative quotes where the theme of “implementing innovative strategies” emerged. Findings from this research reveal that innovative strategies can be divided into offering novel technologies and products, and implementing new business approaches.

Informant 1 is an example of offering novel technologies and products. In the beginning, Informant 1’s organization developed its first innovative electronic product in response to specific customer inquiry. However, subsequent success showed that Informant 1’s organization had created a new market space backed by the worldwide acceptance of this product.

Conducting research, developing and applying new products are a critical strategy for Informant 2 to increase revenue. Informant 2’s organization invented a product in response to customers who had limited budget in building the construction project. This product enabled Informant 2’s organization to complete the building construction with lower costs and without compromising the quality of its work.

As an instance of offering novel products that represent an innovative strategy, Informant 3 developed and commercialized a new software as an ideal replacement to a defective software inside the information technology product sold by his former employer. The software is unique as it incorporated a mathematical insight of Informant 3. Besides, problems of the defective software remained unresolved for years before Informant 3’s software was launched. Informant 3 asserted that, “if you want to be better than other people

Table 4.11: Representative quotes that lead to the theme of “implementing innovative strategies”.

Representative Quotes	First-Order Concepts	Second-Order Theme	Aggregate Dimension
<p>“We made the product. We also have made it popular across the world. It is simple. There were other people who made a similar thing before us, but they did it badly. We made the product much more affordable, smaller, but most importantly, I made money. The market was growing big. So, we are the ones who make this happen.” (Informant 1)</p> <p>“If you want to be better than other people in your role and responsibilities [as an entrepreneur], [you] must try to improve everything a little bit. So, there is no (external) challenge actually, [because] making improvement is a (an internal) challenge. Why you should do it in this way? When you do, if you meet someone who is [comparatively] less talented [than you], [and you] just manage to break through that level (the knowledge level of potential customer who is willing to pay for his problems) in training (the practice of improving continuously), he is willing to pay money.” (Informant 1)</p>	Offering novel technologies and products	Implementing innovative strategies	Enactments of Breakthrough
<p>“These little things (rewards for Informant 2’s innovative behaviors, such as a research room was</p>	Implementing new business approaches		

Table 4.11 continued

assigned to Informant 2 to complete his thesis by his professor as a reward for his extension of a civil engineering theory) let me realize that innovation was valuable. Afterward, when I was working on the design of engineering project, or engineering products, at the time I was working, or I was starting my new business, [I] invented a number of engineering products, new design schemes, new construction schemes. [These innovations] allowed me to win many large civil engineering projects in both domestic and oversea markets”. (Informant 2)

“When customers tell you, “hi, I want this thing”. Firstly, you have got to ask why, why [the customer] want to use this thing... When we know the root of customer demand, we have got to think about solutions that can help customers overcome the problem by fixing the root causes ... This (the solution that fixes the root cause) can have a huge difference from the product that the customer tell you to do in the beginning. Because the customer started from their perspective. The product requested by customer is based on the customer’s limited understanding of technology. [The product] may not be the best solution [to the customer’s problem]” (Informant 4)

in your role and responsibilities [as an entrepreneur], [you] must try to improve everything a little bit. So, there is no (external) challenge actually, [because] making improvement is a (an internal) challenge. Why should you do it in this way? When you do, if you meet someone who is [comparatively] less talented [than you], [and you] just manage to break through that level (the knowledge level of potential customer who is willing to pay for his problems) in training (the practice of improving continuously), he is willing to pay money.” This assertion implied that Informant 3 created wealth from being able to overcome challenging software problems and developed new software as solution to his customers as he was comparatively more talented in the matter and he was improving his knowledge constantly.

Similar to other informants, Informant 4 also researched, developed and sold new products to make a living. The machines he sold facilitated the processes of automation and data exchange in the manufacturing sector. These processes significantly increase the efficiency, and minimize factory waste in the manufacturing process. After selling the first machines, demands increased tremendously and became the primary driver of firm revenue.

Implementing new business approaches is another way of making a living. The business approaches reflect upon how informants grow the firm revenue by creatively managing their businesses. The business approaches were used to tackle key issues in wealth-creating activities.

The first case of implementing a new business approach as a new strategy is Informant 1. Informant 1 created a new business approach to actualize the value of a specific type of opportunities, which initially emerged as organizational threat. After launching Informant 1's first innovative product for one and a half years, a large number of competitors started to sell products that are similar to the product. These competitors acquired a large group of Informant 1's customers because of their relatively lower price and due to the heavily affected sustainability of Informant 1's organization. Informant 1 was reluctant to lower his product price, as he focused on good customers instead. He defined good customers as those who place their priority on the brand image and product quality rather than product price. This implies that good customers are inclined to establish a co-operating relationship with suppliers to achieve product quality.

By acting as a great self, Informant 1 generated a new business approach to develop a relationship with good customers. For instance, Informant 1 rejected good customers' orders when he knew that the product price would drop afterwards, which means that good customers would create business loss if orders were proceeded. Furthermore, there were occasions when Informant 1 shared his customers' losses caused by the downward shift of the product price. In return, good customers were grateful and happy to pay a higher price when they were profiting. After some time, Informant 1 found that many competitors who aggressively lower their product prices disappeared from the market while he enjoyed a profitable growth.

Informant 2 is another instance of utilizing new business approaches as new strategies. A business approach used by Informant 2 is to use a self-invented civil engineering method to achieve the quality of the construction project that is comparatively higher than competitors. Informant 2 explained that he understood the value and benefits of innovation, “these little things (rewards for Informant 2’s innovative behaviors, such as a research room was assigned to Informant 2 to complete his thesis by his professor as a reward for his extension of a civil engineering theory) let me realize that innovation was valuable. Afterward, when I was working on the design of engineering project, or engineering products, at the time I was working, or I was starting my new business, [I] invented a number of engineering products, new design schemes, new construction schemes. [These innovations] allowed me to win many large civil engineering projects in both domestic and oversea markets”. In effect, the image of high-quality civil engineering work had been effective for Informant 2 to acquire new businesses. Therefore, Informant 2 is leveraging on his expertise in civil engineering to differentiate his group of companies from competitors.

Much like Informant 2, Informant 3 exploited his unique expertise to form new business approaches as new strategies. Informant 3 took advantage of mathematics in developing software that was able to address complexity and adapt to unforeseen situations, such as the less predictable demand for software driven by social behavior. The software facilitates his business customers’ service innovation process and reduce the time to launch new services. The high quality of his software is a core selling proposition for Informant 3 to

attract new businesses. Hence, Informant 3 is leveraging on his expertise in mathematics to differentiate his group of companies from other industry players.

Informant 4 is another similar case of using expertise to develop new business approaches as new strategies. In the case of Informant 4, he built a long term relationship with customers as a core objective. Then, customers trusted Informant 4 and became willing to share their problems with him or his employees and place their product requests. Informant 4 utilized the good relationship and opportunities to develop innovative solutions that can meet customer expectations of high-quality business services and products, “when customers tell you, “hi, I want this thing.” First, you have got to ask why, why [the customer] wants to use this thing... When we know the root of customer’s demand, we got to think about the solution that can help customer to overcome the problem by fixing the root causes ... This (the solution that fixes the root causes) can have a huge difference from the product that the customer tells you to do in the beginning, since the customer started from customer’s perspective. The product requested by customer is based on the customer’s limited understanding on technology. [The product] may not be the best solution [to the customer’s problem]”. As highlighted by Informant 4, his technological expertise is unique and much effective in understanding customer problems and providing better business offerings. As a result, Informant 4 could produce technological offerings with high quality and convince his customers to grow his business.

4.3.4 Correcting errors or constant self-upgrading

Following the implementation of innovative strategies, informants might either fail or succeed to produce financial wealth. Informants correct errors and learn their lessons in the case of failure, or upgrade their capabilities continuously if they succeed. Hence, the process is labeled “correcting errors or constant self-upgrading”. Correcting errors is essential because it is part of innovation processes to produce practical results through learning from a series of trial and error processes. In addition, informants found that regardless of how much experience they have, they could only reduce mistakes but not eliminate them.

In the case of Informant 1, an ideal way of correcting errors is to make responses. Informant 1 hinted that it is one of his strengths to be able to make responses in the shortest possible time. For example, he would answer a phone call even during the holidays. As a result, he was able to make swift responses to critical events. In the case of Informant 2, he went through countless failures in his attempts to create a creative idea and conducted extensive tests on his innovative products.

Informant 3 made his preparation for correcting errors by monitoring environmental forces continuously. Being sensitive to, and understanding environmental forces, is very important to him. For instance, Informant 3 was used to making a plan to aim for the US market. However, he changed the plan subsequently to focus on the Asian market instead. This does not mean that

Informant 3 has no customer from the US, but the opportunity in Asia is more attractive for him.

In the case of Informant 4, correcting errors involves seeing positive aspects from the problems. For example, Informant 4 set a strategy to hit a target revenue, which was a significant increase in the firm's revenue with a specified time frame. Subsequently, the revenue rose below the target at the specific time. Informant 4 noticed from the process that there was a larger opportunity in the Asian market, and the focus was shifted on the region to gain better growth in revenue.

Continuous self-upgrading by advancing tacit knowledge is necessary to all four informants. Informant 1 mastered his business skills from his ongoing work, "I am not sitting in the office waiting for the others to come to report [to Informant 1]. I am running the business. I even have to go out [to work]." For Informant 2, he constantly cultivated his mind towards enabling him to innovate. Informant 2 would not hire an engineer even though that interviewee is very experienced. For Informant 3, running his business is simply part of his continuous self-cultivation because he has an utmost interest in the knowledge about human action.

Informant 4 believes that it is necessary to constantly improve his managerial capabilities to change his firm from good to great. He learned the experience of some great companies, "I am the kind of person... [who] want to learn when [I am] facing things that [I] do not know. When the firm wants to grow big,

great... how other firms grew. [I] go to learn, I have got to see, why Toyota is becoming so successful... succeed continuously. What methods have been used by Toyota... Lean, Toyota production system... Are there any other methods? Again, [I] observed GE, another great company. All the firms I studied were great companies.” Therefore, Informant 4 believes that enhancing his management skills continuously is essential to the firm’s long-term survival and wealth creation.

4.4 Survive And Sustainable Growth

Survival and sustainable growth are the stages where all four informants attained their objectives. Survival and sustainable growth consist of great financial wealth and meaning as the ultimate working objective. The resulting outcome from implementing innovative strategies is great financial wealth. The financial wealth is a means for the informants to achieve the ultimate objective of attaining a meaning. They perceive financial return as something that makes their organizations survive and grow stronger.

4.4.1 Great financial wealth

All four informants created considerable financial wealth since they started business. The wealth is the result of their new strategies. Research processes uncovered that informants created wealth mainly from their new strategies, which are the outcome of their creativity, research and development activities. The wealth is identified not only by the revenue generated by the groups of

companies headed by informants, but also by the profit that comes from the revenue. The presence of profit shows that the increase in revenue is unlikely due to the price strategy that sacrifices the company's profit for larger market share. Besides, profit making is much consistent with the meaning of wealth creation, and it demonstrates that firms are growing in a healthy wealth creation approach.

Informant 1 generated great wealth by rising his company's revenue and profit significantly. In early 2000s, Informant 1 and his partners co-founded their firm in Taiwan with a capital of NT30 million. Acting as the founding CEO since the founding period, Informant 1 raised the firm revenue from 0 sales in the beginning to about NT40 billion annually in 2017. From the annual revenue in 2017, the gross profit is about NT10 billion.

Informant 2 successfully created wealth by increasing the revenue and profit of his businesses. In early 1980s, Informant 2 started his first company from 0 sales with a capital of RM20,000. After about 20 years, he retired from the group of companies he founded in late 1990s. In the year of his retirement, Informant 2 generated about RM300 million sales annually, which is about RM7 million operating profit annually, and accumulated about RM145 million of retained profits at the end of year.

Through his new strategies, Informant 3 achieved an ideal financial result as he improved the revenue and profit of his businesses considerably. Informant 3 founded his business groups in late 1980s. In 2017, the group of businesses

was making about RM500 million revenue, and about RM270 million gross profit.

Following his new strategies, Informant 4 has successfully attained financial outcome as evident in the revenue and profit recorded by his group of companies. In early 2000s, Informant 4 and his partners co-founded their first company with a capital of less than RM20,000. In 2017, his businesses became a group of companies, registering about RM330 million annual revenue, and about RM90 million profit before tax.

4.4.2 Meaning as the ultimate working objective

All four informants stressed that what they want at the end of their work is meaning. To them, financial return is simply a means of getting meaning. The meaning behind financial return to informants can be divided into contribution to the well-being of stakeholders, social network and society, and self-fulfilment. The verbal statements on the meaning of financial return are presented in table 4.12 below.

All four informants attained meaning by using financial return as a contribution to the well-being of stakeholders, social network and society. Informant 1 aims for great financial wealth because he wanted to compensate his organizational members with higher level of wages. It is very competitive in his industry (electronics industry) to attract top talents. Besides, the largest group of staff in his firm is involved in research and development activities. Therefore,

Table 4.12: Representative quotes that lead to the theme of “meaning as the ultimate working objective”.

Representative Quotes	First-Order Concepts	Second-Order Theme	Aggregate Dimension
<p>“I feel it is a responsibility. If you ask me why I keep working, I have enough money, enough for me to spend for the entirety of my life. But my employees need a breakthrough [in their financial status]. New employees also need their financial reward.” (Informant 1)</p>	<p>Contribute to the well being of stakeholders and social network</p>	<p>Meaning as the ultimate working objective</p>	<p>Survive and Growth</p>
<p>“The outcome of innovation... [you] must be willing to share with people. If other people are reluctant to [co-operate with you], [they] are not going to help you”. (Informant 2)</p>			
<p>“Make your customers become very successful, [then] you can get a lot of revenue. When your staff become very successful, they will be very rich. [If you] invent many things, customers will be very happy. Firms will definitely make a lot of money”. (Informant 4)</p>			
<p>“I think the first target of young people is to buy a house. Buying a house is very difficult, [it probably takes] twenty years, thirty years. If we can work hard, the company makes money, spend more on</p>	<p>Self fulfillment</p>		

Table 4.12 continued

bonus, [so that] he or she can buy a house within
ten years. I tell you, this is a very good thing.”
(Informant 1)

attractive wages are critical to recruit and keep his employees.

Informant 2 stressed that sustainable wealth creation was achieved through wealth sharing. Informant 2 said, “the outcome of innovation... [you] must be willing to share with people. If other people are reluctant to [co-operate with you], [they] are not going to help you”. According to Informant 2, wealth sharing is of utmost important to develop and maintain co-operation with other experts and organizational members in research and development activities. This is important because the wealth creation of Informant 2 rested primarily on innovation activities. Therefore, sustainable wealth creation is largely depending on ongoing research and development. Establishing and managing a group of co-workers are essential to conduct ongoing research and development.

Informant 3 utilized financial wealth to serve his ultimate objective of making contribution to the society. Informant 3 tried to do his best as a beginning, so that eventually he could develop the capability that allowed him to achieve his objective. Doing his best as a start is evident from his processes of knowledge creation and wealth creation. As he accumulated sufficient financial wealth, he exploited the wealth to contribute to the society. For instance, Informant 3 set up a department responsible for corporate social responsibility in his firm. As a specific example, he personally donated more than one million Malaysian ringgit to the Chinese primary school he graduated from. The school needed further development and lacked the financial support.

Informant 4 applied wealth sharing to achieve sustainable wealth creation. Particularly, he used financial wealth to reward his employee, so that his wealth creation processes were sustainable. Informant 4 said, “make your customers become very successful, [then] you can get a lot of revenues. When your staff become very successful, they will be very rich. [If you] invent many things, customers will be very happy. The firm will definitely make a lot of money”. Hence, Informant 4 revealed that providing attractive financial return to his employees would stimulate their motivation. In return, his employees would be more productive to create more innovative products. Customers would be delighted as these new products would make them much more successful. In turn, Informant 4 might generate greater revenues from successful customers.

Despite making contribution to other people, all four informants also attained meaning by running the processes of knowledge and wealth creation as a self-fulfillment. The attainment of great financial wealth provides self-fulfillment to the informants. Meaning from the self-fulfillment is their ultimate objective of creating wealth. Therefore, the influence of meaning on the knowledge-wealth creation processes is greater than financial wealth.

Informant 1 achieved self-fulfillment when he was able to provide financial reward to his employees. Informant 1 felt grateful for their contributions and are happy when the financial income allows them to make a better living. Informant 1 uncovered that it is meaningful to see his organizational members have a better living. This is especially important in the eyes of Informant 1.

Informant 1 said, “there are so many staff, so the thought of getting things done comes naturally into the mind. So, [I] never think of working for money”. For instance, he noticed that his employees were facing a financial challenge to buy a house. He wished that the wage he paid to his employees was sufficient for them to overcome the challenge.

Meaning is Informant 2’s ultimate working objective as he gained more satisfaction from the capabilities of his technologies and products in solving challenging problems as compared to financial wealth. As reported earlier, the most notable personal natural inclination of Informant 2 is his interest in innovation activities, particularly in creating useful new products or technologies. He insisted that an innovation outcome must be valuable, “the most important thing about innovation is, you can invent a thing. But innovation is when you invented a thing, [it] must contain commercial value, or beneficial to mankind”. Hence, financial wealth is simply an indicator of whether his innovation activities are successful. What was actually wanted by Informant 2 was the satisfaction when seeing that his new products and new technologies overcome challenging civil engineering problems and this created value to customers.

Informant 3 acquired meaning from improvements in his command of knowledge and attained a higher level of knowledge in the areas of his interests, such as mathematics and Chinese philosophies. The working objective is consistent with Informant 3’s personal natural inclination. The knowledge and wealth creation processes are simply a way for him to make improvements and

a lifelong continuous journey towards higher level of knowledge, specifically to achieve the realm of the Union of Heaven and Man. As Informant 3 said, “If your actual aspiration is to attain the realm of the Union of Heaven and Man, what is founding a business (he implies that founding a business is not the focus and finishing point) ... I did not start the business with the purpose of creating a business... [but to] go for another finishing point”. In other words, Informant 3 obtained satisfaction from pursuing his interest in mathematics and Chinese philosophies through innovative business activities, and proving the effectiveness of his knowledge via the increase in business revenue.

Meaning instead of financial wealth, is a higher aim for Informant 4. Informant 4 asserted the problem of money-oriented approach of conducting business, “When we went public in 2005, all of us (Informant 4 and the other two co-founders) became millionaires. There were several companies that went public at that time. 5, 6 companies went public at the same time, like us, also doing automation. Up until today, the gap between them and us is very big. The difference is that when they went public, [they] changed their mindset, lifestyle, forgot original intention. Maybe their original intention is to make money, [and to] enjoy. My original intention is not money making, [and to] enjoy”. Therefore, Informant 4 demonstrated with his experience that money-making orientation is detrimental to wealth creation.

It is meaningful for Informant 4 to grow his firm as a world class technology company. Informant reflected, “[Malaysia] can only depend on multinational enterprises (to involve in high tech industry)... 50 years already, [the country is]

unable to change until now, it is a sad [situation]. So, what I want to do is not just (to form) an enterprise, but an industry... We want to be number one, we don't want to be the only one". Hence, Informant 4 wished that his firm would be a world class corporation in order to be able to nurture other Malaysian high tech companies.

Informant 4 gained self-fulfilment from helping other people, and nurturing other Malaysian high tech companies is just an example. He mentioned the rationale, "[the way I conduct business] is whatever [I] take from society; [I] use them for society... Does helping others create happiness? Yes, it does... Much long lasting than the happiness bought with money. You go to cinema watching the movie, you paid the money, laughed for a while and came out, do not have such feeling anymore. [You] go to help a person, because that person receives your aid, [he or she] manages to rebirth, to live again. That happiness can stay in your heart for a lifetime". Thus, long lasting effect of meaning makes it stronger than wealth as a driver of knowledge-wealth creation process.

4.5 Chapter summary

This chapter shows the process model of knowledge-wealth creation as an answer to the research question. According to the process model, the knowledge creation of successful Malaysian Chinese entrepreneurs involves empowering the natural ability to know and self-cultivate for possibility development. More specifically, the knowledge creation processes start from learning foundational knowledge, followed by self-identifying personal natural

inclination, applying personal principles, accessing sources of information, creating tacit understanding and originating creative initiatives.

These processes hint that individual entrepreneur plays a central role in the knowledge creation effort. The knowledge creation effort of Malaysian Chinese entrepreneurs is distinct from the dominant Western culture that discovers new knowledge through statistical method (Langley & Tsoukas, 2010; Mohr, 1982). Consistent with Zhuāng Zǐ's philosophy, Malaysian Chinese entrepreneurs rely heavily on the strength of human natural abilities to generate new knowledge, such as creativity and personal natural inclination. Hence, the novelty of the knowledge stems primarily from individual creativity, personal natural inclination, continuous self-cultivation, and talent.

As a result, the outcome of the knowledge creation process is great knowledge. To clarify, great knowledge is different from small knowledge for its effectiveness of action by encompassing three dimensions of a subject to be known, and operating a business in particular. These dimensions are evident in acting as a great self, achieving greatness and encountering change.

A unique element leading to the creation of great knowledge is the adoption of Zhuāng Zǐ's philosophy by Malaysian Chinese entrepreneurs. The adoption is especially strong in the process of applying personal principles and contributing to the generation of great knowledge. The most notable influence on the informants is the stark emphasis of Zhuāng Zǐ's philosophy on the

importance of interdependence between people, and the Union of the Heaven and Man.

Thus, applying great knowledge is a stage of showing the existence of great knowledge. Showing by applying is an effective way of demonstrating the presence of great knowledge. Firstly, great knowledge is largely tacit, and it is difficult to explicate and transfer to another person. Secondly, since great knowledge is a capacity to act, the actions of applying great knowledge shows that the capacity is in existence. Hence, the application of great knowledge can be found from daily managerial and business activities carried out by informants.

According to the process model of knowledge-wealth creation, the application of knowledge by Malaysian Chinese entrepreneurs entails transforming events into opportunities, and implementing innovative strategies. In transforming events into opportunities, new business opportunities start to emerge as the application of great knowledge allows other people, especially potential customers to notice the application of their great knowledge. The awareness triggered latent customer needs and the feasibility to overcome challenging business problems.

Informants employed great knowledge in making innovative strategies to capture the new business opportunities. In the implementation of innovative strategies, new technologies, products, and business approaches were developed and commercialized with great knowledge, including informants'

advance technical know-how, in order to seize the opportunities. These new breakthroughs in market are impossible to be achieved without great knowledge because they are tactful and also a type of distinctive capabilities possessed by the Malaysian Chinese entrepreneurs.

Correcting errors or constant self-upgrading occurred after the implementation of innovative strategies. Correcting errors and learning from mistakes happened in the event of unfavorable market response. Constant self-upgrading was conducted continuously by informants to improve their managerial capabilities. Both processes are essential to preserve the continual creation of great knowledge.

After the application of knowledge and the implementation of innovative strategy were effective, favorable market responses enabled informants to create great financial wealth. The wealth is not just a support to the survival of informants' businesses. The wealth is also an indicator of the effectiveness of knowledge creation and knowledge application.

The processes of knowledge creation and knowledge application were driven by informants' ultimate work objectives to attain the meaning of work. Using financial wealth to attain meaning reinforces the processes of knowledge creation and knowledge application. Reinforcement happens as positive responses and motivation for further knowledge creation are generated from a sense of self-fulfillment, financial contribution to the society and financial

reward to employees and stakeholders. Therefore, the objectives are essential to sustainable growth and constant wealth creation.

In what follows, Chapter 5 presents the interpretations and research contributions of the research findings. Firstly, the interpretations and research contributions will be discussed in the comparisons between the existing literature and the process model of knowledge-wealth creation, which consists of learning foundational knowledge, self-identifying personal natural inclination, applying personal principles, accessing sources of information, creating tacit understanding, originating creative initiatives, applying great knowledge, transforming events into opportunities, implementing innovative strategies, correcting errors of constant self-upgrading, great financial wealth, and meaning as the ultimate working objective. Then, the interpretations and research contributions will be shown in the process model of knowledge-wealth creation as a refinement to the strategic knowledge creation framework. Finally, Chapter 5 provides the limitations of this research and suggests future research directions.

5.0 DISCUSSION AND CONCLUSIONS

The findings of this research shed light on three major research gaps. These research contributions are summarized in Table 5.1 below. Firstly, central to the research is the process model of knowledge-wealth creation. The process model improves the understanding of the “micro-foundation” of knowledge creation and strategy innovation by offering insights on the origin of knowledge creation, the processes of knowledge creation, and the knowledge application leading to the creation of wealth. Consistent with Zhuāng Zǐ’s philosophy, the origin of knowledge creation is the human natural ability to know. This research contributes by specifying talent and personal natural inclinations as the examples of human natural ability to know, which comes alongside the birth of an individual human being. In the process model, the process of knowledge creation requires the entrepreneurs to identify and cultivate their natural ability to know in order to create and upgrade their managerial capabilities. The process of knowledge application entails the entrepreneur’s initiation of breakthrough actions to create novel strategic change in the environment. In the micro-level analysis, the three dimensions of great knowledge offer a better knowledge of the managerial capabilities that support the enactment.

Secondly, the process model of knowledge-wealth creation contributes to the dynamic managerial capabilities literature. Managerial intentionality, deliberation, decision making, and action depend on the managerial cognition,

Table 5.1: Summary of main research contributions provided by findings of this research

Major research findings	Major research contributions
Process model of knowledge-wealth creation	Improves the understanding on “micro-foundation” of knowledge creation and strategy innovation, and also sources and methods of wealth creation by offering insights on the origin of knowledge creation, the processes of knowledge creation and knowledge application that lead to the creation of wealth.
Processes that represent sequences in between stages of the process model of knowledge-wealth creation	Furthering knowledge on the interaction between managerial cognition, managerial social capital and managerial human capital by revealing the interaction as a specific form of complex causal mechanisms.
Introduction of “great knowledge” as a new concept in management context	Highlights that superior managerial capabilities and effective wealth creation depends more on great knowledge rather than the idea of knowledge as “justified true belief”, which dominates Western thinking. It is because great knowledge accounts for three core dimensions of a subject to be known rather than taking a static snapshot or partial view of the epistemic object.
Provide clarification of Zhuāng Zǐ’s philosophy and extend the philosophy to management practice and current business context	Clarifies, demonstrates the way to achieve and provides empirical evidence of Zhuāng Zǐ’s philosophical concepts of appropriate time, appropriate skill, appropriate nature and appropriate usage in management practice and current business condition.

social capital, and human capital (Martin, 2011). However, there is a lack of understanding of how all three (i.e. managerial cognition, social capital, and human capital) interact with each other (Helfat & Martin, 2015b).

In the process model of knowledge-wealth creation, managerial cognition consists of entrepreneurs' personal inclination and principles; managerial social capital consists of entrepreneurs' organization members, stakeholder, and social members, which forms a great self (one of the three dimensions of the great knowledge); and managerial human capital consists of entrepreneurs' competency and multi capabilities, which constitutes the greatness and capabilities to encounter change. The process model of knowledge-wealth creation shows that the interaction among all three underpinnings dynamic managerial capabilities can give rise to great knowledge.

Thirdly, this research contributes to a micro-foundation of knowledge creation and strategy innovation of entrepreneurs from a cultural perspective. Barkema, Chen, George, Luo, and Tsui (2015) called for more research on Asian management practices, given that a majority of extant literature focused on the Western context. Furthermore, much of the existing Asia management research has originated from Hong Kong, China, and Singapore (Barkema et al., 2015), while the Malaysian management practices remain a significant puzzle.

The research responded to this call for research by adopting a cultural perspective in order to increase the understanding of how Malaysian Chinese entrepreneurs practice knowledge creation and strategy innovation in a way

that is much different from their Western counterparts. The cultural perspective is the element of Zhuāng Zǐ's philosophy that lies within Chinese culture. The research revealed that Malaysian Chinese entrepreneurs adopted and applied ancient Chinese cultural values, philosophies and Zhuāng Zǐ's philosophy specifically, for practical reasons. Their social reality is interdependent among each other rather than individualistic. Such interdependence stimulates a more harmonious, cooperative, and collaborative environment instead of a competitive business relationship. The joint efforts have important implications — to solve problems that are impossible with a single party's effort, such as sustainability issues and social welfare.

Specifically, the cultural perspective allows this research to contribute by clarifying key concepts of Zhuāng Zǐ's philosophy, extending these concepts to dynamic managerial capabilities literature and current business condition, offers empirical evidence of these concepts and demonstrates the way these concepts can be achieved. These key concepts are appropriate time, appropriate skill, appropriate nature and appropriate usage. There is a lack of research on Zhuāng Zǐ's philosophy and its connection to dynamic managerial capabilities. This research contribution helps fill the research gap.

The process model of knowledge-wealth creation in this research is an extension of and refinement to Zhuāng Zǐ's philosophy. The process model of knowledge-wealth creation is a refinement to the strategic knowledge creation framework in Figure 2.4. As discussed in Section 2.9, the strategic knowledge creation framework is constructed on the basis of Zhuāng Zǐ's philosophy. The

strategic knowledge creation framework defines the scope of investigation of this research and the process model of knowledge-wealth creation is the research outcome. Therefore, the refinement to the strategic knowledge creation framework is supported by empirical evidence. The refinement to the strategic knowledge creation framework and Zhuāng Zǐ's philosophy is discussed extensively in Section 5.2 below.

In overall, this research explored the entrepreneurs' processes and their underlying mechanism of creating new strategies through a knowledge perspective. The findings of the research provided a better understanding of knowledge creation, strategy innovation, and their connections to dynamic managerial capabilities, which explained the link between an individual entrepreneur — his or her actions, strategic change, and firm performance in the changing environment (Helfat & Martin, 2015b). The strategic importance of dynamic managerial capabilities lies in the relationship between superior managerial capabilities and corporate performance in a changing environment (Helfat & Martin, 2015b). In the research findings, the superior managerial capabilities are “great knowledge” — a label is drawn from Zhuāng Zǐ's philosophy, while the firm performance in the changing environment is “great financial wealth”. Consistent with the dynamic managerial capabilities literature (Helfat & Martin, 2015b), strategic change in the research findings consists of processes of knowledge creation and uses in strategy-making .

5.1 Contribution of the process model of knowledge-wealth creation to extant research

This section compares findings of this research with past research to show the improvement in the understanding of knowledge creation and application, and strategy innovation, as well as their implications to dynamic managerial capabilities. In the comparison, similarities between the research findings and past research will demonstrate the relationship between the present research and existing knowledge. Differences between the research findings and past research will present how the research findings improve the existing knowledge. This involves highlighting and filling in the research gaps, extending existing knowledge, and providing answers to contradictory research findings in the past.

5.1.1 Learning foundational knowledge

The research findings of learning foundational knowledge show that the wealth creation processes experienced by innovating founder managers begin from learning foundational knowledge. The foundational knowledge primarily consists of knowledge acquired from formal education and practical skills (including social skills) developed from both working and living experiences. The findings are imperative to uncover the sources of wealth creation since the identification of the origin and methods of wealth creation under the conditions of the change are the unique objectives and focus of the dynamic capabilities view (Teece, Pisano, & Shuen, 1997). During its early development, the

dynamic capabilities framework offers an analysis of the origin and methods of wealth creation under the conditions of change at the firm-level (Teece, 2007). However, subsequent development has extended the analysis to the individual-level (Adner & Helfat, 2003) and the multi-level phases, which comprise of individual, firm, and network levels (Rothaermel & Hess, 2007).

The application of a scientific reductionist approach to trace the origin of dynamic capabilities from firm-level to individual-level has cast some doubts on the value of research on the micro-foundations of dynamic capabilities (Felin, Foss, & Ployhart, 2015). Based on the premise that an organization is more than an aggregation of unrelated individuals, Hodgson (2012) argues that the organizational factors are more possible than the individual factors to have an impact on the organizational phenomenon. Furthermore, Hodgson (2012) claims that the investigation on the individual-level is less likely to yield productive outcomes. Similarly, Devinney (2013) warns that the analysis from the micro-level theories may not adequately inform macro-level theories, and thus can be less suitable than the macro-level analysis. The underlying belief is that a complete account of micro-level details is unnecessary for the verification and explanation of macro-level theories (Devinney, 2013). Moreover, it has been argued that individual organizational members may not be a source of sustainable competitive advantage if the competitors can duplicate their contribution by recruiting them (Campbell, Coff, & Kryscynski, 2012).

The arguments above appear to be paradoxical due to the fact that strategy (Gavetti & Rivkin, 2007) and tacit knowledge (Hatch & Dyer, 2004) reside within individual human being. This fact signifies that an individual may be the locus of sustainable competitive advantage. Hence, the foregoing arguments by Hodgson (2012) and Devinney (2013) are the representatives of macro explanation, which is part of the debate, whether collectivism or individualism is methodologically appropriate or vice versa (Devinney, 2013; Felin, Foss, & Ployhart, 2015).

Despite the current condition that the traditional firm-level analysis remains dominant, the strategic importance of the individual-level origin of dynamic capabilities and strategy has increasingly gained acceptance from scholars. A basic assumption of management as an academic discipline is the belief that knowledge of management offers insight on how firms can be managed and intervened with certain extent of free will, rather than being helplessly shaped by external forces so as to attain organizational objectives such as wealth creation. Under such assumption, greater managerial implications can be derived from the resource-based view, which offer insight on how wealth may be created from the efficiency in firm production processes — in contrast to wealth creation derived from exercising the market power as a monopoly (Peteraf, 1993; Peteraf & Barney, 2003). In the industry analysis, an algorithm of wealth creation for the whole industry is absent (Teece, 1997). In the resource-based view, efficiency is achieved when a firm identifies resources that are valuable, rare, non-imitable, and non-substitutable (Barney, 1991), and acquires them in order to attain cheaper costs or superior value from product

offering (Teece, 1997). Shifting the focus from the industry (analysis) to the firm (resources) appears to be a change in the level of analysis — from macro factors to those that are more micro in nature.

A similar pattern of scientific reduction (i.e. shifting the level of analysis from macro to micro) continues in the dynamic capabilities view. It happens when scholars shift their focus from the firm's dynamic capabilities to an individual's dynamic managerial capabilities to explore sources of wealth creation. Teece (1997) has introduced the concept of dynamic capabilities to extend and complement the shortcomings of the resource-based view. The resource-based view highlights that the possession of scarce resources is the source of wealth, but the perspective is silent about how such resources can be developed, exploited, and protected (Teece, 1997). The dynamic capabilities view specifies that a firm's ability to combine, develop, and renew competences is a type of scarce resources, and is henceforth a source of wealth (Teece, 1997).

However, the firm-level analysis of dynamic capabilities has posed a limitation on understanding the actual sources of firm competencies, which essentially happens at the individual level. The individual-level analysis is essential because the firm-level analysis omits managerial decisions that determine firm actions. In addition to that, it is an individual manager or a group of such individuals who conduct strategic decision-making processes for the firm (Adner & Helfat, 2003; Devinney, 2013).

Hence, the concept of dynamic managerial capabilities fills this gap by the focus on the dynamic capabilities at the individual-level (Helfat & Martin, 2015b). Moreover, there are distinctive dynamic managerial capabilities that are not available at the firm-level, such as the capabilities to assess and prescribe alteration on the configuration of both external and internal organizational assets (Teece, 2012). By driving the new capabilities development to produce a long term economic gain, a new CEO had successfully transformed the National Cash Register, thereby representing an example of individual managerial capabilities as a source of wealth (Rosenbloom, 2000). Similarly, Steve Jobs, the former CEO of Apple, is another example of an individual manager who has a great impact on the company's outstanding performance (Teece, 2012).

In this research, the process model of knowledge-wealth creation shows that the earliest emergence of sources for wealth creation can be traced back to learning foundational knowledge. The foundational knowledge identified in the research includes individual entrepreneur knowledge learned from formal education and practical skills acquired from experience. They are the underlying managerial resources of dynamic managerial capabilities (Adner & Helfat, 2003; Helfat & Martin, 2015b).

For conceptual clarity, researchers (Helfat & Martin, 2015b) have classified these underlying managerial resources into managerial cognition, managerial human capital, and managerial social capital. Managerial cognition is an umbrella term that covers mental models and beliefs, mental processes,

managerial cognitive capabilities, and emotions (Helfat & Martin, 2015b). Mental models are regarded as “representations of knowledge that contain and organize information” (Schneider & Angelmar, 1993, p.349). In the management literature, mental models and beliefs are also known as knowledge structure (Helfat & Martin, 2015b), schema (Bingham & Kahl, 2013), cognitive maps, mental models, frames, and interpretive schemes (Helfat & Peteraf, 2015). Managerial human capital is mainly constituted by knowledge, education, experience, and skills (Helfat & Martin, 2015b). Helfat and Martin (2015b, p.1286) claim that “managerial social capital consists of goodwill derived from relationships, both formal and informal, that managers have with others and can use to obtain resources and information”. These managerial resources have independent effects and interactions among each other (Adner & Helfat, 2003). Hence, the contribution of the research findings in learning foundational knowledge will be discussed by comparing it with extant knowledge regarding the three types of managerial resources so as to provide a better understanding of the field.

In the strategic management field, little is known about the knowledge and skill of entrepreneurs as part of the core underpinnings of dynamic managerial capabilities in the Malaysian context. Wilden, Devinney, and Dowling (2016) have reported that the dynamic capabilities view needs improvements to better understand how changes of resources in organizations happen, or else risk being abandoned. Wang and Ahmed (2007) have pointed out that previous case studies focused on the dynamic capabilities in the firm- or industry-specific processes only. They (Wang & Ahmed, 2007) have urged for further research

so as to search for similarities in dynamic capabilities between different companies, suggesting that those similarities between different companies from various industries are useful. Such research can contribute as the basis of the theoretical development for the dynamic capabilities view to mature as the dynamic capabilities theory (Wang & Ahmed, 2007). As this research investigated the founders of distinct companies from dissimilar industries, findings of this research contribute to the development of the dynamic capabilities theory.

Furthermore, Giudici and Reinmoeller (2012) have found that more empirical research is needed to overcome the shortage of empirical support for the construct validity of dynamic capabilities. Until the present, in terms of quantitative researchers, there has been insufficient attention to learning in underpinning dynamic capabilities (Wilden, Devinney, & Dowling, 2016). On the other hand, qualitative researchers have less interest in firm performance (Wilden, Devinney, & Dowling, 2016). Due to the shortcomings in extant quantitative and qualitative research, the dynamic capabilities view lacks the knowledge as to how an individual's learning affects firm performance.

To date, few studies especially top management journals, have been identified to specifically investigate the knowledge and skill of entrepreneurs as part of the core underpinnings of dynamic managerial capabilities in the Malaysian context. Hambrick (2004) has hinted that managers are long forgotten in the strategic management field, especially in what they do and the ways that they can improve. Adner and Helfat (2003) have suggested that more case study

evidence will be useful to uncover how managerial social capital, managerial human capital, managerial cognition, and their interplay influence strategic change. Helfat and Martin (2015b) have also discovered that only few research works studied all three managerial resources together, despite the fact that they are interrelated. Barkema et al. (2015) have asserted that more research on Eastern management practices and context are needed. While less research has been done in these areas, it is also important to inform the management in a global context (Barkema, Chen, George, Luo, & Tsui, 2015). The Eastern context is obviously distinct from the West due to its unique cultural, philosophical, and broader intellectual inheritance (Barkema et al., 2015). Hence, a study like this research that focuses on Malaysia, which is an Eastern context, may be helpful to close the research gaps.

The research findings of learning foundational knowledge, which comprise of knowledge acquired from education and practical skills developed from experience, contribute to the understanding of managerial social capital, managerial human capital, and managerial cognition. With respect to managerial social capital, learning foundational knowledge sheds light on how entrepreneurs identify the value of managerial social capital and its impact on wealth creation, and how entrepreneurs learn to create and utilize managerial social capital.

Managerial social capital is valuable to entrepreneurs and critical to wealth creation. McDonald and Westphal (2003) have reported that the CEO's advice-seeking from outside managers with diverse information is positively related to

the extent of strategic change and successful firm performance. Collins and Clark (2003) have discovered that a large number of contacts within the top management team's internal network, diverse contacts, and strong relationship within the top management team's external network accelerate sales growth. Davidsson and Honig (2003) have found that business network membership is positively associated with sales and profit. To understand why social capital drives wealth creation, past research has pointed out that social capital can be a source of novel information and perspectives that form the basis of corporate strategy (Acquaah, 2007; Collins & Clark, 2003; McDonald & Westphal, 2003). They are also a source of loyal customers to increase revenue and a source of accountable suppliers to obtain raw materials, services, and delivery that are up to expectation (Park & Luo, 2001).

In the East, social capital has long been deemed important in Chinese societies. An instance is *Guanxi*, a specific type of social capital in Chinese societies, which has existed in the Chinese culture for longer than 5000 years (Park & Luo, 2001). *Guanxi* is "the concept of drawing on a web of connections to secure favors in personal and organizational relations" (Park & Luo, 2001, p.455). *Guanxi* is different from the Western idea of social ties. The Chinese employ *Guanxi* to develop trust and distinguish in-group and out-group members (Barkema et al., 2015). In handling problems, they offer different solutions and choices according to different group memberships and distinct conditions (Barkema et al., 2015). In the West, Americans are generally perceived as trusting strangers more than the Chinese do and are much more inflexible in handling the same problems in diverse situations (Barkema et al.,

2015). Despite its dominant status in Chinese societies, minimal research is conducted in examining *Guanxi* (Barkema et al., 2015).

With the findings of learning foundational knowledge, this research made several contributions to dynamic managerial capabilities literature, particularly in managerial social capital as its underlying content. The research first extends Chinese philosophy, and Zhuāng Zǐ's philosophy specifically, to managerial social capital. Most studies have highlighted the relationship between *Guanxi* and Confucianism (e.g. Park & Luo, 2001). Few studies, to date, have investigated the root of *Guanxi* from Daoism, particularly Zhuāng Zǐ's philosophy. As an empirical finding, learning foundational knowledge uncovers the practical application and extension of Zhuāng Zǐ's philosophy regarding the relationship between managerial social capital and wealth creation under the condition of change.

Zhuāng Zǐ's philosophy of the relationship between managerial social capital and wealth creation can be found in the case of Lín Huí's choice as recorded in the "Mountain Tree" chapter (Watson, 1968). In the case, Lín Huí left a jade disc that equals a thousand measures of gold so that he could carry along a little baby with him to escape rapidly from a threatening situation in the country of Chia together (Watson, 1968). The little baby was not Lín Huí's kith or kin, so his choice puzzled other people. In others' views, the little baby was not valuable in terms of money and brought a lot of trouble (Watson, 1968). For Lín Huí, there was a strategic reason behind the motivation to select the little baby rather than the jade disc. According to his explanation, the link

between the jade disc and him came from profit, but the connection between the little baby and him was made by human nature (Watson, 1968).

These two types of connection change in opposite directions under threatening conditions (Watson, 1968). Threatening conditions will strengthen the connection made by human nature and break the link established by profit (Watson, 1968). Lín Huí knew that the baby would do the same when facing difficulty in the future, including the time when the condition was changing. This is a specific Chinese way that makes social capital valuable.

From the perspective of dynamic managerial capabilities, Lín Huí's choice implies that social capital is more strategic than wealth since the former is the little baby, while the latter is the jade disc. In this research, the term 'strategic' refers to "that relates to the long-term prospects of the company and has a critical influence on its success or failure" (Argarwal & Helfat, 2009, p.281). Obviously, Lín Huí's explanation focuses on the long-term benefit of social capital. It implies that social capital is much more useful than wealth when the business condition turns sour and thus is more strategic.

