CRITICAL SUCCESS FACTOR OF A SMALL MEDIUM ENTERPRISE (SME) STARTUP PROJECT IN MALAYSIA

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A project report submitted in partial fulfilment of the

requirements for the award of the Master of Project Management

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MAY 2019

DECLARATION

I hereby declare that this project report is based on my original work except for citations and quotations which have been duly acknowledged. I also declare that it has not been previously and concurrently submitted for any other degree or award at UTAR or other institutions.

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Specially dedicated to

My beloved family and UTAR lecturers.

ABSTRACT

CRITICAL SUCCESS FACTOR OF A SMALL MEDIUM-SIZED ENTERPRISE START UP PROJECT IN MALAYSIA

Liaw Jia Chien

This research studied and determine about the critical success factor (CSF), barriers and solution of a success small medium-sized enterprise start up project in Malaysia. The CSFs shed insights on the relevant and crucial attributes needed for successful SME venture. The barriers and potential solutions are helpful guidance to new ventures. This study also analysed the homogeneity in perceptions in relation to age group and gender. There were 143 respondents contribute to the survey data of this qualitative research. Besides that, the analysed result of this this using the Statistical Package for Social Science (SPSS) indicated that the most critical success factor of a small medium-sized enterprise is to have good management skill, the biggest barrier of a successful small medium-sized enterprise start-up project is because the product or service has no market fit, and the best solution to successful start-up a small medium-sized enterprise is to have mentors' feedback constantly.

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LIST OF SYMBOLS / ABBREVIATIONS

μ	mean
S	standard deviation
r	pearson correlation
р	significant (2-tailed)
SME	Small and Medium-sized Enterprise
GDP	Gross Domestic Product
MVP	Minimum Viable Product
CEO	Chief Executive Officer
VC	Venture Capital Firm
SPSS	Statistical Package for Social Science

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CHAPTER 1

INTRODUCTION

1.1 Background

The core purpose of this research paper is to identify the critical success factor of a Small and Medium-sized Enterprise (SME) start-up project in Malaysia. This is important to understand the critical success factor of a SME start-up project because successful businesses provide job opportunity and improve the economy of a country especially a developing country like Malaysia (Acs & Amorós, 2008). A study shows that SME contribute the total 40% of countries' Gross Domestic Product (GDP) (Razak, Abdullah, & Ersoy, 2018).

A SME start-up can be categorized as a project because it has life cycle and fits the nature of project (Salamzadeh & Kawamorita Kesim, 2015). According to the SME Corp Report 2015/16, 98.5% of the business that established in Malaysia are SME and estimated as much as 907,065 businesses (SME Corporation Malaysia, 2016). SMEs in Malaysia involved in various of industries. Within the 907,605 businesses there are 89.2% in services sector (809,126 SMEs), 5.3% in Manufacturing sector (47,698 SMEs), 4.3% in construction sector (39,158 SMEs), 1.1% in Agriculture sector (10,218 SMEs) and 0.1% in Mining & Quarrying sector (865 SMEs).

Other than that, SME Corp Malaysia also divide SME into three categories which are micro enterprise, small enterprise and medium enterprise. SME Corp Malaysia defines a micro sized enterprise has an annual sales turnover less than RM 300,000.00 or having not more than 5 employees working for it regardless of any industry background. Other than that, a small sized enterprise has a sales turnover more than RM 300,000 but less than RM 15,000,000 or number of working employees more than 5 but less than 75 when it is in a manufacturing sector. Meanwhile, a service and other sector small sized enterprise should have an annual sales turnover more than RM 300,000 but less than RM 3,000,000 or number of working employees more than 5 but less than 30. Lastly, a medium sized manufacturing enterprise should have RM15,000,000 but less than RM 50,000,000 annual sales turnover or number or working employees more than 75 but less than 200. Meanwhile a medium sized enterprise that is in a service and other sector should have sales turnover more than RM 3,000,000 but not more than RM 20,000,00 or number of employees more than 30 but less than 75. Below is the table of SME definition by SME Corp Malaysia for better understanding:

	Manufacturing Sector		Service and other Sector	
	Full time	Annual Sales	Full time	Annual Sales
	Labour (No.)	Turnover (RM)	Labour (No.)	Turnover (RM)
Micro	< 5	< 300,000	< 5	< 300,000
		300,000 to <		300,000 to <
Small	5 to < 75	15,000,000	5 < 30	3,000,000
		15,000,000 to <		3,000,000 <
Medium	75 to < 200	50,000,000	30 < 75	20,000,000

	Table 1.1: Definition	of SME by	SME Co	rp Malaysia
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Lastly, although previous research has shown the success factor and barriers of a business start-up but these researches are limited to the others country rather than Malaysia. Thus, this is a SME start-up research that will target to the experienced Malaysian business owner from mixed regions of Malaysia.