Next, learning foundational knowledge provides a new insight into the relationship between managerial social capital and knowledge, skill, education, and experience. In dynamic managerial capabilities research, knowledge and skill are perceived as human capital that underpins dynamic managerial capabilities (Adner & Helfat, 2003). In human capital literature, knowledge and skill are part of the cognition (Ployhart & Moliterno, 2011), which is

another type of underpinning for dynamic managerial capabilities (Helfat & Martin, 2015b). The phenomenon suggests that knowledge and skill underpin dynamic managerial capabilities by acting as a managerial cognition and managerial human capital at the same time.

However, little is known about the role of knowledge and skill in managerial social capital. This is an important research gap given the fact that prior experience not only generated the three underpinnings but also created them at the same time in each of the experiences (Helfat & Martin, 2015b). In Zhuāng Zǐ's philosophy, the Lín Huí case is explicit about the value of social capital as an aid to survival, but it does not tell much about how an individual or entrepreneur identifies the value of managerial social capital and its impact to wealth creation. This is important foundational knowledge because not all children will show gratitude to their parents. In addition, identifying the value of managerial social capital and its impact is essential to the strategic assessment process of understanding benefit, cost, and drawback of investment in social capital.

In this research, learning foundational knowledge demonstrated that Malaysian Chinese entrepreneurs identified the value of social capital from their growing up experience in Chinese families and formal Chinese education, especially those from Chinese primary school. Specifically, they recognized the value of social capital through learning Chinese culture from both sources of information. The rationale is obvious — appreciating the benefit of social capital from the cultural experience is in line with the fact that collectivism is a

cultural value of the Chinese culture (Barkema et al., 2015). Collectivism in the Chinese culture is distinct from individualism in the Western culture in that the former perceives the interests and objectives of the group as more important than the interests and objectives of an individual (Barkema et al., 2015). The difference is arguably the biggest divide between the two cultures and causes people from different cultural backgrounds to think and behave differently (Triandis, 1986). Therefore, past research conducted in the Western context might not apply to the Eastern context.

Learning foundational knowledge offers empirical evidence on how entrepreneurs identify the value of social capital through learning about the Chinese culture from both sources of information. The findings reported that the Chinese culture and being a Malaysian Chinese resulted in an inclination to make a contribution to Chinese schools and to the development of Chinese education once an individual becomes wealthy. The case of Informant 1 provided an example of their contribution in the form of monetary donation to Chinese schools. Specifically, Informant 1 was a beneficiary of the Chinese culture and had successfully completed his education with the support of such financial aid.

The relationship between Informant 1 and Chinese school directors was an example of social capital. In this case, their relationship was entirely a formal one. Particularly, Informant 1 was a student of the Chinese school that the directors managed, while the directors were simply members of the Chinese

school top management. The directors donated their money not for private or personal interest, but simply as a fulfillment of the Chinese culture.

As such, the case of Informant 1 showed that entrepreneurs might identify the value of social capital through the living experience in the Chinese society and Chinese education. This is evident from the fact that Informant 1 appreciated what he received in Chinese education and when he was living with other Chinese people. The extent of his appreciation can be seen from showing gratitude to parents and benefactors as a natural behavior. Furthermore, Informant 1 learned from the directors of Chinese schools about donating funds to such schools. The financial assistance to Chinese schools can be maintained if the younger generation follows the practice of helping Chinese schools. Based on the case of Informant 1, it is critical to highlight that the Chinese school directors' choice to donate is identical to Lín Huí's decision to rescue a little baby rather than keeping his expensive jade disc. This is empirical evidence to Zhuāng Zǐ's philosophy, and also an extension of the philosophy to the business setting.

As a new insight, learning foundational knowledge shows how social capital is valuable to wealth creation. The link between social capital and wealth creation is rarely discussed in dynamic managerial capabilities literature. This research contributes to the literature by filling in the gaps.

Learning foundational knowledge revealed that Informant 1 took financial assistance as a lesson and related the value of social capital to wealth creation.

In the perspective of Informant 1, the financial assistance is akin to relief food to a person who is starving to death. It is not about the quantity of the financial aid, but about the benefits of the financial aid to its receivers.

In the case of Informant 1, donating financial assistance as the return of favor has three meanings. First of all, the return of favor is less about the financial value of food or money, but more about a rescue from death or difficulty for survival. In the situation, food or money is given out for its social benefit and long-term financial value to the society (not only to the directors but also new generations of Chinese school students), and less for its short-term gains (personal benefits).

The wealth creation benefits of social capital are long-term in nature, while the wealth creation benefits of financial wealth are short-term. In the long run, the wealth creation benefits of social capital may grow over a longer period of time. They grew when all informants made various contributions, both financially and non-financially, to the Malaysian Chinese education and society following their improved financial strength. The informants did not calculate how much assistance they had received from other people and society but were willing to give back as long as they could afford to do.

Second of all, the idea of a return of favor is applicable in the social capital investment in terms of value evaluation. The value of food, money, or any tangible asset is not evaluated by the particular item, but by its relevance to a particular context. This is consistent with the resource-based view in assessing

a resource according to how much its customers perceive the gains as exceeding its producer's costs (Peteraf & Barney, 2003). In Informant 1's context, the directors' donation did not have much effect on their financial status but had critically changed his destiny from being out of school and starving to a budding entrepreneur.

Applying the idea of a return of favor in the creation of social capital may generate strategic change on customer's perceived gain. Creating social capital may increase a customer's perceived gain. Informant 1's idea of a return of favor hints that a customer's perceived gain may not be the same for two or more different consumers who consume the same product.

An instance of a product that has two different perceived gains is food. To an ordinary person, food consumption can merely be a leisure activity. To the poor, food consumption is a matter of survival.

In addition to the perceived utility value of a particular product, customers may make their buying decisions based on social capital. As reported in Section 4.3.3, Informant 1 focused his effort on good customers and developed good relationships with them. A good relationship is social capital.

Hence, it is important to understand what consumption context leads to greater perceived benefits. Extending Informant 1's perception about the donations received by him to wealth creation, it suggests that a source of greater perceived benefits is the context that can generate goodwill. It should be noted

that goodwill may not only come from suppliers, partners, and friends but also customers.

Thirdly, Informant 1 perceived that the financial value of money was fixed and limited, but the social value of money was much flexible and significantly greater than its financial value. The comparison hints that giving priority to the financial value of money is unwise because the financial benefits are just temporal gains. In contrast, the focus on the social value of money is more sensible because the benefits of the social value of money can be sustained in a longer period of time for the ongoing progress of wealth creation.

As a core concern of the strategic management field, Barney (2001) has clarified that a resource is qualified as a source of economic rent when its resulting value from strategy-making and execution is more than its acquisition and development cost. The excess of resource value over resource cost is widely regarded as a competitive advantage in the strategic management field, but it is more appropriate to be coined as a strategic advantage or economic rent to avoid the confusion caused by various definitions of competitive advantage (Barney, 2001). This notion of economic rent is equal to the term “profit” adopted in the research.

In the research, wealth consists of a firm’s revenue and profit. Adopting wealth instead of competitive advantage as a firm performance is important because the concept of competitive advantage, which may converge the cause and effect of wealth creation can pose a difficulty in the analysis (Barney, 2001).

Hence, the social value of a resource is a source of economic rent or wealth since it can generate a greater financial value of a resource than the financial value of resources spent in the acquisition of the resource. The social value of a resource works to exploit resources, particularly for social purposes.

Learning foundational knowledge sheds light on how entrepreneurs learn to create and utilize managerial social capital. As the social value of money can be translated into the financial value of money, Informant 1's experience of donations from the Chinese school directors appears to be an example of converting intangible assets into tangible assets. Similarly, Informant 2 substituted financial capital with social capital by exploiting the trust of a shop owner in his acquisition of soft drinks for sale without the need to pay first. From the perspective of wealth creation, converting intangible assets into tangible assets is a way of creating tangible assets. Converting intangible assets into tangible assets is especially important for entrepreneurs who lack resources and tangible assets in the early days of starting their business.

With respect to managerial human capital, the research findings pointed out that foundational knowledge, rather than all knowledge and skills led to strategic change and knowledge creation. Researchers claim that an individual's human capital, which includes knowledge, skills, and abilities, can be built up via education and professional experience (Becker, 1975; Wright, Coff, & Moliterno, 2013). This implies that an entrepreneur's dynamic managerial capabilities, creativity, and great knowledge can be built up

through education and professional experience. However, not all knowledge and skills are useful for wealth creation (Castanias & Helfat, 2001).

This study is different from the traditional human capital research in the respect of the later focus on the individual but allocates insufficient attention to that individual's strategic implications (Ployhart, 2015). Besides, this study is distinct from most strategy research in the past with regard to the latter's emphasis on the strategic implications of aggregate level (Nyberg et al., 2014). In this study, the focus is on the strategic implications of an individual entrepreneur's human capital.

From a strategic perspective, differentiating the foundational knowledge from other strategic irrelevant knowledge and skills is consistent with the resource-based view to identify the source of heterogeneity of resources and capabilities (Barney, 1991; Hatch & Dyer, 2004). With the discovery of learning foundational knowledge, this study provides a deeper understanding of the sources of differences in resources and capabilities. In their unit-level analysis, Helfat and Peteraf (2003) have suggested that in the founding stage of an initial capability life cycle, the development of a novel capability starts when that capability is needed by an organized team of individuals to achieve an objective. The Capability Life Cycle is a framework to illustrate the general patterns and potential paths that feature the evolution of a firm's capability (Helfat & Peteraf, 2003).

In this study, each of the four individual entrepreneurs only had a general will to create wealth and survive when they were learning foundational knowledge. During that time, they did not have any objective that gave rise to the need for a specific capability. Learning foundational knowledge is the earliest stage of the processes in discovering such objective. By learning foundational knowledge, all informants got to know more about reality and possibilities with the skills they learned.

Learning foundational knowledge is not just the security for them to invest further in costly human capital and secure employment opportunities, but also the exposure to various possible options and sources of information so as to determine an objective and start their relevant capability development. This may offer an answer to the question of how the heterogeneity of individual resources and capabilities arises. In this study, it was discovered that the heterogeneity arose partly from diverse educational backgrounds in terms of different engineering courses from universities in different countries, and by diverse experiences undertaken by each informant.

This study found a distinct source that is added to the heterogeneity of informant capabilities. Evidence reveals that living experience, in addition to working experience and education, is an important human capital. Human capital does not receive sufficient attention from past research. Human capital variables studied in past research include: CEO tenure in position, CEO firm tenure, top management team (TMT) firm tenure, TMT firm tenure heterogeneity, CEO or founder educational level, TMT educational level, TMT

educational level heterogeneity, CEO or founder educational background, TMT educational background, TMT educational background heterogeneity, CEO or founder functional area experience, TMT functional area experience, TMT functional area heterogeneity, CEO or TMT international experience, CEO or founder industry experience, TMT industry experience, TMT industry experience heterogeneity, founder(s)' prior experience as entrepreneur or self-employed, and founder(s)' prior management or leadership experience (Helfat & Martin, 2015b). These human capital variables are normally generated in an educational and working environment.

In the educational and working environment, entrepreneurs or managers normally share an identical organizational context with their peers. Such context may offer a similar experience and knowledge to entrepreneurs or managers, just like what their peers encounter. This is particularly true in the schooling system and university that has to be fair to all of its students in providing learning materials, such as lecture notes. As the input is the same, homogeneous experience is less conducive to produce heterogeneity to entrepreneurs or managers' capabilities.

In contrast, living experience out of the educational and firm environment is much diverse and not standardized like an organizational context. To put it simply, each individual's living experience is unique and hard to imitate. The challenge is in making use of the living experience to create value out of it.

As observed from learning foundational knowledge, the informants' living experience is unique and unlikely to be duplicated. Informant 1 helped his father in agricultural work, Informant 2 ran a retail business independently, and Informant 4 repaired electrical appliances and later worked in his parent's hawker stall. Therefore, the different experiences are more likely to generate heterogeneity to an individual entrepreneur or manager's capabilities.

In the extant literature, it is the distinctive individual differences that make human capital a source of sustainable advantage (Coff & Ktiscynski, 2011). This is because it is a common agreement that "human assets are often valuable, rare, and imperfectly imitable" (Coff & Ktiscynski, 2011, p.1431). Hence, the finding of living experience as a source of sustainable advantage is consistent with the existing literature. The findings are a response to the specific demand for further knowledge in micro-foundations (Coff & Ktiscynski, 2011).

It is worth noticing that not all living experiences can be a source of heterogeneity to an individual entrepreneur or manager's capabilities. As demonstrated in the research findings, the living experience must be relevant to be a source of heterogeneity to entrepreneurs or managers' capabilities. The relevance of the living experience rested on whether the informants transferred and utilized their living experience in new contexts or expanded their skills further. Again, it reinforces the label of this experience as "foundational knowledge".

With regard to managerial cognition, learning foundational knowledge laid a foundation for constructing a perception that was useful for knowledge creation and strategy innovation. Helfat and Peteraf (2015) asserted that prior knowledge directs perception. In the strategy literature, perception is a managerial cognitive capability that underpins dynamic managerial capabilities (Helfat & Peteraf, 2015). Perception is “the mental activities or processes that organize information (in the sensory image) and they are interpreted as having been produced by properties of (objects or) events in the external (three dimensional) world” (Helfat & Peteraf, 2015, p.14). The Basic Behavioral Science Task Force of the National Advisory Mental Health Council (NAMHC, 1996, p.133) has reported that the human brain constructs sensible inferences about the world by integrating information from sensations such as seeing, listening, touching, smelling, and tasting “with knowledge, beliefs, and expectations”. They further asserted that perception depends largely on knowledge (NAMHC, 1996).

Knowledge facilitates both the speed and quantity of pattern recognition (Helfat & Peteraf, 2015). In a study that looks into chess players’ perceptual processes in chess-playing, Chase and Simon (1973) have attributed the different performance between advanced and novice players to the former outperforming the latter in pattern recognition. In their research, pattern recognition identifies the meaningful organization of several pieces of chess as a chunk (Chase & Simon, 1973). Simon and Chase (1973) have claimed that the capability of recognizing patterns comes from continuous practice over a long period of time.

In this study, it was discovered that informants utilized foundational knowledge in perceiving their rapidly changing business conditions and how they should deal with the situation. As the effect of Chinese education and Chinese culture, Informant 3 explicitly claimed that he employed the Chinese language as a thinking aid in his business. Informant 1 and Informant 3 coincidentally linked an ancient Chinese military strategy, *bèi shuǐ yī zhàn* (fighting with one's back facing the river, which literally means the fight to win or die) to describe how they dealt with the situations when starting their business.

As an application of the Chinese culture in practical skills, Informant 2 applied the Chinese concept of trust in his soft drinks business. He believed that he would not have succeeded in his business if he did not combine what he encountered in his business with trust. Hence, the research finding is consistent with prior research: perception is produced from the combination of sensory input and knowledge.

However, the research finding also pointed out that useful perception was much reliant upon what knowledge was adopted to be integrated with sensory input. To improve the pattern recognition, Simon and Chase (1973) have suggested that years of constant practice is a viable way. In contrast, the research finding showed that the availability of appropriate and different knowledge such as those the informants had learned from the Chinese culture is important too.

Forming the perception with Chinese cultural knowledge is different from other cultures and provides a source of heterogeneity in dynamic managerial capabilities. The awareness and existence of intangible assets ultimately depend on the perception. An instance of a strategic intangible asset in the research findings of learning foundational knowledge was relationship, such as the customer and supplier relationship between Informant 2 and his soft drinks supplier.

5.1.2 Self-identifying personal natural inclination

Research investigating the role of entrepreneur's human nature and personality, in general, and human natural ability to know, in particular, in the processes of developing dynamic managerial capabilities, producing new knowledge and strategy are noticeably absent. This study helps scholars to better understand how an entrepreneur's human nature and personality affect knowledge creation, dynamic managerial capabilities, and strategy innovation. The research finding is important because human nature and personality are a critical source of heterogeneity that is largely omitted by strategy and knowledge-based scholars (Felin & Hesterly 2007). Furthermore, human nature and personality are important initial conditions of knowledge creation, dynamic managerial capabilities, and strategy innovation. According to Popper (2002, p.198), "if the initial conditions cannot be ascertained, the scientific way of predicting breaks down". Simon (1985, p.303) has insisted that "nothing is more fundamental in setting our research agenda and informing our research

methods than our view of the nature of the human beings whose behavior we are studying”.

The exposure to education and living experience was utilized by informants to identify their personal natural inclination through self-reflection. Informants are not indeterminate material shaped by social factors as assumed by Durkheimian and collectivist knowledge-based scholars (Felin & Hesterly, 2007). In knowledge and capabilities-based fields, those studies focus on a collective locus of knowledge assuming that individuals are homogeneous (Felin & Hesterly, 2007). Rather, the informants decided on what they could accept. Learning foundational knowledge simply made the options and thinking aids available to them. The informants resonated with some knowledge, skills, and living experience, leading to the awareness of their interests or tendencies. The informants realized from their own awareness that there was something they were particularly good at or sensitive to. In other words, these elements are their talents, or something they can learn and master better than other people.

Hence, self-identification of personal natural inclination is the process of exploring unique personal strengths, which can be an important source of heterogeneity in dynamic managerial capabilities. The findings of each individual informant are different and possess distinctive knowing ability that provides empirical support to the literature on an individual locus of knowledge (Felin & Hesterly, 2007). This empirical support is important because most research has been conducted on a collective locus of knowledge,

while only a few are done via the individual locus of knowledge (Felin & Hesterly, 2007).

Despite the value of personal natural inclination, this research finding improved the understanding of how personal natural inclination was identified and drove the processes of knowledge creation and strategy innovation. In this research, personal natural inclination consisted of personal interest and sincerity. Informants noticed that the awareness of personal interest emerged automatically when they resonated with a specific thing or event. There is a lack of research on personal interest in the strategy literature. Gottschalg and Zollo's (2007) work is one of the few works at the individual-level that provides an understanding of strategic implication due to personal interest. Gottschalg and Zollo (2007) claim that the competence to align the design of the individual job and job environment to the individual preference can create economic rents and sustainable competitive advantage.

The findings uncovered information showing that the informants knew the subjects of their personal interests better than other things and many other people, which implied that the process involved unusual knowing abilities and talent. It appears that personal interest is an indicator of the extent of how much a subject is to be known and fit with the knower or informants' human nature and personality. The ability to know is obviously a distinctive characteristic of human nature. In the management literature, human nature is defined as "the characteristics of mankind which generally enable us to distinguish humans from animals, inanimate objects, and social abstractions,

such as society or organizations” (Sullivan 1986, p.535). To understand human nature is important to provide an understanding of the causal factors of knowledge creation.

Felin and Hesterly (2007) categorized the extant views in the management field on the causal factors of knowledge creation into collectivist and individualist knowledge perspectives. The collectivist knowledge perspective assumes that cognition and knowledge, in general, are determined by external factors, such as social factors, context, and environment (Felin & Hesterly, 2007). Collectivists focus on collective, firm-level, social knowledge instead of the individual-level and individual knowledge (Felin & Hesterly, 2007). Their strategic rationale is to identify and exploit heterogeneity in external factors, based on their belief that these external factors are deterministic in social knowledge creation (Felin & Hesterly, 2007). Currently, the collectivist knowledge perspective is dominant in the strategy field and knowledge-based view (Felin & Hesterly, 2007). Representative works of collectivists include Brown and Duguid (1991, 2001), Eisenhardt and Martin (2000), Hargadon and Fanelli (2001), Kogut and Zander (1996), Nahapiet and Ghoshal (1998), Nonaka (1994), Spender (1996), and Tsoukas (1996).

In contrast, the individualist knowledge perspective presupposes that cognition and knowledge, in general, are constructed on the basis of internal factors, such as human nature and individual innate cognitive abilities (Felin & Hesterly, 2007). Individualists emphasize their analysis of individual-level and investigate individual knowledge rather than collective, firm-level, and social

knowledge (Felin & Hesterly, 2007). Examples of individualist knowledge-based work include Grant (1996) and Simon (1991). Empirical evidence from the cognitive psychology research demonstrates that internal factors have much greater influence on knowledge creation than external factors (Felin & Hesterly, 2007). These studies observed twins, siblings, and adopted siblings who were either living in similar or dissimilar environments to compare the impact of external factors and internal factors (Felin & Hesterly, 2007). Obviously, the results of these studies pose an important challenge to the assumptions of collectivists. Thus, human nature is arguably the most influential causal factors of knowledge creation (Felin & Hesterly, 2007). However, little is known in extant management and strategy literature about human nature in respect of the heterogeneity of innate knowledge.

The different ability to know about a subject like Informant 3's talent in mathematics, concerns with personality. In the strategy field, there is a lack of research on the role of founder manager's personality in the processes of knowledge creation, dynamic managerial capabilities, and strategy innovation. In the psychology literature, there are many definitions of personality (Crozier, 1997). The definition that is most related to the research is offered by Child (as cited in Crozier, 1997, p.4) who stated that "more or less stable internal factors that make one person's behavior consistent from one time to another and different from the behavior of other people would manifest in comparable situations". Personality may exert decisive effects on knowledge creation, dynamic managerial capabilities, and strategy innovation. As strategic management research, Nadkarni and Herrmann (2010) found that personality

attributes of CEOs may affect their attention focus, which leads to the subsequent impact on how they address environmental change. They (2010) suggested that personality attributes of CEOs filter vast information in perceiving strategic situation and deciding strategic response. In their subsequent study based on the five-factor model, Herrmann and Badkarni (2014) revealed that certain personality attributes of CEOs stimulated the initiation of strategic change, such as emotional stability, extraversion, and openness to experience. However, some personality attributes of CEOs impeded the initiation of strategic change, such as agreeableness and conscientiousness (Herrmann & Badkarni, 2014). In addition, they also uncovered that emotional stability and conscientiousness enhanced the performance effects of strategic change implementation, while agreeableness had a negative impact (Herrmann & Badkarni, 2014). Their findings were conducted based on the five-factor model and hinted that there are various personality attributes, and each of them has a different impact on strategic change and its effect. Their research has demonstrated the value of personality to the strategic management literature. However, little is known about the role of personality in the processes of knowledge creation and strategy innovation and its implication to dynamic managerial capabilities.

The findings of this study extend the insight of Zhuāng Zǐ's philosophy and research on the strategic implications of personality to the identification of a specific personality characteristic of founder manager, which is a personal natural inclination. The self-identifying personal natural inclination is consistent with some insights in psychology literature, particularly Holland's

theory of vocational personalities. Firstly, the stream of the literature reveals that personal interest is an important aspect of personality (Nauta, 2010).

Secondly, personality can be categorized in accordance with distinctive personal preferences of ways of handling daily problems, and this implies that the informant's preference to be sincere in the research findings is a characteristic of personality. In the introduction of his influential theory of vocational choice, Holland (1959) classified personality into six types according to different preferred ways of handling daily problems. The inception of the six types of personality, — motoric, intellectual, esthetic, supportive, persuasive, and conforming, have later been refined as realistic, investigative, artistic, social, enterprising, and conventional (Nauta, 2010).

Thirdly, the accuracy of self-knowledge is important for making adequate choices (Holland, 1959). The self-identifying personal natural inclination is a process of creating self-knowledge, which consists of “the amount of information the person possesses about” oneself (Holland, 1959, p.40). It is worth noticing that the choice-making in Holland's theory is about vocation selection while the research findings concern with competency selection.

Fourthly, an influential assumption of Holland in his theory is that a greater degree of congruence between a person's personality and the environment leads to a better achievement (Nauta, 2010; Su, Murdock, & Rounds, 2015). Recently, the assumption of congruence between personality and environment has been extended to the congruence between interest and occupation (Wille et

al., 2014), and between personality and music education, as well as a career path that may be relevant or irrelevant to the education choice (Cevik et al., 2013). As education and learning are part of the knowledge creation processes, the personality that fits with them may lead to better achievement.

The personality-environment fit assumption resembles Zhuāng Zǐ's philosophy of "appropriate nature" discussed in the foregoing "Outcome of knowledge creation" section. As an illustration of the appropriate nature, the nature of white horned owl is evident in its exceptional night vision. This nature is an advantage and suitable for night hunting, and this implies that there is a nature-environment fit. This nature-environment fit may commensurate with the personality-environment fit.

Furthermore, Zhuāng Zǐ's philosophy has an indication of a person's internal factors that have a greater impact on knowledge creation than external factors. In his philosophy, the Marquis Wu of Wei showed interest in Hsu Wu-Kuei's speech and disinterest in Nu Shang's speech (Watson, 1968). Hsu Wu-Kuei shared his knowledge of dog judging and horse judging, while Nu Shang talked about the Odes and Documents, ritual and music, as well as military strategy texts like the Golden Tablets and the Six Bow-cases (Watson, 1968). Hsu equaled Marquis Wu's interest in the knowledge of dog judging and horse judging to the men who were exiled to Yueh who felt excited to meet something close to them at a foreign place, such as an old acquaintance, a person who looked like a countryman, the rustle of a human footfall in isolation for a long time, and more so like their brother chattering around them

(Watson, 1968). Obviously, the knowledge of dog judging and horse judging is congruent with Marquis Wu's personality. Therefore, internal factors like Marquis Wu's personality has greater influence in learning than external factor like the importance of military strategy knowledge for a marquis.

Both psychology literature and Zhuāng Zi's philosophy point to the significance of the personality and personal interest in the process of learning. Findings from the research uncover how personal natural inclination can be identified through self-knowledge so that it can be exploited for better results of knowledge creation. Furthermore, personal interest is not the only internal factor that leads to knowledge creation as highlighted in the psychology literature and Zhuāng Zi's philosophy. As a new insight discovered from the case of Informant 1, sincerity is another powerful factor that drives the processes of knowledge creation and strategy innovation. Both types of personal natural inclination involve self-reflection on their internal state that needs to be motivated in order to proactively know more about what automatically captures most of their attention.

5.1.3 Applying personal principles

Few research works to date have been identified and have studied the exploitation of human nature in knowledge creation, dynamic managerial capabilities, and strategy innovation. The research helps scholars better understand how human nature may be exploited in knowledge creation, dynamic managerial capabilities, and strategy innovation.

Informants applying personal principles form the way to allocate their attention in creating new knowledge and formulating novel strategies. Informants adopt foundational knowledge that fits their personal natural inclination as personal principles. It is worthy of mention that personality is a part of human nature. Personality, as conceptualized in personality psychology, reflects the differences between individuals while human nature, as conceived in the evolutionary perspective, includes commonalities among human beings (Michalski & Shackelford, 2010). The personal principles consist of Chinese moral values and the Chinese way of life.

Applying Chinese moral values as personal principles is an exploitation of the potential of human nature in relation to the others, such as people, things (e.g. preservation of the cultural artifacts), and environment (e.g. environment protection). The Chinese moral values that were explicitly adopted by informants include the Chinese notion of ritual, righteousness, frugality, sense of shame, and trustworthiness. These Chinese moral values that come out of human nature would be deemed authentic and without ulterior motives, like a parent's unconditional love. In the Keng-sang C'hu chapter of Zhuāng Zǐ's book, the Chinese moral values are connected to a phenomenon, whereby parents would generally forgive their children to make a step and walk on their feet, and thus making apology appears to be superfluous (Watson, 1968). From the Chinese perspective, if the children apologize for small trouble for their parents, this action signifies that they are strange or not close to each other. As human nature, a good parent-child relationship is much common in the human society.

However, the carelessness of stepping on different people's feet requires different rituals or politeness (politeness is part of the ritual in Chinese philosophy and Zhuāng Zǐ's philosophy). Zhuāng Zǐ hinted that it is polite to have a lengthy apology for stepping on a stranger's foot (Watson, 1968). In the case of a person stepping on his or her older brother, only an affectionate pat is needed (Watson, 1968).

Based on these three examples, Zhuāng Zǐ's suggested that the perfect ritual treats all people equally (Watson, 1968). The closest relationship is the one that exists between an individual and his or her parent; then followed by the relationship between the individual and his or her brother, and lastly the relationship between the individual and stranger. Assuming that the closest relationship is the ideal relationship, the advanced ritual appears to be one that exists in the parent-child relationship. Extending the assumption to other relationships, intermediate ritual is comparatively suitable for the relationship with brother, and novice ritual is appropriate for the relationship with a stranger. Therefore, Zhuāng Zǐ's notion of perfect ritual may be the advanced ritual being applied to all people equally. Perfect ritual assumes that the closest relationship exists equally between an individual and all other people. Zhuāng Zǐ considered the competence of developing this closest relationship with all other people, and not just a few people, to be perfect.

Zhuāng Zǐ extended the logic within the perfect ritual to other moral values, such as perfect righteousness, perfect knowledge, perfect benevolence, and

perfect trust (Watson, 1968). The classification of perfect ritual, advanced ritual, intermediate ritual, and novice ritual demonstrates that ritual has different degrees, depending on how much the potential of human nature is being exploited. Furthermore, the notion of perfect righteousness, perfect knowledge, perfect benevolence, and perfect trust strengthens the idea that the potential of human nature needs to be cultivated in order to be fully exploited.

In an indirect way, Zhuāng Zǐ's philosophy has implications on the importance of personal principles. There is a lack of empirical research on Zhuāng Zǐ's philosophy in the strategy field. Besides, little is known about the role of personal principles in knowledge creation, dynamic managerial capabilities, and strategy innovation.

Applying personal principles serves as empirical evidence to Zhuāng Zǐ's philosophy. For instance, Zhuāng Zǐ claimed that perfect trust can be used to substitute gold (Watson, 1968). This is evidenced in Informant 2's case that he employed trust to procure soft drinks and even construction material with a large financial value from his suppliers. Trust allowed Informant 4 to persuade and recruit a key startup partner to sacrifice his short term financial gain to join his startup project. Informant 1 revealed that he could obtain better credit terms with higher trust. Hence, the findings extend Zhuāng Zǐ's philosophy to strategic management. Furthermore, the findings throw some light on the role of personal principles in the processes of knowledge creation and strategy innovation.

Mastering Chinese moral values and their applications as personal principles, and the development of these moral values from novice level to the perfect level is part of the processes of knowledge creation, strategy innovation, and development of managerial cognitive capabilities that underpin dynamic managerial capabilities. Helfat and Peteraf (2015) proposed the concept of managerial cognitive capabilities as the cognitive causal factors of certain top managers in the ownership of above-average capabilities for anticipating, interpreting, and responding to the requirements of a changing condition. Managerial cognitive capabilities are defined as “the capacity of an individual manager to perform one or more of the mental activities that comprise cognition” (Helfat & Peteraf, 2015, p.835). Cognition encompasses both “the mental activities involved in acquiring and processing information” and “an item of knowledge or belief” (Helfat & Peteraf, 2015, p.834). Examples of managerial cognitive capabilities include attention, perception, problem-solving, reasoning, and cognitive capabilities for language, communication, and social cognition (Helfat & Peteraf, 2015). Social cognition refers to “the mental processes involved in perceiving, attending to, remembering, thinking about, and making sense of the people in our social world” (Moskowitz, 2005, p.3).

Helfat and Peteraf (2015) suggested that these managerial cognitive capabilities are likely the underpinning of the three components of dynamic managerial capabilities, which are sensing opportunities, seizing opportunities, and asset orchestration. Specifically, superior attention and perception can enhance the accuracy of the identification of new opportunities and threats

(Helfat & Peteraf, 2015). Superior reasoning and problem-solving capabilities may be helpful for seizing opportunities, in terms of designing better business models and producing wise investment decisions (Helfat & Peteraf, 2015). Cognitive capabilities for language, communication, and social cognition may facilitate asset orchestration, in terms of creating trust, establishing cooperation, and overcoming resistance to change (Helfat & Peteraf, 2015). Therefore, better managerial cognitive capabilities can improve dynamic managerial capabilities and lead to better firm performance (Helfat & Peteraf, 2015). Helfat and Peteraf (2015) suggested that superior managerial cognitive capabilities come through practice, and further practice may lead to path dependence.

In this research, applying personal principles improves managerial cognitive capabilities and underpins dynamic managerial capabilities. Chinese moral values have their effect, where informants had strategically allocated their attention. Attention refers to “a state of focused awareness on a subset of the available perceptual information” (American Psychological Association, 2017). The Chinese moral values were utilized to filter stimuli by deciding on those that are relevant. As a result, informants may avoid ‘inattention blindness’ on the relationship with other people, including organization members, suppliers, customers, and social networks, while pursuing profitable growth. Inattention blindness is “the failure to attend to an event that occurs during the performance of another task” (Helfat & Peteraf, 2015, p.839). The ability to minimize inattention blindness may improve the process of paying attention and thus has strategic importance in the processes of knowledge creation and

strategy innovation. In addition, different cognitive ‘filters’ may yield different views on the business landscape and produce different strategies (Csaszar & Levinthal, 2016).

With respect to the cognitive capabilities of perception, informants employed Chinese moral values to guide their perceptual mental activity. Informants integrated perceptual data from the environment with Chinese moral values to make an appropriate response. The researchers suggest that the most notable differences between experts and novices are the abilities of the former to recognize the larger quantity of patterns in a timely manner and to react appropriately (NAMHC, 1996). The informants exploited Chinese moral values to assess the personality of their counterparts to determine whether they should create and maintain relationship with them, or vice versa. Knowledge of Chinese moral values facilitated the recognition of the pattern of the personalities that may be helpful for the mutual development of good relationships. A mutual effort is critical for creating trust and co-operation (Helfat & Peteraf, 2015). In addition, the compliance with the Chinese moral values made the response and business actions of informants to be more appropriate.

Informants considered applying the Chinese moral values as a type of problem-solving capabilities to overcome the challenges facing their organizations to attain long term business growth. By the time they first applied the Chinese moral values, informants believed that the long term gain is greater and more strategic than the short term gain. Later, they affirmed that their belief was

right, with the support of successful experiences in their businesses, and in comparison with a large number of competitors. One of the most critical problems they were encountering, in the long run, is to generate steady revenue growth. One of their solutions was to generate and maintain a relationship with good customers. The demonstration of high Chinese moral values is the key to gain acceptance from good customers. From the perspective of informants, good customers not only contribute to a significant revenue to their business over a long period of time but also to be co-operative and supportive to them. It is difficult for competitors to win good customers from the informants.

Chinese moral values enhance the social cognition, leading to superior social skills. Helfat and Peteraf (2015) asserted that the social cognitive capabilities of an individual vary from one to another. Galinsky et al. (2006) found that people differ in their inclination to take others' perspectives, knowledge, and emotion into account. Adjusting to other people's perspectives is difficult if there is a lack of consideration from their perspective. This may not only lower other people's inclination to co-operate but also miss out the information about opportunities within their perspective.

Findings reveal that informants made an effort to gain respect from the others by demonstrating ethical conduct, taking them into account, and even offering assistance to them to overcome hardship. For instance, Informant 2 knew that he needed to repay his debt to the soft drinks suppliers in a timely manner so that the supplier could trust him and supply more merchandise on credit. Informant 4 developed a trustworthy relationship with his customers to

constantly solicit information about their problems so that he could use the information for innovation and increase sales. Being benevolent and caring to his organization members, Informant 1 detected from the facial expression that his employee was in trouble while they were working together. When asked about the problem his employee was facing, the employee told him about his or her plan to resign from the company and to run away from a loan shark. With trust in Informant 1, the employee admitted that the debt was unbearable due to losses in gambling. Applying perfect righteousness, Informant 1 lent his money to his employee in order for his employee to repay the debt and obtained the promise of not to gamble again from the employee. Informant 1 thought that it was worthwhile to help because the employee performed well in his organization, and more importantly, he saved a family. The employee's family depended on the financial support of the employee. As a result, Informant 1 kept a well-performing employee and the employee had not made the same mistake again. This is consistent with Zhuāng Zǐ's notion of perfect righteousness. Specifically, perfect righteousness outweighs things (Watson, 1968). Here, the employee outweighs Informant 1's personal financial wealth by asking for his help.

Applying the idea of the Union of the Heaven and Man as personal principles is the utilization of the potential of human nature in relation to self. The philosophy serves as a guide on how Informant 3 may utilize the power of Heaven. This is feasible since nature is within human beings, and his talent is part of it. The finding provides empirical evidence to Zhuāng Zǐ's philosophy, particularly the carving skill of woodcarver, Ch'ing, as discussed in the

“Literature review” section. Applying the Union of Heaven and Man enabled Ch’ing to generate a creative perception, a bell within the tree (Watson, 1968). The finding helps fill in several research gaps in the studies of managerial cognitive capabilities underpinning dynamic managerial capabilities. Firstly, it uncovers creativity within the managerial cognitive capabilities. Creative, rather than ordinary perception can be a source of heterogeneity. Secondly, it reveals how the creative managerial cognitive capabilities may be attained. Both self-knowledge and knowledge of nature are important for the development of creative managerial cognitive capabilities.

5.1.4 Accessing sources of information

Few management research works examine the information accessible through the lens of Daoism and Zhuāng Zǐ’s philosophy, in particular. This study helps fill in the gap.

The informants concentrated on relevant information from distinctive sources of information and common sources of information. In a dynamic capabilities perspective, the acquisition of information is part of ‘absorptive capacity’ (Kor & Mesko, 2013; Lichtenthaler, 2009; Zahra & George, 2002). In their proposal of the concept, Cohen and Levinthal (1990, p.128) refer to the absorptive capacity as “the ability of a firm to recognize the value of new, external information, assimilate it, and apply it to commercial ends”. Absorptive capacities draw on the firm’s level of prior related knowledge to better and evaluate technology advancement and its value so that decisions on investment

in innovative capabilities can be made accordingly (Cohen & Levinthal, 1990). Cohen and Levinthal (1990) suggested that firm's inward-looking absorptive capacities contact internal sources of information, while outward-looking absorptive capacities connect with the external sources of information. Zahra and George (2002) divided absorptive capacity into potential absorptive capacity and realized it as absorptive capacity. Potential absorptive capacity consists of the capabilities to acquire and assimilate knowledge, while the realized absorptive capacity constitutes of the capabilities of transforming and exploiting knowledge (Zahra & George, 2002). Their notion of knowledge acquisition is related to accessing sources of information. Zahra and George (2002, p.189) regarded knowledge acquisition as "a firm's capability to identify and acquire externally generated knowledge that is critical to its operations". The quality of acquisition depends on the intensity and speed of a firm's efforts, while the knowledge path followed by the firm relies on the direction of the knowledge accumulation (Zahra & George, 2002). The findings of accessing the sources of information are consistent with the absorptive capacity with respect to the actions of knowledge acquisition.

Similar to the initiatives taken by inward-looking absorptive capacities and outward-looking absorptive capacities introduced by Cohen and Levinthal (1990), informants in this study also connect with the internal sources and external sources of information. Moreover, informants revealed that concentrating on relevant informants may enhance the intensity and speed of information acquisition. Despite that, Zahra and George (2002) hinted that little is known about individual capabilities that make up the firm's absorptive

capacity. Extant literature adopted the absorptive capacity predominantly as an organizational-level construct (Lane, Koka, & Pathak, 2006; Tortoriello, 2015). The research gap is important to understand the origin of organizational absorptive capacity because it is driven by the individual absorptive capacity (Cohen & Levinthal, 1990; Tortoriello, 2015).

The research provides a better understanding of the individual absorptive capacity for the development of dynamic managerial capabilities with the findings of novel information sources and different ways of accessing sources of information. Tortoriello's (2015) study is one of few research works on individual absorptive capacity. Tortoriello (2015) found that the ability of individual organization members to utilize external knowledge (or information) for innovation activities is subject to bridging opportunities present to them.

Categorizing information sources into internal and external sources has implications for the generation of innovation (Tortoriello, 2015). On one hand, internal knowledge exists inside the firm and is more likely to be homogeneous (Tortoriello, 2015). On the other hand, external knowledge is available outside the firm and is more likely to be heterogeneous, which may introduce the elements of novelty and diversity (Tortoriello, 2015). Tortoriello (2015) suggested important sources of external knowledge, such as funded projects, standardization of committees, collaboration with clients, collaboration with suppliers, conferences, scientific journals, patents, and collaboration with research institutions. Work relations with clients, suppliers, and research institutions are obviously part of the managerial social capital.

Tortoriello's (2015) study is not alone in recognizing social capital as an important source of information.

In the dynamic managerial capabilities literature, important sources of information come primarily from the managerial social capital, and those sources used in the development of managerial human capital. As discussed in the foregoing sections, both formal and informal relationships form the basis for managers to access information from their networks within and across firms (Helfat & Martin, 2015b). Most of the notable sources of information utilized in the development of managerial human capital are education, training, and work (Helfat & Martin, 2015b).

Currently, little attention to dynamic managerial capabilities literature is given to some information sources and ways of accessing these sources of information. Findings in the research reaffirm that training, work, and social capital are the important origins of information, but they also uncover a new one. For instance, the opportunity to take on special tasks may be a better source to attain diverse streams of information, if compared to the tenure in the position and homogeneous task for a long period of time.

Distinct from Tortoriello's (2015) study, the research classifies information sources into distinctive sources of information and common sources of information, rather than internal knowledge and external knowledge. In comparison with external knowledge, distinctive sources of information may provide greater heterogeneity, which may introduce more elements of novelty

and diversity. Particularly, distinctive sources of information may be available within an organization due to the context faced by each individual, such as unique job functions and special job opportunities.

As a CEO and leader of their respective firms, all informants have distinct job functions and privileged access to the information within firms, including those that were classified as private and confidential, and not available to most other organization members. Informants also had the opportunities to take on special tasks. During his former employment with a Malaysian branch of a multinational enterprise, Informant 3 was offered an opportunity to work in several oversea branches of the firm to solve a unique technology problem. Similarly, while working for a Malaysian branch of another multinational enterprise, Informant 4 had a special responsibility to lead a new technology development project from his employer.

The findings of accessing sources of information show the ways to have a better access to sources of information. How information is accessed can severely affect knowledge assimilation and the development of dynamic managerial capabilities. In the Autumn Floods chapter of *Zhuāng Zǐ*'s text, Jo of the North Sea warned that it is difficult for a well frog to understand the ocean because the space it lives in restrains its access to the ocean (Watson, 1968). Similarly, it is hard for a summer insect to have an idea of ice since a summer constitutes its entire lifetime (Watson, 1968). Jo added that it is challenging for a cramped scholar to apprehend the Way as the individual is constrained by personal doctrines acquired in the past (Watson, 1968). In the

strategic management literature, it is recognized that prior knowledge may generate cognitive rigidity that hampers the understanding of novel information (Danneels, 2010; Gibert, 2005; Leonard-Barton, 1992a).

To resolve this issue, Jo's arguments can be used as a hint on how this limitation on knowing can be overcome. Jo commented that the Lord of the River can understand something beyond the limitations in his life after several actions being taken (Watson, 1968). The Lord of the River made it possible by moving beyond the river banks and borders of where he lived and had spotted the great sea (Watson, 1968).

These actions imply that cognitive rigidity can be overcome by establishing access to sources of information about things outside a manager's limits in terms of space, time, and prior knowledge. In this study, informants strive to access the greatest possible variety of information sources and information from experts in various fields. These origins of information have been categorized into distinctive sources of information and common sources of information. Due to the information overload, the informants only concentrated on relevant information and disregarded irrelevant information. This is particularly important in the condition of problem-solving, which involves information search that is directed by problem-solving needs. In these ways, informants had better access to information sources.

5.1.5 Creating tacit understanding

The creation of tacit understanding is related to an individual's absorptive capacity to assimilate information (Cohen & Levinthal, 1990) and transform information (Todorova & Durisin, 2007). Cohen and Levinthal (1990, p.129) asserted that to understand novel knowledge, an individual needs "the breadth of categories into which prior knowledge is organized, the differentiation of those categories, and the linkages across them." Understanding new knowledge involves the associations between things to be learned and prior related knowledge (Cohen & Levinthal, 1990). Hence, learning may be comparatively easier and faster in areas with a certain level of familiarity, and on the contrary, may be relatively difficult and slow in new areas (Cohen & Levinthal, 1990). However, the type of learning highlighted by Cohen and Levinthal (1990) represents only a part of individual learning. Further knowledge is needed to better understand how individuals learn.

There are other types of individual learning that have equal importance within the individual absorptive capacity and it may be more appropriate to be applied in different circumstances. Based on two alternative processes of how cognitive structure responds to new knowledge, Todorova and Durisin (2007) classified two individual learning into assimilation and transformation. Both processes share a similar assumption, where the learning process entails achieving a match between new knowledge and the existing cognitive schema (Todorova & Derision, 2007). Assimilation will be applied if the new idea is highly compatible with the existing cognitive schemas, which implies that

changes in the existing cognitive structure are not needed (Todorova & Derision, 2007). In this scenario, a little alteration will be made to the new idea to enhance the compatibility, so that it can be assimilated into the existing cognitive structures (Todorova & Derision, 2007). The transformation will be employed if the new idea cannot be modified to match with the existing cognitive schemas (Todorova & Derision, 2007). In this situation, the existing cognitive structure will be transformed to match the new idea (Todorova & Derision, 2007).

Prior related knowledge is generally deemed to be the most important factor for the best learning performance in both absorptive capacity and dynamic managerial capabilities literature. Cohen and Levinthal (1990) argued that the accumulation of relevant expertise makes further learning in the relevant areas more efficient in a changing environment. In addition, holding prior knowledge in stock is believed to be able to improve the comprehension and assessment of a new technology's potential benefits and forming expectations (Cohen & Levinthal, 1990). Generally, the expectation may be comparatively higher in a particular technological domain that is close to the firm's existing knowledge base and may be relatively lower in other technological domains that are far from the firm's current stock of knowledge (Cohen & Levinthal, 1990). The expertise in a particular technological domain improves the firm's sensitivity and access to the emerging technological opportunities in that domain (Cohen & Levinthal, 1990).

Researchers have a contradictory view on the usefulness of prior knowledge for individual learning. In their review of research on the managerial human capital underpinning dynamic managerial capabilities, Helfat and Martin (2015b) tentatively concluded that empirical evidence from the research is indicative of the majority of the modes of education, and prior related work experiences are frequently useful rather than damaging, to the strategic change and company performance under the changing environment. In this respect, evidence in managerial human capital research seems to be contradictory to that in managerial cognition research (e.g. Danneels, 2010, Traipses & Gavetti, 2000). Helfat and Martin (2015b) stressed that more research is needed to understand the situations where managerial human capital, cognition, and social capital have a constructive, destructive or no influence on strategic change. The finding of “creating tacit understanding” in this study helps to close the gap.

Despite its advantage, prior knowledge has limitations in the adaption to change. As the expectation increases, the gap to achieve the aspiration level grows larger, which triggers the firm’s investment in further innovation activity in the technological domain to exploit the opportunity (Cohen & Levinthal, 1990). Therefore, prior related knowledge is accumulated in a dynamically self-reinforcing manner, which may lead to path-dependency, organizational inertia, and may be ignorant to the technological development in domains distant to the firm’s existing knowledge base (Cohen & Levinthal, 1990).

The assimilation mode of understanding may generate a greater rigidity than the transformation, as no adaptation of the existing cognitive structure to external environmental change is conducted in the former. The misfortune of Polaroid in Tripsas and Gavetti (2000) and Smith Corona in Danneels (2010) are examples of the downside of the inflexible managerial knowledge structures. In contrast, Nadkarni and Narayanan (2007) discovered that the strategic flexibility of complex knowledge structures increases the chance of success in the fast-changing environment. The comparison between the flexible and rigid knowledge structure shows that the perspective adopted by managers has a profound influence in creating tacit understanding and inducing distinct effects on the adaptation to environmental change.

Prior knowledge has the second limitation in its application in the adaption to change, that is, it may not be relevant to changes in the environment being encountered. Scanning the environment, identifying and understanding what may be relevant to changes that are needed, and how it is relevant is challenging to managers. The value of resources may decrease following the impacts resulting from changes in the external environment, like technology and distribution (Danneels, 2010). As prior knowledge is an intangible resource, a decrease in value may happen when prior knowledge is irrelevant to the new technological development and the emergence of discontinuous innovation.

A typical example of a decrease in knowledge value is the knowledge in the typewriter industry possessed by Smith Corona's CEO. A director of the

company suggested to the CEO that computers might offer better business prospects (Danneels, 2010). In his objection to the director's suggestion, the CEO insisted that the director did not understand Smith Corona's target market (Danneels, 2010). The CEO implies that he is knowledgeable in the typewriter industry, and did not see how the industry is related to, and affected by, computers. Based on the knowledge of typewriter's functionalities, the CEO estimated that typewriter has a price advantage over computer and is likely to be the winner in the market (Danneels, 2010). However, the knowledge of typewriter's functionalities did not enable the CEO to understand the potential of computers and make a better comparison between typewriters and computers. Such a comparison may provide a better understanding as to why the computers would eventually substitute typewriters in the market.

In fact, the technological development in Smith Corona is highly path-dependent and domain-specific. Smith Corona focused its research and development activities on developing new typewriters for the office market and ignoring the non-office markets since the product category was the company's largest source of revenue (Danneels, 2010). The research and development activities enabled Smith Corona to change its mechanical typewriters to electric typewriters and subsequently to electronic typewriters and personal word processors (Danneels, 2010). The transition to personal word processors was unsuccessful because Smith Corona understands how their product could benefit customers rather than what the customers need, their purchase behaviors, and the fact that they lack profound customer understanding (Danneels, 2010). Therefore, it is reasonable to propose that Smith Corona's

prior knowledge and product development eventually become irrelevant to the customers.

The third limitation of prior knowledge is that some of them are not fungible, which is to be utilized for new uses, novel understanding, and strategic change. The degree of fungibility is varied among resources (Danneels, 2007). It happens because some resources have been transformed from a generic resource — a highly fungible state, to a product-specific resource — a state of limited fungibility (Danneels, 2007). Prior knowledge of Smith Corona is an example of a resource with limited fungibility. Particularly, their customer understandings were product-specific, such that how their products could serve their customers (Danneels, 2010). After their products failed in the market, they were not able to leverage the product knowledge for new use (Danneels, 2010).

Zhuāng Zǐ had been well aware of the three limitations of prior knowledge. Zhuāng Zǐ thought that a rigid knowledge structure constrains an individual's ability to make a strategic change. An example is Hui Tzu's thought about the use of a huge gourd. Hui Tzu thought that huge gourds are useless according to his prior knowledge (Watson, 1968). In his perception, gourds were utilized only as water containers and dippers (Watson, 1968). As a water container, huge gourds were too heavy for Hui Tzu to heave (Watson, 1968). As a dipper, huge gourds were oversized to put in most other objects that were smaller in size (Watson, 1968). In the opposition, Zhuāng Zǐ thought that huge gourds were useful if they could be leveraged for novel uses (Watson, 1968). Zhuāng Zǐ

proposed to apply huge gourds as great tubs for Hui Tzu to stay afloat on the water while crossing the waterways and lakes (Watson, 1968). Hence, Zhuāng Zǐ discarded the conventional uses of gourds from prior knowledge and leveraged huge gourds by exploring new ways of using it.

Secondly, Zhuāng Zǐ noted that prior knowledge may not be relevant to changes in the environment. In Zhuāng Zǐ's text, Zhū Píng-Màn is a person similar to the CEO of Smith Corona. After Zhū Píng-Màn learned the technique of slaying dragons, he found that there was nowhere to apply his knowledge (Watson, 1968). Since Zhū Píng-Màn could not find a dragon in real life, his knowledge is irrelevant to his targeted customers (Watson, 1968). The dragon is analogous to the wishful market perceived by the CEO of Smith Corona. After heavy investment in developing new typewriter products and personal word processors, Smith Corona discovered that there was a lack of market for this product category (Danneels, 2010).

Thirdly, Zhuāng Zǐ noticed that the fungibility of prior knowledge is important for creating tacit understanding about new skills. An instance in Zhuāng Zǐ's philosophy is Yen Yuan's discovery of a ferryman who was exceptional in steering a boat (Watson, 1968). According to the ferryman, his boat steering skill can be learned (Watson, 1968). The ferryman added that a competent swimmer can master the boat steering skill in a short time (Watson, 1968). Moreover, the capability of swimming underwater enables a man to know the boat steering skill without learning and having knowledge of a boat (Watson,

1968). Since the swimming skill can be a prior knowledge for boat steering, it is fungible.

Findings from the research on creating tacit understanding via experiencing working processes, memorizing, and thinking about prior knowledge, offer empirical evidence on how dynamically managerial capable entrepreneurs develop a tacit understanding about the information they received. In particular, the processes contribute to how flexible the knowledge structure, relevance, and fungibility of prior knowledge were attained. First of all, the relevance of prior knowledge emerged when entrepreneurs were selective on job options. To clarify, being selective on job options does not mean that entrepreneurs take on a specific job function and accumulate working experience in the area as a specialist. Rather, entrepreneurs choose those jobs that match their long term objectives. When Informant 2 received three job offers after completing his undergraduate studies, he chose an option that provided opportunities to work in various civil engineering projects. Being selective on job options, Informant 2 rejected a specialist job function in a reputable multinational oil and gas company with the highest pay among the three options. Furthermore, Informant 2 did not only work on demand from his employer but more importantly, he proactively requested an involvement in a job that he was interested in. This implies that not all of the job working experiences are relevant to Informant 2's competency development. It, therefore, informs that his tenure in a working position does not necessary indicate his level of competency.

Other informants were selective on job options too. During his employment in a multinational firm, Informant 4 had to work extended long hours. Informant 4 spent normal work time to satisfy the job demand of his employer. With the consent of his employer, he also worked overtime, which frequently included the weekend. The extended time is very much needed to work on jobs that Informant 4 proactively requested without interrupting his normal tasks.

Informant 3 was selective on job options. Informant 3 focused on specific software for two years. To attain his objective, he was willing to resign from a senior position in the famous multinational company that he worked for. It is obvious that Informant 3 had sacrificed promising financial rewards.

Similarly, selective job options are key to Informant 1. In the early stage of starting a new business with his partner, they helped their customers to design various electronic components and sell a variety of consumer electronic products. In this business model of reactively responding to customer demands, Informant 1's startup did not generate much revenue. Subsequently, Informant 1 concentrated on research and development activities on a strategic electronic component. Following the transition, Informant 1's firm grew steadily.

Secondly, informants attained a flexible knowledge structure by updating and advancing their knowledge structure with working experience constantly. Informants did not take their prior knowledge as orthodox. Rather, they accumulated considerable, diverse, and relevant working experience with the extensive workload. The continuous renewal of their knowledge structure

through learning by working persistently allows informants to capture and handle the recent changes in their working environment.

Thirdly, entrepreneurs in the research attained the fungibility of prior knowledge by way of recognizing and developing their competencies in an area with the potential to be applied in different ways. After years of self-learning, Informant 3 noted that mathematics knowledge has multiple applications. Informant 1 chose to focus on research and development activities related to a strategic electronic component because the item is required in producing a variety of electronic products. Similarly, Informant 4 concentrates on the advancement of automation machinery technology. Core to his firm's product innovation, the automation machinery technology forms the basis for creating different products. Informant 2 developed expertise in civil engineering intentionally. The improvement in his expertise enabled him to provide various engineering services, such as constructing high rise buildings and bridges, as well as inventing civil engineering technologies and products.

Achieving tacit understanding through memorizing and thinking is one of the ways to exploit the fungibility of prior knowledge. Memorizing is important for entrepreneurs to leverage advanced knowledge that is not apprehensible and applicable instantly. This is especially critical for that advanced knowledge that is generic, such as mathematics. Thinking is needed to associate knowledge in the memory with diverse contexts where the entrepreneurs are working so that they can generate new uses.

5.1.6 Originating creative initiatives

There is a lack of understanding of creativity in nascent research on dynamic managerial capabilities. Creativity is an important managerial behavior that influences organizational decisions and outcomes (Helfat et al., 2007). In particular, creativity is needed for a company's innovation activities (Teece, 2017a). Creativity is needed in dynamic capabilities to sense opportunities and seize the opportunity by creating and applying novel solutions (Teece, 2007). Helfat and Martin (2015a) suggested that dynamic managerial capabilities may support creativity in generating changes like technological innovation and business model innovation. Further research on creativity is needed to understand how creative thinking and behavior produce novel ideas and insights to affect strategic changes and innovation outcomes, leading to corporate performance (Helfat et al., 2007). Despite its central importance to change, creativity has received little attention in dynamic managerial capabilities research (MacLean, MacIntosh, & Seidl, 2015). This research offers assistance to bridge the gap.

The dynamic managerial capable entrepreneurs of this research utilized their tacit knowledge to create new ideas and novel insights for their new businesses. The finding is consistent with Teece's (2007, p.1330) observation on the relationship between creativity and tacit knowledge in his conceptual paper, "designing a new business requires creativity, insight, and a good deal of customer, competitor, and supplier information and intelligence. There is a significant tacit component". Focusing on the creativity of managers, creativity

research may uncover the actual creative actions that clarify the concept of dynamic capabilities in the practice of generating, extending and altering the firm's resource base (Helfat et al., 2007).

The entrepreneurs generated creative ideas and new insights via conscious thinking processes and unconscious thinking processes. Based on insights from psychology research and related fields, Helfat and Peteraf (2015) claimed that System 1, or automatic mental processing of information and System 2, or controlled mental processing of information underpin dynamic capabilities for sensing, dynamic capabilities for seizing, and dynamic capabilities for re-configuring. Unconscious thinking and System 1 mental processing are two terms that denote the mental processing of information with the features of being automatic and unconscious (Stanovich & West, 2000). In addition to System 1 mental processing and unconscious thinking, there are other representative terms, which include "tacit thought processes", "intuitive cognition", and "automatic processing" (Stanovich & West, 2000).

On the other hand, conscious thinking and System 2 mental processing are two terms that represent the mental processing of information with the characteristics of being controlled and analytical (Stanovich & West, 2000). Despite System 2 mental processing and conscious thinking, other terms that have been used to name the mental process include "explicit thought processes", "analytical cognition", and "controlled processing" (Stanovich & West, 2000). Thus, the findings on how the entrepreneurs generated creative ideas and new insights via conscious thinking processes and unconscious

thinking processes provide further insight into the developmental processes of dynamic managerial capabilities.

The entrepreneurs' capabilities to perform conscious thinking processes and unconscious thinking processes are part of the managerial cognitive capabilities. In line with Helfat and Peteraf (2015, p.835), the managerial cognitive capability is defined as “the capacity of an individual manager to perform one or more of the mental activities that comprise cognition”. Managerial cognitive capabilities offer an underpinning for the dynamic managerial sensing capabilities, dynamic managerial seizing capabilities, and dynamic managerial re-configuring capabilities (Helfat & Peteraf, 2015).

Managerial cognitive capabilities that under-gird dynamic managerial sensing capabilities encompass perception and attention (Helfat & Peteraf, 2015). Unconscious thinking empowers perception to conduct swift pattern recognition, — a characteristic of a high performer's skill (Helfat & Peteraf, 2015). With regard to attention, unconscious thinking, to a certain degree, raises attention to the information within sensory stimuli and is responsible for the alert state of the mind (Helfat & Peteraf, 2015). Conscious thinking allocates and focuses on the process of looking for a subject of interest (Helfat & Peteraf, 2015).

Managerial cognitive capabilities that bolster dynamic managerial seizing capabilities include problem-solving and reasoning (Helfat & Peteraf, 2015). Problem solving and reasoning rely on conscious thinking to utilize formal

rules of logic or other rational methods, and largely reduce the dependency on prior knowledge (Helfat & Peteraf, 2015). In comparison, problem-solving and reasoning need unconscious thinking to employ the automatic “heuristic processing” that is in particular suitable for overcoming ill-defined problems or well-defined but complex problems (Helfat & Peteraf, 2015). “Heuristic processing” is a reasoning process that involves fast response and judgments on the basis of overall commonalities between the present stimulus and prior associated stimulus (De Neys, 2006). Heuristic processing starts from the speculation of a tentative answer to a problem and working backward to examine whether the answer is appropriate, or vice versa (Helfat & Peteraf, 2015).

The findings of originating creative initiatives relate to conscious thinking and unconscious thinking, which had been applied in the managerial cognitive capabilities underpinning dynamic managerial sensing capabilities and dynamic managerial seizing capabilities. All four informants had consistently employed unconscious thinking in order to sense and seize opportunities. Firstly, all four informants employed unconscious thinking in problem-solving as the solutions emerged automatically into their thoughts. As reported in the Findings section, creative ideas emerged before Informant 1 fell asleep or at the time he woke up. Similarly, company vision and mission came into Informant 4’s thought while he was sleeping or at midnight. It happened again, during rest time, whereby Informant 2 unconsciously associated the shape of chocolate he was eating to an idea of a new civil engineering product.

Informant 3 offered a unique example of solving a problem with unconscious thinking. Informant 3 highlighted that the availability of thinking aid is a must for him to effectively and efficiently solve a problem. Informant 3 used the achievement of Andrew Wiles in successfully solving Fermat's Last Theorem as an example to illustrate the importance of a thinking aid. According to Informant 3, contemporary breakthroughs in mathematics had been applied by Andrew Wiles and served as an important thinking aid that made solving Fermat's Last Theorem possible. When the amount of thinking aid became enormous, each of the many thinking aids that started as a thinking tool may be accumulated and organized into a thinking toolbox, and then transformed into an "automatic machine". The analogy of a stock of thinking aids in becoming an "auto machine" obviously signifies that the application of thinking aid in mental activities involves automatic thinking processes, which is a characteristic of unconscious thinking.

Secondly, Informant 2 utilized unconscious thinking in his attention to identify a latent need for a new civil engineering product. During his experience of using existing civil engineering products, the weakness of these civil engineering products raised his awareness. Existing civil engineering products were either costly, short in supply, or suitable only for small or large construction, but not for medium construction. The awareness of Informant 2 is therefore similar to "a phenomenon called "pop-out" that occurs when a stimulus differs sufficiently from the ones around it that it grabs our attention automatically" (Helfat & Peteraf, 2015, p.839). The automatic allocation of attention is a distinctive feature of unconscious thinking.

Thirdly, Informant 3 utilized unconscious thinking in constructing useful and meaningful information about subjects and the environment being studied with thinking aids. This phenomenon conforms to Helfat and Peteraf's (2015) contention that expert chess players depend on unconscious thinking to recognize the pattern of chess positions comparatively faster than novice chess players. In particular, unconscious pattern recognition happens as Helfat and Peteraf (2015, p.838) commented that "familiar or meaningful constellations of pieces that are already structured... in long-term memory... enabling more rapid pattern recognition". The superior pattern recognition comes through a continuous practice over many years (Helfat & Peteraf, 2015).

In this research, thinking aids such as mathematical theories and Chinese idioms were effective for Informant 3 to generate a swift recognition and suitable reaction. Mathematical theories appear to be a foundation for solving mathematical problems. Chinese idioms that came from historical experience provide useful lessons about similar events or situations. The unconscious thinking is achieved at least through three types of mechanisms, namely 1) storage of familiar or meaningful information in long-term memory, 2) organization of familiar or meaningful information in long-term memory, and 3) practice over a long period of time.

Despite unconscious thinking, informants had also applied conscious thinking in the managerial cognitive capabilities underpinning the dynamic managerial sensing capabilities and dynamic managerial seizing capabilities. Helfat and

Peteraf (2015) hinted that conscious thinking enables the brain to concentrate. Concentration is especially important to active search for a specific feature, object, or event (Helfat & Peteraf, 2015). Findings show that Informant 1 paid attention to an active search for “bugs” (major new obstacles) in his work and “debug” (overcoming these obstacles). Similarly, Informant 4 also emphasized the importance of concentration in originating creative initiatives, with specific focus on developing and constantly upgrading his new machine automation technology to be at par with the world-class standards.

While the concept of managerial cognitive capabilities sheds light on the importance of conscious thinking and unconscious thinking to dynamic capabilities, the work of Helfat and Peteraf (2015) offers little knowledge on how conscious thinking and unconscious thinking lead to creative ideas and innovative outcome. Such understanding is important as creativity and innovation are distinctive features that distinguish dynamic capabilities from the operational capability (Helfat & Martin, 2015a). Moreover, creativity and innovation are the core to create a novel strategic change. As managerial cognitive capabilities underlie the dynamic capabilities, creativity is part of the managerial cognitive capabilities. Besides, creative thinking is widely accepted as being part of the cognitive process (Runco, 2014). Hence, the findings of originating creative initiatives help better understand creative thinking.

Creativity research offers a partial understanding of how conscious thinking and unconscious thinking lead to creative ideas and innovative outcomes. Discoveries from the creativity field reveal that creative thinking rests on

unconscious thinking (Gilhooly, Georgiou, & Devery, 2013; Runco, 2014) and ordinary thinking (Weisberg, 2006). The notion of “unconscious thinking” and “ordinary thinking” share some commonalities and differences with the dual-process theories of “unconscious thinking” and “conscious thinking” adopted in the concept of managerial cognitive capabilities. The similarities exist due to their intellectual roots in cognition psychology.

In creativity research, “ordinary thinking” has four distinctive features. Firstly, thoughts can lead one to another, or connect one to another on the account of similarity and logical reasoning (Weisberg, 2006). Secondly, ordinary thinking relies on past experiences (Weisberg, 2006). Thirdly, knowledge and expectations guide ordinary thinking (Weisberg, 2006). Last but not least, ordinary thinking is easily affected by environmental events (Weisberg, 2006).

A comparison between ordinary thinking and conscious thinking involves revealing the relationship between creativity and managerial cognitive capabilities. Ordinary thinking is identical to conscious thinking in which both of them employ logic, reasoning, deliberation, and expectation-directed behavior. The other two characteristics of ordinary thinking that resemble those of unconscious thinking are sensitive to environmental events and prior experience-dependence. Commonalities between ordinary thinking and unconscious thinking exist because conscious thinking shares some characteristics of unconscious thinking (Stanovich & West, 2000).

In the creativity field, researchers hold two different views of unconscious thinking. The first view suggests that unconscious thinking is the same with conscious thinking (Weisberg, 2006). The only major distinction between the two thinking is that unconscious thinking is capable of operating parallel processing, while conscious thinking can only run serial processing (Weisberg, 2006).

The second view proposes that unconscious thinking is different from conscious thinking (Weisberg, 2006). In this view, unconscious thinking consists of unconscious associations and unconscious processing (Weisberg, 2006). Unconscious associations refer to the connections between ideas for unknown reasons (Weisberg, 2006). Unconscious processing is the working of unconscious thought with unconscious associations (Weisberg, 2006).

Both conscious thinking and unconscious thinking have distinctive strengths in creative thinking. Conscious thinking is efficient when creative output or solution to a non-insight problem can be produced straightaway (Ward, Smith, & Finke, 1998). However, unconscious thinking is especially important for overcoming mental block or fixation cast by prior experience in the conception (Ward, Smith, & Finke, 1998).

There are a few studies that offer knowledge on how conscious thinking and unconscious thinking empower managerial cognitive capabilities to produce creative ideas and innovative outcome. The psychology field confesses that there is a lack of knowledge on the cognitive basis of creative thought (Beatty,

2014). The foregoing discussion shows that both conscious thinking and unconscious thinking can be applied by managerial cognitive capabilities to generate creative thought and non-creative thought. Furthermore, there is a lack of sufficient empirical evidence on the advantage of unconscious thinking (Ritter, Baaren, & Dijksterhuis, 2012). The findings of originating the creative initiatives help to close the gap.

In Zhuāng Zǐ's philosophy, inactivity is used to foster conscious thinking and unconscious thinking for generating creative output. The creative output is a bell stand, which amazed its audiences to be a masterpiece made by a woodworker named Ch'ing (Watson, 1968). Before making the bell stand, Ch'ing needed to maintain his heart, so that he could forego distracting thoughts like thoughts of skills or clumsiness, of congratulations or rewards, and even his own body (Watson, 1968). After his skill is concentrated, he would observe the Heavenly nature of the trees and identify a tree with the superlative form in the mountain forest (Watson, 1968). Within the tree, Ch'ing could perceive a bell stand, which allows him to do the carving work with his hand accordingly (Watson, 1968). Ch'ing confessed that the process was his way of joining up "Heaven" (nature of the tree) with "Heaven" (nature of his cognitive capabilities) (Watson, 1968). Ch'ing's comment shows that he employed both conscious thinking and unconscious thinking in his creative act. An example of Ch'ing's applied conscious thinking is concentration, while instances of Ch'ing's employed unconscious thinking are conceiving a bell stand in a tree and carving the wood in a natural manner, instead of in a self-controlled way. Most importantly, what is lacking in the Western literature is

Ch'ing's application of inactivity in conscious thinking and unconscious thinking for producing creative actions. Ch'ing's application of inactivity appears to be a practical example of the fasting of the heart.

The findings of originating creative initiatives provide empirical support to Zhuāng Zǐ's insight on how inactivity strengthens conscious thinking and unconscious thinking in the processes of creative actions. Inactivity happened when informants did not consciously conduct creative work, or consciously active, but this moment of void in conscious thought gave rise to an 'aha experience' (the mental experience of the emergence of the sudden and unexpected idea). Inactivity conditions found in the research include the time informants were falling asleep, waking up, and taking a rest. Inactivity enhances creative thinking as it allows unconscious thinking to receive more allocation of mental resources from the brain's limited capacity than conscious thinking.

Empirical evidence in the research also reveals that inactivity enhances conscious thinking by facilitating concentration. In the research, Informant 1 focused on strategic problem solving via his unique debug approach, while Informant 4 concentrated on the development of his new machine automation technology. They were reluctant to divert their attention to unrelated matters, such as to invest in unrelated real property business. Inactivity helps to focus by eliminating unnecessary attention to non-core activities.

Next, findings in the research uncover that unconscious thinking is more effective than conscious thinking in challenging conditions of producing creative thought. Informant 3 emphasized collecting thinking aids for effective use in solving difficult mathematical problems, and generating useful and meaningful information about subjects and the environment being observed in an automatic manner. Informant 2 unconsciously discovered a gap between the existing civil engineering and construction needs. The emphasis on unconscious thinking resonates with Ch'ing carving the wood in a natural manner rather than in a self-controlled way.

5.1.7 Applying great knowledge

Informants stressed that distinctive management capability, which is labeled as “great knowledge” in this research, is key to the generation of effective strategic change. This finding extends researchers’ understanding of the characteristic of dynamic managerial capabilities and Zhuāng Zǐ’s concept of great knowledge in dynamic capabilities with empirical support. This is in line with the distinctive focus of the dynamic managerial capabilities concept on the capacity of the managers to produce strategic change individually and in a team effort (Helfat & Martin, 2015b). Adler and Helfat (2003) found that executives were dissimilar in their management capability, which may lead to different corporate performances.

Understanding the managerial capabilities of the executives is important as they determine and direct organizational working processes toward achieving

organizational goals (Augier & Teece, 2009). This is evident in the former Apple's CEO, Steve Jobs as an instance of a manager with distinctive management capability (Teece, 2012). However, previous research is lacking the knowledge of the characteristics of distinctive management capability and its relevance to Zhuāng Zǐ's concept of great knowledge.

Zhuāng Zǐ differentiated knowledge into great knowledge and "little knowledge" (Watson, 1968), which may be equivalent to advanced management capability and novice management capability. To illustrate his idea, Zhuāng Zǐ compared the capabilities of a giant bird P'eng with the cicada and the little dove (Watson, 1968). P'eng was capable of ascending as high as 90,000 *li* (a unit of measurement used by ancient Chinese to measure height), while the cicada and the little dove could only spring up to the elm or the Sappanwood tree and they even failed occasionally (Watson, 1968). Obviously, P'eng is an icon with great knowledge, while the cicada and the little dove are symbols of little knowledge. Furthermore, Zhuāng Zǐ argued that little knowledge cannot match up great knowledge in achieving a higher standard of performance (Watson, 1968). Therefore, the difference between great knowledge and little knowledge is analogical to the dissimilarity between advanced management capability and novice management capability. On this account, Zhuāng Zǐ's insight on great knowledge may improve the understanding of dynamic managerial capabilities.

Although Zhuāng Zǐ did not explain the great knowledge directly, his philosophy did imply the three dimensions of great knowledge. The philosophy

lies with Zhuāng Zǐ's three epistemological questions related to his exact knowledge about the sky. Firstly, Zhuāng Zǐ questioned the true color of the sky (Watson, 1968). It is difficult to find a definite answer to the question because the color varies according to the weather, places, day time, night time, and many other factors.

The discovery of applying great knowledge in the research reveals that the changes in the sky's color are analogical to informants' capabilities to create strategic change to align with the changes in the external environment. Therefore, this dynamic dimension of great knowledge is labeled as "encountering change".

Secondly, Zhuāng Zǐ asked about where the end of the sky is (Watson, 1968). The exact knowledge about the sky should cover the entire sky, not just part of it. It is important to determine the end of the sky together with the beginning of the sky, in order to identify the whole body of the sky.

In the research findings, the body of the sky represents the body of informants' capabilities that encompass the number of relevant skills and proficiency of each skill that can help grow the business. Hence, the dimension of the great knowledge that signifies the body of great knowledge is denoted as "achieving greatness".

Thirdly, Zhuāng Zǐ raised a doubt whether seeing down from the sky was the same as looking up from the ground or vice versa (Nán, 2007a). The sky has

different meanings when it was observed from different perspectives. For instance, Zhuāng Zǐ argued that a damp place would cause a man's backaches and made him half-paralyzed if it was where he slept (Watson, 1968). However, sleeping at a damp place is unlikely to cause a loach backache (Watson, 1968).

The findings of applying great knowledge uncover the fact that informants avoid an individualistic perspective (self-importance or selfishness), and see themselves as an individual within a bigger entity, which is a "team". The perspective is essential to the direct action of the "team" rather than themselves as an individual only. Thus, the dimension of the great knowledge representative of this position of great knowledge is labeled as "acting as a great self".

In summary, past research on dynamic managerial capabilities focuses on functions of dynamic managerial capabilities to sense and seize opportunities and reconfigure organizational resources and competency, while the great knowledge concept throws light on three facets of dynamic managerial capabilities corresponding to these functions.

5.1.7.1 Acting as a great self

The informants pointed out that they operated their business by working as a "team" mindset, which reflects on the label of "acting as a great self". The informants highlighted that it was their effort to collaborate with others as a team rather than work individually to get to what they had achieved in their

businesses. The term “great self” is a specific mindset they adopted in the collaboration, which involves seeing things from the perspectives of their collaborators.

The finding of “acting as a great self” is consistent with prior research on dynamic managerial capabilities. The most important commonality between the findings of Martin’s (2011) and acting as a great self being managers’ capacity to “work as team” is a key attribute of dynamic managerial capabilities. In comparison with the selected set of business-unit general managers in lower-performing multi-business firms, Martin (2011) found that the observed set of business-unit general managers in higher-performing multi-business firms exhibited behaviors like a “team”, instead of a “set” and a “group”. Martin (2011) argued that a “set” consists of individual actors who share a similar role, and a “group” comprises individual actors who own a common objective. In contrast, a “team” is made up of individual actors who work interdependently with each other (Martin, 2011). Martin (2011) linked a greater extent of cross-business unit collaboration behaviors and reciprocal interdependence among general managers within multi-business firms with higher firm performance. Similarly, informants in this research acknowledged the value of interdependence from acting as a great self and collaborating with their suppliers, co-workers, and even the heaven.

Next, Martin (2011) discovered that a collective focus, following the establishment of reciprocally interdependent relationships, enhances GM’s capabilities to sense and seize opportunities, as well as to detect and overcome

threats. In this research, informants enjoy the reciprocal benefits provided and the key support received from their coworkers and suppliers. Informant 1 and his suppliers were saving each other during their hard time. Informant 2 shared intellectual property with some of his coworkers who had a significant contribution in producing their innovation outcome.

Despite the commonalities in the findings between Martin's (2011) research and this research, the findings of "acting as a great self" reveal a greater extent of interdependence that may lead to higher firm performance. In Martin's (2011) research, interdependence exists among a set of general managers within a multi-business firm. In this research, interdependence emerges in the micro-level like collaboration within an innovation project team, and also in the macro-level like inter-organizational assistance. Thus, the term "great" reflects this larger extent of inter-dependency.

Moreover, Martin's (2011) research is situated at the group level of analysis, while the findings of this research describe the cognitive processes of individual entrepreneurs. As a result, Martin (2011) proposes a new construct, "episodic team" to denote an executive leadership group that episodically exhibits a high degree of frequent "team like" behaviors. In contrast, this research suggests the construct of "great self" to reflect the empathetic mindset of an individual entrepreneur in keeping a collective focus underpinning his engagement in an episodic "team" as defined in this research.

The notion of “self”, instead of “team” is important to highlight informants’ mindset, or a dominant logic (Prahalad & Bettis, 1986), taking others’ perspectives into consideration. This mindset enhanced the development of higher interdependence within the team. In their first introduction of the concept, Prahalad and Bettis (1986, p.491) defined dominant logic as “a mindset or a world view or conceptualization of the business and the administrative tools to accomplish goals and make decisions in that business”. A dominant logic must match with changes in the environment to produce appropriate responses (Prahalad & Bettis, 1986). In addition, dominant logic can predispose an organization to some types of strategic problems and generate these problems through its regular interactions with organizational systems and structures (Bettis & Prahalad, 1995). An outdated dominant logic is a primary root of managerial inertia that induces the resistance to strategic change and subsequent business failure (Bettis & Prahalad, 1995). A lack of past research on effective dominant logic rendering much understanding about ideal dominant logic is needed. The finding of “acting as a great self” helps address the gap by showing “great self” as an effective dominant logic.

The findings reveal that a key feature of “acting as a great self” is the informants’ utilization of morality in orienting their business actions to create a positive reaction and consistent collaboration from organization members, stakeholders, and the society. In their conceptual paper, Kor and Mesko (2013) propose that dominant logic is grounded on the three underlying elements of dynamic managerial capabilities, which are cognition, managerial human capital, and social capital. Specifically, dominant logic is generated from the

application of these elements in the process of making sense of the stimuli and information particular to a firm and its environment (Kor & Mesko, 2013). Findings in the research provide an empirical understanding of the influence of the three underpinnings of dynamic managerial capabilities on dominant logic.

Regarding the managerial human capital, Kor and Mesko (2013) claimed that major assumptions and heuristics utilized by managers to perceive and interpret an environment are influenced by past experiences and relevant skill sets in the resource deployment, development, acquisition, and combinations. As reported in the Findings section, the informants applied morality like righteousness, benevolence, and wisdom, in the way they utilized the resource. For instance, Informant 2 adopted benevolence to share intellectual property (an intangible resource) of new inventions with his co-workers. These experiences and practices predispose informants to identify and pursue a business action that confirms to the righteousness, benevolence, wisdom, or other moral values.

In terms of the managerial cognition, Kor and Mesko (2013) argued that cognitive lenses used by managers to make sense of the world are developed from past experiments, accomplishments, and failures. In comparison, the finding of “acting as a great self” reveals that accomplishments in the past can contribute to the development of informants’ morality. Informant 1 is an example of the righteousness developed. As an accomplishment, there was a time that Informant 1 succeeded in persuading a strategic supplier to sell him the electronic component he needed urgently. Informant 1 thought that he

should return a favor and offer a helping hand to the strategic supplier during the firm's needful time. Informant 1 felt that this is righteous.

With respect to the managerial social capital, Kor and Mesko (2013) contended that the knowledge, heuristics, and interpretive lenses adopted by managers to understand an environment are given by the members of the managers' network. In contrast, the finding of "acting as a great self" uncovers that members of the informants' network provided informants the knowledge that promotes the formation of informants' morality. The case of Informant 1 provides such an instance. A supplier told Informant 1 why he, instead of another American customer who came at the same time, was chosen to sell the electric component that was limited in stock during a shortage of supply worldwide. Informant 1 tended to be fair to the supplier by prompting the firm to sell at a price that was up to the expectation and commensurate with the situation. This is much different from the American customer, who requested for a discounted price based on the bulk purchase logic. For Informant 1, payment for a higher price is equal to giving up what the supplier deserves, and it was just a share of the profit he earned from selling the products. In Zhuāng Zǐ's text, the robber, Chih claimed that distributing the loot equally is benevolent (Watson, 1968). Benevolence is one of the five virtues that are essential to becoming a greatly successful robber (Watson, 1968). Similarly, the indirect way of Informant 1 sharing profit with his supplier is also a mark of benevolence.

The informants attained morality through empathy. While acting as an individual or a team, the informants predominantly applied empathy in the process of understanding new stimuli and information. Empathy in general means “identifying with the emotions of a target or understanding her or his experiences” (Parker & Axtell, 2001, p.1087). In their suggestion for further research, Kor and Mesko (2013, p.242) claimed that “a leap forward in dynamic capabilities research hinges on an intuitive understanding of how managers, individually and as a team, perceive, process, and interpret new stimuli and information and respond to them”.

This research helps close the gap. The informants utilized empathy with the assumption that individual interest is grounded in team interest. For example, when the electronic component that Informant 1 needed was in short supply globally, he had to purchase sufficient stock from his supplier. Informant 1 empathized with his supplier and understood that the stock available would be limited and likely offered at a price higher than other times. Such perception is reasonable because the supplier, as a business entity, will strive to maximize their profit by increasing their price to exploit or respond to the timing of the demand that exceeds supply. As a result, Informant 1 met the supplier’s expectations and purchased what he had requested.

5.1.7.2 Achieving greatness

There is a lack of empirical research on the required skills in dynamic managerial capabilities. The knowledge is important because skills are

implicated within a manager's dynamic capabilities (Teece, 2014a). To the best knowledge of the researcher, the study is the first endeavor to close the gap.

The findings reveal that the informants developed and applied multiple skills in their works. The multiple skills encompass both general management skills and specialized skills. This is consistent with the dynamic managerial capabilities literature that has divided human capital into generalist and specialist skills (e.g. Helfat & Martin, 2015b; Kor & Mesko, 2013).

There are somewhat differences in the definition of generalist and specialist skills among prior research. Custódio, Ferreira, and Matos (2013) corresponded to the generalist chief executive officers (CEOs) to general managerial skills and specialist CEOs to firm-specific human capital. Datta and Iskandar-Datta (2014) considered generalist as an individual who has developed strategic skills from an MBA degree, and specialist as an individual who is having expertise in a functional area, such as accounting. Ferreira and Sah (2012, p.578) categorized generalist as an executive with "less deep expertise in a larger number of areas", and specialist as an executive with "deeper expertise in a smaller number of areas". Kor and Mesko (2013) postulated that general managerial skills are not firm-specific and can be used in different organizations, which include forming team and network, as well as conducting collaboration and organization. In addition, they (Kor & Mesko, 2013, p.237) asserted that general managerial skills encompass entrepreneurial skills, such as "alertness, sensing new opportunities, scanning and interpreting information, and constructing new business models". Since the informants

possess multiple skills, they are generalists as defined by Ferreira and Sah (2012).

As a contribution of the research, the informants' development and application of multiple skills hint that an executive's expertise breadth is more important than the depth to dynamic managerial capabilities. In their economic analysis, Ferreira and Sah (2012) presented that expertise breadth carries more value (e.g. increase organizational profit) in the condition of higher complexity, greater unpredictability, or advancement of communication technologies. Having various types of expertise that are in common with specialists in diverse areas allow generalists to better communicate with them, whereas communication among specialists from different areas is challenging (Ferreira & Sah, 2012). Communication can increase the information that is especially valuable when a firm is facing high business unpredictability (Ferreira & Sah, 2012). In the research, the informants did not only utilize their multiple skills in communication with their partners and other coworkers but also they could actualize their creative ideas.

The finding of achieving greatness is not just consistent with the economic study conducted by Ferreira and Sah (2012), but also connected with their work to the dynamic managerial capabilities literature in order to offer new understandings and new empirical evidence gained from the real world. According to Helfat and Martin (2015b), dynamic managerial capabilities are a unique concept that relates different firm performance in changing the environment to distinctive managerial capabilities. Based on the focus of the

concept, Ferreira's and Sah's (2012) work is relevant to dynamic managerial capabilities. They show that broader expertise enables generalists to better communicate with specialists in different areas, which leads to lower unpredictability and higher profit in the firm's business (Ferreira & Sah, 2012). Since communication is a part of managerial cognitive capabilities for re-configuring assets (Helfat & Peteraf, 2015), the generalists' superior communication skills can be seen as part of distinctive managerial capabilities.

In the finding of achieving greatness, informants developed and exploited a unique combination of multiple skills for creating innovative products (a strategic change) that led to organizational profitable growth. The informants' unique combination of multiple skills within an individual is a source of heterogeneity in managerial capabilities. This research finding is skill-based and clearly differs from demographics-based understanding provided by the traditional human capital research, as cited in Helfat and Martin (2015b), and thereby increasing the knowledge on how managerial human capital underpins the dynamic managerial capabilities.

Next, the findings of achieving greatness uncover that informants exploited multiple skills and general management skills to recruit organization members with the expertise in need to produce their innovative business offerings. Kor and Mesko (2013, p.238) posited a theoretical proposition, stating that "the CEO plays the lead role in (re)configuring dynamic managerial capabilities within the senior executive team". The (re)configuration entails determining, procuring, and organizing specialized skills and generic skills that are needed

(Kor & Mesko, 2013). Findings in the research offer empirical evidence to their theoretical proposition. As the CEO and chairman of their firms or leader of their start-up, informants identified and employed specialists from various areas of expertise, recognized the importance of their expertise, exploited their competencies, and integrated their works. The evidence does not only confirm Kor's and Mesko's (2013) proposition but also adding the fact that the (re)configuration function requires relevant expertise and multiple skills in an individual for the combination in an organization to happen.

5.1.7.3 Encountering change

A key dimension of the informants' managerial capabilities is to create strategic change that is in harmony with the changes in the external environment. Helfat and Martin (2015b) categorized prior empirical research of managerial impact on strategic change and subsequent organization performance into studies on strategic change in general, on specific aspects of strategic change, on the role of top management in asset orchestration, on the managerial reaction to external change, and on the strategic renewal. Despite its core status in the dynamic capabilities perspective, there is a lack of attention on the managerial impact on the response to changes in external environments. In turn, there is little understanding of the capabilities of an individual manager in addressing and shaping the rapidly changing environments. In their seminal paper, Teece, Pisano, and Shuen (1997, p.516) refer to dynamic capabilities "as the firm's ability to integrate, build, and reconfigure internal and external competences to address rapidly changing

environments”. As Adner and Helfat (2003, p.1012) explained that “the concept of dynamic managerial capabilities is a direct analogy to” the definition of dynamic capabilities suggested by Teece, Pisano, and Shuen (1997), the capabilities of coping with the external environment is a defining feature of dynamic managerial capabilities. The finding of “encountering change” shows the capabilities of the informants in addressing and shaping the fluctuation in the environment.

The informants have proactively taken two types of actions in encountering change. The first involves the actions to overcome the threatening change in the external environment. Peteraf and Reed (2007) discovered that managers adapt by adjusting their administrative practices to fit the operation affected by the deregulation of the U.S. airline industry. In the study, the fit was preferred over the ‘best practice’ as an adaptation for improved efficiency (Peteraf & Reed, 2007). Specifically, managers selected the new administrative practices with an intention to cope with the new situations of the deregulated environment, rather than because the administrative practices are new and universally superior to older administrative practices (Peteraf & Reed, 2007).