1.2 Problem Statement

The growth of Malaysia economy is contributed by local Small and Mediumsized Enterprise (SME). SMEs contributed 36.6% of the Gross Domestic Product (GDP) of Malaysia in the year of 2015 (SME Corporation Malaysia, 2016). Few studies show that there are some factors and challenges that making all these SME hard to survive in current cooperate world. Other than that, a research shows that the failure rate of a SME start-up in Malaysia is estimated around 60% and it is three times higher than Australia as only 20% (Ahmad & Seet, 2014). Additionally, Ahmad and Seet's research also defines that a startup failure is a start-up that shut down before 5 years of operation.

High failure rate of a business start-up need to improve because a failed business brings job lost to the people and indirectly increase a country's unemployment rate (Naples, 1997). Unemployment will suffer the people because they have no income to sustain their lifestyle. There is a statement that has been made by the SME Corp Malaysia that 65.3% of the jobs are created from the SMEs in Malaysia in the year 2015 (SME Corporation Malaysia, 2016). There are some previously available studies about the succession, barrier and solution of the successful SMEs start-up in Malaysia. However, this research is in a startup project perspective and intent to gather all three elements, and try to update the old success factor, solution and barriers in Malaysia to the latest. The result of study contributes to the knowledge of entrepreneurship in a way that the CSFs shed insights on the relevant and crucial attributes needed for successful SME venture. The barriers and potential solutions are helpful guidance to new ventures.

1.3 Research Aim

Aim of this research paper is to determine the successful factor and solution to a startup project and apply the proper management skills into startup that can potentially contribute a new knowledge to the project management domain.

1.4 Research Objectives

- 1 To Identify the critical success factor of a Small and Medium-sized (SME) start-up project in Malaysia.
- 2 To determine the barrier of a Small and Medium-sized (SME) start-up project in Malaysia.
- 3 To determine the potential solution to a successful Small and Medium-sized (SME) start-up project in Malaysia.

1.5 Research Questions

- 1 What is the critical success factor of a Small and Medium-sized (SME) startup project in Malaysia?
- 2 What is the barrier of a Small and Medium-sized (SME) start-up project in Malaysia?
- 3 What is the potential solution to a successful Small and Medium-sized (SME) start-up project in Malaysia?

1.6 Research Hypothesis

Aim of this research paper is to explore and determine the critical success factor, barriers and solution of a successful Small and Medium-sized Enterprise startup project in Malaysia. Some research shows that the following hypotheses are able to further analysis on the relationship between age, gender, success factor, barrier and solutions of a successful small medium sized enterprise (SME) start up project in Malaysia:

- Age and Success factor of a SME start up project:
 - Ho = There is no statistically significant relationship between age and success factor of a SME start up project.
 - Ha = There is statistically significant relationship between age and success factor of a SME start up project.

- Gender and Success factor of a SME start up project:
 - Ho = There is no statistically significant relationship between gender and success factor of a SME start up project.
 - Ha = There is statistically significant relationship between gender and success factor of a SME start up project.
- Age and barrier of a SME start up project:
 - Ho = There is no statistically significant relationship between age and barrier of a SME start up project.
 - Ha = There is statistically significant relationship between age and barrier of a SME start up project.
- Gender and barrier of a SME start up project:
 - Ho = There is no statistically significant relationship between gender and barrier of a SME start up project.
 - Ha = There is statistically significant relationship between gender and barrier of a SME start up project.

1.7 Research Scope

There are four scopes will be covered in this research report. First of the scope is to focus on the information of Malaysia Small & Medium-sized Enterprise (SME) and Start-ups. The second scope would be gather data about success factors and barriers of a SME start-up project, and solution to a success SME start-up project. Moreover, all the business and startup related research papers that written from other countries author will be apply in the literature review for this research. Next, the third scope of this research is to send out the questionnaire to gather data from the experienced entrepreneur in Malaysia to determine the success factor, barrier of a SME start-up project and solution to a successful SME start-up project in Malaysia. Last part of the scope is to analyse and explain the gathered data in this research and make a conclusion on it.