It is challenging to achieve suitability. In the semiconductor industry, Holbrook et al. (2000) found that firms had a difficulty to cater to an environment characterized by rapid technological advancement. The difficulty requires knowledge about prospective applications of R&D outcomes that will accurately meet the emerging demand (Holbrook et al., 2000). Such knowledge contributes to firms’ technological goals, and early commitment is necessary to

develop the ability to produce what is needed in the market (Holbrook et al., 2000). Thus, prior research highlighted that top managers need to lead their firms to achieve fit under the changing conditions to overcome threatening change, but they offer little insight on how managers encounter this challenge.

In this research, all four informants demonstrated their knowledge in overcoming the threatening change in the external environment by taking precautionary actions, contrasting to the attainment of fit by passively coping with external change. As reported in the Research Findings, Informant 1 recruited a globally reputable supplier as their shareholder to prevent further attempts from competitors to damage his organization's reputation and customer relationship. Informant 2 fostered the cooperation with other innovators to realize his creative idea and obtain intellectual property before it is registered by any potential competitors who coincidentally have a similar idea. Informant 3 constantly upgraded himself by continuously improving his competency, so that he could set a higher standard in his businesses ahead of the competitors. Informant 4 raised his customer base to create diversified sources of revenue with the purpose of countering the market volatility.

Next, the second type of measurements taken by all four informants in encountering change entail the actions to capture the trend in a rapidly changing environment. Teece (2014b, p.333) commented that "the ability of a CEO and the top management team to recognize a key development or trend, then delineate a response and guide/lead the firm in its path forward, might be the most prominent feature of the firm's dynamic capabilities". Relevant

research on dynamic managerial capabilities in this area has been conducted by Kaplan, Murray, and Henderson (2003). Utilizing letters to shareholders from established pharmaceutical companies, Kaplan, Murray, and Henderson (2003) documented that top management's recognition of advances in biotechnology shaped the strategic actions of their companies in response to the emergence of biotechnology.

The emergence of biotechnology is an important trend in the pharmaceutical industry. Due to the technological advances, a large number of companies altered their technological identity (Kaplan, Murray, & Henderson, 2003). Besides, biotechnology stimulated new entrants with more than 1,000 new companies within 25 years (Kaplan, Murray, & Henderson, 2003). Hence, the study conducted by Kaplan, Murray, and Henderson (2003) implied that managerial recognition is key to capture the trend in complex and turbulent environments. However, the study does not show how managerial recognition leads to effective strategic actions, particularly the initiatives of capturing trend, in a rapidly changing environment.

In contrast, the research provides empirical evidence on the capacity to change following the awareness of the need for change. The knowledge of how to change is equally important as the managerial recognition of change. The knowledge is essential to understand how firms cope with the complex and turbulent environment while acting as an instance of applying knowledge in making an innovative strategy.

The finding of “encountering change” reveals that the second type of effective strategic action is to capture the trend in such an environment. Consistent with the work of Kaplan, Murray, and Henderson (2003), the strategic action of capturing trends is based on top manager mental models. For example, Informant 4 drew on his experience of developing an automation machinery technology for his former employer to foresee the potential demand for the technology. Informant 4 believed that the demand would be growing as he noticed that a significant number of companies would need his machinery solution. As a contribution of the research, the findings demonstrate the second type of effective strategic action, which is Informant 4 capturing the trend by continuously developing the automation machinery technology and selling them to his customers.

5.1.8 Transforming events into opportunities

The environment in which dynamic managerial capabilities operate to identify and create opportunities has largely been omitted by prior studies, especially in their dynamic capabilities frameworks (e.g. Helfat & Martin, 2015b; Helfat & Peteraf, 2015; Teece, 2014b). As discussed in the foregoing section, the ability to cope with a rapidly changing environment is a defining feature of dynamic managerial capabilities. Moreover, the manager’s interaction in an uncertain and complex environment is critical to the understanding of how dynamic managerial capabilities for sensing leads to opportunity recognition and creation. Sensing, together with seizing and re-configuring, are three categories of dynamic managerial capabilities (Helfat & Peteraf, 2015; Teece, 2007).

Sensing opportunities involve two types of interaction that a manager may artificially generate opportunities (Alvarez & Barney, 2007) or locate opportunities that objectively present the independence of the manager's perception (Gaglio & Katz, 2001). The processes of generating opportunities have greater possibilities as a firm's sustainable competitive advantage than the processes to discover opportunities (Alvarez, Barney, & Anderson, 2013). The research helps fill in the gap by providing empirical evidence on how founders apply their knowledge in the high-velocity environment in order to create opportunities.

Research findings reveal that great knowledge allowed all four informants to create opportunities by transforming events in the environment into opportunities. This is not possible with common knowledge. In dynamic managerial capabilities research, the external environment can be classified into 'weak situations' and 'strong situations' (Cooper & Withey, 2009). As their defining features, weak situations allow each individual to interpret the particular events in a different manner, the lack of uniform expectancy about the required conduct, the lack of incentives that commensurate with the conduct, and the failure to supply the learning conditions, which support the conduct (Cooper & Withey, 2009).

Hence, weak situations are simply the type of environment that is less restrictive and provides more space for managerial discretion and managers to apply their dynamic managerial capabilities. In dynamic managerial

capabilities research, an uncertain and complex environment that encompasses dynamic and discontinuous events does not have obvious features to determine action and thus, is an instance of weak situations (Kaplan, Murray, & Henderson, 2003). Kaplan, Murray, and Henderson (2003) recognized that the advances in biotechnology are a weak situation for the pharmaceutical industry, which afforded top management of different pharmaceutical firms to perceive and react to such a rapidly changing environment differently.

Strong situations are the opposite of weak situations. As their defining features, strong situations make all individuals encode the particular events in a standard manner, instigate uniform expectancy about the required conduct, supply incentives that commensurate with the conduct, and offer learning conditions to stimulate the conduct (Cooper & Withey, 2009). Hence, strong situations represent the type of environment that is much restrictive and leaving less room for managerial discretion.

An instance of a strong situation in the dynamic managerial research is the U.S. airline industry during its regulated era, as documented in a study conducted by Peteraf and Reed (2007). When the industry was regulated, regulations limited managerial discretions on operational choices, involving “activities that are relatively discrete, well understood, and observable, with parameters that can be clearly specified” (Peteraf & Reed, 2007, p.1095). To match with regulatory requirements, managers employed the relatively greater discretion they had in administrative practices to generate adaptive adjustments (Peteraf & Reed, 2007). The administrative practices consist of “activity sets that are more

complex, harder to specify, tacit in nature, and which outcomes are causally ambiguous” (Peteraf & Reed, 2007, p.1095).

The comparisons between weak situations and strong situations in dynamic managerial capabilities studies have three important implications that are relevant to the findings of transforming events into opportunities. Firstly, tacit knowledge is central to administrative practices and dynamic managerial capabilities within administrative practices. Secondly, the two pieces of research show that dynamic managerial capabilities are key to firm’s survival in both strong situations and weak situations. The transformation of events into opportunities is the response of all four informants to weak situations. The industries where the informants are operating their businesses are not highly regulated.

Thirdly, it is the way managers interpret and comprehend situations that determine the consequences of the situations (Cooper & Withey, 2009). The interpretation of whether a situation is an opportunity or threat is largely subject to the managerial perception. Since the difference in the abilities of managers matters most in determining the effects of the situations, the great knowledge becomes a much influential source of heterogeneity and key for managers to interpret and comprehend situations in an effective way. The three implications suggest that managers can create opportunities from transforming events while the research offers empirical support to the implications.

In the research, the informants created opportunities in two ways. Firstly, all four informants demonstrated the competency to induce customer needs in which potential customers had a better knowledge of what was possible and doable with their capabilities and placed their requests to informants. In dynamic managerial capabilities studies, researchers noticed that creating opportunities is a form of dynamic managerial capabilities for sensing. Teece (2007) pointed out that opportunities can be generated from new information and new knowledge. Helfat and Peteraf (2015) hinted that the actions of sense-making in a changing condition may give rise to opportunities. Hence, these scholars imply that producing knowledge and showing the competency of know-how is also a way of constructing opportunities. Despite the key insight, dynamic managerial capabilities literature is silent about the process of generating opportunities.

In a closely related field, the entrepreneurship literature offers some insights into the processes of generating opportunities by individual entrepreneurs. Based on the sense-making concept, Alvarez, Barney, and Anderson (2013) argued that the creation process starts when entrepreneurs initiate entrepreneurial actions that are in compliance with the initial beliefs about opportunities and their thoughts about the resources and abilities required to capitalize the opportunities. Then, entrepreneurs learn from the reactions toward their initial action and adjust their beliefs accordingly to produce the next round of actions (Alvarez, Barney, & Anderson, 2013). The processes are reiterated until entrepreneurs enact the opportunities they ultimately utilize (Alvarez, Barney, & Anderson, 2013).

In the research, demonstrating competency to induce customer needs is a specific type of entrepreneurial action that solicits responses in the external environment. However, showing competency has a better chance to match with potential customer needs than the creation process as described by Alvarez, Barney, and Anderson (2013). Presenting what the informants could do enabled potential customers to understand what was doable and useful that might satisfy their possible needs. As potential customers connected the competency to their latent needs, the informants' tacit know-how becomes valuable to them. Consistent with the resource-based view, they are less likely to find an alternative in the market because of the tacit or non-imitable nature of the informants' knowledge.

In another conceptual paper, Wood and McKinley (2010) advocated a process model of opportunity creation based on a constructivist view. The processes involve a number of stages, which encompass conceiving an idea of an opportunity, objectifying that idea, utilizing social ties and reputation to build the consensus with stakeholders about the value of the entrepreneur's project and their willingness to give support, and enacting the opportunity into a new business (Wood & McKinley, 2010). Wood and McKinley (2010, p.74) defined reputation as "information regarding an individual's prior performance". In the research, competency is demonstrated as a way to disseminate information about the informants' performance and thereby may constitute a reputation in the eyes of potential customers.

Wood and McKinley (2010) suggested two benefits of reputation, which are also related to the research findings. Firstly, reputation raises public attention (Wood & McKinley, 2010). As shown in the research findings, potential customers sought for services and products from all four informants because of their capabilities, and they were noticed as suitable candidates that meet their requirements.

Secondly, reputation helps to build the confidence of outsiders about the chance to successfully enact an objectified opportunity (Wood & McKinley, 2010). In the research, confidence in all four informants was very important to potential customers because satisfying their needs was very challenging. For example, Informant 3 explained that he was assigned the task to solve a difficult software problem because his former employer had confidence in him. This implies that his former employer regarded Informant 3 as the most capable employee or option (when external professionals were considered, given the financial strength of the former employer) to overcome the problem. Due to the potential to become a reputation, competency is shown to be a powerful way applied by all four informants to transform an event and create change in an uncertain environment.

As the only empirical study on the processes of opportunity creation by individual entrepreneurs, Singh, Corner, and Pavlovich (2015) found that the processes consist of “anticipating failure”, “meeting failure”, “experiencing epiphanies”, and “transforming failure”. Epiphanies were especially important in the processes of opportunity creation because they were the insights that

entrepreneurs used to transform their venture failure into the learned experience for their subsequent founding of new ventures (Singh, Corner, & Pavlovich, 2015).

Epiphanies are relevant to the demonstration of competency in the research. The demonstration of competency signifies that all four informants possess insights, which contribute to their competencies. In contrast, these insights were not from venture failures like those reported in Singh, Corner, and Pavlovich (2015), but from the great knowledge.

In the research, the second way of creating opportunities is by solving tough problems. Helfat and Martin (2015a) emphasized that dynamic capabilities are the capabilities applied by managers in an endeavor to build any kind of change. Consistent with the definition of dynamic capabilities, capabilities to solve a tough problem is a type of dynamic capabilities because the effort involves changing a problematic state to the desired state.

The findings of solving tough problems throw some light on how opportunities emerge in the processes of creating opportunities. Helfat and Martin (2015a) argued that solving a problem may lead to the sensing opportunities in the process of improvisation. According to Miner, Bassoon, and Moorman (2001, p.314), “improvisation is the deliberate and substantive fusion of the design and execution of a novel production”. In their organizational research, Miner, Bassoon, and Moorman (2001) found that firms converted problems into perceived opportunities after they improvised in their problem-solving

activities. Miner, Bassoon, and Moorman (2001) hinted that improvisation may generate knowledge as a byproduct, but its impacts can be positive and negative. Their assertion leaves an unanswered question about what the key is, to successfully transform problem-solving into opportunity creation.

The research findings show that improvisation is not necessary for the transformation, but great knowledge is more useful. This is because improvisation is simply one of the three types of organizational learning processes (Miner, Bassoon, & Moorman, 2001). Useful knowledge for problem-solving may be created from other types of learning processes, especially the knowledge creation processes presented in the research findings.

5.1.9 Implementing innovative strategies

In the research, the actions of dynamic managerial capabilities lead to the creation and implementation of innovative strategies. Teece (2014b) warned that dynamic capabilities are likely to become ineffective in the absence of sound strategy. This warning signifies the importance of supplement dynamic managerial capabilities with innovative strategies that comply with the high-velocity business environment.

Furthermore, Teece (2014b) argued that dynamic capabilities for sensing, seizing, and transforming interact with, and contribute to, strategy-making . In empirical research on dynamic managerial capabilities, Adner and Helfat (2003) suggested that heterogeneity in the three managerial attributes of corporate

managers, namely managerial cognition, managerial human capital, and managerial social capital, and the interaction among these attributes may contribute to heterogeneity in corporate strategy. Although prior literature noticed the relationship between dynamic managerial capabilities and strategy, there is a lack of knowledge on the process of how the actions of dynamic managerial capabilities in opportunities creation, — not objective opportunities identification, drive strategy-making .

The research is not merely consistent with dynamic managerial capabilities research, but also offers further knowledge on the process of how dynamic managerial capabilities lead to strategy-making . Recalling that dynamic managerial capabilities are “the capabilities with which managers create, extend, and modify the ways in which firms make a living” (Helfat & Martin, 2015b, p.1281), in the research, the ways in which firms make a living became strategies, which are the “methods” created by the informants for their companies to generate wealth.

The findings uncovered that all four informants devised and implemented innovative strategies to seize opportunities created from transforming events in the previous stage. This reveals that innovative strategies are most relevant to seizing opportunities. The findings are consistent with Teece’s (2014b) view that seizing opportunities are materialized in the actions of strategy. In essence, Al-Aali and Teece (2014, p.104) argued that strategy concerns with “how success can be achieved”, which implies that the organizational success rests on seizing opportunities. Particularly, Teece (2014a) claimed that the seizing

serves the primary function of acquiring value from opportunities. Serving as empirical support to Teece's (2014a; 2014b) theoretical insight, the research findings demonstrate that the action of capturing opportunities reflect the methods applied by the informants in generating revenue.

All four informants created and applied two types of methods in which their firms make a living. Firstly, they offer novel technologies and products that were developed by their firms. This is consistent with Teece's (2007) assertion that new products offering, processes, or services are necessary for seizing opportunities. In addition, new product introduction may generate the greatest surprise to the market in comparison with other strategic actions, which implies the largest potential for value creation and impact to firm performance (Morrow et al., 2007).

Prior research recognized that the strategies of introducing novel offering to meet market needs are significantly affected by dynamic managerial capabilities. Morrow et al. (2007) found that managers have a greater knowledge of their firm resources than knowledge of resources from the external market. Such superiority in knowledge empowers managers to recombine the existing internal resources more effectively and swiftly into novel capabilities for new product development (Morrow et al., 2007).

In contrast, Eggers and Kaplan (2009) found that the CEO's attention to the existing technology (which can be a firm's existing resource for recombination) is related to slower progress in the development of novel product offerings that

allow the firm to enter an entirely new market. On the contrary, they (Eggers & Kaplan, 2009) associated the CEO's attention to emerging technology with quick new product market entry. The finding of implementing innovative strategies shows that all four informants developed great knowledge in emerging technologies and produce related innovative outcomes. Thus, their approaches exploited the advantages of greater knowledge of their resources and attention to the emerging technology, as suggested in previous research.

In addition, the innovation of new products may induce a dilemma. On one hand, technology and product innovation involve development and commercialization tasks (Teece, 2007) that demand a period of time. On the other hand, rapid entry and commitment are critical to build a marketplace acceptance and obtain a first-mover advantage, especially when network externalities are in existence (Teece, 2007). As a solution to the dilemma, the cases of all four informants demonstrate that the development of new technology and product innovation based on prior knowledge and great knowledge, in particular, mitigate the dilemma by flawlessly linking opportunities creation to opportunities exploitation and reduce the new product development time to market.

Secondly, innovative strategies employed by the informants were new business approaches for the creation of wealth. New business approaches are similar to Teece's (2007) idea of methods. Teece (2007) pointed out that product features and their intended performance reflect the specific "methods" applied by firms

to bring value to customers and attract customers to generate revenue and make a profit from the revenue.

Moreover, the methods must be innovative for them to be effective — in the condition that they are valuable (e.g. useful) and difficult-to-imitate (e.g. new and non-existence in the previous condition). Morrow et al. (2007) discover that enterprises can reverse declining the market-based performance with novel integration of current resources for innovative product launches or new resources acquisitions, — only if they are conducted in valuable and difficult-to-imitate manners. Hence, the concept of new business approaches is this research's contribution that integrates insights from Teece's (2007) and Morrow et al.'s (2007) study. In doing so, the research's findings of new business approaches reveal specific methods that are valuable and difficult-to-imitate to be used by enterprises.

This study found two types of methods that are valuable and difficult-to-imitate as applied by the informants. Firstly, the informants embedded internally developed technologies, and working processes into the products and services they provided to their customers. This is inconsistent with Teece's (2007) ideas of how dynamically capable managers seize opportunities. Teece (2007) suggested that technologies and features included in firm's product and service represent the manager's assumption of customers' wants and the ways in which firms satisfy customers and make a living.

However, methods utilized by the informants are valuable and difficult-to-imitate, — a step beyond what was suggested by Teece (2007). For example, Informant 2 and Informant 3 developed their technologies internally to achieve expected higher quality of standard (e.g. higher accuracy in a civil engineering project and higher robustness of software) in their products and services, which is valuable to their customers. Besides, their technologies are hard to copy because the technologies are largely used in the production process, rendering low chances of exposure in the final production outcome, and thus causing them to be hardly visible or inaccessible to outsiders.

Secondly, the informants concentrated on a distinct type of customers. Teece (2007) hinted that the characteristics of market segment selected by firms symbolized manager's assumptions of customers' wants and the manners in which firms fulfill customers' wants and make a living. This research finding is not only in line with Teece's (2007) opinion, but also uncover the methods that are valuable and difficult-to-imitate.

As reported in the research findings, Informant 1 and Informant 4 took the initiative to develop and maintain long term customer relationships. Particularly, Informant 1 focuses on loyal customers, while Informant 4 opens offices in locations close to key customers to conduct sales activities and provide technical support. Their methods are valuable as the customers were attracted by the quality of products and services offered by the informants and become loyal to them. The informants' approaches are difficult-to-imitate as the customers are loyal to the extent that potential competitors were unable to

lure them away from the informants even if they can apply the same methods. Furthermore, their interpretation of loyal customers and key customers is subject to judgment rather than an objective standard that can be followed by other managers.

5.1.10 Correcting errors or constant self-upgrading

The research findings of “correcting errors or constant self-upgrading” are related to reconfiguration, — “the third leg of the dynamic capabilities triad” (Helfat & Peteraf 2015, p.842). The dynamic capabilities triad consists of reconfiguration, sensing, and seizing (Helfat & Peteraf, 2015). At the organizational level, reconfiguration involves the reformation of assets, organizational structures, business models, modification of routines, and asset orchestration (Teece, 2007). In the individual manager level, reconfiguration entails choosing, altering, aligning, and forming tangible and intangible assets (Helfat & Peteraf, 2015). Reconfiguration is a type of adaptive change needed to achieve superior profitable growth, preserve evolutionary fitness, and move away from adverse path dependencies (Teece, 2007). Reconfiguration is relevant as correcting errors is a way of achieving evolutionary fitness. Particularly, failure in strategic initiatives, which may be resulting from unfavorable path dependencies, requires correction in order to match the demand of the external environment. Besides, reconfiguration is related to constant self-upgrading with respect to enhanced firm performance and sustained superior profitable growth.

The findings of “correcting errors” advance the understanding of how dynamic managerial capabilities for reconfiguration lead to evolutionary fitness. Helfat and Peteraf (2015) claimed that reconfiguration, primarily involves choosing, altering, aligning, and forming tangible and intangible assets. However, Zahra, Sapienza, and Davidsson (2006) pointed out that resource allocation and dedication are insufficient to sustain superior firm performance. The findings suggest that error correction process can achieve evolutionary fitness and maintain profitable growth because the process overcomes the mismatch between firm resources and changes in the environment.

In addition, the findings of constant self-upgrading add knowledge on how dynamic managerial capabilities for reconfiguration lead to evolutionary fitness, improve firm performance and sustain superior profitable growth. Amit and Schoemaker (1993) argued that a firm may increase profits by building invisible assets like tacit organizational knowledge. Teece, Pisano, and Shuen (1997) pointed out that the reconfiguration of asset structure in corporate transformation, including the kind of building invisible assets, demands ongoing observation of the markets and technologies, and a strong desire to embrace the best practice. In the research, the informants were not satisfied with the adoption of the best practice, but they constantly developed themselves to be better.

The findings of constant self-upgrading may pose an answer to the economic problem of the society, as pointed out by Hayek (1945). According to Hayek (1945), the economic problem of society is not just about the allocation of the

“given” resource that is made available to a single mind. Hayek’s (1945) insight hinted that the reconfiguration is not limited to the reformation of assets, organizational structures, business model, modification of routines, and asset orchestration, as assumed by Teece (2007) and asset orchestration, as suggested by Helfat and Peteraf (2015). According to Teece (2014b), mainstream economic theories associate economics primarily with the distribution of resources among unlimited wants. Much is needed to know about the actual actions conducted by managers involved in technology development and deployment, as well as the production of goods and services (Teece, 2014b). As suggested by Hayek (1945), overcoming the economic problem of the society requires the knowledge of the best use of resources or assets in the mind of any individual, which is not provided to anyone. Since the knowledge is not given, the individual entrepreneur or manager has to use personal effort to attain or create knowledge. The research findings show that constant self-upgrading may generate the knowledge of a resource’s best use.

5.1.11 Great financial wealth

Consistent with dynamic capabilities (Teece, Pisano & Shuen, 1997) and dynamic managerial capabilities (Helfat & Martin, 2015b) literature, research findings revealed that wealth is the economic outcome of implementing innovative strategies. In their major paper, Teece, Pisano and Shuen (1997, p.509) explicitly stated that “the dynamic capabilities framework had analyzed the sources and methods of wealth creation and it had been captured by private enterprise firms which had operated in environments of rapid technological

change”. The statement clearly stressed that wealth is the economic outcome analyzed by dynamic capabilities framework and the framework should provide an understanding on the way wealth is created. Teece, Pisano and Shuen (1997), Helfat and Martin (2015b) extended the analysis of the sources and methods of the wealth creation to the individual level. The focus of the analysis on wealth creation is reflected in their concept of dynamic managerial capabilities, which is “the capabilities with which managers had created, extended and modified the ways in which firms make a living” (Helfat & Martin, 2015b, p.1281). Therefore, the research findings of wealth as an economic outcome in the process model of knowledge-wealth creation comply with the dynamic managerial capabilities concept. The consistency is attained by this research through purposely-based sampling criteria on the performance of wealth creation achieved by informants.

The finding of great financial wealth shows that growth in sales and profit are the indicators of wealth which resulted from implementing innovative strategies. The tremendous changes in sales and profit can be seen as a positive response of the market on the strategic change implemented by informants. Helfat and Martin (2015b) found in dynamic managerial capabilities literature that the outcome of strategic change includes; survival, growth, time to market, long-term financial performance, change in sales, income/profit, productivity, market share, Tobin’s q ”.

In this study, informants have emphasized the increase in sales and profit for two most important reasons. First, informants believed that sales and profit are

more important than market share. Informants observed that many competitors were selling at lower costs to raise unprofitable market share. However, these competitors were unable to maintain and cope with the financial losses for a long period which eventually led them to exit the market. Secondly, informants perceived that sales and profit are essential for firm survival and funding for activities related to long-term financial performance, such as research and development.

Recent research uncovers that increase in sales is a critical indicator of the effectiveness of new strategies implemented by informants. This finding is consistent with the dynamic managerial capabilities literature. Several dynamic managerial capability studies have adopted sales growth as a dependent variable. For instance, Nadkarni and Narayanan (2007) discovered that strategic flexibility in resource deployment and competitive actions were positively related to increase in sales. In addition, Collins and Clark (2003) reported that diversity and strength of external as well as internal networks were also positively associated with growth in sales.

In another study, Eisenhardt and Schoonhoven (1990) have found that new strategies driven by new technologies are capable of generating sales in the firms' early years of operation. This is comparable to the research findings that significant sales growth resulted from the introduction of new products or services based on new technologies developed by informants.

Eisenhardt and Schoonhoven (1990) have further pointed that the impact of technical innovation is better reflected by sales figure than other possible measures like percentage growth and growth rate. The primary reason is that there are likely no sales for new entrepreneurial firms during their inception period which made the computation of their percentage growth difficult (Eisenhardt & Schoonhoven, 1990). The reason is appropriate for this study as all four informants are the founders of their entrepreneurial firms.

Research findings revealed that increase in profit is another important indicator of the effectiveness of the new strategies implemented by informants. This finding is compatible with the dynamic managerial capabilities literature. Profit growth is a dependent variable in a number of dynamic managerial capabilities researches. Bosma, van Praag, Thurik and de Wit (2004) discovered that the former experiences of business founders in the industry in which the business was founded, entrepreneur's level of education, information collection through commercial relations and emotional support of spouses were positively related to profit growth in newly founded companies. Davidson and Honig (2003) found that business networks have a positive relation with profit growth in the nascent entrepreneurship.

In another study, Miller and Shamsie (2001) reported an inverse U-shaped relation between the tenure of a film production head and profit. This means that there was profit growth during the film production head's earlier years and decline in the later years of tenure. Miller and Shamsie (2001) also uncovered that the product line experimentation in the later years of a top manager's

career was more positively related to profit growth than the product line experimentation in the early years of the top manager's career.

Profit is an appropriate indicator of the outcome of new strategies. Miller and Shamsie (2001) noted that profit is a primary measure used by the Hollywood film industry to evaluate the performance of their film production heads for a long period of time. Similarly, informants in the study perceived profit as an indicator of the performance of their new strategies, which implies their dynamic managerial capabilities.

Miller and Shamsie (2001) added that the evaluation of the profit performance by using studio heads' annual slate of productions as a basis is more appropriate than that on individual film because of the uncertainties in the movie business. In this study, the profit of a single new strategy did not accommodate well with the fast-changing environment encountered by informants. Therefore, the profit performance of a series of new strategies made over a year appeared to be more appropriate.

5.1.12 Meaning as the ultimate working objective

There are a few research studies which examined meaning orientation rather than profit orientation of top managers or entrepreneurs in the process of creating new knowledge and its use in developing a novel strategy. There is a great need to develop novel strategy and understand meaning orientation in firm's new knowledge creation and its strategic importance over the more

commonly adopted profit orientation. The strategic orientation of dynamic capabilities in extant literature can be found in “the logical structure of the dynamic capabilities framework” proposed by Teece (2014b, p.334). Teece’s (2014b) framework exemplifies the profit orientation of dynamic capabilities as his framework shows that the final outcome of applied dynamic capabilities is the level of profit (Teece, 2014b).

However, profit orientation may hamper company’s financial success in the long run. In recent research, Yoo and Kim (2015) found that profit-oriented strategy constrains firm growth and it is detrimental to firms in an unstable macroeconomic environment. Profit-oriented companies preferred the present profits over the uncertainty that accompanies growth and had low awareness to invest in research and development activities (Yoo & Kim, 2015). The phenomenon suggests that the strategic orientation that stimulates the creation of new knowledge and development of novel strategy for enterprise growth is needed. This research helps in bridging the research gap.

Research findings have shown that meaning is the final outcome of the processes of knowledge creation and strategy innovation. Informants stressed that creating knowledge and new strategy had a meaning that was greater than generating profit. This is comparable to what an early study found from workers that working is more than a means to make a living for them (Morse & Weiss, 1955). Morse and Weiss (1955) discovered that workers wished to work even when they have achieved financial freedom. Despite their early insight, the study conducted by Morse and Weiss (1955) involved only workers rather

than the top managers and entrepreneurs. In addition, there is lack of research on the ways that affect the development of new knowledge and strategy.

Adopting meaning-oriented strategy instead of profit-oriented strategy is a paradigm shift as the former is more strategic than the later. In this research, the term “strategic” refers to “that which relates to the long-term prospects of the company and has a critical influence on its success or failure” (Agarwal & Helfat, 2009, p.281). Whilst the orientation towards quantitative financial permanence is more common, the orientation towards meaning is a critical source of heterogeneity because meaning as assigned by informants is diversified. Kor and Mesko (2013) claimed that exogenous factors like competition can have different meanings to different managers because of the subjectivism in their perceptions, expectations and preferences. Due to these managerial differences, enterprises can respond differently and this induces diverse consequences (Kor & Mesko, 2013).

In this research, the final outcome as was expected by informants is meaning while revenue and profit growth are simply the means towards this end. They perceived greater importance in creating new knowledge as they outperform other competitors. Drawing from experience, informants uncovered that new knowledge had a longer-lasting impact to firm’s success than outperforming other industry players. The findings on meaning as the ultimate working objective furthered the knowledge on the effective process of creating new knowledge and its use in making novel strategy.

To avoid confusion and adding to the conceptual clarity, it is important to highlight that meaning in the research is different from entrepreneurial motivation. Teece (2007) suggested that entrepreneurial action is a symbol of ideal dynamic managerial capabilities. In entrepreneurship, motivation is related to business purposes. A representative definition of motivation is “a driving motive in the heart of a person to perform or achieve particular business goals” (Machmud & Sidharta, 2016, p.65). On the other hand, meaning is “the thoughts, ideas and experiences that actors have in their mental processes” (Li, 2017, p.521).

The two concepts are different as entrepreneurial motivation is a driver of the entrepreneurship process (Shane, Locke & Collins, 2003), whereas meaning is an outcome of it. In other words, entrepreneurial motivation can be a stimulus of entrepreneurial process or what entrepreneurs hope for (Carsrud & Brännback, 2011) while meaning is what entrepreneurs actually get from their entrepreneurial journey. In addition, Carsrud and Brännback (2011) pointed out that entrepreneurial motivation may have a missing link between entrepreneurial intention and entrepreneurial action, which remains under research.

Common to all four informants, there are two types of meaning generated after their firms had created financial wealth. The two types of meaning exist concurrently because of the two-human nature of pursued self-interests and collective interests (Van de Ven, Sapienza & Villanueva, 2007). The research finding showed that personal natural inclination reflects the human nature of all

four informants and thus meaning is simply the corresponding outcome driven by these personal natural inclinations. While current research treated self-interests (e.g. financial gains) and collective interests (e.g. social welfare and ecological sustainability) as mutually exclusive or two conflicting missions (Stevens, Moray & Bruneel, 2015), this study discovered that they could co-exist and were complementary to each other.

The first type of meaning is a self-fulfillment from making a contribution to the well-being of stakeholders, society and natural environment. This meaning is a desired product of human nature of pursued collective interests. In their conceptual paper, Miller, Grimes, McMullen and Vogus (2012) suggested that compassion-based cognition and affection stimulate social entrepreneurship; a process of utilizing market-based methods to overcome social problems to obtain social and economic values simultaneously. They (Miller et al., 2012) warned that the explanations for new venture creation may not be comprehensive without taking into account the pro-social motivation, especially when the process is loaded with uncertainties. In this study, all four informants encountered uncertainties in making and implementing new strategies and their outcomes as well as changes in the economic environment. Their pro-social meaning seeking orientation provides a fuller understanding on the processes of knowledge creation and strategy innovation.

Furthermore, the pro-social meaning has a strategic importance to their businesses. Understanding strategic importance is critical to the preservation of self-interests and collective interests due to the presence of causes of

hybridized tension intensification (Davies & Doherty, 2018). By generating social value, informants gained trust to entice a strong co-operation from outsiders who became their strategic shareholders, partners who reduced their financial burden and co-operation in technology research, development and commercialization. Most importantly, informants attracted talents to their firms and retained them.

Talented employees were especially important to informants as their firms are heavily involved in knowledge-intensive work, such as research and development. Informants highlighted that organizational members were the center of their innovation activities, who produced innovative outcome that created profitable growth. Therefore, keeping a pool of talented employees is of strategic importance. In this way, the social value had been translated into financial benefits to the informants and thereby making the co-existence of self-interests and collective interests possible.

This knowledge of translating social value into financial benefits is a complement to the insights of Miller et al. (2012). They (Miller et al., 2012) suggested that compassion drives social entrepreneurship. This leaves questions on the sustainability of the social entrepreneurship. This research showed that strategic importance can be another motivation which exists concurrently with compassion. As a consequence, collective interests may be more sustainable with the presence of self-interests.

The second type of meaning that all four informants acquired after successfully achieving financial wealth is self-satisfaction from a repeated attainment of high achievements. This is a desired result coming from the human nature of pursued self-interests. Hinz (2017) hinted that an individual is likely to generate satisfaction by utilizing enough time and effort for challenging works and getting the lesson learned through the process. Despite the lesson learned, the reward to informants for having spent sufficient time and effort in challenging works was seen in the higher level of achievements and their meaning as an indicator and validation of improvement in their dynamic managerial capabilities from successful processes of knowledge creation and strategy innovation. This is consistent with Carsrud and Brännback's (2011) finding that entrepreneur's need for achievement is an entrepreneurial motivation. However, achievement motivation comprises of different components, which differ in their strategic importance and require further knowledge of their application and influence in entrepreneur's knowledge creation and strategy innovation.

Carsrud and Brännback (2011) proposed that achievement motivation consists of "work orientation", "interpersonal competitiveness" and "mastery needs". Work orientation is an entrepreneur's preference for working hard (Carsrud & Brännback, 2014). Interpersonal competitiveness is an entrepreneur's feeling of the importance of winning in the business competition (Carsrud & Brännback, 2014) while mastery needs is an entrepreneur's preference for works that demand a high level of skill (Carsrud & Brännback, 2014).

The finding of meaning as the ultimate working objective shows that informants' need for achievement is mainly a mastery need while work orientation and interpersonal competitiveness were perceived as comparatively less important in their processes of knowledge creation and strategy-making . There is lack of research on the motivation of mastery needs and its utilization in the business context (Manish & Sutter, 2016). Manish and Sutter (2016) suggested that being excellent in a task is related to enjoyment. This implies that working hard may not produce enjoyment or lead to motivation if the performance or the outcome of the task is not preferable. Although this study discovered that informants were working hard, they were comparatively less motivated by work orientation. Instead, they associated hard working with its meaning, which was the satisfaction gained from seeing the achievement becoming fruitful.

With respect to interpersonal competitiveness, Manish and Sutter (2016) argued that mastery comes from proving oneself in a process of competition; a motive to outperform other industry players. Their argument obviously ties interpersonal competitiveness and mastery needs closely together. In contrast, this study revealed that informants regarded participation in a competition similar to entering a race in which the standard of winning was set by other parties. Informants warned that this would place them in a strategic disadvantage as the standard of winning matched the best way of how the other parties play the game. Therefore, informants preferred to set their own standard of winning, which means constantly improving themselves to raise the requirement or create a new requirement for a higher level of firm performance.

In this way, research empirical findings showed that interpersonal competitiveness and mastery needs can be two distinctly separated motivations.

Concerning mastery needs, informants expressed and demonstrated in many occasions that to be increasingly competent is their top priority. Carsrud and Brännback (2011) claimed that past success may inspire an individual to raise the aspiration level and alter goals, which commensurate with the new aspiration level. This research revealed that repeated high achievements created enjoyment for informants to inspire lifting the level of competency so that higher goals could be achieved. For instance, Informant 1 did not resort at providing an attractive financial compensation to his employees, instead helping them to solve more challenging financial goals. One of the challenges was to fulfill employees' aspiration of buying a house. The informant asserted that this aspiration was difficult as not many young working adults can afford to buy a home, given their salary level.

Research findings showed that mastery needs are strategic as they enable managers and entrepreneurs to change goals, and thus becoming more adaptable in a high velocity environment. Furthermore, Teece, Pisano and Shuen (1997) stressed that it is essential that capabilities must be developed internally since they are difficult to purchase. Therefore, mastery needs become strategically important for driving the internal knowledge creation.

5.2 Refinements to the strategic knowledge creation framework: The process model of knowledge-wealth creation

This study was set out to explore into the processes of strategy innovation from the aspect of knowledge creation to better understand dynamic managerial capabilities and their development. As explained earlier, the strategic knowledge creation framework depicted in Figure 2.4 defines this research's investigation scope. The framework describes a process of generating dynamic managerial capabilities from the aspect of how knowledge creation leads to strategy innovation. The process starts from an individual access to an external material or event, which triggers a reactive mode of knowing induced by external event. The process is followed by a proactive mode of knowing, which is initiated by a concentration on the act of knowing and a spirit mode beyond knowing towards an appropriate usage of a resource. At the end of the framework, a novel usage of a resource leads to the new financial wealth. After investigation, the findings of this research provided empirical validation and some very important refinements to the strategic knowledge creation framework. These refinements are summarized in Table 5.2 below.

These refinements explicate the contribution of this research in providing further understanding on Zhuāng Zǐ's philosophy. These refinements offer further details on the important concepts of Zhuāng Zǐ's philosophy, such as extending these concepts to dynamic managerial capabilities literature and current business condition, offering empirical evidence of these concepts and demonstrating the way these concepts can be achieved.

The findings of this research proposed a more complex process model, that is “the process model of knowledge-wealth creation” - to understand the ways the successful Malaysian Chinese entrepreneurs created and applied knowledge in strategy-making to generate new wealth consistently in organizations by leveraging on the teaching of Zhuāng Zǐ’s philosophy. Firstly, a reactive mode of knowing induced by external event had led to the discovery of three processes; 1) learning foundational knowledge, 2) self-identifying personal natural inclination and 3) applying personal principles. Secondly, a proactive mode of knowledge triggered by a concentration on the act of knowing had prompted the findings of two processes; accessing sources of information and creating tacit understanding. Thirdly, a spirit mode beyond knowing had helped locate two processes; originating creative initiatives and applying great knowledge, which consisted of acting as a great self, achieving greatness and encountering change. Fourth, appropriate usage had directed the identification of three processes; transforming events into opportunities, implementing innovative strategies and a feedback loop that is correcting errors or constant self-upgrading. Finally, new wealth had guided the rediscovery of two outcomes, which are the great financial wealth and meaning as the ultimate working objective.

Table 5.2: Summary of refinements to the strategic knowledge creation framework

Stages in the strategic knowledge creation framework	Stages in the process model of knowledge-wealth creation	Refinements to the strategic knowledge creation framework
A reactive mode of knowing induced by external event	<ul style="list-style-type: none"> • Learning foundational knowledge • Self-identifying personal natural inclination • Applying personal principles 	<ul style="list-style-type: none"> • Shows how a reactive mode of knowing is started • Uncovers how to decide on what knowledge to be created • Reveals how guidance and interpretive lens for effective process of knowing are established
A proactive mode of knowing	<ul style="list-style-type: none"> • Accessing sources of information • Creating tacit understanding 	<ul style="list-style-type: none"> • Shows how the knowledge creation process can be in a proactive mode • Demonstrates how information is perceived and understood in an individual's process of knowledge creation
A "spirit" mode beyond knowing	<ul style="list-style-type: none"> • Originating creative initiatives • Applying great knowledge 	<ul style="list-style-type: none"> • Clarifies the spirit mode beyond knowing as a creative state of mind • Reveals outcomes of the spirit mode beyond knowing
Appropriate usage	<ul style="list-style-type: none"> • Transforming events into opportunities 	<ul style="list-style-type: none"> • Uncovers what is an appropriate usage in the contemporary business context and how it can be attained

Table 5.2 continued

	<ul style="list-style-type: none">• Implementing innovative strategies• Correcting errors or constant self-upgrading	<ul style="list-style-type: none">• Reveals when the appropriate time is and how it emerges in the management context• Demonstrates what an appropriate skill is and how it is achieved• Shows what an appropriate nature is and the way it emerges
New wealth	<ul style="list-style-type: none">• Great financial wealth• Meaning as the ultimate working objective	<ul style="list-style-type: none">• Validate “wealth” as an outcome from the process of knowledge creation and the process of strategy innovation in the strategic knowledge creation framework• Demonstrates strategic use and meaning of financial wealth for on-going wealth creation purpose• Reveals the strategic importance of work meaning

5.2.1 Refinements of learning foundational knowledge to a reactive mode of knowing induced by external event

Learning foundational knowledge complements a reactive mode of knowing induced by external event. It showed a starting point of an individual's knowledge creation process. During this process, the individual is a beginner or happens to be in their early childhood period, who is unable to make a choice of education and is relatively helpless in making self-discretion; a reactive way of encountering formal and informal education, as well as the fact that family and social influence are inevitable. Therefore, learning foundational knowledge explains how the reactive mode of knowing is established.

Learning foundational knowledge also demonstrates how the Chinese culture is inherited and basic knowledge is acquired. At the beginning of his training, Cook Ting might have witnessed ox cutting and learned from other cooks. In addition, Cook Ting spoke Chinese language and adopted the distinctive Chinese concept of *Dào* that lies within the Chinese language. It is evident that Cook Ting had been influenced by education and living experience in the Chinese society and its culture. This cultural and educational influence to Cook Ting is a phenomenon that is common to all four informants in this research. Therefore, the findings on learning foundational knowledge suggested that Zhuāng Zǐ's philosophy was useful for effective processes of knowledge creation and strategy innovation in contemporary business setting.

5.2.2 Refinements of self-identifying personal natural inclination to a reactive mode of knowing induced by external event

Self-identifying personal natural inclination provides a better understanding to a reactive mode of knowing induced by external event. The inner apprehension of *Dào* can be achieved through a variety of skills, such as cicada catching and bell stand carving (Höchsmann & Yang, 2016). However, Cook Ting preferred and chose to focus on ox cutting (Watson, 1968) without explanation on the rationale of the selection. Research findings suggested that an individual's natural inclination was an appropriate criterion for selection. This means that among a wide range of approaches, only ox cutting was best matched with Cook Ting's personal natural inclination. As revealed in this study, skillful performance could be achieved through selection and development skills according to this personal natural inclination. Among the reasons for this were that conducting such activities could be an intrinsic motivation by itself and an individual is talented in skills that are in compliance with their personal natural inclination.

Self-identifying personal natural inclination involves developing self-awareness on an individual's talent and subjectivity as a powerful source of heterogeneity. Developing self-awareness is a reflection process which requires a focus on an individual's state of mind rather than external event or factor. In other words, the reflection directs an individual's attention. This process may highlight the point where Cook Ting started his way towards the inner apprehension of *Dào*. Although the eyes of Cook Ting saw a variety of things

or events, his focus remained on the ox in his perception. In this research, informants were well aware of their internal state of mind. Informant 1 focused on the problems he might encounter for wealth creation and noticed that he lacked the working knowledge. Informant 2, Informant 3 and Informant 4 became aware of their interest in specific activities or technologies and they were persistent in pursuing their interest.

5.2.3 Refinements of applying personal principles to a reactive mode of knowing induced by external event

Applying personal principles uncovers the way *Zhuāng Zi*'s philosophy had been applied. In the strategic knowledge creation framework, Cook Ting's ox cutting was in accordance to *Dào*, which served as a guide to his practice. In the process model of knowledge-wealth creation, informants utilized Chinese moral values and way of life as their guidelines. The personal principles of the guidelines offer clearer sense on the useful cognitive reference that guided the effective processes of knowledge creation and strategy innovation.

Furthermore, the personal principles acted as interpretive lens for a manager to filter and understand information for their further actions. The signature feature in a reactive mode of knowing is induced by an external event being Cook Ting seeing any image in his eyes as an ox. The ox appeared to be his interpretive lens in understanding images in his eyes. Research findings revealed that informants utilized personal principles in perceiving an ideal way of generating wealth. Specifically, informants strived to follow or be in

compliance with Chinese moral values and its way of life in their strategic change and strategic actions. For instance, Informant 1 saw things from the perspective of trustworthiness. He did not only assess whether a potential partner or a supplier was trustworthy, but also put in his best effort in establishing trustworthiness from all of his actions. Therefore, the perception of trustworthiness functions like the perception of ox in Cook Ting's mind. A strategic action is not just an action in an objective external reality, but also induces trustworthiness in the subjective internal reality within the mind of an individual.

5.2.4 Refinements of accessing sources of information to a proactive mode of knowing driven by a concentration on the act of knowing

Accessing sources of information has shown the way a knowledge creation process can be in a proactive mode. In the proactive mode of knowledge driven by a concentration on the act of knowing, Cook Ting did not see any ox even if the ox was in front of him. Cook Ting demonstrated proactivity by selectively concentrating his attention on the source of knowledge within himself rather than the outside world. This means that he was no longer reactive in his knowledge creation effort and the concentration made him ignore the existence of an ox in front of him.

In this research, the proactivity in the knowledge creation process was to actively search for information from diverse sources of information. The active search was driven by personal natural inclination. Moreover, the information

was filtered (e.g. Cook Ting divided types of information sources and sought only from internal instead of external sources) through personal principles and informants were thereby allowed to focus on those deemed relevant and important.

Accessing sources of information sheds light on how external information sources served as an essential component of creating new tacit knowledge within an entrepreneur. The phenomenon of Cook Ting who did not see an ox despite it being in front of him was previously connected in the conceptual framework section to Zhuāng Zǐ's theory of seeing things as equal. The connection highlights that an objector, or whatever that was presented in front of an individual's eyes and what the individual perceives from the vision are two different subjects. In particular, the ox that appears in the individual's perception is very likely different from the ox that exists physically. Nevertheless, the theory of seeing things as equal points that "*Shì yì yīn bǐ*", which means the creation of an idea about a material thing or an epistemic object is triggered at the time that a person comes in touch with an ox (Nán, 2007a). In the case of Cook Ting, an eyesight of the physical ox was essential for creating the perceptive ox. In other words, this physical ox was a source of information. It then implied that external objects or whatever that is present through the eyes of a manager can be a source of information. The findings of accessing sources of information uncovered that sources of information were not only from reading and observation, but also through listening and interacting with the social network. As reported previously, social capital is a

distinctive information source that offers heterogeneity to managerial capabilities.

5.2.5 Refinements of creating tacit understanding to a proactive mode of knowing driven by a concentration on the act of knowing

The process of creating tacit understanding reveals the reason why a concentration on the act of tacit knowing is needed. During the time when information is available to a manager, it does not have a meaning. The problem requires a manager to actively create a meaning for the information. The creation of meaning is tacit because it happens within a manager's perception.

Creating tacit understanding uncovers how information becomes meaningful through an entrepreneur's internal knowing processes. According to the theory of seeing things as equal, the formation of an idea about a material thing or an epistemic object requires a source of information and an individual's perception (Nán, 2007a). While accessing sources of information demonstrates the way how a manager comes to know the information, creating tacit understanding shows the way how such information is perceived inside an entrepreneur's cognition. The phenomenon of Cook Ting not seeing an ox implies that he attained a higher level of familiarity about an ox to the extent that his eyesight on the ox was not needed to perform ox cutting. Ox cutting is thus conducted based on the internal familiarity about the ox and not on the eyesight.

This study discovered that informants understood information via personal experience in the working process, which is through memorizing and thinking. Since working processes can be complex and vary from person to person, work related meaning and wisdom of information are generated by an entrepreneur differently and contributed to heterogeneity in managerial capabilities. Besides, information can be memorized for the subsequent deep thinking about the meaning of the information and its application. Memorizing is particularly useful for creating tacit understanding when the stored information is intellectually challenging for the development of a higher level of managerial capabilities. In other words, the information is transformed by the process of creating tacit understanding into a working knowledge or experience, which functions like the internal familiarity about the ox, in guiding a working activity.

5.2.6 Refinements of originating creative initiatives to a “spirit” mode beyond knowing

Originating creative initiatives sheds light on the distinctive feature of the spirit mode beyond knowing as a creative capability. In Cook Ting’s ox cutting narrative, the connection between creativity and the highest level of ox cutting skill, the spirit mode beyond knowing, is not clear in the original text and requires further understanding, particularly in terms of its application in a management context.

In this research, the spirit mode beyond knowing is a creative state of mind. By spirit, it means “a state of mind with superior cognitive abilities transcending the ordinary human sensory and cognitive processes” (Vávra, 2017, p.204). Chiu (2016, p.46) refers to the spirit that had been used in cutting an ox as “the creative power of the world”. Ni (2003, p.198) claimed that the spirit mode beyond knowing is “the unity between the self and the heaven”, or the union of the heaven and man, resulting from a period of cultivating oneself. As discussed earlier in the “Knowledge creation in Daoism” section, the union of the heaven and man enabled woodcarver Ch’ing to have a creative idea of a bell stand within a tree and to carve the tree according to the idea (Watson, 1968).

In the case of Cook Ting, the union of the heaven and man allowed him to make some creative knife cuts. This is because the union had empowered Cook Ting to access the potential of both an ox and himself so as to utilize this potential in ox cutting (Chiu, 2016). The potential provided creative insights for a highly efficacious ox cutting, at least by revealing the precise points for a cook to put the knife. Therefore, the spirit mode beyond knowing may produce creative ideas and insights. Despite the conceptual insight in the philosophy literature, there is a lack of empirical study on the spirit mode beyond knowing in management.

Empirical evidence provided by informants uncovered that the process of originating creative initiatives generated both creative ideas and insights through inactivity in a management context. As discussed earlier, inactivity

was utilized by informants to improve both conscious and unconscious thinking for an effective creative process. In terms of the conscious thinking, inactivity allowed informants to concentrate better. The concentration is important for establishing a pre-condition necessary to activate an effective unconscious thinking in creativity. Concentration, especially facilitated the cognitive capability of memorizing relevant information in the long-term, organizing such information and conducting practical activities over a long period of time.

In terms of unconscious thinking, inactivity is similar to the condition of heart fasting or emptying conscious thought, which prevents artificial thoughts or conscious thinking, inhibits novel ideas or insights from natural thought, or unconscious thinking to come into the consciousness. The conscious thought may be occupied with the existing knowledge and may induce rigidity, leaving little room for new idea or insight to emerge. This is consistent with Fraser (2014) that emptiness is needed in order to use the nature-given capacities and be free from conscious ambitions or distraction. Hence, originating creative initiatives highlights that inactivity is a distinctive creative act of the spirit mode beyond knowing and how inactivity can be applied in producing creative ideas and insights.

5.2.7 Refinements of applying great knowledge to a “spirit” mode beyond knowing

The findings of applying great knowledge distinguished the outcome of the spirit mode beyond knowing and the way it had been used. In the research, great knowledge is an outcome of the spirit mode beyond knowing. It has three facets: acting as a great self, achieving greatness and encountering change. These dimensions of great knowledge improve the understanding on three distinctive characteristics of the outcome of the spirit mode beyond knowing, namely 1) the union of the heaven and man or “the unity between the self and heaven” (Ni, 2003, p.198), 2) perfection of skills (Vávra, 2017), and 3) adaptability to changes in the environment (Chiu, 2016). Acting as a great self, achieving greatness and encountering change correspond to the union of the heaven and man, perfection of skill and adaptability to changes in the environment, respectively.

Acting as a great self demonstrates how the union of the heaven and man had been applied in management. Ni (2003) pointed that Cook Ting’s cultivation of ox cutting skill ultimately gives rise to the union of the heaven and man. The distinguished feature of the union of the heaven and man can be seen from the sharp segregation between the self and non-self becomes vanished (Ni, 2003). Chen (2016) asserted that harmonious relationship between men is a main aspiration of the union of the heaven and man. Acting as a great self, it extends the insights from the philosophical literature to the business context. In this research, the union of the heaven and man appeared as the unity between an

entrepreneur (each of the informants) - and his surroundings, other people or organizational members in particular. The unity is reflected from a larger extent of a reciprocally interdependent relationship. This relation existed between each informant and his organizational members, co-workers in innovative product development, suppliers, customers and others. To generate this relationship, informants used empathy to attain the morality for the purpose of evoking co-operation from other parties. Informants presumed that an individual's interest is grounded on the team's interest and in return they experienced advantages of acting as a great self.

Achieving greatness shows how the perfection of skill had been applied in management. Vávra (2017) stressed that Cook Ting's cultivation of ox cutting skill is a narrative about a craftsman perfecting his skill. The narrative serves as a literary tool possible for diverse applications in a myriad of conditions to achieve a variety of objectives (Vávra, 2017).

This implies that Cook Ting's perfection of ox-cutting skill may provide lessons concerning the perfection of management skills. In the narrative, Cook Ting's ox cutting performance encompasses the skills of preserving his knife, nurturing life, dance and music in his rhythmic movement (Lin, 2015). It achieves greatness in extending teaching from the narrative to dynamic managerial capabilities. In this study, the perfection of management involved informants' development and application of various skills.

For the purpose of creating innovative technologies, products and services as well as other business functions, experts from various areas of expertise were needed. Therefore, the development and application of various skills were not only for informants to participate in innovating novel business offerings, but also for them to identify and recruit key specialists. Knowledge in various fields allowed informants to better appreciate the expertise brought upon by key specialists and its associated value so as to combine their work to produce great results. In this way, the combination of various skills within an individual is required to establish the informant's idea of a perfect management. In short, achieving greatness highlights that entrepreneurs or corporate leaders utilize their organization to achieve their collective goals through co-operation. This is in contrast to the skillful practice as narrated in Zhuāng Zǐ's book that craftsman completes their work by using tools (Vávra, 2017).

Encountering change uncovers the way the adaptability to changes in the environment had been applied in management. Chiu (2016) claimed that the spirit mode allows an individual to function together with the environment by better taking into the account of particularities of the situation, so as to bring out the possibilities of things and people and minimize any contradiction in their interactivity. Particularly in his continuing movements, spirit enabled Cook Ting to see and follow the natural patterns of an ox for choosing and cutting the parts of an ox that are related to his purposes (Chiu, 2016). Chiu (2016, p.46) argued that Cook Ting was "working with the ox" rather than passively following the natural patterns of the ox. It was the working with the ox that helped to achieve the adaptability to change. In the contemporary

management context, Cook Ting symbolizes a manager while the ox symbolizes an external environment. Therefore, the narrative implies that the manager can work with the rapid-change in the environment instead of following passively the natural patterns of external environment.

From the research, encountering change showed the way manager works in a high velocity environment. Instances of adaptability can be seen from informants who overcame the threat of change and capture trend in the external environment. Passively following the external environment is detrimental to firms as threatening change is a negative direction of change, and thus it demands advanced managerial capabilities (great knowledge) to overturn the challenge. Furthermore, the capture trend requires managers not to restrict their observation on the current status of an external aspect, but to see possibilities of environmental change and actions can be taken based on the particularities of the situation.

5.2.8 Refinements of transforming events into opportunities to appropriate usage

The findings of transforming events into opportunities improve the understanding of the appropriate time in the contemporary business context. In the “outcome of knowledge creation” section, discussions revealed that the spirit mode beyond knowing may lead to “appropriate usage”. Appropriate usage needs to be supported by appropriate time, skill and nature.

In this study, appropriate time happened when informants' great knowledge was connected to potential customers' latent needs or challenges they faced. This required informants to demonstrate their competency to potential customers, enable customers to recognize the value of their competency and accept that informants can meet their expectations. As a result, potential customer needs and challenges had been transformed into opportunities to the informants.

Transforming events into opportunities has shown how appropriate time can be attained. An appropriate time emerges during the time an opportunity is created. In other words, an appropriate time occurs when great knowledge is associated with potential customer needs or problems. The emergence of appropriate time requires great knowledge to identify and provide solution for possible customer needs and problems.

In the absence of great knowledge, an appropriate time is less likely to appear as there will be a smaller chance for converting events into opportunities. Potential customers may be satisfied with the status quo without knowing that their situation can be improved with great knowledge. In such condition, customers may be unaware of their potential needs, or leave their difficult problems unresolved. As discussed earlier, the application of great knowledge can bring out new possibilities and lead to a better situation. Missing such business opportunities is identical to missing an appropriate timing.

5.2.9 Refinements of implementing innovative strategies to appropriate usage

The findings of implementing innovative strategies have improved the understanding on the appropriate usage in the contemporary business context. Zhuāng Zǐ explained the idea of appropriate usage by contrasting examples of a proper use and a misuse of a battering ram (Fraser, 2015). A proper use of a battering ram is to be utilized against a city wall while a misuse is to fill in a hole (Fraser, 2015). This is suggestive of the fact that the circumstances have a deterministic influence over whether or not it is appropriate to utilize a battering ram (Fraser, 2015). Changing circumstances can be dangerous when they cause the same action to produce uncertain outcomes, varied from a noble result to a mean one (Fraser, 2015).

In this research, appropriate usage emerges when innovative strategies are crafted as appropriate means to seize opportunities created in the previous stage. On one hand, opportunities represent favorable conditions to entrepreneurs, like how a city wall or a hole is related to a battering ram. On the other hand, innovative strategies represent customized solutions used by entrepreneurs to match these conditions, like how a battering ram is related to a city wall or hole.

The findings of implementing innovative strategies show how an appropriate usage can be attained. In the findings, innovative strategies can be categorized into new technologies and products and new business approaches. Latent

customer demands new specifications and functionalities that no existing product has. Therefore, new products and technologies are developed and designed with the new features and functionalities that matched with the latent customer demand. For example, a bigger and longer size of wood to match the city wall's sturdiness is required in designing its battering ram. In comparison, the design of a new tool for plugging a hole needs a smaller and shorter size of wood to fit the small hole. From this research, such new specifications and functionalities of new products and technologies include lower cost, stable software with lower errors and even new concepts of electronic products and machines for very new requirements. Appropriate usage is established when new products and technologies are being used by customers and are capable of meeting their requirements.

New business approaches provide the ways how entrepreneur's underlying thinking attains appropriate usage. Appropriate usage requires entrepreneurs to lead in a way that their firms are in harmony with their external environment, especially their customers. As discussed in Section 5.9, product specifications and their intended performance represent new business approaches for wealth creation. These product specifications, their intended performance as well as embedded technologies reflect entrepreneurs' perception of customer needs and the ways their firms satisfy customers and make a living (Teece, 2007). Therefore, entrepreneurs may strategically change and improve their firms to cater for requirements in the supply and demand to attain appropriate usage. To better supply their offerings, such as to achieve a higher standard of product and service performance, informants had developed new technologies and

work processes to be applied into their products and services. Informants also subjectively defined their target customers so that they could have better focus and meet their demand better. As such, entrepreneurs can make adjustments and improvements in the firm's supply or meeting demand to actualize appropriate usage.

5.2.10 Refinements of correcting errors or constant self-upgrading to appropriate usage

The findings of implementing innovative strategies appreciate the appropriate skill and nature in the volatile and complex business environment. As discussed in the foregoing sections, appropriate skill and nature under-gird appropriate usage. In his text, Zhuāng Zǐ illustrates two famous horses which had galloped an exceptional long distance within a day, but losing out to a wild weasel in catching a rat (Legge, 1981). This implied that galloping an exceptional long distance within a day is an appropriate skill for transportation, but not for catching a rat. Therefore, the distinctive skill of galloping for a long distance within a day is an ideal support to transportation and this showed that appropriate skill under-girds appropriate usage.

Furthermore, the lesson highlighted that no specific skill is an appropriate skill by judging it in its existence alone. The qualification of being appropriate is not determined solely by a skill, but also by the circumstance it was applied (Fraser, 2015). Therefore, an appropriate skill is more needed to know to

achieve a sustainable wealth creation in a volatile and complex business condition.

In this study, correcting error or constant self-upgrading had helped in establishing the appropriateness for a skill, great knowledge included to undergird appropriate usage. Correcting error or constant self-upgrading is the strategic changes needed in an entrepreneur's skill to keep up with a volatile and complex business environment. In correcting error, informants are actively prepared for errors. They monitored business situation continuously. For instance, Informant 1 was ready to respond to phone calls at any time in the middle of the night. In the event of a failure, informants update their knowledge accordingly. In one way, the update may involve the refinement to their skills similar to Informant 2 who made improvement over a series of trial and error in his work.

In another way, informants identified different contexts that were suitable for them to implement their skills. For instance, Informant 3 shifted his target market from the United States of America to Asia. After refinements had been made, skills became in harmony with informants' target business environment and those are appropriate skills that support appropriate usage.

In constant self-upgrading, informants continuously updated and upgraded their knowledge to create a favorable new business situation. They not only responded to unwanted environmental changes, but generated a new one to gain more profit. Informants create new markets by constantly producing new

products or services. Innovating new products and services ceaselessly are driven primarily by ongoing self-upgrading with new knowledge. New knowledge leads to a new skill, which acts as an appropriate skill in developing new products and services. As discussed earlier, new products and services can be appropriate usage when they satisfy customer needs. As such, correcting error and constant self-upgrading are the ways to establish appropriate skills. The findings of correcting error or constant self-upgrading demonstrated that appropriate skill is a skill that is in harmony with the context it has been applied.

Correcting error or constant self-upgrading does not only enable great knowledge to contribute to appropriate skills, but it also helps transforming personal inclination into appropriate nature. Specifically, correcting error and constant self-upgrading are ways to establish the appropriateness to an individual's natural inclination, leading to an appropriate usage. For example, Informant 1 exploited his obsession of solving problems in handling his business problems. He had been perceiving the accumulation of problem-solving experiences as an advancement of his managerial capabilities. As reported in the findings, being better in managerial capabilities can lead to a better business management.

A similar pattern of the way appropriate nature emerges can be found in Informant 2, Informant 3 and Informant 4. These informants are obsessed with innovating which motivated and directed their ongoing knowledge creation process. They learned and created new knowledge, and then transformed the

knowledge into appropriate skills to produce new products and services that represent appropriate usage. This shows that personal inclination becomes appropriate nature as it improves the managerial capabilities for appropriate skills and contributes to appropriate usage as the continuous knowledge creation process is needed to match the changes that happen in the environment.

5.2.11 Refinements of great financial wealth to new wealth

The findings of great financial wealth in the process model of knowledge-wealth creation improve the understanding on new wealth in the contemporary business condition. Consistent with the literature review and strategic knowledge creation framework, the performance of wealth creation achieved by informants is a sampling criterion. In the process framework, new wealth had been generated from appropriate usage, which was the application of a recipe for salve for chapped hand in war instead of washing silk. The phenomenon is recorded as taking place in ancient China but the recipe is no longer in existence. This raises a question on the effectiveness of appropriate usage for wealth creation in the contemporary economic situation. Resolving the doubt demands an investigation on wealth as an indicator of the effectiveness.

The findings of great financial wealth suggest that appropriate usage is effective in the contemporary economic circumstances. When informants work as employees, their knowledge earned them a normal level of financial income, deriving primarily from the wages paid by their employers. Therefore, utilizing

their knowledge in an employment is comparable to the application of a recipe for salve for chapped hand in washing silk.

In contrast, the application of knowledge in their entrepreneurship is akin to the application of a recipe for salve for chapped hand in war. As the monetary reward is much greater from their entrepreneurship as compared to employment and signifies greater appropriateness in terms of wealth creation, the financial performance of their appropriate usage is termed as a great financial wealth. As such, great financial wealth shows that wealth differs according to the method the knowledge was applied.

Despite the increase in the firm revenue, the findings of great financial wealth hint at another key consideration of using knowledge in different context is the increase in firm profit. One context may demand comparatively more resources than another context. In this research, entrepreneurship demands more resources than employment. This can be seen from the findings of great knowledge informants needed to recruit and pay employees in addition to the salary in their previous employment that they sacrificed. As warned by informants, some firms have even sacrificed their profit to increase the revenue and occupy a larger market share. Great financial wealth provides a clearer picture on healthy wealth creation that giving up profit is not viable and profit is an essential indicator of a successful wealth creation.

5.2.12 Refinements of meaning as the ultimate working objective to new wealth

The findings of meaning as the ultimate working objective gained a clearer sense on new wealth as a financial return for firm's sustainable development in the long run, instead of a short-term financial reward that inflicts self-destruction and threatens firm survival. In the strategic knowledge creation framework, the concept of wealth creation is adopted from Zhuāng Zǐ's story of the son of the duke of Zān who went fishing using a great hook. After he managed to catch the big fish, the prince shared it with other people (Legge, 1891). As the big fish could be exchanged for monetary income, the behavior of sharing it was similar to distributing financial wealth to other people. However, Zhuāng Zǐ's did not explain the strategic importance and rationale of the prince sharing his wealth with other people.

Meaning, as the ultimate working objective in the process model of knowledge-wealth creation, reveals a strategic importance and rationale of sharing wealth with other people. Specifically, meaning as the ultimate working objective connects wealth-sharing to a sustainable wealth creation. In this research, informants intentionally shared some of their wealth with employees, collaborators and the society. Therefore, wealth-sharing conducted by informants is identical to the allocation of the big fish to the public by the prince. According to informants, the strategic importance and rationale of sharing their wealth is to attain meaning. In other words, wealth is simply a means to create meaning, which is the ultimate objective of the informants.

As reported in the findings, the rationale is driven by informants' personal natural inclination. Instead of financial wealth, the personal natural inclination stimulated informants' intrinsic motivation. For example, Informant 2 was interested in innovating new technologies and products. He shared the financial wealth generated from his technologies and products with his partners because these employees and collaborators were part of the process of creating new things. Meaning is the ultimate working objective as Informant 2 gained more satisfaction from the capabilities of his technologies and products in solving challenging problems than his satisfaction on the financial wealth.

In addition, the strategic importance of meaning is to reinforce firm's further development. As revealed by Informant 2, wealth sharing is the key to attract top talents for research and development activities. Top talents worked with him to create new technologies and products continuously, and thus it spurred firm's further development.

5.3 Limitations and future research directions

The result of this study suffers from four limitations. Firstly, this research focuses on how knowledge creation and strategy innovation are carried out by individuals rather than a group of organization members. It is consistent with the situation in *Zhuāng Zǐ*'s stories and the Chinese history. In Cook Ting's story, knowledge is created individually. In the story of a recipe for salve for chapped hand, strategy innovation is conducted by a stranger. In *Zhàn Guó Cè* (Crump, 1996), an ancient Chinese text about strategies in the Chinese history, most strategies were provided by individual strategists. However, knowledge creation (Nonaka, 1994) and strategy-making (Mintzberg, Ahlstrand & Lampel, 1998) may involve more than one organization member in modern economic environment. The group level of analysis is not adopted in this research because of the fact that the objective is to focus on identifying the origin of the knowledge creation within an individual. Moreover, the unique position of informants as the top decision maker of their firms allows them to finalize a strategy-making process and decide on a new strategy.

Despite the focus, the research finding of acting as a great-self reveals the thought of informants in their collaboration with other team members. Besides, the research finding of accessing sources of information also highlights that informants like to receive information from different people who can be their collaborators. These findings uncover how an individual manager creates and applies the knowledge in the collaboration of a team. To have a comprehensive understanding, future research can be conducted with a team level analysis

about the way how a team of organization members, who leverages on Zhuāng Zǐ's philosophy creates and applies the knowledge in making new strategies. This can be achieved by choosing a group of individuals as sample of future research.

Secondly, the findings of this research do not constitute a generalization that can be extended to a population in a statistical sense (Schreier, 2018). This is because samples of this research were selected based on research objectives rather than the extent to which a sample represents a population (Stake, 2006). The purposive selection of samples in this research is needed for a theory-building multiple-case study design (Carroll & Swatman, 2000) to explore the phenomenon of interest, which is the processes of knowledge creation and application of Malaysian Chinese entrepreneurs. In addition, transferability instead of statistical generalization is the focus of, and is consistent with, this qualitative research (Schreier, 2018). Transferability is the extent to which the research findings are applied to other instances (Schreier, 2018). To overcome this limitation, future research can employ quantitative methods to study Chinese societies like China and Hong Kong, which can validate the process model of knowledge-wealth creation and generate its statistical generalizability (Schreier, 2018).

Thirdly, the findings of this research do not provide predictions in terms of a deterministic cause and effect relationship. This is because the research philosophy of this research is constructivism, which is frequently combined with interpretivism (Creswell & Creswell, 2018) and employs a distinctive set

of ontological belief, epistemological belief and other assumptions as discussed in Section 1.6. Constructivism is adopted as the research philosophy because its of assumption of knowledge emerges from the interaction between the theory-base of an individual and the medium of phenomena (Mir & Watson, 2000). This assumption allows the exploration of processes of knowledge creation and strategy innovation from Zhuāng Zǐ's perspective. An important theory-base of an individual is culture and the influence of Zhuāng Zǐ's philosophy to Chinese culture is incalculable (Ames, 1998). Therefore, processes of knowledge creation and strategy innovation from Zhuāng Zǐ's perspective can be explored by studying Malaysian Chinese entrepreneurs, who are influenced by Chinese culture.

This research is an interpretive case research, which is different from a positivist case research (Bhattacharjee, 2012). As an interpretive case research, this study does not generate the prediction of behavior or affirmation of law-like regularities (Daymon & Holloway, 2011). This is because social reality is assumed in interpretive research paradigm to be not singular or objective and dependent on social contexts and individual experiences (Bhattacharjee, 2012). Therefore, predictions on the ground of law-like regularities existing in the objective reality is inconsistent with interpretive case research.

In addition, prediction is inappropriate for this study because the priority of an interpretive case research is to increase the understanding of a phenomenon, which is most suited for the exploration of an under researched area (Daymon & Holloway, 2011). Specifically, the exploration of an interpretive case

research allows the building of new theory through the analysis and synthesis of evidence collected from cases, which enable the emergence of concepts and patterns (Bhattacharjee, 2012). In this study, the under researched area consists of processes of knowledge creation and strategy innovation from Zhuāng Zǐ's perspective while the resulting theory is the process model of knowledge-wealth creation.

Future studies may utilize the positivist approach to generate predictions (Daymon & Holloway, 2011) to increase the predictive ability (Bhattacharjee, 2012) of the process model of knowledge-wealth creation developed in this research. Predictions are possible within the positivist paradigm for its assumption of social reality is objective and exists independently of human perceptions in a way that is identical to the natural reality (Daymon & Holloway, 2011). This implies that law-like generalities and rules in the natural reality may also exist in social reality (Daymon & Holloway, 2011). Therefore, predictions may be generated on the ground of the universal laws and regularities searched by positivists (Daymon & Holloway, 2011).

Fourthly, the process model of knowledge-wealth creation may not be applicable to managers or entrepreneurs who are not influenced by Chinese culture or Zhuāng Zǐ's philosophy. Since the model emphasizes on the use of human nature for knowledge creation and strategy innovation, entrepreneurial managers from other cultures may utilize their human nature for the same purposes. The human's natural ability to know is universally common to all human beings. However, differences may exist from the cultural impact to the

business approaches adopted by entrepreneurial managers. For example, individualism in the Western culture may pose a challenge for an individual to act as a great self. Nevertheless, entrepreneurial managers from other cultures who are driven by the purposes on solving social or environmental issues may provide further insight on acting as a great self and knowledge. In addition, the notion of great knowledge is the first attempt of this study to connect Zhuāng Zǐ's philosophy to dynamic capabilities perspective. The idea of knowledge is rather new to entrepreneurial managers from other cultures. Therefore, additional research studies are required to examine great knowledge and the process model of knowledge-wealth creation further so that the process model may be applicable to, and usable by, entrepreneurial managers from other cultures.

5.4 Implications for practice

This study has a number of key implications for practice. Firstly, the process model of knowledge-wealth creation developed in this research provides guidance on a way of moving from generating the novel know-how towards making a living. In comparison to the explanations about the relationship between variables and the effectiveness of the variables in predicting outcome, knowledge from research findings that uncovers the process is more actionable and a useful guide for practitioners to follow (Langley et al., 2013). Process contains actionable knowledge about things to do, ways to make desired changes and the sequence of moves needed to achieve objectives (Langley et al., 2013). In the process model of knowledge-wealth creation, things to do are

grouped into three categories, which consist of 1) the empowerment of the natural ability to know, 2) self-cultivation for possibility development, and 3) enactments of breakthrough. As depicted in Figure 4.1, things to do in the category of empowering the natural ability to know consists of learning foundational knowledge, self-identifying personal natural inclination and applying personal principles. In the category of self-cultivation for possibility development, things to do consist of accessing sources of information, creating tacit understanding, and originating creative initiatives.

In the category of enactments of breakthrough, they entail applying great knowledge, transforming events into opportunities, implementing innovative strategies, and correcting errors or constant self-upgrading. These things produce the desired outcomes, which are financial wealth and meaning.

In addition, the sequence of moves is represented by arrows in the process model (Van de Ven & Poole, 1995) in Figure 4.1. This implies that practitioners can follow the process model to identify where to begin with, the next thing that they may need to do after one thing is accomplished and the potential outcomes that can be produced.

In the process model, the ways of making desired changes are the manners in which the Malaysian Chinese entrepreneurs learn the foundational knowledge and move forward to achieve the attainment of financial wealth and meaning. As described and explained in the research findings, these ways of change-making underlie the process model and are consistent with Zhuāng Zǐ's

philosophy. For example, research findings show that learning foundational knowledge involves acquiring basic knowledge from formal Chinese education, early life experiences in a Chinese-educated society and early skill development. This implies that practitioners should reflect on their basic knowledge from formal education, early life experiences and early skill development. For practitioners without Chinese education, the findings imply that they may learn the Chinese culture, Chinese language or interact with Chinese-educated persons in addition to the basic knowledge from formal education, early life experiences and early skill development.

As shown in the process model, learning foundational knowledge is a pre-requirement for moving to subsequent processes. As discussed in Section 3.1, Zhuāng Zǐ's philosophy is inherent in Chinese language and Chinese culture followed by Malaysian Chinese. The foundational knowledge is important for practitioners to develop understanding on Chinese concepts and Chinese ideas that are applied in subsequent processes. For instance, the process of learning foundational knowledge is followed by the process of self-identifying personal natural inclination. Self-identifying personal natural inclination is a way for practitioners to find "appropriate nature", which is Zhuāng Zǐ's concept. The process of self-identifying personal natural inclination is followed by the process of applying personal principles. In the process of applying personal principles, the guidelines of perceptual mental activities are adopted from Chinese ideas, such as Chinese moral values and way of life.

Learning Chinese cultural knowledge reflects the purpose of learning foundational knowledge to provide the basis and to increase diverse experiences for identifying personal natural inclination. In the event of basic knowledge from the past, it does not help in searching for personal natural inclination, and the process of learning foundational knowledge implies that practitioners should explore different levels of formal education, different life experiences and different skill developments. As suggested in the process of self-identifying personal natural inclination, personal interest (a type of personal natural inclination) comes from a strong feeling toward a specific type of things or events, and sincerity (another type of personal natural inclination) emerges from personal feelings on something.

Practitioners can also refer to and learn from the manners Malaysian Chinese entrepreneurs are moving forward to achieve the attainment of financial wealth and meaning in subsequent processes. In the process of accessing sources of information, the concentration on relevant information is achieved through developing distinctive sources of information and acquiring common sources of information. In the process of creating tacit understanding, tacit knowledge and capabilities are generated from experiencing through personal involvements, and memorizing and thinking to comprehend. In the process of originating creative initiatives, creative aspirations are created through conceiving new ideas and developing creative insight of what could have been the greatest impact. In the process of applying great knowledge, a more comprehensive account of the three dimensions of the thing to be acted upon or understood is taken, namely the perspective from the position of the thing, its

whole picture, and its changes. In the process of transforming events into opportunities, the transformation is achieved by way of demonstrating competency to induce latent customer needs and solving tough problems. In the process of implementing innovative strategies, opportunities are captured by offering novel products and implementing new business approaches. In the process of correcting errors or constant self-upgrading, further improvements are attained by using failures as lesson learned and pursuing higher levels of knowledge continuously.

An actionable knowledge is important for practitioners. There is a lack of knowledge and empirical research on the process of building capability (Bingham, Howell & Ott, 2019; Helfat & Peteraf, 2015). Therefore, research findings of this research is one of the points of guidance in this area.

Secondly, the process model of knowledge-wealth creation implies that practitioners should increase the understanding of themselves to identify and develop their natural ability to know. Practitioner literature shows that in his young age, the late Steve Jobs was interested and had developed knowledge in areas like electronics and Eastern spirituality to increase self-knowledge and search for the way he could fit into things (Isaacson, 2011). The knowledge was important for him to create new insights and applied in his subsequent implementation of innovative strategies, such as iPod, iPhone and iPad (Isaacson, 2011). This implied that Steve Jobs identified his natural ability to know from his obsession with electronics (also referred as a personal natural inclination in this research) and constantly cultivate his knowledge related to

this area. Besides, his search for self-knowledge and the way he could fit into things is an exploration of “appropriate nature”. As the literature focuses on Steve Jobs, it provides little guidelines to practitioners about identifying their natural ability to know and creating new knowledge for their application in forming innovative strategies. Developing self-knowledge is especially important because it is common that an individual has little knowledge about their unique capabilities, and also their weaknesses to avoid wealth creation approaches that are not suitable to them (Lingo, 2020).

This research informs practitioners that human’s natural ability to know is an origin of great strategies, which should be utilized to differentiate them from competitors and to aid the successful wealth creation. Practitioners facing unanswered questions about the actual origin of great strategies and the way to develop them (Gavetti & Porac, 2018). Research findings show practitioners a way of understanding the human natural ability to know, where an individual may notice personal natural inclination when it resonates with some knowledge, skills, or living experience. Useful knowledge to practitioners being the personal natural inclination is important to know things an individual can be good at and more sensitive to than the others. This implies that practitioners should begin and focus on their knowledge creation effort according to their personal natural inclinations because these areas are those that differentiate them from the other people, and likely yield better outcome compared to their effort in other areas. Human natural ability to know is an endogenous root of great strategies that is unique to an individual and more likely to be helpful to bring out special outcome. The endogenous root of great strategies is

distinguished from the exogenous origin of great strategies like social movements that are available to the mass (Rao & Dutta, 2018).

Practitioners can use the findings of the empowerment of the natural ability to know as a guideline as to how their personal values are selected. Personal values direct the allocation of an individual's attention and modify an individual's understanding of resources and markets (Rindova & Martins, 2018). There is a lack of knowledge about the process of selecting personal values (Ott, Eisenhardt & Bingham, 2017). The findings with regard to the empowerment of the natural ability to know inform practitioners to form personal principles by selecting personal values from their foundational knowledge that is compatible with their personal natural inclination. The personal principles consist of Chinese moral values and Chinese ways of life, which emphasize living in harmony with the people and the world through an exploitation of the potential of human nature in relation to the others, such as people, things (e.g. preservation of the cultural artifacts), and natural environment. The personal principles give privilege to business approaches that are co-operative attitude over confrontational attitude, such as taking hostile competitive moves. As shown in the research findings, co-operative approaches can benefit practitioners from fostering co-operation in new product development and gaining resources like privileged information from customers, suppliers, stakeholders and the social network.

Thirdly, the new concept of “great knowledge” introduced in this study suggests to practitioners that the knowledge used by them in forming new

strategies should capture three aspects of a subject (e.g. a new technology) to be known, which are perspectives of the involving parties, comprehensive understanding of the subject, and possible changes related to the subject. Knowledge is essential for practitioners to make effective and action-oriented strategies (Bolisani & Bratianu, 2017; Grant & Baden-Fuller, 2018). Taking perspectives of the parties involved helps practitioners understand their needs, interactions and inter-reactions with the subject of inquiry. The understanding is needed to create a strong co-operation and interdependence between people so as to establish mutual benefits, such as co-working opportunities to facilitate new technologies in the development process and make a new product development project feasible.

A comprehensive understanding of the subject of inquiry implies that practitioners need to develop multi capabilities to satisfy their working needs, and use multi capabilities to coordinate and combine the work of his working team. Steve Jobs highlighted that the wisdom of “connecting the dots” allowed him to apply his knowledge on calligraphy in personal computer technology to invent wonderful typography (Schlender & Tetzeli, 2015). Although knowledge on calligraphy and knowledge on computer technology seemed to be two unrelated dots, Steve Jobs connected them to produce innovative typography. Therefore, multi capabilities appear to be a variety of dots needed to be connected for the development of new innovation. As shown in this research, the connections of multi capabilities should not be restricted to the connections of an individual’s different capabilities as in the case of Steve Jobs. The connections of multi capabilities should extend to the connections of a

variety of capabilities of different people. Such connections of multi capabilities demand practitioners to have a comprehensive understanding of the subject of inquiry in order to search for the knowledge required, understand different knowledge required and the way different bodies of knowledge are connected for the development of an innovation or a novel strategic change.

Findings of this research inform practitioners that possible changes are an important aspect of the subject of inquiry, which may happen and seriously affect firm performance. These changes may be threats from external environment, such as competitive moves and economic recession that affect the investment of resources in the new product development, and the emergence of trend, such as new technologies that may complement the building construction process or firm's existing product and drive business growth. The finding of "encountering change" should help practitioners design their counter measurements to overcome the possible changes.

In particular, the finding of "encountering change" suggest to practitioners that the knowledge of possible changes can be used in catching new trends. Based on the finding, a way of tackling a trend is to utilize the understanding of the potential demand of a new technology, such as identifying the influence of the problem to be solved by the technology. This implies that practitioners need to have the knowledge of the new technology, the nature of problem and the application of the technology to the problem.

In addition, the finding of “encountering change” suggests that practitioners can design precautions that can help preventing and solving threatening changes. The finding shows that threatening changes are likely connected to limitations such as financial constraints, speed of developing new technologies and products, narrow customer base for firm’s new product and lack of competencies needed to react to potential threats. This implies that practitioners need to recognize and reflect on their limitation early enough to be able to prevent and overcome potential threats. The early time is required because some precautions may be time-consuming, such as competency development.

5.5 Conclusions

This research strives to discover “how do successful Malaysian Chinese entrepreneurs create and apply the knowledge in strategy-making to generate new wealth consistently in organizations by leveraging on the teaching of Zhuāng Zǐ’s philosophy”. The research objectives are to explore into the knowledge creation processes among four successful entrepreneurs, to come up with the new applications of knowledge in wealth creation and finally to create a conceptual model to discern the pattern within the processes of knowledge creation and application experienced by those entrepreneurs. Following an exploratory, process-oriented, constructivist, theory-building multiple-case study research process and data analysis, findings of this research led to a process model of knowledge-wealth creation.

The process model of knowledge-wealth creation is a central research contribution of this study. This research compared the data from four Malaysian Chinese entrepreneurs to develop the process model. The proposed process model of knowledge-wealth creation is a four-stage process that consists of the empowerment of the natural ability to know, self-cultivation for possibility development, enactments of breakthrough and survival and growth.

The model shows that entrepreneurs are mindful in their processes of knowledge creation and strategy innovation. Entrepreneurs' mindfulness consists of self-knowledge and concentration on knowledge creation and strategy innovation. Entrepreneurs reflect their cognition and personal thinking to better understand and cultivate themselves and increase self-knowledge, such as personal natural inclination. Personal natural inclination helps entrepreneurs to focus on their process of knowledge creation and strategy innovation.

This research improves the understanding of micro foundations of learning and their integration as well as knowledge creation and strategy innovation. As dynamic managerial capabilities' concepts argue that superior dynamic managerial capabilities enable managers to effectively adapt and change their firm in rapidly changing circumstances (Helfat & Martin, 2015b), it is important to know the way the superior dynamic managerial capabilities emerge. The process model of knowledge-wealth shows that managers who have superior dynamic managerial capabilities are supported by great knowledge. In the micro level, analytics disentangles great knowledge into the

three dimensions of great knowledge which reveal the causal mechanisms that lead to superior dynamic managerial capabilities. This research contribution suggests that entrepreneurs and managers should pursue broader knowledge instead of limited knowledge for their firm to adapt and change effectively in a dynamic environment.

As an answer to a fundamental question in the strategic management about the roots of generating income in the long run (Teece, 2014b), the process model of knowledge-wealth creation demonstrates that human's natural ability to know is the origin of wealth creation. Accompanying the birth of an individual, the human's natural ability to know - such as talent - is a difficult-to-imitate natural source to be cultivated with human effort or left underdeveloped and unused for valuable course. In the processes of transforming knowledge into cash flow and an intangible asset into a tangible asset, the ability is responsible for learning and creating new knowledge which has led to new opportunities and novel solutions to challenging problems. Since wealth is generated with capabilities and capabilities are grounded in human nature, this research finds human natural ability to know as the source of wealth creation.

As an answer to a key question in the strategic management about the method of creating cash flow in the long run, the process model of knowledge-wealth creation presents the pattern of generating financial wealth over the long period. As a research contribution, this model hints that the meaning of work is required as a motivation that drives the processes of knowledge creation and strategy innovation. The meaning of work is stimulated by, and

commensurated with, personal natural inclination. It allows entrepreneurs to concentrate on creating great knowledge. Great knowledge is then applied to transform events into new opportunities and thereby improves financial performance consistently. It is this transformation that spurs the emergence of tremendous value to customers and generates cash flow. In comparison, long-term wealth creation is much promising with the focus on the meaning of work than conventional profit-seeking orientation. Additionally, overturning an unfavourable situation such as to survive from challenging business problems can be more valuable than increasing the productivity of non-capable types of resources as asserted by Makadok (2001).

In line with Ridder, Hoon and McCandless Baluch's (2014), who focused on the notion of antagonistic positioning research contributions of theory building case study research, this study uses Zhuāng Zǐ's philosophy to converse with the dynamic managerial capabilities literature in order to better understand the empirical phenomenon of dynamic managerial capabilities development and application that drive different corporate performances. Antagonistic positioning refers to the search of dissimilarities by linking the research findings with the theoretical stream distant to the primary field of this study, but sharing a similar phenomenon of interest (Ridder, Hoon & McCandless Baluch, 2014). Antagonistic positioning in this research involves situating the findings of this research in Zhuāng Zǐ's philosophy which shares a proximal phenomenon of interest with the dynamic managerial capabilities literature. The phenomenon is the development and application of an individual's superior managerial capabilities to affect the strategic change and improve

organizational performance in a high velocity environment. The application of antagonistic positioning enables this research to construct a new process model, namely the process model of knowledge-wealth creation and a new concept, namely the great knowledge. The application leads to a better understanding of dynamic managerial capabilities, entrepreneurship and knowledge creation, and thereby contributes to these fields.

In conclusion, the knowledge creation process is a fulfillment of desire for knowledge driven by personal natural inclination, which involves learning foundational knowledge, self-identifying personal natural inclination, applying personal principles, accessing sources of information, creating tacit understanding and originating creative initiatives. The knowledge application process is the utilization of great knowledge which entails applying great knowledge as a way of actualizing great knowledge for the awareness of other people, transforming events into opportunities, and seizing opportunities with innovative strategies. Overall, these processes demonstrate how a new strategy emerges from the thought of Malaysian Chinese entrepreneurs.