1.8 Significance of Research

This research is related to the success factor, barrier of a Small and Mediumsized Enterprises (SME) start-up project and solution to a success SMEs startup in Malaysia. This research could help to provide a reference and guideline to a young entrepreneur that is newly enter to the entrepreneurship carer and indirectly increase the SMEs start-up success rate in Malaysia. Significance of this research is to increase the success rate due to failure rate in Malaysia is considered high compared to Australia. Other than that, job opportunity will increase if there is a significant increasing success rate in Malaysia.

As result, this research will determine the critical success factor of a SMEs start-up project in Malaysia that lead to contribute to the knowledge of entrepreneurship to increase success rate. Other than that, this research will determine the barrier of a SMEs start-up project in Malaysia that lead to notice the entrepreneur avoid the possible mistake. Furthermore, the solution of successful SMEs start-up project in Malaysia will be determined to speed up the succession of SMEs start-up in Malaysia.

Lastly, this research will study and collect the data of SMEs in Malaysia in order for entrepreneur to have a better understand the SMEs ecosystem of Malaysia. This research aims to provide a detailed SMEs start-up project report that cover as much as possible of the issues that is currently face by a new entrepreneur.

1.9 Structure of Dissertation

Dissertation of this research report is structured into five chapters, which are arranged as following:

Chapter 1 – Introduction

In this chapter, the foundation of this research paper will be covered including the research background, problem statement, aims, objectives, hypothesis, scope, significant of research and so on. From this chapter the reader would understand better about the Small and Medium-sized Enterprise and start-ups in Malaysia. Other than that, this chapter also letting the reader know the research intention, and expectation of this research paper.

Chapter 2 – Literature Review

This chapter focus to review all the relevant literature from published journals, articles, book or reports. This chapter provide the life-cycle of the start-up, success factor and barriers of the SMEs start-up project, and solution to a success SMEs start-up project in Malaysia. Other than that, this chapter will conclude the top 20 success factor, barriers and solution and use it to design a questionnaire survey then distribute to the respondent all over the Malaysia. Thus, this chapter is critical because its content determines the quality of this research report.

Chapter 3 – Research Methodology

This chapter shows the method of research that applied in this start-up project research study to test the theoretical framework. However, several famous tests will be used in this research paper such as factor analysis or Kruska Wallis test. The purpose of conducting such tests is to achieve the objectives and aims of this research paper including the targeted methodology of data analysation and collection.

Chapter 4 – Results and Discussions

This chapter elaborate, analyse or illustrate the collected data such as critical success factor, barriers, and solutions from the questionnaire survey. Other than that, there will be a further discussion of the collected data in chapter including general judgement, fact discussion, and so on. However, in the discussion might involve personal opinion of the author.

Chapter 5 - Conclusions and Recommendations

This is the last chapter of this research paper. This chapter discuss about the conclusion of this report, limitation of this report and recommendation for future researcher. Conclusion of the paper will mention about the top 5 success factors, barriers, and solution of a successful start-up project in Malaysia. Limitation explain about the restriction of this report such as time limitation, resources limitation, region limitation and so on.

CHAPTER 2

LITERATURE REVIEW

2.1 Overview

There are four parts discussed in this literature review chapter. The first part discusses about the brief introduction of a start-up project, historical development of start-up, and start-up projects ecosystem in Malaysia.

The second part discusses about the critical success factor of start-up project that had been studied by another researcher. There will be a total of 20 success factors of a Small and Medium sized Enterprise (SME) will be study in this part. All these data will be use to form the part 3 section of the questionnaire.

The third part discusses about the barriers of start-up project which studied by another researcher. There will be a total of 20 barriers of a Small and Medium sized Enterprise (SME) will be study in this part. All these data will be use to form the part 4 section of the questionnaire. Last part discusses about the potential solution of a successful start-up project by another researcher. There will be a total of 15-20 solution to a successful Small and Medium sized Enterprise (SME) will be study in this part. All these data will be use to form the part 4 section of the questionnaire.