REFERENCES

- Abbott, A. (1988). Transcending general linear reality. *Sociological Theory*, 6(2), 169-186. doi: 10.2307/202114
- Abdullah, A., Noor Raha, M., Hafizoah, K., & Mohammad Musab, A. (2014). Conceptualizing English Workplace Communication Needs of Professional Engineers: The Challenges for English Language Tertiary Educators. *International Journal of Contemporary Business Management*, 1(1), 1-9.
- Acquaah, M. (2007). Managerial social capital, strategic orientation, and organizational performance in an emerging economy. *Strategic Management Journal*, 28(12), 1235-1255. doi: 10.1002/smj.632
- Adner, R., & Helfat, C. (2003). Corporate effects and dynamic managerial capabilities. *Strategic Management Journal*, 24(10), 1011-1025. doi: 10.1002/smj.331
- Afuah, A. (2009). *Strategic innovation: New game strategies for competitive advantage*. New York: Routledge.
- Agarwal, R., & Helfat, C. (2009). Strategic renewal of organizations. *Organization Science*, 20(2), 281-293.
- Al-Aali, A., & Teece, D. (2014). International entrepreneurship and the theory of the (long-lived) international firm: A capabilities perspective. *Entrepreneurship Theory And Practice*, 38(1), 95-116. doi: 10.1111/etap.12077
- Alam, S., & Sayuti, N. (2011). Applying the Theory of Planned Behavior (TPB) in halal food purchasing. *International Journal Of Commerce And Management*, 21(1), 8-20. doi: 10.1108/10569211111111676
- Allen, B. (2010). The virtual and the vacant - Emptiness and knowledge in Chan and Daoism. *Journal Of Chinese Philosophy*, 37(3), 457-471. doi: 10.1111/j.1540-6253.2010.01596.x
- Alvarez, S., & Barney, J. (2007). Discovery and creation: alternative theories of entrepreneurial action. *Strat. Entrepreneurship J.*, 1(1-2), 11-26. doi: 10.1002/sej.4
- Alvarez, S., Barney, J., & Anderson, P. (2013). Forming and exploiting opportunities: The implications of discovery and creation processes for entrepreneurial and organizational research. *Organization Science*, 24(1), 301-317. doi: 10.1287/orsc.1110.0727
- Amabile, T. (1983). The social psychology of creativity: A componential conceptualization. *Journal Of Personality And Social Psychology*, 45(2), 357-376. doi: 10.1037//0022-3514.45.2.357

- Amabile, T., & Mueller, J. (2008). Studying creativity, its processes, and its antecedents: An exploration of the componential theory of creativity. In J. Zhou & C. Shalley, *Handbook of organizational creativity* (pp. 33-64). New York: Lawrence Erlbaum.
- Amabile, T., & Pratt, M. (2016). The dynamic componential model of creativity and innovation in organizations: Making progress, making meaning. *Research In Organizational Behavior*, 36, 157-183. doi: 10.1016/j.riob.2016.10.001
- Amabile, T., Conti, R., Coon, H., Lazenby, J., & Herron, M. (1996). Assessing the work environment for creativity. *Academy Of Management Journal*, 39(5), 1154-1184. doi: 10.5465/256995
- Ambrosini, V., & Bowman, C. (2001). Tacit knowledge: Some suggestions for operationalization. *Journal Of Management Studies*, 38(6), 811-829. doi: 10.1111/1467-6486.00260
- American Psychological Association. (2017). Glossary of Psychological Terms. Retrieved from <http://www.apa.org/research/action/glossary.aspx>
- Ames, R. (1998). Introduction. In R. Ames, *Wandering at ease in the Zhuangzi* (pp. 1-14). New York: State University of New York.
- Amit, R., & Schoemaker, P. (1993). Strategic assets and organizational rent. *Strategic Management Journal*, 14(1), 33-46. doi: 10.1002/smj.4250140105
- Anderson, N., Potočnik, K., & Zhou, J. (2014). Innovation and creativity in organizations: A state-of-the-science review, prospective commentary, and guiding framework. *Journal Of Management*, 40(5), 1297-1333. doi: 10.1177/0149206314527128
- Argote, L., & Ren, Y. (2012). Transactive memory systems: A microfoundation of dynamic capabilities. *Journal Of Management Studies*, 49(8), 1375-1382. doi: 10.1111/j.1467-6486.2012.01077.x
- Arndt, F., Pierce, L., & Teece, D. (2018). The behavioral and evolutionary roots of dynamic capabilities. *Industrial And Corporate Change*, 27(2), 413-424. doi: 10.1093/icc/dtx042
- Augier, M., & Teece, D. (2009). Dynamic capabilities and the role of managers in business strategy and economic performance. *Organization Science*, 20(2), 410-421. doi: 10.1287/orsc.1090.0424
- Aziz, M., & Abdullah, D. (2014). Finding the next 'wave' in internationalisation of higher education: focus on Malaysia. *Asia Pacific Education Review*, 15(3), 493-502. doi: 10.1007/s12564-014-9336-7
- Aziz, R. (2012). New Economic Policy and the Malaysian multiethnic middle class. *Asian Ethnicity*, 13(1), 29-46. doi: 10.1080/14631369.2012.625692
- Azman, A., Sulaiman, J., Mohamad, M., Jamir Singh, P., Yahaya, M., & Drani, S. (2014). Addressing poverty through innovative policies: A review of the

- Malaysian experience. *International Journal Of Social Work And Human Services Practice*, 2(4), 157 - 162.
- Baer, R. (2003). Mindfulness training as a clinical intervention: A conceptual and empirical review. *Clinical Psychology: Science And Practice*, 10(2), 125-143. doi: 10.1093/clipsy/bpg015
- Baregheh, A., Rowley, J., & Sambrook, S. (2009). Towards a multidisciplinary definition of innovation. *Management Decision*, 47(8), 1323-1339. doi: 10.1108/00251740910984578
- Barkema, H., Chen, X., George, G., Luo, Y., & Tsui, A. (2015). West meets East: New concepts and theories. *Academy Of Management Journal*, 58(2), 460-479. doi: 10.5465/amj.2015.4021
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal Of Management*, 17(1), 99-120. doi: 10.1177/014920639101700108
- Barney, J. (2001). Is the resource-based “view” a useful perspective for strategic management research? Yes. *Academy Of Management Review*, 26(1), 41-56. doi: 10.5465/amr.2001.4011938
- Barney, J., & Zhang, S. (2009). The future of Chinese management research: A theory of Chinese management versus a Chinese theory of management. *Management And Organization Review*, 5(1), 15-28. doi: 10.1111/j.1740-8784.2008.00102.x
- Barrales-Molina, V., Bustinza, Ó., & Gutiérrez-Gutiérrez, L. (2013). Explaining the causes and effects of dynamic capabilities generation: A multiple-indicator multiple-cause modelling approach. *British Journal Of Management*, 24(4), 571-591. doi: 10.1111/j.1467-8551.2012.00829.x
- Beatty, R., Silvia, P., Nusbaum, E., Jauk, E., & Benedek, M. (2014). The roles of associative and executive processes in creative cognition. *Memory & Cognition*, 42(7), 1186-1197. doi: 10.3758/s13421-014-0428-8
- Becker, G. (1975). *Human capital: A theoretical and empirical analysis, with special reference to education* (2nd ed.). New York: National Bureau of Economic Research.
- Becker, M. (1995). Nineteenth-century foundations of creativity research. *Creativity Research Journal*, 8(3), 219-229. doi: 10.1207/s15326934crj0803_2
- Bergh, D., Aguinis, H., Heavey, C., Ketchen, D., Boyd, B., & Su, P. et al. (2014). Using meta-analytic structural equation modeling to advance strategic management research: Guidelines and an empirical illustration via the strategic leadership-performance relationship. *Strategic Management Journal*, 37(3), 477-497. doi: 10.1002/smj.2338
- Berma, M. (2004). Towards the National Vision Policy: Review of the New Economic Policy and New Development Policy among the Bumiputera Communities in Sarawak. *Kajian Malaysia*, 21(1&2), 211-256.

- Berthrong, J. (1998). *Concerning creativity: A comparison of Chu His, Whitehead, and Neville*. New York: State University of New York.
- Bertrand, M., & Schoar, A. (2003). Managing with Style: The Effect of Managers on Firm Policies. *The Quarterly Journal Of Economics*, 118(4), 1169-1208. doi: 10.1162/003355303322552775
- Bettis, R., & Prahalad, C. (1995). The dominant logic: Retrospective and extension. *Strategic Management Journal*, 16(1), 5-14. doi: 10.1002/smj.4250160104
- Bhaskar, R. (2008). *A realist theory of science*. New York: Routledge.
- Bhatt, G. (2000). Organizing knowledge in the knowledge development cycle. *Journal Of Knowledge Management*, 4(1), 15-26. doi: 10.1108/13673270010315371
- Bhattacharjee, A. (2012). *Social science research: Principles, methods, and practices*. Florida: USF Tampa Bay Open Access Textbooks Collection.
- Bhave, M. (1994). A process model of entrepreneurial venture creation. *Journal Of Business Venturing*, 9(3), 223-242. doi: 10.1016/0883-9026(94)90031-0
- Biber, D. (1988). *Variations across speech and writing*. Cambridge: University of Cambridge.
- Bing, S. (2013). The divergence and convergence of China's written and spoken languages: Reassessing the vernacular language during the May Fourth period. *Twentieth-Century China*, 38(1), 71-93. doi: 10.1179/1521538512z.00000000019
- Bingham, C., & Kahl, S. (2013). The process of schema emergence: Assimilation, deconstruction, unitization and the plurality of analogies. *Academy Of Management Journal*, 56(1), 14-34. doi: 10.5465/amj.2010.0723
- Bingham, C., Howell, T., & Ott, T. (2019). Capability creation: Heuristics as microfoundations. *Strategic Entrepreneurship Journal*, 13(2), 121-153. doi: 10.1002/sej.1312
- Blair, E. (2015). A reflexive exploration of two qualitative data coding techniques. *Journal Of Methods And Measurement In The Social Sciences*, 6(1), 14-29. doi: 10.2458/v6i1.18772
- Bloomfield, L. (1935). *Language*. New York: H. Holt and Company.
- Bodhi, B. (2011). Two styles of insight meditation. Retrieved from http://www.accesstoinsight.org/lib/authors/bodhi/bps-essay_45.html
- Bolisani, E., & Bratianu, C. (2017). Knowledge strategy planning: An integrated approach to manage uncertainty, turbulence, and dynamics. *Journal Of Knowledge Management*, 21(2), 233-253. doi: 10.1108/jkm-02-2016-0071

- Boltz, W. (1994). *The origin and early development of the Chinese writing system*. New Haven: American Oriental Society.
- Bosma, N., van Praag, M., Thurik, R., & de Wit, G. (2004). The value of human and social capital investments for the business performance of startups. *Small Business Economics*, 23(3), 227-236. doi: 10.1023/b:sbej.0000032032.21192.72
- Boyd, R. (1983). On the current status of the issue of scientific realism. *Methodology, Epistemology, And Philosophy Of Science*, 19(1/3), 45-90.
- Brown, K., Ryan, R., & Creswell, J. (2007). Mindfulness: Theoretical foundations and evidence for its salutary effects. *Psychological Inquiry*, 18(4), 211-237. doi: 10.1080/10478400701598298
- Bruner, J. (1979). *On knowing: Essays for the left hand*. Cambridge: Belknap.
- Bruner, J. (1986). *Actual minds, possible worlds*. Cambridge: Harvard University.
- Bruner, J. (1991). The narrative construction of reality. *Critical Inquiry*, 18(1), 1-21. doi: 10.1086/448619
- Buil-Fabregà, M., Alonso-Almeida, M., & Bagur-Femenías, L. (2017). Individual dynamic managerial capabilities: Influence over environmental and social commitment under a gender perspective. *Journal Of Cleaner Production*, 151, 371-379. doi: 10.1016/j.jclepro.2017.03.081
- Burik, S. (2009). *End of Comparative Philosophy and the Task of Comparative Thinking: Heidegger, Derrida, and Daoism* (1st ed.). New York: State University of New York.
- Burgelman, R., Floyd, S., Laamanen, T., Mantere, S., Vaara, E., & Whittington, R. (2018). Strategy processes and practices: Dialogues and intersections. *Strategic Management Journal*, 39(3), 531-558. doi: 10.1002/smj.2741
- Burrell, G., & Morgan, G. (1979). *Sociological paradigms and organisational analysis: Elements of the sociology of corporate life*. London: Heinemann Educational Books.
- Campbell, B., Coff, R., & Kryscynski, D. (2012). Rethinking Sustained Competitive Advantage from Human Capital. *Academy Of Management Review*, 37(3), 376-395. doi: 10.5465/amr.2010.0276
- Carlopio, J. (2009). Creating strategy by design. *Design Principles And Practices: An International Journal*, 3(5), 155-166. doi: 10.18848/1833-1874/cgp/v03i05/37665
- Carlopio, J. (2010). *Strategy by design: A process of strategy innovation*. New York: Palgrave Macmillan.

- Čarnogurská, M. (1998). Original ontological roots of Ancient Chinese philosophy. *Asian Philosophy*, 8(3), 203-213. doi: 10.1080/09552369808575484
- Carroll, J., & Swatman, P. (2000). Structured-case: A methodological framework for building theory in information systems research. *European Journal Of Information Systems*, 9(4), 235-242. doi: 10.1057/palgrave/ejis/3000374
- Carsrud, A., & Brännback, M. (2011). Entrepreneurial motivations: What do we still need to know?. *Journal Of Small Business Management*, 49(1), 9-26. doi: 10.1111/j.1540-627x.2010.00312.x
- Carsrud, A., & Brännback, M. (2014). Linking achievement motivation to intentions, goals and entrepreneurial behaviors. In J. Mitchell, R. Mitchell & B. Randolph-Seng, *Handbook of entrepreneurial cognition* (pp. 86-112). Cheltenham: Edward Elgar.
- Castanias, R., & Helfat, C. (2001). The managerial rents model: Theory and empirical analysis. *Journal Of Management*, 27(6), 661-678. doi: 10.1177/014920630102700604
- Cevik, B., Perkmen, S., Alkan, M., & Shelley, M. (2013). Who should study music education? A vocational personality approach. *Music Education Research*, 15(3), 341-356. doi: 10.1080/14613808.2013.788140
- Cham, T., Lim, Y., Cheng, B., & Lee, T. (2016). Determinants of knowledge management systems success in the banking industry. *VINE Journal Of Information And Knowledge Management Systems*, 46(1), 2-20. doi: 10.1108/vjikms-03-2014-0021
- Cham, T., Lim, Y., Sia, B., Cheah, J., & Ting, H. (2020). Medical tourism destination image and its relationship with the intention to revisit: A study of Chinese medical tourists in Malaysia. *Journal Of China Tourism Research*, 1-29. doi: 10.1080/19388160.2020.1734514
- Chan, S. (2018). In between worlds: The convergence of Chinese and Western values as global habitus. *Journal Of Southeast Asian Studies*, 23(1), 156 - 190.
- Chan, W. (1963). *A source Book in Chinese Philosophy: Translated and compiled by Wing-tsit Chan*. Princeton: Princeton University Press.
- Chang, C. (1977). The philosophy of Taoism according to Chuang Tzu. *Philosophy East And West*, 27(4), 409-422. doi: 10.2307/1397984
- Chang, C. (2011). *Creativity and Taoism: A study of Chinese philosophy, art and poetry*. London: Singing Dragon.
- Charmaz, K. (2014). *Constructing grounded theory*. Los Angeles: Sage.
- Chase, W., & Simon, H. (1973). Perception in chess. *Cognitive Psychology*, 4(1), 55-81. doi: 10.1016/0010-0285(73)90004-2

- Chen, D. (2005). Three meta-questions in epistemology: Rethinking some metaphors in Zhuangzi. *Journal Of Chinese Philosophy*, 32(3), 493-507. doi: 10.1111/j.1540-6253.2005.00206.x
- Chen, P. (2001). Development and standardization of lexicon in modern written Chinese. In N. Gottlieb & P. Chen, *Language planning and language policy: East Asian perspectives* (1st ed.). Richmond: Curzon.
- Chen, P. (2015). Language reform in modern China. In W. Wang & C. Sun, *The Oxford Handbook of Chinese Linguistics* (1st ed.). New York: Oxford University.
- Chen, Z. (2016). On the core of Chinese traditional values – the “Unity between Heaven and Man”. *International Journal Of Social Science And Humanity*, 6(4), 282-287. doi: 10.7763/ijssh.2016.v6.658
- Cheng, C. (1973a). A generative unity: Chinese language and Chinese philosophy. *Tsing Hua Journal Of Chinese Studies*, 10(1), 90-105.
- Cheng, C. (1973b). Unity and creativity in Wang Yang-ming's philosophy of mind. *Philosophy East And West*, 23(1/2), 49-72. doi: 10.2307/1398064
- Cheng, C. (1974). Theory and practice in Confucianism. *Journal Of Chinese Philosophy*, 1(2), 179-198. doi: 10.1111/j.1540-6253.1974.tb00648.x
- Cheng, C. (1979). Categories of creativity in Whitehead and Neo-Confucianism. *Journal Of Chinese Philosophy*, 6(3), 251-274. doi: 10.1111/j.1540-6253.1979.tb00215.x
- Cheng, C. (1986). On the environmental ethics of the Tao and the Ch'i. *Environmental Ethics*, 8(4), 351-370. doi: 10.5840/enviroethics19868436
- Cheng, C. (2003). Dao (Tao): The Way. In A. Cua, *Encyclopedia of Chinese philosophy*. New York: Routledge.
- Cheng, C. (2008). The Yijing (《易經》) as creative inception of Chinese philosophy. *Journal Of Chinese Philosophy*, 35(2), 201-218. doi: 10.1111/j.1540-6253.2008.00473.x
- Cheng, Z. (1991). *New dimensions of Confucian and Neo-Confucian philosophy*. New York: State University of New York.
- Cheung, C., & Chan, A. (2005). Philosophical foundations of eminent Hong Kong Chinese CEOs' leadership. *Journal Of Business Ethics*, 60(1), 47-62. doi: 10.1007/s10551-005-2366-7
- Chia, R. (2003). From knowledge-creation to the perfecting of action: Tao, Basho and pure experience as the ultimate ground of knowing. *Human Relations*, 56(8), 953-981. doi: 10.1177/00187267030568003
- Chia, R., & Holt, R. (2006). Strategy as practical coping: A Heideggerian perspective. *Organization Studies*, 27(5), 635-655. doi: 10.1177/0170840606064102

- Chin, J. (2009). The Malaysian Chinese dilemma: The Never Ending Policy (NEP). *Chinese Southern Diaspora Studies*, 3, 167-182.
- Chin, Y. (2008). The evolution of Chinese Malaysian entrepreneurship: From British colonial rule to Post-New Economic Policy. *Journal Of Chinese Overseas*, 4(2), 203-237. doi: 10.1163/179325408788691354
- Chin, Y. (2012). The evolution of Malaysia's development strategies and the global economy: Responses from SMEs and civil societies. *Copenhagen Journal Of Asian Studies*, 30(1), 11-35.
- Chin, Y. (2015). State intervention in business and Malaysian Chinese entrepreneurship. *Malaysian Journal Of Chinese Studies*, 4(2), 1-26.
- Chin, Y., & Teh, C. (2015). Malaysia's protracted affirmative action policy and the evolving Bumiputera commercial and industrial community. Retrieved from <http://hdl.handle.net/11540/6711>
- Chinnery, J. (1996). Daoism. In C. Littleton, *Eastern wisdom: An illustrated guide to the religions and philosophies of the East* (pp. 116-143). London: Duncan Baird.
- Chiu, W. (2016). Zhuangzi's idea of 'spirit': Acting and 'thinging things' without self-assertion. *Asian Philosophy*, 26(1), 38-51. doi: 10.1080/09552367.2015.1136201
- Chong, K. (2016). *Zhuangzi's critique of the Confucians: Blinded by the human*. Albany: State University of New York.
- Chong, W. (2012). Critical success factors for small and medium enterprises: Perceptions of entrepreneurs in urban Malaysia. *Journal Of Business And Policy Research*, 7(4), 204-215.
- Chou, C., & Ching, G. (2012). *Taiwan education at the crossroad: When globalization meets localization* (1st ed.). New York: Palgrave MacMillan.
- Chua, S. (2005). The nameless and formless Dao as metaphor and imagery: Modeling the Dao in Wang Bi's Laozi. *Journal Of Chinese Philosophy*, 32(3), 477-492. doi: 10.1111/j.1540-6253.2005.00205.x
- Chuang, T., & Fung, Y. (2016). *Chuang-Tzu: A new selected translation with an exposition of the philosophy of Kuo Hsiang*. Heidelberg: Springer.
- Chun, A. (2013). The culture industry as national enterprise: The politics of heritage in contemporary Taiwan. In V. Domínguez & Y. Wu, *From Beijing to Port Moresby: The politics of national identity in cultural policies* (1st ed.). New York: Routledge.
- Cleary, T. (1993). *The essential Tao: An initiation into the heart of Taoism through the authentic Tao Te Ching and the Inner Teachings of Chuang-Tzu*. New York: Harper Collins.
- Cline, E. (2008). Mirrors, minds, and metaphors. *Philosophy East And West*, 58(3), 337-357. doi: 10.1353/pew.0.0006

- Coff, R. (1999). When competitive advantage doesn't lead to performance: The resource-based view and stakeholder bargaining power. *Organization Science*, *10*(2), 119-133. doi: 10.1287/orsc.10.2.119
- Coff, R., & Kryscynski, D. (2011). Drilling for micro-foundations of human capital-based competitive advantages. *Journal Of Management*, *37*(5), 1429-1443. doi: 10.1177/0149206310397772
- Cohen, W., & Levinthal, D. (1990). Absorptive capacity: A new perspective on learning and innovation. *Administrative Science Quarterly*, *35*(1), 128-152. doi: 10.2307/2393553
- Colander, D., Föllmer, H., Haas, A., Goldberg, M., Juselius, K., & Kirman, A. et al. (2009). *The financial crisis and the systemic failure of academic economics*, Kiel Working Paper, No. 1489. Kiel: Kiel Institute for the World Economy (IfW).
- Collins, C., & Clark, K. (2003). Strategic human resource practices, top management team social networks, and firm performance: The role of human resource practices in creating organizational competitive advantage. *Academy Of Management Journal*, *46*(6), 740-751.
- Connelly, B., Ketchen, D., & Slater, S. (2011). Toward a “theoretical toolbox” for sustainability research in marketing. *Journal Of The Academy Of Marketing Science*, *39*(1), 86-100. doi: 10.1007/s11747-010-0199-0
- Connolly, T. (2011). Perspectivism as a way of knowing in the Zhuangzi. *Dao*, *10*(4), 487-505. doi: 10.1007/s11712-011-9246-x
- Cook, S. (1997). Zhuang Zi and his carving of the Confucian ox. *Philosophy East And West*, *47*(4), 521-553. doi: 10.2307/1400301
- Cook, S., & Brown, J. (1999). Bridging Epistemologies: The Generative Dance Between Organizational Knowledge and Organizational Knowing. *Organization Science*, *10*(4), 381-400. doi: 10.1287/orsc.10.4.381
- Cool, K., & Schendel, D. (1988). Performance differences among strategic group members. *Strategic Management Journal*, *9*(3), 207-223. doi: 10.1002/smj.4250090302
- Cooper, W., & Withey, M. (2009). The Strong Situation Hypothesis. *Personality And Social Psychology Review*, *13*(1), 62-72. doi: 10.1177/1088868308329378
- Corbin, J., & Strauss, A. (1990). Grounded theory research: Procedures, canons, and evaluative criteria. *Qualitative Sociology*, *13*(1), 3-21. doi: 10.1007/bf00988593
- Corbin, J., & Strauss, A. (2008). *Basics of qualitative research: Techniques and procedures for developing grounded theory*. Thousand Oaks: Sage.
- Cornelissen, J. (2017). Preserving theoretical divergence in management research: Why the explanatory potential of qualitative research should be

- harnessed rather than suppressed. *Journal Of Management Studies*, 54(3), 368-383. doi: 10.1111/joms.12210
- Creel, H. (1939). On the ideographic element in ancient Chinese. *T'oung Pao*, 34(4), 265-294. doi: 10.1163/156853236x00056
- Creswell, J. (1998). *Qualitative inquiry and research design: Choosing among five traditions*. Thousand Oaks: Sage.
- Creswell, J., & Creswell, J. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). Thousand Oaks: Sage.
- Creswell, J., & Miller, D. (2000). Determining validity in qualitative inquiry. *Theory Into Practice*, 39(3), 124-130. doi: 10.1207/s15430421tip3903_2
- Creswell, J., & Poth, C. (2018). *Qualitative inquiry and research design: Choosing among five approaches* (4th ed.). Thousand Oaks: Sage.
- Crossan, M., Lane, H., & White, R. (1999). An Organizational Learning Framework: From Intuition to Institution. *Academy Of Management Review*, 24(3), 522-537. doi: 10.2307/259140
- Crozier, W. (1997). *Individual learners: Personality differences in education* (1st ed.). London: Routledge.
- Crump, J. (1996). *Chan kuo ts'e*. Ann Arbor: University of Michigan.
- Csaszar, F., & Levinthal, D. (2016). Mental representation and the discovery of new strategies. *Strategic Management Journal*, 37(10), 2031-2049. doi: 10.1002/smj.2440
- Csikszentmihalyi, M. (1988). Society, culture, and person: A systems view of creativity. In R. Sternberg, *The nature of creativity: Contemporary psychological perspectives* (pp. 325-339). New York: Cambridge University.
- Csikszentmihalyi, M. (1997). *Creativity: Flow and the psychology of discovery and invention*. New York: Harper Collins.
- Culham, T. (2015). Reuniting virtue and knowledge. *Journal Of Philosophy Of Education*, 49(2), 294-310. doi: 10.1111/1467-9752.12142
- Custódio, C., Ferreira, M., & Matos, P. (2013). Generalists versus specialists: Lifetime work experience and chief executive officer pay. *Journal Of Financial Economics*, 108(2), 471-492. doi: 10.1016/j.jfineco.2013.01.001
- D'Ambrosio, P. (2020a). Confucianism and Daoism: On the relationship between the Analects, Laozi, and Zhuangzi, Part I. *Philosophy Compass*, 15(9), 1-11. doi: 10.1111/phc3.12702
- D'Ambrosio, P. (2020b). Confucianism and Daoism: On the relationship between the Analects, Laozi, and Zhuangzi, Part II. *Philosophy Compass*, 15(9), 1-11. doi: 10.1111/phc3.12701

- Damm, J. (2012). Multiculturalism in Taiwan and the Influence of Europe. In J. Damm & P. Lim, *European Perspectives on Taiwan* (1st ed.). Wiesbaden: Springer.
- Dane, E. (2011). Paying attention to mindfulness and its effects on task performance in the workplace. *Journal Of Management*, 37(4), 997-1018. doi: 10.1177/0149206310367948
- Danneels, E. (2007). The process of technological competence leveraging. *Strategic Management Journal*, 28(5), 511-533. doi: 10.1002/smj.598
- Danneels, E. (2010). Trying to become a different type of company: Dynamic capability at Smith Corona. *Strategic Management Journal*, 32(1), 1-31. doi: 10.1002/smj.863
- Datta, S., & Iskandar-Datta, M. (2014). Upper-echelon executive human capital and compensation: Generalist vs specialist skills. *Strategic Management Journal*, 35(12), 1853-1866. doi: 10.1002/smj.2267
- Davidsson, P., & Honig, B. (2003). The role of social and human capital among nascent entrepreneurs. *Journal Of Business Venturing*, 18(3), 301-331. doi: 10.1016/s0883-9026(02)00097-6
- Davies, I., & Doherty, B. (2018). Balancing a hybrid business model: The search for equilibrium at Cafédirect. *Journal Of Business Ethics*, 1-24. doi: <https://doi.org/10.1007/s10551-018-3960-9>
- Daymon, C., & Holloway, I. (2011). *Qualitative research methods in public relations and marketing communications* (2nd ed.). New York: Routledge.
- De Jager, J., & Soontiens, W. (2009). The role of reputation in higher education choices: A case of Australian education in Malaysia and Singapore. *Journal Of Business And Management Dynamics*, 15-26. Retrieved from <http://digitalknowledge.cput.ac.za/xmlui/handle/11189/2513?show=full>
- De Neys, W. (2006). Automatic–heuristic and executive–analytic processing during reasoning: Chronometric and dual-task considerations. *The Quarterly Journal Of Experimental Psychology*, 59(6), 1070-1100. doi: 10.1080/02724980543000123
- Deb, P., & Wiklund, J. (2017). The effects of CEO founder status and stock ownership on entrepreneurial orientation in small firms. *Journal Of Small Business Management*, 55(1), 32-55. doi: 10.1111/jsbm.12231
- DeFrancis, J. (1986). *The Chinese language: Fact and fantasy*. London: The University of Chicago Press.
- DeFrancis, J. (1989). *Visible speech*. Honolulu: University of Hawaii Press.
- Demarest, M. (1997). Understanding knowledge management. *Long Range Planning*, 30(3), 374-384. doi: 10.1016/s0024-6301(97)90250-8

- Department of Statistics Malaysia. (2011). *Population distribution and basic demographic characteristic report 2010*. Retrieved from https://www.dosm.gov.my/v1/index.php?r=column/cthemByCat&cat=117&bul_id=MDMxdHZjWtk1SjFzTzNkRXYzcVZjdz09&menu_id=L0pheU43NWJwRWVVSZklWdzQ4TlhUUT09
- Devinney, T. (2013). Is microfoundational thinking critical to management thought and practice?. *Academy Of Management Perspectives*, 27(2), 81-84. doi: 10.5465/amp.2013.0053
- Di Stefano, G., Peteraf, M., & Verona, G. (2014). The organizational drivetrain: A road to integration of dynamic capabilities research. *Academy Of Management Perspectives*, 28(4), 307-327. doi: 10.5465/amp.2013.0100
- Dong, H. (2014). *A history of the Chinese language*. New York: Routledge.
- Doraisami, A. (2012). Economic crisis and policy response in Malaysia: the role of the new economic policy. *Asian-Pacific Economic Literature*, 26(2), 41-53. doi: 10.1111/j.1467-8411.2012.01348.x
- Dretske, F. (1981). *Knowledge and the flow of information*. MA: MIT.
- Dreyfus, H. (2009). *On the internet* (2nd ed.). New York: Routledge.
- Drucker, P. (1955). *The practice of management*. London: Butterworth-Heinemann.
- Drucker, P. (1974). *Management: Tasks, responsibilities, practices*. New York: Harper and Row.
- Du Ponceau, P. (1838). *A dissertation on the nature and character of the Chinese system of writing*. Philadelphia: American Philosophical Society.
- Dyer, W., & Wilkins, A. (1991). Better stories, not better constructs, to generate better theory: A rejoinder to Eisenhardt. *Academy Of Management Review*, 16(3), 613-619. doi: 10.2307/258920
- Eggers, J., & Kaplan, S. (2009). Cognition and Renewal: Comparing CEO and Organizational Effects on Incumbent Adaptation to Technical Change. *Organization Science*, 20(2), 461-477. doi: 10.1287/orsc.1080.0401
- Eggers, J., & Kaplan, S. (2013). Cognition and capabilities: A multi-level perspective. *The Academy Of Management Annals*, 7(1), 295-340. doi: 10.1080/19416520.2013.769318
- Eisenhardt, K. (1989). Building theories from case study research. *Academy Of Management Review*, 14(4), 532-550. doi: 10.2307/258557
- Eisenhardt, K., & Graebner, M. (2007). Theory building from cases: Opportunities and challenges. *Academy Of Management Journal*, 50(1), 25-32. doi: 10.5465/amj.2007.24160888

- Eisenhardt, K., & Martin, J. (2000). Dynamic capabilities: What are they?. *Strategic Management Journal*, 21(10-11), 1105-1121. doi: 10.1002/1097-0266(200010/11)21:10/11<1105::aid-smj133>3.0.co;2-e
- Eisenhardt, K., & Schoonhoven, C. (1990). Organizational growth: Linking founding team, strategy, environment, and growth among U.S. semiconductor ventures, 1978-1988. *Administrative Science Quarterly*, 35(3), 504-529. doi: 10.2307/2393315
- Eisenhardt, K., Graebner, M., & Sonenshein, S. (2016). Grand challenges and inductive methods: Rigor without rigor mortis. *Academy Of Management Journal*, 59(4), 1113-1123. doi: 10.5465/amj.2016.4004
- Embong, A. (2002). Malaysia as a Multicultural Society. *Macalester International*, 12(1), 37-58.
- Eriksson, P., & Kovalainen, A. (2008). *Qualitative methods in business research*. London: Sage.
- Felin, T., & Foss, N. (2011). The endogenous origins of experience, routines, and organizational capabilities: The poverty of stimulus. *Journal Of Institutional Economics*, 7(2), 231-256. doi: 10.1017/s1744137410000214
- Felin, T., & Hesterly, W. (2007). The knowledge-based view, nested heterogeneity, and new value creation: Philosophical considerations on the locus of knowledge. *Academy Of Management Review*, 32(1), 195-218. doi: 10.5465/amr.2007.23464020
- Felin, T., Foss, N., & Ployhart, R. (2015). The Microfoundations Movement in Strategy and Organization Theory. *The Academy Of Management Annals*, 9(1), 575-632. doi: 10.1080/19416520.2015.1007651
- Feng, S. (2009). On modern written Chinese. *Journal Of Chinese Linguistics*, 37(01), 145-162.
- Ferreira, D., & Sah, R. (2012). Who gets to the top? Generalists versus specialists in managerial organizations. *The RAND Journal Of Economics*, 43(4), 577-601. doi: 10.1111/1756-2171.12000
- Fischer, J. (2016). Manufacturing halal in Malaysia. *Contemporary Islam*, 10(1), 35-52. doi: 10.1007/s11562-015-0323-5
- Fitzpatrick, S., Jordens, C., Kerridge, I., Keown, D., Walter, J., & Nelson, P. et al. (2014). Religious perspectives on the use of psychopharmaceuticals as an enhancement technology. *Journal Of Religion And Health*, 53(5), 1440-1455. doi: 10.1007/s10943-013-9761-7
- Foss, N., & Pedersen, T. (2016). Microfoundations in strategy research. *Strategic Management Journal*, 37(13), E22-E34. doi: 10.1002/smj.2362
- Fraser, C. (2014). Heart-fasting, forgetting, and using the heart like a mirror: Applied emptiness in the Zhuangzi. In J. Liu & D. Berger, *Nothingness in Asian philosophy* (pp. 197-212). London: Routledge.

- Fraser, C. (2015). Zhuangzi and the heterogeneity of value. In L. Kohn, *New visions of the Zhuangzi* (pp. 40-58). St Petersburg: Three Pines.
- Fraser, C., Robins, D., & O'Leary, T. (2011). *Ethics in Early China: An anthology*. Hong Kong: Hong Kong University Press.
- Freud, S. (1953). The interpretation of dreams. In J. Strachey, *The standard edition of the complete Psychological works of Sigmund Freud, vol. 4*. London: The Hogarth Press and the Institute of Psycho-analysis.
- Fung, Y. (1948). *A short history of China: A systematic account of Chinese thought from its origins to the present day*. London: The Free Press.
- Gaglio, C., & Katz, J. (2001). The psychological basis of opportunity identification: Entrepreneurial alertness. *Small Business Economics*, 16(2), 95-111.
- Galinsky, A., Magee, J., Ena Inesi, M., & Gruenfeld, D. (2006). Power and perspectives not taken. *Psychological Science*, 17(12), 1068-1074. doi: 10.1111/j.1467-9280.2006.01824.x
- Ganesan, K. (2010). The Malaysian Indian Diaspora and its Transformation through K.S. Maniam's: The Return (1981) and between Lives (2003). *The International Journal Of The Humanities*, 8(5), 227-235.
- Gaver, W. (1991). Technology affordances. In *Proceedings of the CHI Conference on Human Factors in Computing Systems* (pp. 79-84). New York: ACM.
- Gaver, W. (1996). Situating action II: Affordances for interaction: The social material for design. *Ecological Psychology*, 8(2), 111-129. doi: 10.1207/s15326969eco0802_2
- Gavetti, G. (2012). Toward a behavioral theory of strategy. *Organization Science*, 23(1), 267-285. doi: 10.1287/orsc.1110.0644
- Gavetti, G., & Porac, J. (2018). On the origin of great strategies. *Strategy Science*, 3(1), 352-365. doi: 10.1287/stsc.2018.0054
- Gavetti, G., & Rivkin, J. (2007). On the Origin of Strategy: Action and Cognition over Time. *Organization Science*, 18(3), 420-439. doi: 10.1287/orsc.1070.0282
- Gilbert, C. (2005). Unbundling the structure of inertia: Resource versus routine rigidity. *Academy Of Management Journal*, 48(5), 741-763. doi: 10.5465/amj.2005.18803920
- Gill, S., & Gopal, N. (2010). Understanding Indian Religious Practice in Malaysia. *Journal Of Social Science*, 25(1-2-3), 135-146.
- Gilmour, C., & Rowe, D. (2012). Sport in Malaysia: National imperatives and western seductions. *Sociology Of Sport Journal*, 29(4), 485-505. doi: 10.1123/ssj.29.4.485

- Gioia, D., & Pitre, E. (1990). Multiparadigm perspectives on theory building. *The Academy Of Management Review*, 15(4), 584-602. doi: 10.2307/258683
- Gioia, D., Corley, K., & Hamilton, A. (2012). Seeking qualitative rigor in inductive research: Notes on the Gioia methodology. *Organizational Research Methods*, 16(1), 15-31. doi: 10.1177/1094428112452151
- Giudici, A., & Reinmoeller, P. (2012). Dynamic capabilities in the dock: A case of reification?. *Strategic Organization*, 10(4), 436-449. doi: 10.1177/1476127012457977
- Goh, B. (2002). *Modern dreams: An inquiry into power, cultural production, and the cityscape in contemporary urban Penang, Malaysia* (1st ed.). New York: Southeast Asia Program.
- Gomez, E. (2015). Identity, transnationalism and corporate development: Chinese business in Malaysia. In J. Bhattacharya & C. Kripalani, *Indian and Chinese immigrant communities: Comparative perspectives*. Singapore: Anthem & ISEAS.
- Gottschalg, O., & Zollo, M. (2007). Interest alignment and competitive advantage. *Academy Of Management Review*, 32(2), 418-437. doi: 10.5465/amr.2007.24351356
- Gourlay, S. (2006). Conceptualizing knowledge creation: A critique of Nonaka's theory. *Journal Of Management Studies*, 43(7), 1415-1436. doi: 10.1111/j.1467-6486.2006.00637.x
- Graham, A. (1969). Chuang-tzu's essay on seeing things as equal. *History Of Religions*, 9(2/3), 137-159. doi: 10.1086/462602
- Graham, A. (1989). *Disputers of the Tao: Philosophical argument in ancient China* (1st ed.). La Salle, Ill.: Open Court.
- Grant, A., Langer, E., Falk, E., & Capodilupo, C. (2004). Mindful creativity: Drawing to draw distinctions. *Creativity Research Journal*, 16(2-3), 261-265. doi: 10.1207/s15326934crj1602&3_9
- Grant, R. (1996). Toward a knowledge-based theory of the firm. *Strategic Management Journal*, 17(S2), 109-122. doi: 10.1002/smj.4250171110
- Grant, R., & Baden-Fuller, C. (2018). How to develop strategic management competency: Reconsidering the learning goals and knowledge requirements of the core strategy course. *Academy Of Management Learning & Education*, 17(3), 322-338. doi: 10.5465/amle.2017.0126
- Grapragasem, S., Krishnan, A., & Mansor, A. (2014). Current trends in Malaysian higher education and the effect on education policy and practice: An overview. *International Journal Of Higher Education*, 3(1), 85-93. doi: 10.5430/ijhe.v3n1p85
- Gruber, M., MacMillan, I., & Thompson, J. (2012). From Minds to Markets: How Human Capital Endowments Shape Market Opportunity

- Identification of Technology Start-Ups. *Journal Of Management*, 38(5), 1421-1449. doi: 10.1177/0149206310386228
- Guba, E., & Lincoln, Y. (1981). *Effective evaluation: Improving the usefulness of evaluation results through responsive and naturalistic approaches*. San Francisco: Jossey-Bass.
- Guba, E., & Lincoln, Y. (1994). Competing Paradigms in Qualitative Research. In N. Denzin & Y. Lincoln, *Handbook of qualitative research* (pp. 105-117). Thousand Oaks: Sage.
- Guilford, J. (1950). Creativity. *American Psychologist*, 5(9), 444-454. doi: 10.1037/h0063487
- Gupta, V., Chiles, T., & McMullen, J. (2016). A process perspective on evaluating and conducting effectual entrepreneurship research. *Academy Of Management Review*, 41(3), 540-544. doi: 10.5465/amr.2015.0433
- Guzowska, J. (2015). Li, Yancang 李延倉, the deconstruction and reconstruction of the dao: From the Zhuangzi to Guo Xiang's commentary to Cheng Xuanying's sub-commentary 道體的失落與重建: 從《莊子》、郭《註》到成《疏》. *Dao*, 14(2), 299-302. doi: 10.1007/s11712-015-9429-y
- Guō, Q. (1961). *Zhuāngzǐ jīshì* 莊子集釋. Beijing: Zhōnghuá shūjú 中华书局.
- Ha, P., Kho, J., & Chng, B. (2013). Nation building, English as an international language, medium of instruction, and language debate: Malaysia and possible ways forward. *Journal Of International And Comparative Education*, 2(2), 58-71. doi: 10.14425/00.50.27
- Hall, D. (1978). Process and anarchy: A Taoist vision of creativity. *Philosophy East And West*, 28(3), 271-285. doi: 10.2307/1398237
- Hambrick, D. (2004). The disintegration of strategic management: It's time to consolidate our gains. *Strategic Organization*, 2(1), 91-98. doi: 10.1177/1476127004040915
- Hambrick, D., & Quigley, T. (2014). Toward more accurate contextualization of the CEO effect on firm performance. *Strategic Management Journal*, 35(4), 473-491. doi: 10.1002/smj.2108
- Hamel, G. (1998). Strategy innovation and the quest for value. *Sloan Management Review*, 39(2), 78-86.
- Hamel, G., & Prahalad, C. (1989). Strategic intent. *Harvard Business Review*, 67(3), 63-76.
- Han, J., Wang, G., & Zhou, L. (2012). *Chinese characters*. New York: Cambridge University Press.
- Hang, T. (1986). Notes on the concept of creativity in Chinese philosophy. *Journal Of Chinese Philosophy*, 13(3), 283-290. doi: 10.1111/j.1540-6253.1986.tb00097.x

- Hansen, C. (1985). Chinese language, Chinese philosophy, and "truth". *The Journal Of Asian Studies*, 44(3), 491-519. doi: 10.2307/2056264
- Hansen, C. (1993). Chinese ideographs and Western ideas. *The Journal Of Asian Studies*, 52(2), 373-399. doi: 10.2307/2059652
- Hansen, C. (2000). *A Daoist theory of Chinese thought: A philosophical interpretation*. New York: Oxford University Press.
- Hansen, C. (2009). *Tao Te Ching: Laozi on the art of harmony*. London: Watkins Media.
- Hao, C. (2005). Relativity of the human world and Dao in Lao-Zhuang: An interpretation of chapter 1 of the Zhuangzi and of the Laozi. *Asian Philosophy*, 15(3), 265-280. doi: 10.1080/09552360500382057
- Hara, F. (1991). Malaysia's New Economic Policy and the Chinese business community. *The Developing Economies*, 29(4), 350-370. doi: 10.1111/j.1746-1049.1991.tb01040.x
- Hargadon, A., & Fanelli, A. (2002). Action and possibility: Reconciling dual perspectives of knowledge in organizations. *Organization Science*, 13(3), 290-302. doi: 10.1287/orsc.13.3.290.2772
- Hatch, N., & Dyer, J. (2004). Human capital and learning as a source of sustainable competitive advantage. *Strategic Management Journal*, 25(12), 1155-1178. doi: 10.1002/smj.421
- Hax, A., & Majluf, N. (1988). The Concept of Strategy and the Strategy Formation Process. *Interfaces*, 18(3), 99-109. doi: 10.1287/inte.18.3.99
- Hayek, F. (1945). The use of knowledge in society. *The American Economic Review*, 35(4), 519-530.
- Helfat, C., & Martin, J. (2015a). Dynamic managerial capabilities: A perspective on the relationship between managers, creativity, and innovation in organizations. In C. Shalley, M. Hitt & J. Zhou, *The Oxford handbook of creativity, innovation, and entrepreneurship*(pp. 421-429). New York: Oxford University Press.
- Helfat, C., & Martin, J. (2015b). Dynamic managerial capabilities: Review and assessment of managerial impact on strategic change. *Journal Of Management*, 41(5), 1281-1312. doi: 10.1177/0149206314561301
- Helfat, C., & Peteraf, M. (2003). The dynamic resource-based view: Capability lifecycles. *Strategic Management Journal*, 24(10), 997-1010. doi: 10.1002/smj.332
- Helfat, C., & Peteraf, M. (2015). Managerial cognitive capabilities and the microfoundations of dynamic capabilities. *Strategic Management Journal*, 36(6), 831-850. doi: 10.1002/smj.2247
- Helfat, C., Finkelstein, S., Mitchell, W., Peteraf, M., Singh, H., Teece, D., & Winter, S. (2007). *Dynamic capabilities: Understanding strategic change in organizations*. Malden: Blackwell.