2.2 Introduction of Start-Up

A start up is a new established company by an individual person as known as entrepreneur that aims to develop a scalable business model to solve the problems or needs from the marketplace (Katila, Chen, & Piezunka, 2012). However, the intention of start up is to grow from a solo founder to have employees working under their company and from a small and medium sized company grow into large size of business (Mamun, Nawi, Mohiuddin, Shamsudin, & Fazal, 2017).

Startup is usually begin by a founder or together with co-founder who have a new idea toward solving the problem on the marketplace (Uy, Foo, & Ilies, 2015). In a lean start-up approach, the start-up founder or founders will begin the market testing by conduct interview such as problem interview, and solution interview. After that they will build a minimum viable product (MVP). A minimum viable product is an early product that just enough the basic features to satisfy the early customer, and intent to use it as to receive feedback for future product improvement and development (Schilling, 2016). One of the examples of MVP is prototype; an early sample of a product that built to test a concept of a business founder. Some research argue that the process of startup would take a long time to run, as estimated three years or longer period (Carter, Gartner, & Reynolds, 1996). Thus, this is challenging for the founders to sustaining put out many efforts during this period of time because of the low success rate and unguaranteed result (Uy et al., 2015).

2.2.1 Startup principles

There are many principles involved in forming a startup. There are:

- lean startup
- market validation
- design thinking
- decision-making under uncertainty
- partnering entrepreneurial learning
- and business model design.

Lean Startup

Lean startup is a new methodology or approach that aims to develop business product and business in a shorter period of time with limited resource (Ries, 2013). The typical process of a lean startup is first to make a business hypothesis by conducting interview to the potential customer, then the second move is to build a minimum viable product (MVP) such as prototype, third is to let potential customer to test the prototype and get feedback from them, and the last stage is to learn from the feedback of the prototype and improve the product (Potter & Adler, 2011). Compare to the old method of starting up a business that involves big amount of initial project funding and expensive product launches, lean start-up has less market risks and more flexibility to continue develop and improve the product. Other than that, because of the minimal cost involved, founders are able to split testing product. A split testing is an experience that founder develop different version and different type of the MVP to test the market, which is much more effective in terms of speed, learning and focus. (Ries, 2013).

Market Validation

One of the important start-up principles is to confirm and validate the market need before the founder has a start-up idea. This action is to avoid the founder to have a business idea with weak demand that may leads to start-up failure (Ries, 2013).

Design Thinking

Design thinking is used to recognize the client's need in a different perspective in order to reduce biases such as anchoring, overconfident and arrogant (Tidwell, 2012). Entrepreneur shall consider the opposite of all decision that is about to make to increase the success rate.

Decision-Making Under Uncertainty

There are many of the decisions made under hesitations, therefore start-ups should be flexible and agile enough to handle it (Schmitt, Rosing, Zhang, & Leatherbee, 2018). They claim that founder of the startup business should design the startup in a flexible manner in order for them to change easily in the future. Other than that, their study also found out that there will be more opportunities for entrepreneurs when they feel more uncertain during startup time (Schmitt et al., 2018).

Partnering

Partnership with other firms is one of the principles that startup should obey in order to enable their business model to operate and grow (Teece, 2010). However, start-ups have to bring into line about their internal features, such as to have a brilliant product/service that market demand in order to become attractive to other business and form partnership. There is a research shows that startup has a higher chances of becoming successful by finding a business partner that is strong and stable and cooperate with them (Kask & Linton, 2013). Startup needs to learn along the way and have to make sure it is fast enough before the company resources such as capital fund is going to finish. There is a research shows that founder can learning can through proactive actions such as experiment, research, and so on to start up a company (Castrogiovanni, 1996).

Business Model Design.

A business model is a description that represent how an organization creates, deliver, and captures value to the market and usually founder come out the business model right after gained the right knowledge from lean start up approach, market validation and design thinking process (Osterwalder, Pigneur, & Smith, 2010). However, Graham argued that the new entrepreneur should not spend too much effort during the early stage of startup. He suggested that the most important task during an early startup is to build something (product or services) that the market people really demand(Graham, 2006).