- Hinz, A. (2017). Entrepreneurial behaviour revisited: Linking self-efficacy with effectuation. *International Journal Of Business And Society*, 18(S2), 245–260.
- Hislop, D. (2005). *Knowledge management in organizations: A critical introduction*. Oxford: Oxford University Press.
- Höchsmann, H., & Yang, G. (2016). *Zhuangzi*. New York: Routledge.
- Hodgson, G. (2012). The mirage of microfoundations. *Journal Of Management Studies*, 49(8), 1389-1394. doi: 10.1111/j.1467-6486.2012.01079.x
- Holbrook, D., Cohen, W., Hounshell, D., & Klepper, S. (2000). The nature, sources, and consequences of firm differences in the early history of the semiconductor industry. *Strategic Management Journal*, 21(10-11), 1017-1041. doi: 10.1002/1097-0266(200010/11)21:10/11<1017::aid-smj131>3.0.co;2-g
- Holland, J. (1959). A theory of vocational choice. *Journal Of Counseling Psychology*, 6(1), 35-45. doi: 10.1002/j.2164-585x.1963.tb00022.x
- Holt, R. (1967). The development of primary process: A structural view. *Psychological Issues*, 5(2-3), 344-383.
- Hsu, C. (1996). *The written word in ancient China, Volume I*. Hong Kong: Tan Hock Seng.
- Hsu, H. (2000). Confucius and act-centered morality. *Journal Of Chinese Philosophy*, 27(3), 331-344. doi: 10.1111/0301-8121.00020
- Hsu, M., & Chiu, K. (2008). A comparison between I-Ching's early management decision-making model and Western management decision-making models. *Chinese Management Studies*, 2(1), 52-75. doi: 10.1108/17506140810866241
- Huang, C., Li, Y., & Li, Y. (2009). *The syntax of Chinese* (1st ed.). Cambridge, UK: Cambridge University Press.
- Huang, S. (2013). *Chinese grammar at work* (1st ed.). Amsterdam: John Benjamins.
- Hult, G. (2011). Market-focused sustainability: Market orientation plus!. *Journal Of The Academy Of Marketing Science*, 39(1), 1-6. doi: 10.1007/s11747-010-0223-4
- Humphrey, G. (1963). *Thinking: An introduction to its experimental psychology*. New York: Wiley.
- Ibrahim, R. (2007). Multiculturalism and education in Malaysia. *Culture And Religion*, 8(2), 155-167. doi: 10.1080/14755610701424024
- Isaacson, W. (2011). *Steve Jobs*. London: Little, Brown.
- Ivanhoe, P. (1993). Zhuangzi on skepticism, skill, and the ineffable Dao. *Journal Of The American Academy Of Religion*, 61(4), 639-654. doi: 10.1093/jaarel/lxi.4.639

- Jacobsen, R. (1988). The persistence of abnormal returns. *Strategic Management Journal*, 9(5), 415-430. doi: 10.1002/smj.4250090503
- Jakobsen, M. (2015). *Ethnic Chinese entrepreneurship in Malaysia: On contextualisation in international business studies*. New York: Routledge.
- Jamshidi, L., Arasteh, H., NavehEbrahim, A., Zeinabadi, H., & Rasmussen, P. (2012). Developmental patterns of privatization in higher education: a comparative study. *Higher Education*, 64(6), 789-803. doi: 10.1007/s10734-012-9529-0
- Jensen, J. (1987). Rhetorical emphases of Taoism. *Rhetorica*, 5(3), 219-229. doi: 10.1525/rh.1987.5.3.219
- Jesudason, J. (1990). *Ethnicity and the economy: The state, Chinese business, and multinationals in Malaysia* (1st ed.). Singapore: Oxford University Press.
- Johnson, W. (2000). *Technological innovation and knowledge creation: A study of the enabling conditions and processes of knowledge of knowledge creation in collaborative R&D projects* (Ph.D). York University.
- Jomo, K. (2003). Chinese capitalism in Southeast Asia. In K. Jomo & C. Brian, *Ethnic Business: Chinese Capitalism in Southeast Asia* (1st ed.). Abingdon: Routledge.
- Kaplan, S., Murray, F., & Henderson, R. (2003). Discontinuities and senior management: Assessing the role of recognition in pharmaceutical firm response to biotechnology. *Industrial And Corporate Change*, 12(2), 203-233. doi: 10.1093/icc/12.2.203
- Kenayathulla, H. (2015). Ethical issues in the Malaysian education system. *Educational Philosophy And Theory*, 47(5), 440-454.
- Kennedy, G. (1964). The butterfly case (Part I). Wennti 8. In T. Li, *Selected works of George A. Kennedy* (1st ed., pp. 238–322). New Haven: Far East.
- Khairani, A., & Abdul Razak, N. (2013). Assessing factors influencing students' choice of Malaysian public university : A Rasch model analysis. *International Journal Of Applied Psychology*, 3(1), 19-24. Retrieved from <http://article.sapub.org/10.5923.j.ijap.20130301.04.html>
- Kim, W., & Mauborgne, R. (1997). Value innovation: The strategic logic of high growth. *Harvard Business Review*, 75(1), 102-112.
- Kirkwood, W. (1995). Revealing the mind of the sage: The narrative rhetoric of the Chuang Tzu. *Rhetoric Society Quarterly*, 25(1-4), 134-148. doi: 10.1080/02773949509391037
- Kjellberg, P. (1994). Skepticism, truth, and the good life: A comparison of Zhuangzi and Sextus Empiricus. *Philosophy East And West*, 44(1), 111-133. doi: 10.2307/1399806

- Klerman, D., Mahoney, P., Spamann, H., & Weinstein, M. (2011). Legal Origin or Colonial History?. *Journal Of Legal Analysis*, 3(2), 379-409. doi: 10.1093/jla/lar002
- Koestler, A. (1976). *The act of creation*. London: Hutchinson.
- Kohn, L. (2008). *Introducing Daoism*. State College: Journal of Buddhist Ethics Online Books.
- Kohn, L. (2020). *Daoism: A contemporary philosophical investigation*. New York: Routledge.
- Koller, J. (2012). *Asian philosophies* (6th ed.). New Jersey: Pearson Education.
- Kor, Y., & Mesko, A. (2013). Dynamic managerial capabilities: Configuration and orchestration of top executives' capabilities and the firm's dominant logic. *Strategic Management Journal*, 34(2), 233-244. doi: 10.1002/smj.2000
- Kramp, M. (2004). Exploring life and experience through narrative inquiry. In K. deMarrais & S. Lapan, *Foundations for research : Methods of inquiry in education and the social sciences* (pp. 103-122). Mahwah: Lawrence Erlbaum Associates.
- Kuo, E. (1996). Ethnicity, polity and economy: A case study of Mandarin trade and the Chinese connection. In G. Hamilton, *Asian business networks* (1st ed., pp. 115-132). Berlin: De Gruyter.
- Kwan, T. (2011). Abstract concept formation in archaic Chinese script forms: Some Humboldtian perspectives. *Philosophy East And West*, 61(3), 409-452. doi: 10.1353/pew.2011.0038
- Lai, F., Chong, S., Sia, B., & Ooi, B. (2010). Culture and Consumer Behaviour: Comparisons between Malays and Chinese in Malaysia. *International Journal Of Innovation, Management And Technology*, 1(2), 180-185.
- Lai, K. (2006). Philosophy and philosophical reasoning in the Zhuangzi: Dealing with plurality. *Journal Of Chinese Philosophy*, 33(3), 365-374. doi: 10.1111/j.1540-6253.2006.00365.x
- Lai, K. (2008a). *An introduction to Chinese philosophy*. Cambridge: Cambridge University.
- Lai, K. (2008b). Learning from the Confucians: Learning from the past. *Journal Of Chinese Philosophy*, 35(1), 97-119. doi: 10.1111/j.1540-6253.2007.00465.x
- Lai, K. (2015). Daoism and Confucianism. In X. Liu, *Dao companion to Daoist philosophy* (pp. 489-511). Dordrecht: Springer Science+Business Media.
- Lakomski, G. (2009). Collective learning and knowledge transfer. In S. Armstrong & C. Fukami, *The SAGE Handbook of Management Learning, Education and Development* (pp. 69-88). London: SAGE.

- Lam, A. (2000). Tacit knowledge, organizational learning and societal institutions: An integrated framework. *Organization Studies*, 21(3), 487-513. doi: 10.1177/0170840600213001
- Lane, P., Koka, B., & Pathak, S. (2006). The reification of absorptive capacity: A critical review and rejuvenation of the construct. *Academy Of Management Review*, 31(4), 833-863. doi: 10.5465/amr.2006.22527456
- Langer, E. (2000). Mindful learning. *Current Directions In Psychological Science*, 9(6), 220-223. doi: 10.1111/1467-8721.00099
- Langley, A. (1999). Strategies for theorizing from process data. *The Academy Of Management Review*, 24(4), 691-710. doi: 10.2307/259349
- Langley, A., & Tsoukas, H. (2010). Introducing "perspectives on process organization studies". In T. Hernes & S. Maitlis, *Process, sensemaking, and organizing* (pp. 1-26). New York: Oxford University.
- Langley, A., Smallman, C., Tsoukas, H., & Van de Ven, A. (2013). Process studies of change in organization and management: Unveiling temporality, activity, and flow. *Academy Of Management Journal*, 56(1), 1-13. doi: 10.5465/amj.2013.4001
- Lao, T., & Henricks, R. (1989). *Lao-tzu: Te-tao ching: A new translation based on the recently discovered Ma-wang-tui texts*. New York: Ballantine Books.
- Latiff, Z., & Ayob, M. (2015). Consumption awareness of Indian community towards food label in Klang, Selangor. *International Academic Research Journal Of Business And Technology*, 1(2), 45-50.
- Lau, D. (1979). *Confucius: The analects (Lun yü)*. London: Penguin Group.
- Lee, Y., Han, A., Byron, T., & Fan, H. (2008). Daoist leadership: Theory and application. In C. Chen & Y. Lee, *Leadership and management in China: Philosophies, theories and practices* (pp. 83-107). Cambridge: Cambridge University.
- Legge, J. (1891). James Legge's translation of the complete Chuang Tzu (Zhuangzi). Retrieved from <http://oaks.nvg.org/chuang.html>
- Leonard-Barton, D. (1992a). Core capabilities and core rigidities: A paradox in managing new product development. *Strategic Management Journal*, 13(S1), 111-125. doi: 10.1002/smj.4250131009
- Leonard-Barton, D. (1992b). The factory as a learning laboratory. *Sloan Management Review*, 34(1), 23-38. doi: 10.1016/b978-0-7506-7223-8.50007-1
- Levitt, T. (1960). Marketing myopia. *Harvard Business Review*, 38(4), 24-47.
- Li, M., Liu, H., & Zhou, J. (2018). G-SECI model-based knowledge creation for CoPS innovation: The role of grey knowledge. *Journal Of Knowledge Management*, 22(4), 887-911. doi: 10.1108/jkm-10-2016-0458

- Li, W. (2009). *Chinese writing and calligraphy*. Honolulu: University of Hawaii.
- Li, X. (2016). *Modern China* (1st ed.). Santa Barbara: ABC-CLIO.
- Li, Y. (2017). A semiotic theory of institutionalization. *Academy Of Management Review*, 42(3), 520-547. doi: 10.5465/amr.2014.0274
- Liao, B., Yang, J., & Shao, Y. (2012). New curriculum structure of high school in China. In *International Conference on Science Education 2012* (pp. 85-92). Heidelberg: Springer.
- Liao, B., Yang, J., & Shao, Y. (2014). New curriculum structure of high school in China. In B. Zhang, G. Fulmer, X. Liu, W. Hu, S. Peng & B. Wei, *International Conference on Science Education 2012 Proceedings: Science Education: Policies and Social Responsibilities* (1st ed.). Heidelberg: Springer.
- Lichtenthaler, U. (2009). Absorptive capacity, environmental turbulence, and the complementarity of organizational learning processes. *Academy Of Management Journal*, 52(4), 822-846. doi: 10.5465/amj.2009.43670902
- Light, D. (1979). Surface data and deep structure: Observing the organization of professional training. *Administrative Science Quarterly*, 24(4), 551-559. doi: 10.2307/2392361
- Lim, Y., Cheng, B., Cham, T., Ng, C., & Tan, J. (2019). Gender differences in Perceptions and attitudes toward online shopping: A study of Malaysian consumers. *Journal Of Marketing Advances And Practices*, 1(2), 11-24.
- Lin, M. (2015). Thinking with Zhuangzi and Su Shi against Heidegger on artwork. *Philosophy East And West*, 65(3), 809-845. doi: 10.1353/pew.2015.0081
- Lin, Y. (1942). Chuang-tzu Chapters in Lin Yutang's Translation. Retrieved from <http://oaks.nvg.org/chuang-lin.html>
- Lin, Y. (1963). *The wisdom of China*. London: New English Library.
- Lincoln, Y., & Lynham, S. (2011). Criteria for assessing theory in human resource development from an interpretive perspective. *Human Resource Development International*, 14(1), 3-22. doi: 10.1080/13678868.2011.542895
- Lingo, E. (2020). Entrepreneurial leadership as creative brokering: The process and practice of co-creating and advancing opportunity. *Journal Of Management Studies*, 57(5), 962-1001. doi: 10.1111/joms.12573
- Liu, H. (2015). *The Chinese strategic mind*. Massachusetts: Edward Elgar.
- Liu, J. (2006). *An introduction to Chinese philosophy: From ancient philosophy to Chinese Buddhism*. Malden: Blackwell.

- Loewe, P., Williamson, P., & Wood, R. (2001). Five styles of strategy innovation and how to use them. *European Management Journal*, 19(2), 115-125. doi: 10.1016/s0263-2373(00)00081-5
- Loo, M. (2011). Business with Malaysian Chinese. *International Journal Of Arts & Sciences*, 4(9), 79-98.
- Low, J. (2019). A pragmatic definition of the concept of theoretical saturation. *Sociological Focus*, 52(2), 131-139. doi: 10.1080/00380237.2018.1544514
- Low, S. (2001). Chinese business principles from the Eastern Zhou dynasty (770-221 BC): Are they still relevant today?. *Marketing Intelligence & Planning*, 19(3), 200-208. doi: 10.1108/02634500110391744
- Lu, W., & Aiken, M. (2004). Origins and evolution of Chinese writing systems and preliminary counting relationships. *Accounting History*, 9(3), 25-51. doi: 10.1177/103237320400900303
- Ma, L., & Brakel, J. (2019). *Beyond the troubled water of Shifei: From disputation to walking-two-roads in the Zhuangzi*. Albany: State University of New York.
- Macaulay, M. (1990). *Processing varieties in English: An examination of oral and written speech across genres*. Vancouver: University of British Columbia Press.
- Machmud, S., & Sidharta, I. (2016). Entrepreneurial motivation and business performance of SMEs in the SUCI Clothing Center, Bandung, Indonesia. *DLSU Business And Economics Review*, 25(2), 63-78.
- Mackenzie, K. (2000). Processes and their frameworks. *Management Science*, 46(1), 110-125. doi: 10.1287/mnsc.46.1.110.15126
- MacLean, D., MacIntosh, R., & Seidl, D. (2015). Rethinking dynamic capabilities from a creative action perspective. *Strategic Organization*, 13(4), 340-352. doi: 10.1177/1476127015593274
- Mair, V. (1996). Modern Chinese writing. In P. Daniels & W. Bright, *The world's writing systems* (pp. 200-208). New York: Oxford University Press.
- Mair, V. (1997). *Wandering on the Way: Early Taoist tales and parables of Chuang Tzu*. Honolulu: University of Hawaii Press.
- Mair, V. (2000). The Zhuangzi and its impact. In L. Kohn, *Daoism handbook* (pp. 30-52). Leiden: Brill.
- Mair, V. (2007). *The art of war: Sun Zi's military method*. New York: Columbia University Press.
- Major, J. (1975). The efficacy of uselessness: A Chuang-tzu motif. *Philosophy East And West*, 25(3), 265-279. doi: 10.2307/1398197

- Makadok, R. (2001). Toward a synthesis of the resource-based and dynamic-capability views of rent creation. *Strategic Management Journal*, 22(5), 387-401. doi: 10.1002/smj.158
- Makadok, R., Burton, R., & Barney, J. (2018). A practical guide for making theory contributions in strategic management. *Strategic Management Journal*, 39(6), 1530-1545. doi: 10.1002/smj.2789
- Makkonen, H., Pohjola, M., Olkkonen, R., & Koponen, A. (2014). Dynamic capabilities and firm performance in a financial crisis. *Journal Of Business Research*, 67(1), 2707-2719. doi: 10.1016/j.jbusres.2013.03.020
- Malaysia. (2009). *New Economic Model for Malaysia Part 1: Strategic policy directions* (1st ed.). Putrajaya: National Economic Advisory Council.
- Manish, G., & Sutter, D. (2016). Mastery versus profit as motivation for the entrepreneur. *Journal Of Entrepreneurship And Public Policy*, 5(1), 95-112. doi: 10.1108/jep-10-2015-0032
- Marshall, C., & Rossman, G. (2006). *Designing qualitative research*. London: SAGE.
- Martin, J. (1982). Stories and scripts in organizational settings. In H. Hastorf & A. Isen, *Cognitive social psychology* (1st ed., pp. 155-305). New York: Elsevier.
- Martin, J. (2011). Dynamic managerial capabilities and the multibusiness team: The role of episodic teams in executive leadership groups. *Organization Science*, 22(1), 118-140. doi: 10.1287/orsc.1090.0515
- Martin, J., & Bachrach, D. (2018). A relational perspective of the microfoundations of dynamic managerial capabilities and transactive memory systems. *Industrial Marketing Management*, 74, 27-38. doi: 10.1016/j.indmarman.2018.07.008
- Matondang, S. (2016). The revival of Chineseness as a cultural identity in Malaysia. *Khazar Journal Of Humanities And Social Sciences*, 19(4), 56-70. doi: 10.5782/2223-2621.2016.19.4.56
- McAdam, R. (2004). Knowledge creation and idea generation: A critical quality perspective. *Technovation*, 24(9), 697-705. doi: 10.1016/s0166-4972(02)00169-4
- McAdam, R., & McCreedy, S. (1999). A critical review of knowledge management models. *The Learning Organization*, 6(3), 91-101. doi: 10.1108/09696479910270416
- McDermott, R. (1999). Why information technology inspired but cannot deliver knowledge management. *California Management Review*, 41(4), 103-117. doi: 10.2307/41166012
- McDonald, M., & Westphal, J. (2003). Getting by with the advice of their Friends: CEOs' advice networks and firms' strategic responses to poor performance. *Administrative Science Quarterly*, 48(1), 1-32. doi: 10.2307/3556617

- McLeod, J. (2011). *Qualitative research in counselling and psychotherapy*. London: Sage.
- McMullen, J., & Dimov, D. (2013). Time and the entrepreneurial journey: The problems and promise of studying entrepreneurship as a process. *Journal Of Management Studies*, 50(8), 1481-1512. doi: 10.1111/joms.12049
- Merton, T. (1965). *The way of Chuang Tzu*. New York: New Directions.
- Meso, P., & Smith, R. (2000). A resource-based view of organizational knowledge management systems. *Journal Of Knowledge Management*, 4(3), 224-234. doi: 10.1108/13673270010350020
- Michalski, R., & Shackelford, T. (2010). Evolutionary personality psychology: Reconciling human nature and individual differences. *Personality And Individual Differences*, 48(5), 509-516. doi: 10.1016/j.paid.2009.10.027
- Mikecz, R. (2012). Interviewing elites: Addressing methodological issues. *Qualitative Inquiry*, 18(6), 482-493. doi: 10.1177/1077800412442818
- Mikulas, W. (2011). Mindfulness: Significant common confusions. *Mindfulness*, 2(1), 1-7. doi: 10.1007/s12671-010-0036-z
- Miller, D., & Shamsie, J. (2001). Learning across the life cycle: Experimentation and performance among the hollywood studio heads. *Strategic Management Journal*, 22(8), 725-745. doi: 10.1002/smj.171
- Miller, T., Grimes, M., McMullen, J., & Vogus, T. (2012). Venturing for others with heart and head: How compassion encourages social entrepreneurship. *Academy Of Management Review*, 37(4), 616-640. doi: 10.5465/amr.2010.0456
- Miner, A., Bassoff, P., & Moorman, C. (2001). Organizational improvisation and learning: A field study. *Administrative Science Quarterly*, 46(2), 304-337. doi: 10.2307/2667089
- Minford, J. (2002). *The art of war: Sun-tzu (Sunzi)*. New York: Penguin Group.
- Mintzberg, H. (1987). The strategy concept I: Five Ps for strategy. *California Management Review*, 30(1), 11-24. doi: 10.2307/41165263
- Mintzberg, H. (1994). The fall and rise of strategic planning. *Harvard Business Review*, 72(1), 107-114. doi: 10.1016/0024-6301(92)90013-r
- Mintzberg, H., Ahlstrand, B., & Lampel, J. (1998). *Strategy safari*. New York: Free Press.
- Mir, R., & Watson, A. (2000). Strategic management and the philosophy of science: the case for a constructivist methodology. *Strategic Management Journal*, 21(9), 941-953. doi: 10.1002/1097-0266(200009)21:9<941::aid-smj141>3.0.co;2-d

- Mir, R., & Watson, A. (2001). Critical realism and constructivism in strategy research: Toward a synthesis. *Strategic Management Journal*, 22(12), 1169-1173. doi: 10.1002/smj.200
- Mohammad Rizal, S. (2006). Legal transplantation and local knowledge: Corporate governance in Malaysia. *Australian Journal Of Corporate Law*, 20(10), 1-29.
- Mohr, L. (1982). *Explaining organizational behavior*. San Francisco: Jossey-Bass.
- Mok, K. (2012). The rise of transnational higher education in Asia: Student mobility and studying experiences in Singapore and Malaysia. *Higher Education Policy*, 25(2), 225-241. doi: 10.1057/hep.2012.6
- Mokhtar, K., Chan, A., & Jamir Singh, P. (2013). The New Economic Policy (1970 - 1990) in Malaysia: The economic and political perspectives. *GSTF Journal Of Law And Social Sciences*, 2(2), 12-17.
- Molla, R., Murad, M., & Alam, M. (2011). Malaysia's economic globalization in the milieu of deceptive game of capitalist globalization. Retrieved from <http://www.freit.org/WorkingPapers/Papers/PoliticalEconomy/FREIT366.pdf>
- Moore, O. (2000). *Chinese* (1st ed.). Berkeley: University of California Press.
- Morrow, J., Sirmon, D., Hitt, M., & Holcomb, T. (2007). Creating value in the face of declining performance: firm strategies and organizational recovery. *Strategic Management Journal*, 28(3), 271-283. doi: 10.1002/smj.579
- Morse, N., & Weiss, R. (1955). The function and meaning of work and the Job. *American Sociological Review*, 20(2), 191-198. doi: 10.2307/2088325
- Moser, D. (2016). *A billion voices: China's search for a common language* (1st ed.). Hawthorn: Penguin Books.
- Moskowitz, G. (2005). *Social cognition: Understanding self and others*. New York: Guilford.
- Mukhtar, A., & Butt, M. (2012). Intention to choose Halal products: the role of religiosity. *Journal Of Islamic Marketing*, 3(2), 108-120. doi: 10.1108/17590831211232519
- Muller, A. (2009). Daode Jing. Retrieved from <http://www.acmuller.net/con-dao/daodejing.html#div-17>
- Mumford, M., & Gustafson, S. (1988). Creativity syndrome: Integration, application, and innovation. *Psychological Bulletin*, 103(1), 27-43. doi: 10.1037/0033-2909.103.1.27
- Mäkelä, M., & Turcan, R. (2007). Building grounded theory in entrepreneurship research. In H. Neergaard & J. Ulhøi, *Handbook of*

- qualitative research methods in entrepreneurship* (pp. 122-143). Cheltenham: Edward Elgar.
- Møllgaard, E. (2007). *An introduction to Daoist thought: Action, language, and ethics in Zhuangzi*. London: Routledge.
- Nadkarni, S., & Herrmann, P. (2010). CEO personality, strategic flexibility, and firm performance: The case of the Indian business process outsourcing industry. *Academy Of Management Journal*, 53(5), 1050-1073. doi: 10.5465/amj.2010.54533196
- Nadkarni, S., & Narayanan, V. (2007). Strategic schemas, strategic flexibility, and firm performance: The moderating role of industry clockspeed. *Strategic Management Journal*, 28(3), 243-270. doi: 10.1002/smj.576
- NAMHC. (1996). Basic behavioral science research for mental health: Perception, attention, learning, and memory. *American Psychologist*, 51(2), 133-142. doi: 10.1037//0003-066x.51.2.133
- Nán, H. (2003). *Nán Huáijǐn xuǎnjí dì shí juàn (Yuánběn dàxué wēiyán)* [南怀瑾选集第十卷(原本大学微言)]. Shanghai: Fudan University Press.
- Nán, H. (2007a). *Zhuāngzǐ nánhuá (shàng)* [庄子蒹蒹(上)]. Shanghai: Shanghai People's Publishing House.
- Nán, H. (2007b). *Zhuāngzǐ nánhuá (xià)* [庄子蒹蒹(下)]. Shanghai: Shanghai People's Publishing House.
- Nán, H. (2008). *Nán Huáijǐn xuǎnjí dì liù juàn (Lìshǐ de jīngyàn)* [南怀瑾选集第六卷(历史的经验)]. Shanghai: Fudan University Press.
- Nan, H., & Wen, K. (1984). *Tao & longevity: Mind-body transformation*. York beach: Samuel Weiser.
- Narayanan, V., Zane, L., & Kemmerer, B. (2011). The Cognitive Perspective in Strategy: An Integrative Review. *Journal Of Management*, 37(1), 305-351. doi: 10.1177/0149206310383986
- Näsi, J. (1999). Information systems and strategy design: The knowledge creation function in three modes of strategy-making. *Decision Support Systems*, 26(2), 137-149. doi: 10.1016/s0167-9236(99)00025-1
- Nauta, M. (2010). The development, evolution, and status of Holland's theory of vocational personalities: Reflections and future directions for counseling psychology. *Journal Of Counseling Psychology*, 57(1), 11-22. doi: 10.1037/a0018213
- Nayak, S., Awal, M., Chang, W., Sivaram, G., Vigneswaran, T., Tee, L., & Althal, A. (2016). Is there a correlation between languages spoken and intricate movements of tongue? A comparative study of various movements of tongue among the three ethnic races of Malaysia. *Journal Of Clinical And Diagnostic Research*, 10(1), 8-11.

- Needham, J. (1969). *The grand titration*. London: Allen and Unwin.
- Neisser, U. (1976). *Cognition and reality: Principles and implications of cognitive psychology*. San Francisco: Freeman.
- Neville, R. (1980). From nothing to being: The notion of creation in Chinese and Western thought. *Philosophy East And West*, 30(1), 21-34. doi: 10.2307/1399009
- Newell, A., Shaw, J., & Simon, H. (1962). The process of creative thinking. In H. Gruber, G. Terrell & M. Wertheimer, *Contemporary approaches to creative thinking* (pp. 153-189). New York: Pergamon.
- Newman, W., Logan, J., & Hegarty, W. (1971). *Strategy, policy, and central management*. Ohio: South-Western Publications.
- Ng, M., & Lee, Y. (2018). Malaysian Chinese language newspapers and national Identity: A study of the roles of Sin Chew Daily in Chinese cultural preservation and nation building. *Kajian Malaysia*, 36(1), 63-103. doi: 10.21315/km2018.36.1.4
- Ni, P. (2003). Toward a broader notion of causation (and technology). In P. Hershock, M. Stepaniants & R. Ames, *Technology and cultural values: On the edge of the third millennium* (pp. 188-205). Honolulu: University of Hawai'i.
- Nisbett, R. (2003). *The geography of thought: How Asians and Westerners think differently...and why*. London: Nicholas Brealey.
- Nisbett, R., Peng, K., Choi, I., & Norenzayan, A. (2001). Culture and systems of thought: Holistic versus analytic cognition. *Psychological Review*, 108(2), 291-310. doi: 10.1037/0033-295x.108.2.291
- Niu, W., & Sternberg, R. (2006). The philosophical roots of Western and Eastern conceptions of creativity. *Journal Of Theoretical And Philosophical Psychology*, 26(1-2), 18-38. doi: 10.1037/h0091265
- Nonaka, I. (1994). A dynamic theory of organizational knowledge creation. *Organization Science*, 5(1), 14-37. doi: 10.1287/orsc.5.1.14
- Nonaka, I., & Takeuchi, H. (1995). *The knowledge-creating company: How Japanese companies create the dynamics of innovation*. New York: Oxford University Press.
- Nonaka, I., & Toyama, R. (2003). The knowledge-creating theory revisited: Knowledge creation as a synthesizing process. *Knowledge Management Research & Practice*, 1(1), 2-10. doi: 10.1057/palgrave.kmrp.8500001
- Nonaka, I., Takeuchi, H., & Umemoto, K. (1996). A theory of organizational knowledge creation. *International Journal Of Technology Management*, 11(7/8), 833-845.
- Noor, N., & Leong, C. (2013). Multiculturalism in Malaysia and Singapore: Contesting models. *International Journal Of Intercultural Relations*, 37(6), 714-726. doi: 10.1016/j.ijintrel.2013.09.009

- Norman, J. (1988). *Chinese*. New York: Cambridge University Press.
- Nuyen, A. (2011). The Kantian good will and the Confucian sincere will. *Journal Of Chinese Philosophy*, 38(4), 526-537. doi: 10.1111/j.1540-6253.2011.01673.x
- Nyberg, A., Moliterno, T., Hale, D., & Lepak, D. (2014). Resource-based perspectives on unit-Level human capital: A review and integration. *Journal Of Management*, 40(1), 316-346. doi: 10.1177/0149206312458703
- O'Neill, T. (2013). Xu Shen's scholarly agenda: A new interpretation of the Postface of the Shuowen jiezi. *Journal Of The American Oriental Society*, 133(3), 413-440. doi: 10.7817/jameroriesoci.133.3.0413
- O'Neill, T. (2016). *Ideography and Chinese language theory: A history*. Berlin: De Gruyter.
- Orsato, R. (2006). Competitive environmental strategies: When does it pay to be green?. *California Management Review*, 48(2), 127-143. doi: 10.2307/41166341
- Oxford, R. (1997). Constructivism: Shape-shifting, substance, and teacher education applications. *Peabody Journal Of Education*, 72(1), 35-66. doi: 10.1207/s15327930pje7201_3
- Palanca, E. (2004). Chinese education in the Philippines and Malaysia: A comparative study. *Journal Of Malaysian Chinese Studies*, 7, 115-137.
- Park, S., & Luo, Y. (2001). Guanxi and organizational dynamics: organizational networking in Chinese firms. *Strategic Management Journal*, 22(5), 455-477. doi: 10.1002/smj.167
- Parker, S., & Axtell, C. (2001). Seeing another viewpoint: Antecedents and outcomes of employee perspective taking. *Academy Of Management Journal*, 44(6), 1085-1100. doi: 10.2307/3069390
- Pas, J. (1998). *The A to Z of Taoism*. Lanham: The Scarecrow Press.
- Patton, M. (2015). *Qualitative research and evaluation methods* (4th ed.). Thousand Oaks: Sage.
- Payne, G., Pearson, A., & Carr, J. (2017). Process and variance modeling: Linking research questions to methods in family business research. *Family Business Review*, 30(1), 11-18. doi: 10.1177/0894486516679749
- Peng, K., Spencer-Rodgers, J., & Nian, Z. (2006). Naïve dialecticism and the Tao of Chinese thought. In U. Kim, K. Yang & K. Hwang, *Indigenous and cultural psychology: Understanding people in context* (pp. 247-262). New York: Springer.
- Penrose, E. (1959). *The theory of the growth in the firm*. Oxford: Blackwell.

- Peteraf, M. (1993). The cornerstones of competitive advantage: A resource-based view. *Strategic Management Journal*, 14(3), 179-191. doi: 10.1002/smj.4250140303
- Peteraf, M., & Barney, J. (2003). Unraveling the resource-based tangle. *Managerial And Decision Economics*, 24(4), 309-323. doi: 10.1002/mde.1126
- Peteraf, M., & Reed, R. (2007). Managerial discretion and internal alignment under regulatory constraints and change. *Strategic Management Journal*, 28(11), 1089-1112. doi: 10.1002/smj.628
- Peteraf, M., Di Stefano, G., & Verona, G. (2013). The elephant in the room of dynamic capabilities: Bringing two diverging conversations together. *Strategic Management Journal*, 34(12), 1389-1410. doi: 10.1002/smj.2078
- Pettigrew, A. (1992). The character and significance of strategy process research. *Strategic Management Journal*, 13(S2), 5-16. doi: 10.1002/smj.4250130903
- Pettigrew, A., Woodman, R., & Cameron, K. (2001). Studying organizational change and development: Challenges for future research. *Academy Of Management Journal*, 44(4), 697-713. doi: 10.2307/3069411
- Peyraube, A. (2016). Ancient Chinese. In S. Chin, *The Routledge Encyclopedia of the Chinese Language* (1st ed.). New York: Routledge.
- Ployhart, R. (2014). Strategic organizational behavior (STROBE): The missing voice in the strategic human capital conversation. *Academy Of Management Perspectives*, 29(3), 342-356. doi: 10.5465/amp.2014.0145
- Plucker, J., Beghetto, R., & Dow, G. (2004). Why isn't creativity more important to educational psychologists? Potentials, pitfalls, and future directions in creativity research. *Educational Psychologist*, 39(2), 83-96. doi: 10.1207/s15326985ep3902_1
- Poincaré, H. (1913). *The foundations of science*. Lancaster: Science Press.
- Polanyi, M. (1966). *The tacit dimension*. Garden City, N.Y.: Doubleday.
- Polanyi, M. (1969). Knowledge and Being. In M. Grene, *Knowing and Being, Essays* (pp. 123-207). London: Routledge and Kegan Paul.
- Polkinghorne, D. (1988). *Narrative knowing and the human sciences*. New York: State University of New York.
- Poole, M. (2004). Central issues in the study of change and innovation. In M. Poole & A. Van de Ven, *Handbook of organizational change and innovation* (pp. 3-31). New York: Oxford University.
- Poole, M. (2007). Generalization in process theories of communication. *Communication Methods And Measures*, 1(3), 181-190. doi: 10.1080/19312450701434979

- Poole, M. (2013). On the study of process in communication research. In C. Salmon, *Communication yearbook 36* (pp. 371-409). New York: Routledge.
- Poole, M., & Van de Ven, A. (2010). Empirical methods for research on organizational decision-making processes. In P. Nutt & D. Wilson, *Handbook of decision making* (pp. 543-580). West Sussex: John Wiley & Sons.
- Poole, M., Van de Ven, A., Dooley, K., & Holmes, M. (2000). *Organizational change and innovation processes: Theory and methods for research*. New York: Oxford University.
- Popadiuk, S., & Choo, C. (2006). Innovation and knowledge creation: How are these concepts related?. *International Journal Of Information Management*, 26(4), 302-312. doi: 10.1016/j.ijinfomgt.2006.03.011
- Popper, K. (2002). *The logic of scientific discovery* (1st ed.). London: Routledge Classics.
- Porter, M. (1985). *Competitive advantage: Creating and sustaining superior performance*. New York: Free Press.
- Porter, M. (1991). Towards a dynamic theory of strategy. *Strategic Management Journal*, 12(S2), 95-117. doi: 10.1002/smj.4250121008
- Powell, T., Lovallo, D., & Fox, C. (2011). Behavioral strategy. *Strategic Management Journal*, 32(13), 1369-1386. doi: 10.1002/smj.968
- Prahalad, C., & Bettis, R. (1986). The dominant logic: A new linkage between diversity and performance. *Strategic Management Journal*, 7(6), 485-501. doi: 10.1002/smj.4250070602
- Pratt, W. (1952). Toward a philosophy of oil-finding. *AAPG Bulletin*, 36(12), 2231-2236. doi: 10.1306/5ceadb8-16bb-11d7-8645000102c1865d
- Prietula, M., & Simon, H. (1989). The experts in your midst. *Harvard Business Review*, 89(1), 120-124.
- Puziak, M. (2017). The persistence of abnormal returns: Analysis of Polish manufacturing industry. *Economics And Sociology*, 10(1), 48-60. doi: 10.14254/2071-789x.2017/10-1/4
- Qiu, X., Mattos, G., & Norman, J. (2000). *Chinese writing*. Berkeley: The Society for the Study of Early China and The Institute of East Asian Studies, University of California.
- Quigley, T., & Graffin, S. (2017). Reaffirming the CEO effect is significant and much larger than chance: A comment on Fitza (2014). *Strategic Management Journal*, 38(3), 793-801. doi: 10.1002/smj.2503
- Rae, I., & Witzel, M. (2008). *The overseas Chinese of South East Asia: History, Culture, Business*. Basingstoke: Palgrave Macmillan.

- Rao, H., & Dutta, S. (2018). Why great strategies spring from identity movements. *Strategy Science*, 3(1), 313-322. doi: 10.1287/stsc.2017.0046
- Redding, S. (1993). *The spirit of Chinese capitalism*. New York: de Gruyter.
- Reese, W. (1991). Categories of creativity in Whitehead and Chu Hsi. *Journal Of Chinese Philosophy*, 18(3), 287-308. doi: 10.1111/j.1540-6253.1991.tb00450.x
- Richert, A. (2006). Narrative psychology and psychotherapy integration. *Journal Of Psychotherapy Integration*, 16(1), 84-110. doi: 10.1037/1053-0479.16.1.84
- Ridder, H., Hoon, C., & McCandless, A. (2009). The theoretical contribution of case study research to the field of strategy and management. In D. Bergh & D. Ketchen, *Research Methodology in Strategy and Management (Research Methodology in Strategy and Management, Vol. 5)* (pp. 137-175). Bingley: Emerald Group.
- Ridder, H., Hoon, C., & McCandless Baluch, A. (2014). Entering a dialogue: Positioning case study findings towards theory. *British Journal Of Management*, 25(2), 373-387. doi: 10.1111/1467-8551.12000
- Rindova, V., & Martins, L. (2018). From values to value: Value rationality and the creation of great strategies. *Strategy Science*, 3(1), 323-334. doi: 10.1287/stsc.2017.0038
- Ringov, D. (2017). Dynamic capabilities and firm performance. *Long Range Planning*, 50(5), 653-664. doi: 10.1016/j.lrp.2017.02.005
- Ritter, S., van Baaren, R., & Dijksterhuis, A. (2012). Creativity: The role of unconscious processes in idea generation and idea selection. *Thinking Skills And Creativity*, 7(1), 21-27.
- Romaine, S. (2009). Language, culture, and identity across nations. In J. Banks, *The Routledge international companion to multicultural education* (1st ed.). New York: Routledge.
- Rosenbloom, R. (2000). Leadership, capabilities, and technological change: The transformation of NCR in the electronic era. *Strategic Management Journal*, 21(10-11), 1083-1103. doi: 10.1002/1097-0266(200010/11)21:10/11<1083::aid-smj127>3.0.co;2-4
- Roslan, A. (2001). Income inequality, poverty and development policy in Malaysia. In *International Seminar on Poverty and Sustainable Development*. Université Montesquieu-Bordeaux IV, France.
- Roth, H. (1991). Psychology and self-cultivation in early Taoistic thought. *Harvard Journal Of Asiatic Studies*, 51(2), 599-650. doi: 10.2307/2719289
- Rothaermel, F., & Hess, A. (2007). Building Dynamic Capabilities: Innovation Driven by Individual-, Firm-, and Network-Level Effects. *Organization Science*, 18(6), 898-921. doi: 10.1287/orsc.1070.0291

- Rumelt, R. (1979). Evaluation of strategy: Theory and models. In D. Schendel & C. Hofer, *Strategic management: A new view of business policy and planning* (pp. 196-212). Boston: Little Brown.
- Runco, M. (2014). *Creativity: Theories and themes: Research, development, and practice* (2nd ed.). London: Elsevier, Academic Press.
- Russ, S. (2001). Primary-process thinking and creativity: Affect and cognition. *Creativity Research Journal*, 13(1), 27-35. doi: 10.1207/s15326934crj1301_4
- Saidel, E. (1998). Beliefs, desires, and the ability to learn. *American Philosophical Quarterly*, 35(1), 21-37.
- Saldaña, J. (2013). *The coding manual for qualitative researchers*. London: Sage.
- Salmador, M., & Bueno, E. (2005). Strategy-making as a complex, double-loop process of knowledge creation: Four cases of established banks reinventing the industry by means of the internet. *Advances In Strategic Management*, 22, 267-318. doi: 10.1016/s0742-3322(05)22010-7
- Salmador, M., & Bueno, E. (2007). Knowledge creation in strategy-making: Implications for theory and practice. *European Journal Of Innovation Management*, 10(3), 367-390. doi: 10.1108/14601060710776761
- Salvato, C. (2009). Capabilities unveiled: The role of ordinary activities in the evolution of product development processes. *Organization Science*, 20(2), 384-409. doi: 10.1287/orsc.1080.0408
- Sapir, E. (1921). *Language: An introduction to the study of speech*. Cambridge: Cambridge University.
- Saravanamuttu, J. (2010). Malaysia: Multicultural society, Islamic state, or what?. In S. Heng & C. Ten, *State and secularism: Perspectives from Asia* (1st ed., pp. 279-300). Singapore: World Scientific.
- Schilke, O., Hu, S., & Helfat, C. (2018). Quo vadis, dynamic capabilities? A content-analytic review of the current state of knowledge and recommendations for future research. *Academy of Management Annals*, 12(1), 390-439. doi: 10.5465/annals.2016.0014
- Schlender, B., & Tetzeli, R. (2015). *Becoming Steve Jobs: The evolution of a reckless upstart into a visionary leader*. New York: Crown Business.
- Schmandt-Besserat, D., & Erard, M. (2008). Origins and forms of writing. In C. Bazerman, *Handbook of research on writing: History, society, school, individual, text*. New York: Taylor & Francis Group.
- Schmidt, S. (2011). Mindfulness in East and West – Is it the same?. In H. Walach, S. Schmidt & W. Jonas, *Neuroscience, Consciousness and Spirituality. Studies in Neuroscience, Consciousness and Spirituality, vol 1* (pp. 23-38). Dordrecht: Springer.