2.2.2 Founder / Entrepreneurs

Founders are the people that start the startup companies in the early first place. There is no requirement to be a startup company's founder; anyone can be a founder. The common type of founder is to act as a founder-Chief executive officer (CEO), they responsible for total of the startup strategies (Hoang & Gimeno, 2010). Below are the principles of start-up founders:

Self-efficacy

Self-efficacy is mean the size of founder's confident to create a start-up or a new business (Stevenson, Ciuchta, Letwin, Dinger, & Vancouver, 2019). Research shows that the sense of self-efficacy of an entrepreneur decides how they approaches goals, solve problems, and manage tasks and risk. Those entrepreneur with high self-efficacy that believe in themselves that they can perform well are more likely to view a challenging and difficult task as something new to learn rather than prevent it.

Stress

Strat-up entrepreneurs encounter stress very often due to they always in a do-ordie condition (Uy, Foo, & Song, 2013). They claim that start-up entrepreneur has to develop a good product/service to the market and as fast as possible before the company run out of resources. Thus, coping with stress is an important skill to entrepreneur because an entrepreneur that failed to cope with stress will lead to emotional exhaustion, and result in closing or exits the startups (Uy et al., 2013). Some of the young founders have a more casual and relax attitude in their office space and dressing rule. For example, startup founders in the latest 2010s year may dress casually to business meeting, and their office might have full of recreational facility such as video games machine, pool tables, and so on. A fun working environment is aim to increase the creativity of employees (Sunanda & Indartono, 2017). In a 1960 study, one researcher argued that human is born with the motivation to work what they love without any bonus or incentives, therefore punishments and rewards for employees in the workplace are not necessary (Gannon & Boguszak, 2014). Without the stress of strict environment rules, employees are more stress-free to focus on achieving the task in hand, and benefit for both the employees and company.

Failure

Studies has shown that the failure rate of a start-up company is high around the globe (Holm, 2018). Other study that has exanimated 101 unsuccessful start ups and found out that the top five of the failure factors were:

- 1. Lack of consumer interest in the product or service (42% of failures)
- 2. Funding or cash problems (29%)
- 3. Personnel or staffing problems (23%)
- 4. Competition from rival companies (19%)
- 5. Problem with pricing of the product or service (18%)

Additionally, studies show that an entrepreneur with failure experience have a higher chance of being a better entrepreneur (Holm, 2018).

2.2.3 Startup training

There are startup trainings that available in the market for the entrepreneur who look forward to learn about entrepreneurial skill. A start-up training programme should have both business component and psychology components (Campos et al., 2017). Research also show that the start up education is effective in helping the entrepreneur's business grow by improving the entrepreneurial attitudes and behaviour control (Campos et al., 2017). Other than that, startup training mostly is on the experience-type of learning in which they will meet up some real-life new venture teams and learn from them (Pittaway & Cope, 2007).

2.2.4 Startup investing

Startup investing is one of the actions that apply in the early stage of the company. Other than founder's own investment into the early startup, some of the founder they would seek for additional investment at several stages of their company growth. There are many types of financing options that available in the market. Which include revenue-based financing, venture capital firms (VC) and angel investor, bootstrapping, factoring, equity crowdfunding and so on. A revenue based financing is like a loan, founder exchange it to the lender for a percentage of monthly revenue (Berniker & Mintzberg, 2006). A VC, Angel investor and crowdfunding is financing through exchange of equity of the

company. Additionally, some VC and angel investor help founder to do networking in order for the company to grow. Lastly, bootstrapping is mean selffunding by the founder. This is considered higher risk due to 100% of the shares belong to founder, however it also has potential higher return on investment

2.2.5 Start-up Project life-cycle & Procedures.

In recent years, the research on start-ups' lifecycle is well established by many researchers. Since the sequence of stages and activities might different among vary startups, below is the figure that shows the lifecycle of startups for a better understanding:



Figure 2.1: Lifecycle of a startup project

Bootstrapping stage is the very early stage where entrepreneur start a set of activities that might turn his own idea into the business that is profit. This is the high risk because during this stage entrepreneur has to deal with many uncertainties. Financing option in this state is usually to ask funding from family member, personal fund or from friend. Second phase in a startup life cycle is the
seed stage. Seed stage is a stage that founder use the investment to build the product or service and start enter to the market (Manchanda & Muralidharan, 2014). This is the stage where most startup fail (Salamzadeh & Kawamorita Kesim, 2015). Last of stage of start up is the creation stage. The component in creation stage is that they sell the product, and after hire the first employees (Salamzadeh & Kawamorita Kesim, 2015).

2.2.6 Small & Medium Enterprise Start-ups