- Schneider, S., & Angelmar, R. (1993). Cognition in Organizational Analysis: Who's Minding the Store?. *Organization Studies*, 14(3), 347-374. doi: 10.1177/017084069301400302
- Schoenberg, R. (2003). An integrated approach to strategy innovation. *European Business Journal*, 15(3), 95-103.
- Schreier, M. (2018). Sampling and generalization. In U. Flick, *The SAGE handbook of qualitative data collection* (pp. 84-98). London: Sage.
- Schwandt, T. (1998). Constructivist, interpretivist approaches to human inquiry. In N. Denzin & Y. Lincoln, *The landscape of qualitative research: Theories and issues* (pp. 221-259). Thousand Oaks: Sage.
- See, H. (2010). Globalization and the Malaysian experience: Upsides and downsides. *Journal Of Asia Pacific Studies*, 2(1), 1-27.
- Seneviratne, K. (2012). *Countering MTV influence in Indonesia and Malaysia* (1st ed.). Singapore: Institute of Southeast Asian Studies.
- Shane, S., Locke, E., & Collins, C. (2003). Entrepreneurial motivation. *Human Resource Management Review*, 13(2), 257-279.
- Shei, C. (2014). *Understanding the Chinese language*. New York: Routledge.
- Shen, V. (2014). Introduction: Classical Confucianism in historical and comparative context. In V. Shen, *Dao companion to classical Confucian philosophy* (pp. 1-19). Dordrecht: Springer Science+Business Media.
- Shepherd, J., & Johnson, G. (1999). A case study of strategy innovation: Creating a multi-perspective view of organizational knowledge. *Knowledge And Process Management*, 6(2), 63-71. doi: 10.1002/(sici)1099-1441(199906)6:2<63::aid-kpm57>3.0.co;2-k
- Shien, G. (1951). Being and nothingness in Greek and ancient Chinese philosophy. *Philosophy East And West*, 1(2), 16-24. doi: 10.2307/1396846
- Shkedi, A. (2005). *Multiple case narrative: A qualitative approach to studying multiple populations*. Amsterdam: John Benjamins.
- Sia, K. (2010). Institutional factors influencing students' college choice decision in Malaysia: A conceptual framework. *International Journal Of Business And Social Science*, 1(3), 53-58.
- Siah, P., Ong, S., Tan, S., & Sim, C. (2015). Perception on Chinese values: A comparison of Chinese secondary students studying at national secondary schools and Chinese independent schools in Malaysia. *The Social Science Journal*, 52(1), 62-68. doi: 10.1016/j.soscij.2014.08.006
- Siggelkow, N. (2007). Persuasion with case studies. *Academy Of Management Journal*, 50(1), 20-24. doi: 10.5465/amj.2007.24160882
- Sim, A. (2009). Contextual perspectives of turnaround in Malaysian firms. *Asia Pacific Business Review*, 15(2), 199-216. doi: 10.1080/13602380701830052

- Sim, L., & Bretzke, J. (1994). The notion of sincerity (cheng) in the Confucian classics. *Journal Of Chinese Philosophy*, 21(2), 179-212. doi: 10.1111/j.1540-6253.1994.tb00464.x
- Simon, H. (1985). Human nature in politics: The dialogue of psychology with political science. *American Political Science Review*, 79(2), 293-304. doi: 10.2307/1956650
- Simon, H. (1991). Bounded rationality and organizational learning. *Organization Science*, 2(1), 125-134. doi: 10.1287/orsc.2.1.125
- Simon, H., & Chase, W. (1973). Skill in chess. *American Scientist*, 61(4), 394-403.
- Singh, S., Corner, P., & Pavlovich, K. (2015). Failed, not finished: A narrative approach to understanding venture failure stigmatization. *Journal Of Business Venturing*, 30(1), 150-166. doi: 10.1016/j.jbusvent.2014.07.005
- Sirmon, D., & Hitt, M. (2009). Contingencies within dynamic managerial capabilities: interdependent effects of resource investment and deployment on firm performance. *Strategic Management Journal*, 30(13), 1375-1394. doi: 10.1002/smj.791
- Smircich, L., & Stubbart, C. (1985). Strategic management in an enacted world. *Academy Of Management Review*, 10(4), 724-736. doi: 10.5465/amr.1985.4279096
- Soles, D., & Soles, D. (1998). Fish traps and rabbit snares: Zhuangzi on judgement, truth and knowledge. *Asian Philosophy*, 8(3), 149-164. doi: 10.1080/09552369808575481
- Stake, R. (2006). *Multiple case study analysis*. New York: The Guilford.
- Stanovich, K., & West, R. (2000). Individual differences in reasoning: Implications for the rationality debate?. *Behavioral And Brain Sciences*, 23(5), 645-726. doi: 10.1017/s0140525x00003435
- Stephens, D. (2009). Confucianism, pragmatism, and socially beneficial philosophy. *Journal Of Chinese Philosophy*, 36(1), 53-67. doi: 10.1111/j.1540-6253.2008.01504.x
- Stevens, R., Moray, N., & Bruneel, J. (2015). The social and economic mission of social enterprises: Dimensions, measurement, validation, and relation. *Entrepreneurship Theory And Practice*, 39(5), 1051-1082. doi: 10.1111/etap.12091
- Stoecker, R. (1991). Evaluating and Rethinking the case study. *The Sociological Review*, 39(1), 88-112. doi: 10.1111/j.1467-954x.1991.tb02970.x
- Storz, M. (1999). Malay and Chinese values underlying the Malaysian business culture. *International Journal Of Intercultural Relations*, 23(1), 117-131. doi: 10.1016/s0147-1767(98)00028-5

- Sturgeon, D. (2015). Zhuangzi, perspectives, and greater Knowledge. *Philosophy East And West*, 65(3), 892-917. doi: 10.1353/pew.2015.0064
- Su, R., Murdock, C., & Rounds, J. (2015). Person-environment fit. In P. Hartung, M. Savickas & W. Walsh, *APA handbook of career intervention, Volume 1: Foundations* (1st ed., pp. 81-98). Washington: American Psychological Association.
- Suddaby, R. (2006). From the editors: What grounded theory is not. *Academy Of Management Journal*, 49(4), 633-642. doi: 10.5465/amj.2006.22083020
- Sullivan, J. (1986). Human nature, organizations, and management theory. *Academy Of Management Review*, 11(3), 534-549.
- Sveiby, K. (1997). *The new organizational wealth*. San Francisco: Berrett-Koehler Publishers.
- Tai, T. (2011). *The six scripts or the principles of Chinese writing*. Cambridge: Cambridge University.
- Taliff, R., & Noor, R. (2009). Connecting Language Needs in the Workplace to the Learning of English at Tertiary Level. *Pertanika Journal Of Social Science & Humanities*, 17(2), 67-77.
- Tam, G. (2016). "Orbiting the core": Politics and the meaning of dialect in Chinese linguistics, 1927-1957. *Twentieth-Century China*, 41(3), 280-303.
- Tan, C. (1988). Nation-building and being Chinese in a Southeast Asian state: Malaysia. In J. Cushman & G. Wang, *Changing identities of the Southeast Asian Chinese since World War II* (pp. 139-164). Singapore: Hong Kong University.
- Tan, C. (2001). Chinese in Southeast Asia and identities in a changing global context. In M. Armstrong, R. Armstrong & K. Mulliner, *Chinese populations in contemporary Southeast Asian societies: Identities, interdependence and international influence* (1st ed.). New York: Routledge.
- Tang, S., & Hussin, S. (2013). Advancing sustainability in private higher education through quality assurance: A study of two Malaysian private universities. *Asian Social Science*, 9(11), 270-279. doi: 10.5539/ass.v9n11p270
- Taylor, R., Hoy, M., & Haley, E. (1996). How French advertising professionals develop creative strategy. *Journal Of Advertising*, 25(1), 1-14. doi: 10.1080/00913367.1996.10673492
- Teece, D. (2007). Explicating dynamic capabilities: the nature and microfoundations of (sustainable) enterprise performance. *Strat. Mgmt. J.*, 28(13), 1319-1350. doi: 10.1002/smj.640
- Teece, D. (2010). Business models, business strategy and innovation. *Long Range Planning*, 43(2-3), 172-194. doi: 10.1016/j.lrp.2009.07.003

- Teece, D. (2012). Dynamic capabilities: Routines versus entrepreneurial Action. *Journal Of Management Studies*, 49(8), 1395-1401. doi: 10.1111/j.1467-6486.2012.01080.x
- Teece, D. (2014a). A dynamic capabilities-based entrepreneurial theory of the multinational enterprise. *Journal Of International Business Studies*, 45(1), 8-37. doi: 10.1057/jibs.2013.54
- Teece, D. (2014b). The foundations of enterprise performance: Dynamic and ordinary capabilities in an (economic) theory of firms. *Academy Of Management Perspectives*, 28(4), 328-352. doi: 10.5465/amp.2013.0116
- Teece, D. (2016). Dynamic capabilities and entrepreneurial management in large organizations: Toward a theory of the (entrepreneurial) firm. *European Economic Review*, 86, 202-216. doi: 10.1016/j.euroecorev.2015.11.006
- Teece, D. (2017a). Business models and dynamic capabilities. *Long Range Planning*. doi: 10.1016/j.lrp.2017.06.007
- Teece, D. (2017b). Towards a capability theory of (innovating) firms: Implications for management and policy. *Cambridge Journal Of Economics*, 41(3), 693-720. doi: 10.1093/cje/bew063
- Teece, D., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal*, 18(7), 509-533. doi: 10.1002/(sici)1097-0266(199708)18:7<509::aid-smj882>3.0.co;2-z
- Tellis, W. (1997). Introduction to case study. *The Qualitative Report*, 3(2), 1-14.
- Teoh, K. (2016). Domesticating hybridity: Straits Chinese cultural heritage projects in Malaysia and Singapore. *Cross-Currents: East Asian History And Culture Review*, 5(1), 115-146. doi: 10.1353/ach.2016.0005
- Thern, K. (1966). *Postface of the Shuo-wen Chieh-tzu: The first comprehensive Chinese dictionary*. Madison: University of Wisconsin.
- Thillainathan, R., & Cheong, K. (2016). Malaysia's new economic policy, growth and distribution: Revisiting the debate. *Malaysian Journal Of Economic Studies*, 53(1), 51-68.
- Ting, M. (2013). Language, identity and mobility: Perspective of Malaysian Chinese youth. *Malaysian Journal Of Chinese Studies*, 2(1), 83-102.
- Ting, S. (2016). Language choices of CEOs of Chinese family business in Sarawak, Malaysia. *Journal Of Multilingual And Multicultural Development*, 1-12. doi: 10.1080/01434632.2016.1207181
- Ting, S., & Puah, Y. (2015). Sociocultural traits and language attitudes of Chinese Foochow and Hokkien in Malaysia. *Journal Of Asian Pacific Communication*, 25(1), 117-140. doi: 10.1075/japc.25.1.07tin
- Torii, T. (1997). The New Economic Policy and the United Malays National Organization - With special reference to the restructuring of Malaysian

- society. *The Developing Economies*, 35(3), 209-239. doi: 10.1111/j.1746-1049.1997.tb00846.x
- Tortoriello, M. (2015). The social underpinnings of absorptive capacity: The moderating effects of structural holes on innovation generation based on external knowledge. *Strategic Management Journal*, 36(4), 586-597. doi: 10.1002/smj.2228
- Triandis, H. (1986). Collectivism v. individualism: A reconceptualisation of a basic concept in cross-cultural social psychology. In C. Bagley & G. Verma, *Personality, cognition and values: Cross-cultural perspectives of childhood and adolescence* (1st ed., pp. 60-95). London: Macmillan.
- Tripsas, M., & Gavetti, G. (2000). Capabilities, cognition, and inertia: Evidence from digital imaging. *Strategic Management Journal*, 21(10/11), 1147-1161. doi: 10.1002/1097-0266(200010/11)21:10/11<1147::aid-smj128>3.3.co;2-i
- Tseng, Y. (1993). *A history of Chinese calligraphy*. Hong Kong: The Chinese University Press.
- Tsoukas, H. (1989). The validity of idiographic research explanations. *The Academy Of Management Review*, 14(4), 551-561. doi: 10.2307/258558
- Tsoukas, H. (1996). The firm as a distributed knowledge system: A constructionist approach. *Strategic Management Journal*, 17(S2), 11-25. doi: 10.1002/smj.4250171104
- Tsoukas, H. (2003). Do we really understand tacit knowledge?. In M. Easterby-Smith & M. Lyles, *The Blackwell Handbook of Organizational Learning and Knowledge management*(pp. 410-427). Oxford: Blackwell Publishing.
- Tsoukas, H. (2005). *Complex Knowledge*. Oxford: Oxford University Press.
- Tsoukas, H., & Hatch, M. (2001). Complex thinking, complex practice: The case for a narrative approach to organizational complexity. *Human Relations*, 54(8), 979-1013. doi: 10.1177/0018726701548001
- Tyre, M., & von Hippel, E. (1997). The situated nature of adaptive learning in organizations. *Organization Science*, 8(1), 71-83. doi: 10.1287/orsc.8.1.71
- Unger, J. (2004). *Ideogram: Chinese Characters and the Myth of Disembodied Meaning* (1st ed.). Honolulu: University of Hawai'i Press.
- Unger, J. (2011). What linguistic units do Chinese characters represent?. *Written Language And Literacy*, 14(2), 293-302. doi: 10.1075/wll.14.2.06ung
- Van de ven, A. (1992). Suggestions for studying strategy process: A research note. *Strategic Management Journal*, 13(S1), 169-188. doi: 10.1002/smj.4250131013
- Van de Ven, A. (2007). *Engaged scholarship : A guide for organizational and social research*. New York: Oxford University.

- Van de Ven, A., & Engleman, R. (2004). Event- and outcome-driven explanations of entrepreneurship. *Journal Of Business Venturing*, 19(3), 343-358. doi: 10.1016/s0883-9026(03)00035-1
- Van de Ven, A., & Huber, G. (1990). Longitudinal field research methods for studying processes of organizational change. *Organization Science*, 1(3), 213-219. doi: 10.1287/orsc.1.3.213
- Van De Ven, A., & Poole, M. (1995). Explaining development and change in organizations. *Academy Of Management Review*, 20(3), 510-540. doi: 10.5465/amr.1995.9508080329
- Van de Ven, A., Sapienza, H., & Villanueva, J. (2007). Entrepreneurial pursuits of self- and collective interests. *Strategic Entrepreneurship Journal*, 1(3-4), 353-370. doi: 10.1002/sej.34
- VÁVRA, D. (2017). Skilful practice in the Zhuangzi: Putting the narratives in context. *Asian Studies*, 5(1), 195-219. doi: 10.4312/as.2017.5.1.195-219
- Viale, R., & Pozzali, A. (2007). Cognitive aspects of tacit knowledge and cultural diversity. In J. Kacprzyk, L. Magnani & P. Li, *Model-Based Reasoning in Science, Technology, and Medicine* (pp. 229–244). Berlin: Springer.
- Vogus, T., & Sutcliffe, K. (2012). Organizational mindfulness and mindful organizing: A reconciliation and path forward. *Academy Of Management Learning & Education*, 11(4), 722-735. doi: 10.5465/amle.2011.0002c
- von den Driesch, T., Eva Susanne da Costa, M., Christina Flatten, T., & Brettel, M. (2015). How CEO experience, personality, and network affect firms' dynamic capabilities. *European Management Journal*, 33(4), 245-256. doi: 10.1016/j.emj.2015.01.003
- von Hippel, E. (1986). Lead users: A source of novel product concepts. *Management Science*, 32(7), 791-805. doi: 10.1287/mnsc.32.7.791
- von Krogh, G., & Grand, S. (2002). From economic theory towards a knowledge-based theory of the firm: Conceptual building blocks. In C. Choo & N. Bontis, *The strategic management of intellectual capital and organizational knowledge* (pp. 163-184). New York: Oxford University.
- Wahi, W. (2014). English language literacy: Juxtaposing undergraduate students' competencies with workplace requirements. *International Journal Of Language Education And Applied Linguistics*, 1(2014), 18-31.
- Walton, P. (1986). The export of British accounting legislation to Commonwealth countries. *Accounting And Business Research*, 16(64), 353-357. doi: 10.1080/00014788.1986.9729335
- Wang, C., & Ahmed, P. (2007). Dynamic capabilities: A review and research agenda. *International Journal Of Management Reviews*, 9(1), 31-51. doi: 10.1111/j.1468-2370.2007.00201.x

- Wang, X. (2009). The spread of Mandarin in Malaysia evidence in language choices in public settings. *Journal Of Modern Languages*, 19(1), 207-224.
- Wang, X. (2014). Chinese education in Malaysia: Past and present. In X. Curdt-Christiansen & A. Hancock, *Learning Chinese in diasporic communities: Many pathways to being Chinese* (1st ed.). Amsterdam: John Benjamins.
- Wang, X. (2015a). The spread of Mandarin in a Malaysian Hakka community: Focus on religious domain. In *International Society for the Study of Chinese Overseas 2015 Regional Conference*. Seoul National University, Korea. Retrieved from <http://eprints.um.edu.my/id/eprint/13877>
- Wang, X. (2015b). The spread of Mandarin in Malaysia: Evidence in language choices in public settings. *Journal Of Modern Languages*, 19(1), 207-224.
- Ward, T., Smith, S., & Finke, R. (1998). Creative cognition. In R. Sternberg, *Handbook of creativity* (pp. 189-212). Cambridge: Cambridge University.
- Wasserman, N. (2003). Founder-CEO succession and the paradox of entrepreneurial success. *Organization Science*, 14(2), 149-172. doi: 10.1287/orsc.14.2.149.14995
- Watson, B. (1968). The complete works of Chuang Tzu translated by Burton Watson. Retrieved from <https://terebess.hu/english/chuangtzu.html>
- Weick, K., & Putnam, T. (2006). Organizing for mindfulness: Eastern wisdom and Western knowledge. *Journal Of Management Inquiry*, 15(3), 275-287. doi: 10.1177/1056492606291202
- Weick, K., & Sutcliffe, K. (2006). Mindfulness and the quality of organizational attention. *Organization Science*, 17(4), 514-524. doi: 10.1287/orsc.1060.0196
- Weick, K., Sutcliffe, K., & Obstfeld, D. (2005). Organizing and the Process of Sensemaking. *Organization Science*, 16(4), 409-421. doi: 10.1287/orsc.1050.0133
- Weisberg, R. (1986). *Creativity: Genius and other myths*. New York: Freeman.
- Weisberg, R. (2006). *Creativity: Understanding innovation in problem solving, science, invention, and the arts*. New Jersey: John Wiley & Sons.
- Welch, C., & Paavilainen-Mäntymäki, E. (2014). Putting process (back) in: Research on the internationalization process of the firm. *International Journal Of Management Reviews*, 16(1), 2-23. doi: 10.1111/ijmr.12006
- Wenzel, C. (2010). Isolation and Involvement: Wilhelm von Humboldt, François Jullien, and More. *Philosophy East And West*, 60(4), 458-475. doi: 10.1353/pew.2010.0011
- White, D. (2008). *The complete Book of Changes: Including translation, commentary, and exercises*. Taiwan: Delta Point Books.

- Wieger, L. (1965). *Chinese characters: Their origin, etymology, history, classification and signification: A thorough study from Chinese documents* (2nd ed.). New York: Paragon Book Reprint and Dover.
- Wilden, R., Devinney, T., & Dowling, G. (2016). The architecture of dynamic capability research: Identifying the building blocks of a configurational approach. *The Academy Of Management Annals*, *10*(1), 997-1076. doi: 10.1080/19416520.2016.1161966
- Wilhelm, R. (1971). *The I Ching or Book of changes*. New Jersey: Princeton University Press.
- Wille, B., Tracey, T., Feys, M., & De Fruyt, F. (2014). A longitudinal and multi-method examination of interest–occupation congruence within and across time. *Journal Of Vocational Behavior*, *84*(1), 59-73. doi: 10.1016/j.jvb.2013.12.001
- Wood, M., & McKinley, W. (2010). The production of entrepreneurial opportunity: A constructivist perspective. *Strategic Entrepreneurship Journal*, *4*(1), 66-84. doi: 10.1002/sej.83
- Woodman, R., Sawyer, J., & Griffin, R. (1993). Toward a theory of organizational creativity. *Academy Of Management Review*, *18*(2), 293-321. doi: 10.2307/258761
- Wright, P., Coff, R., & Moliterno, T. (2014). Strategic human capital: Crossing the great divide. *Journal Of Management*, *40*(2), 353-370. doi: 10.1177/0149206313518437
- Wu, K. (1991). Non-world-making in Chuang Tzu. *Journal Of Chinese Philosophy*, *18*(1), 37-50. doi: 10.1111/j.1540-6253.1991.tb00616.x
- Xia, N., Yang, Y., & Lee, Y. (2018). Chinese education in Malaysia under Malaysian ethnic politics. *Journal Of Politics And Law*, *11*(2), 23-36. doi: 10.5539/jpl.v11n2p23
- Xie, W. (2000). Approaching the Dao: From Lao Zi to Zhuang Zi. *Journal Of Chinese Philosophy*, *27*(4), 469-488. doi: 10.1111/0301-8121.00027
- Xinda, L. (2009). Zhuangzi the poet: Re-reading the Peng bird image. *Dao*, *8*(3), 233-254. doi: 10.1007/s11712-009-9117-x
- Xing, Y., & Sims, D. (2011). Leadership, Daoist Wu Wei and reflexivity: Flow, self-protection and excuse in Chinese bank managers' leadership practice. *Management Learning*, *43*(1), 97-112. doi: 10.1177/1350507611409659
- Xu, K. (1997). The unique features of Hui Shi's thought: A comparative study between Hui Shi and other pre-Qin philosophers. *Journal Of Chinese Philosophy*, *24*(2), 231-253. doi: 10.1111/j.1540-6253.1997.tb00206.x
- Xu, K. (2011). A different type of individualism in Zhuangzi. *Dao*, *10*(4), 445-462. doi: 10.1007/s11712-011-9244-z

- Yeung, A., & Fung, C. (2011). The soft power in the Confucian. In R. Fan, *The Renaissance of Confucianism in Contemporary China* (1st ed.). Dordrecht: Springer Netherlands.
- Yin, J. (2016). Chinese characters. In S. Chan, *The Routledge encyclopedia of the Chinese language*. New York: Routledge.
- Yin, R. (2003). *Case study research: Design and methods* (3rd ed.). London: Sage Publications.
- Yip, P. (2000). *The Chinese lexicon: A comprehensive survey* (1st ed.). London: Routledge.
- Yoo, S., & Kim, J. (2015). The dynamic relationship between growth and profitability under long-term recession: The case of Korean construction companies. *Sustainability*, 7(12), 15982-15998. doi: 10.3390/su71215796
- Yuen, D. (2014). *Deciphering Sun Tzu: How to read 'the art of war'*. New York: Oxford University.
- Yusof, S. (2014). Household decision-making in Malaysia: The ethnic dimension. *Social Indicators Research*, 124(1), 283-293. doi: 10.1007/s11205-014-0782-8
- Zack, M. (1999). Developing a knowledge strategy. *California Management Review*, 41(3), 125-145. doi: 10.2307/41166000
- Zahra, S., & George, G. (2002). Absorptive capacity: A review, reconceptualization, and extension. *Academy Of Management Review*, 27(2), 185. doi: 10.2307/4134351
- Zahra, S., Sapienza, H., & Davidsson, P. (2006). Entrepreneurship and dynamic capabilities: A review, model and research agenda. *Journal Of Management Studies*, 43(4), 917-955. doi: 10.1111/j.1467-6486.2006.00616.x
- Zhang, X. (1999). Tolerance: Chuang-Tzu's epistemological approach. *The Culture Mandala*, 3(2), 29-34.
- Zhang, Z. (2016). A multi-dimensional corpus study of mixed compounds in Chinese. In H. Tao, *Integrating Chinese linguistic research and language teaching and learning* (1st ed.). Amsterdam: John Benjamins.
- Zhao, S., & Baldauf, R. (2008). *Planning Chinese characters: Reaction, evolution or revolution?*. Dordrecht: Springer.
- Zhong, Y., & Bao, Q. (2016). *Chinese classic economics*. United Kingdom: Paths International.
- Zhou, C., & Ching, G. (2012). *Taiwan education at the crossroad: When globalization meets localization* (1st ed.). New York: Palgrave Macmillan.
- Zhuangzi., Palmer, M., Breuilly, E., Chang, W., & Ramsay, J. (1996). *The book of Chuang Tzu*. London: Penguin Books.

Zin, R. (2014). Malaysian development experience: Lessons for developing countries. *Institutions And Economies*, 6(1), 17-56.

APPENDICES

APPENDIX A

Table A1: Comparison of conceptions of creativity between Western and Chinese (adopted from Niu & Sternberg, 2006)

	Western		Chinese	
	Ancient	Modern	Ancient	Modern
Origin	God/gods/individual	Individual	Nature/individual	Individual
Defining factors	Novelty	Novelty	Novelty	Novelty
	Moral goodness	Usefulness	Moral goodness (excluding Daoism)/ Usefulness	Moral goodness
	Everlasting renovation		Everlasting renovation	

APPENDIX B

Table A2: List of creativity definition in modern Western culture

Study	Definition	Dimension of creativity
Sternberg and Lubart (1999, p.3)	“The ability to produce work that is both novel (i.e., original, unexpected) and appropriate (i.e., useful, adaptive concerning task constraints)”.	Creativity as source
Drabkin (1996, p.78)	“The ability of human intelligence to produce original ideas and solutions using imagination”.	Creativity as source
Csikszentmihalyi (1990, p.198)	“Creativity is not an attribute of individuals, but of social systems making judgments about individuals... The social and cultural conditions, interacting with individual potentialities, brought about the objects and behaviours we call creative”.	Creativity as source
Marceau (2011, p.33)	“The creation of new ideas or a recombination of existing knowledge that has no immediate or particular market drivers”.	Creativity as activity
Cropley (2011, p.359)	“The production of relevant and effective novelty”.	Creativity as activity

Mumford, Hester and Robledo (2012, p.4)	“The production of high quality, original, and elegant solutions to problems”.	Creativity as activity
Bruner (1979, p.18)	“An act that produces effective surprise”.	Creativity as activity
Mednick (1962, p.221)	“The creative thinking is the forming of associative elements into new combinations which either meet specified requirements or are in some way useful”.	Creativity as activity
Plucker, Beghetto and Dow (2004, p.90)	“The interaction among aptitude, process, and environment by which an individual or group produces a perceptible product that is both novel and useful as defined within a social context”.	Creativity as activity
Amabile, Conti, Coon, Lazenby and Herron (1996, p.1155)	“The production of novel and useful ideas in any domain”.	Creativity as activity
Amabile and Mueller (2008, p.35)	“A process resulting in a product; it is the production of a novel and appropriate response, product, or solution to an open- ended task. The response must be new, but	Creativity as activity

	<p>it must also be appropriate to the task to be completed or the problem to be solved. In addition, the task must be open-ended, rather than having a single, obvious solution”.</p>	
<p>Csikszentmihalyi (1994, p.299)</p>	<p>“An attribute of ideas or products that (1) are original or statistically infrequent, and therefore unpredictable, in a given culture”.</p>	<p>Creativity as outcome</p>
<p>Mumford and Gustafson (1988, p.28)</p>	<p>“A syndrome involving a number of elements: (a) the processes underlying the individual’s capacity to generate new ideas or understandings, (b) the characteristics of the individual facilitating process operation, (c) the characteristics of the individual facilitating the translation of these ideas into action, (d) the attributes of the situation conditioning the individual’s willingness to engage in creative behaviour, and (e) the attributes of the situation influencing evaluation of the individual’s productive efforts”.</p>	<p>Creativity as outcome</p>
<p>Sawyer (2006, p.27)</p>	<p>“A novel product that attains some level of social recognition”.</p>	<p>Creativity as outcome</p>

APPENDIX C

Table A3: Theories of creativity (based on Weisberg, 2006)

Theoretical stream	Issue(s)	Relevant knowledge creation literature
Cognitive theories	Newell, Shaw & Simon: Creative thinking and problem solving Expertise in creative thinking Perkins: Ordinary thinking in creativity	SECI (Nonaka, 1994): Knowledge creation involves convert knowledge from one form to another.
Psychometric theories	Guilford: problem identification, divergent thinking, convergent thinking.	Adaptive learning (Tyre & von Hippel, 1997): Problem can only be identified through situated learning.
Unconscious thinking: Associative unconscious; unconscious processing	Freud: associative unconscious Poincaré: unconscious processing; incubation and illumination.	4I model (Crossan, Lane and White 1999, p.526): “The process of intuiting— a largely subconscious process—is an important part of the framework.”

APPENDIX D

Interview questions

Informant		Date	
Organization		Location	
Position		Researcher	Tan Jui Aik

Exploring you as the core of your process of seeking and creating knowledge

Question 1 objective: To trace the origins of an entrepreneur's knowledge, knowledge creation and new strategy

Question 1: The person who really understands you is most likely yourself. Please share about your understanding of your mind, such as what is inside your mind and those deep inside your heart. Please share your behavior if they are driven by something in your mind or heart that is hard to explicate.

- i. Are you the same person before you started your business?
 - a. Is there anything that generates the feeling of being yourself again by doing it?
 - b. What causes you to like or dislike to do something?
- ii. What is the language you use when you communicate with your parents?
 - a. Is this the language you use in your thought when you conduct your thinking activities?
- iii. What kind of education have you received?

- iv. Have you ever been influenced by the Chinese culture? If so, what are the influences of the Chinese culture? The influences may include:
 - a. Your way of thinking.
 - b. What causes you to feel that you should do something (e.g. righteous and trust)?
 - c. Your way of working.
 - d. Your way of life.
- v. In what ways are you influenced by the Chinese culture?
- vi. What is the source of the Chinese culture that has an influence to you?

Starting your business

Question 2 objective: To explore the entrepreneurial journey of an entrepreneur from a holistic view.

Question 2: Please share your story as an entrepreneur.

- i. Please share about the situation, timing and important events when you start your business. Is there any of these things that affect your intention of starting a business?
- ii. What is your role and responsibility in the new business? How are they decided?
- iii. How do you overcome resource shortage?
- iv. What is your challenge in the entrepreneurial process?

- v. What are those things that needed to be thought through in the entrepreneurial process?

Question 3 objective: To explore the origin and motivation of the intention to start a business.

Question 3: What causes you to start a business?

- i. Are you motivated by personal interest, personal need or anything else to start your business?
- ii. How do you become aware of your interest in something?
- iii. Do you have the aspiration to launch a new business?
- iv. How did your intention to start a new business emerge?
- v. Is there any change in your personal interest or intention to start a business before and after you started a new business?

Question 4 objective: To explore an entrepreneur's method and cognitive activities in creating new knowledge about new business opportunities.

Question 4: Did you ever use a perspective to observe and understand a variety of things, such as connecting anything that you see to possible new business opportunities?

- i. How do you think about what kind of business you want to do?
- ii. What makes you start to relate what you see and listen to new business opportunities or your new business?
- iii. How do you interpret what you see and listen so as to generate new insights and personal opinions?

- iv. In the process of conceiving business opportunity, what do you want to find out (e.g. profitability)?
- v. How do you know and affirm that a new business has the potential to grow?
- vi. How do you increase the knowledge about starting a new business?
- vii. How do you improve the capabilities of observing and handling the potential of a new business?

Question 5 objective: To explore the way an entrepreneur concentrates in producing and using creative outcome, such as new knowledge.

Question 5: Have you ever concentrated on an idea or kept on thinking over one thing for a period of time (e.g. solving a challenging problem and producing a new product or service)?

- i. Have you ever created a new product, new service, new business model, new working process or new way of doing business?
- ii. Why was the new thing created and what was its value?
- iii. How do you improve and do things better especially those that help to increase your revenue? To do things better, do you need new knowledge?
- iv. How do you know that you have the knowledge of something?
- v. Please provide an example of the most ideal outcome that came from your creativity.

- vi. What is the process of producing the creative outcome? What is the thinking behind the process?
- vii. Among the knowledge you used in conceiving a new way of running a business activity (e.g. product or service innovation, changing way of doing business), where the knowledge has already been known by you or not new to the world, and which of those knowledge is new to the world?
- viii. What is the result and effect of your applied knowledge, especially the knowledge that is new to the world?
- ix. In your opinion, what did you get in return after you have applied your knowledge? From the things that you got, which of them you feel are important?
- x. How do you promote your product or service?
- xi. A successful business dealt normally will generate an amount of financial income. In your opinion, what do you get after being successful in your business?
- xii. How do you perceive financial wealth?
- xiii. Have you ever faced obstacles in generating new knowledge and new strategy? How do you overcome the obstacles?

Question 6 objective: To explore an entrepreneur's immersive experience of fusion with the thing in focus during the conception of the creative output and achieving objectives.

Question 6: During the thinking process of conceiving a new solution, new product or something new and important, have you ever experienced a specific

condition, which is characterized by 1) an extreme focus on a specific thing to the extent of losing the sense of yourself, time and all other things that are not in focus and, 2) in the immersive experience, you interfused with the thing in your focus, feeling that the unification between you and the thing in your focus has led to both of you becoming one (epistemic entity) (e.g. a blind man using a white cane as a sentient extension of the human body to walk on the street safely)?

- i. How do you attain the above-mentioned condition?
 - a. Before the thinking process of conceiving a new thing, did you empty your mind?
 - b. Have the thinking process of conceiving a new thing occurred during or after your ‘mental downtime’, such as during the traffic jam?
- ii. In the above-mentioned condition of immersive experience, what is in your thought?
 - a. In the above-mentioned condition, what do you focus on?
 - b. Is there any difference between what is in your thought and what you focus on?
- iii. At the time you were entering the above-mentioned condition of immersive experience, what is your objective (e.g. producing a new product idea)?
 - a. How your objective emerge?
 - b. How do you communicate your objective (e.g. deliver a power point presentation and formal written

- communication to your employees, co-workers or suppliers)?
- c. How does your organization act in accordance to your objective?
 - d. How do you affirm that your objective can be actualized?
- iv. What would happen after you attained the above-mentioned condition of immersive experience?
- a. What was the effect or result of the above-mentioned condition of immersive experience?
 - b. What were the distinctive advantages of the above mentioned condition of immersive experience?
- v. How do you know what your employees or coworkers think?
- a. How do you know there is a suitable match in between a work responsibility and employee or coworker who is assigned the job?
 - b. How do you know about the condition of your industry, your customers and your firm?
 - c. How do you interact or communicate with your employees?
 - d. How do you perceive your customers and their buying intention?
- vi. What are the things that you keep thinking about when you are running your business (e.g. customers, revenue and cost)?

- a. Would you keep these things in your brain or your heart?
What are the effects of keeping these things in your brain or your heart?
 - b. What are the differences between keeping these things in your brain and your heart (e.g. differences in terms of being easy to remember and memorize for long term use)?
 - c. Have you ever experienced an event of something where what you put in your heart comes into your thought when you start conceiving of a new thing, solving a new problem or conducting a creative activity? If so, how did the thing get inside your heart? Can you describe the situation when this happened?
- vii. When you encounter things that you keep thinking about (e.g. firm resources and work progress), what is the condition of your heart or mind? What is your feeling and thought at that time?
- a. In the condition of facing things that you keep thinking about, what comes into your perception?
 - b. How do you understand the nature of things that may be important to you at work?
 - c. How do you create and capture new opportunities?
 - d. Would you attract new customers with intangible things, such as increasing the buying intention by generating customer's preference and sense of honor from the purchase? Why?

- e. How does your product or service attract customers (e.g. friendly-user experience)?
 - f. How do you fully utilize the potential of your firm, capabilities of employees or your working teams, firm resources and any other things you feel important?
 - g. How do you improve the performance of your employees and firm performance?
- viii. How do you select the easiest thing to begin with, so that you can improve from that starting point and move toward greater challenges?
- ix. Based on your experience, what is the difference between the above-mentioned condition of immersive experience and the condition when inspiration comes into existence?
- x. Is there anything else that you think is important about the above-mentioned condition of immersive experience?

Growing your business

Question 7 objective: To explore ways of growing a new business.

Question 7: How do you grow your business?

- i. How do you think about the way to increase revenue?
- ii. How do you close the first deal that is important to you?
 - a. How do you attract the first customer that is important to you?
 - b. Is the revenue from the first deal sufficient for your new business to sustain?

- c. Does the revenue from the first deal have any meaning to you other than sustaining your business?
- d. Is the meaning from the revenue important for you to run your business? If yes, how can the meaning be important for running your business?

Question 8 objective: To explore the way of creating new knowledge that leads to a new value proposition or improvement of business offering.

Question 8: How do you improve what you sell, and make it more attractive to the customers?

- i. How do you improve the strength of your business?
- ii. What is the most interesting thing in your business, which you feel important?

Question 9 objective: To explore the way an entrepreneur increases and creates new knowledge.

Question 9: How do you increase and create your knowledge about your business?

- i. Is there any pieces of knowledge you gained without learning, which comes naturally, unconsciously (e.g. singing a song without purposely and consciously learning the song) or any other ways?
 - a. Among the knowledge that you have gained without learning, what knowledge can be expressed explicitly, and what knowledge cannot be explicated in words?

Could you please use some metaphors to explain those that are harder to explicate?

- b. How do you start to pay attention to certain things?
 - c. How do you know that something is the best (or only good) and something is the worst (or only bad)?
 - d. When your knowledge towards something (e.g. your product or service) is good or bad, do you think your customers also have the same opinion as yours? How would you know if your customers have the same understanding as what you think when it comes to a judgment of whether something is good or bad?
 - e. How do you get the most up-to-date and detailed information especially those related to the market and key technologies?
- ii. What is the knowledge you acquired through learning? Which of the knowledge is important?
 - iii. What is the knowledge that you generated through thinking? It may be your ideas in the beginning, but found to be useful after being applied in practice.

Question 10 objective: To explore key areas that may require the creation of new knowledge by an entrepreneur.

Question 10: What attracts the most and the least of your attention as you are running your business?

Question 11 objective: To explore what is useful for an entrepreneur to increase revenue.

Question 11: What were your strengths (encouraging internal factors coming from yourself) and advantages (encouraging external factors coming from the environment) that could be used to increase the revenue when you started your business?

- i. Is there any change to your strength and advantage since the beginning of your new business until now? If yes, how did it happen?
- ii. How does the change affect your business growth?
- iii. What do you do when your competency in an area hits the highest limit and further skill improvement in that area would be unlikely or difficult? Do you apply your competency in a different area?

Question 12 objective: To explore the process of creating knowledge in overcoming obstacles of business growth.

Question 12: What were your weaknesses (discouraging internal factors coming from yourself) and disadvantages (discouraging external factors coming from the environment) when you started your business?

- i. Is there any change to your weaknesses and disadvantages since the beginning of your new business until now? If yes, how did it happen?
- ii. How does the change affect your business growth?

Question 13 objective: To explore the way an entrepreneur makes the strategic decision to change.

Question 13: How do you perceive (e.g. interpret from the requirement from a domain, such as seeing swift decision making as a beneficial element in a domain but a detrimental element in a different domain) and decide to change your strength and weakness?

Achieving ideal state of business condition

Question 14 objective: To explore the best performance of a firm, an entrepreneur's objective and idea of an ideal business condition.

Question 14: What is the most ideal business condition (e.g. monopoly) you wish to achieve?

- i. Please describe the most ideal business condition you had ever experienced.
- ii. How do you know that something would be beneficial or damaging to your business?
- iii. How do you develop the ability of discerning something that would be beneficial or damaging to your business?
- iv. Before starting a business project, how do you know it is going to be a success, failure, has growth potential or is worth pursuing to meet the strategic objectives?

Question 15 objective: To identify the way the most successful method created and applied by an entrepreneur to innovate new strategies and gain ideal business results.

Question 15: How did you manage to attain the most ideal business condition you wish to achieve?

- i. How did you generate the most significant income that you have ever received in the past?
 - a. How did you attract the most important clients?
 - b. After earning those money, what did you want to do the most?
- ii. Could you please share about how you made use of your existing knowledge as you come up with new ideas to earn the most significant income that you have ever received in the past?
 - a. What did you think during the process of coming up with new ideas to earn the most significant income?
 - b. What was your mindset during the process of coming up with new ideas to earn the most significant income?
- iii. Please list the key knowledge that helped you to earn the most significant income that you have ever received in the past. If some of them are difficult to explain, please provide and explain using some examples and metaphors.
- iv. In the process of conceiving new ideas, which key knowledge came into your thought without much thinking effort according to your wish?

- v. In the process of conceiving new ideas, which key knowledge came into your thought without much thinking effort and did not follow your wish?
- vi. How do you improve your method of coming up with new thoughts and ideas?
- vii. Please provide examples of using your heart and using your mind to do business. What is the process of using your heart and your mind?

Question 16 objective: To explore how an entrepreneur manages a firm and mobilizes resources to achieve an ideal business condition.

Question 16: What is the key business operation process in your firm that leads to the most ideal condition (e.g. monopoly) to your business?

- i. How do you design the business process to achieve the most ideal condition for your business?
 - a. What do you need in the business operation process that leads to the most ideal condition?
 - b. Why are they needed? How are they applied?
 - c. How do you complete your key daily responsibilities (happening every day) and key responsibilities during critical events (happening when something important occasionally occurs)?
 - d. Are there any important environmental changes that affect your business? If so, how do you change your business process accordingly? Is your change effective?

- ii. How do you think about the way to achieve the most ideal condition for your business?
 - a. How do you come up with an idea of the most ideal condition for your business?
- iii. What are the benefits of and reward from attaining the most ideal condition for your business?
 - a. What can best represent your success in business? What is your idea of success in business?
 - b. What does being successful in business mean to you?

Question 17 objective: To explore an ideal way of doing business.

Question 17: Please describe your way of doing business.

- i. Can you give an example of how your business approach leads to an ideal outcome (e.g. significant increase in the number of customers)?
 - a. Please describe the thinking process and mental state that create the business approach for producing an ideal outcome.
- ii. Is there any change in your way of doing business from the time you start your business until you feel that you are successful?

Question 18 objective: To explore into an entrepreneur's managerial capabilities and strategic change in overcoming the biggest challenge in running business.

Question 18: What is the worst situation you have ever faced before?

- i. How did you overcome the situation?

Question 19 objective: To explore into the best performance produced by an entrepreneur's managerial capabilities and new strategies.

Question 19: What is the best situation you have ever experienced?

- i. How did the situation happen?

Sustain business for long term

Question 20 objective: To explore the way an entrepreneur creatively applies his managerial capabilities in new areas.

Question 20: How do you apply your knowledge in different products, different markets (e.g. high-end and low-end market) or different environments (e.g. Asia and Europe)?

Question 21 objective: To identify new strategies and managerial capabilities that are important for long-term business survival and improve firm performance.

Question 21: How do you sustain business performance for long-term business survival and move to a higher achievement?

- i. How do you explore and develop new sources of revenue that can contribute to your firm performance over the long-term?
- ii. Is there any thing other than the source of revenue that you feel is important to sustain business performance for long-term business survival and better achievement?

- iii. How do you recruit the first employee (or team member) that is most important to you in the past and the employee (or team member) that is most important to you currently?

Question 22 objective: To explore the way an entrepreneur connects to, and combine with, the knowledge of different people that may produce new knowledge for long-term business survival and improve firm performance.

Question 22: How you choose people who are working together with you?

- i. How do you work with them?
- ii. How do you assign roles and responsibilities?
 - a. Would you assign roles and responsibilities to people who have no related experience or not familiar with the job?
- iii. How do you drive your team's best performance?
 - a. What are the features of the best performance of your team?

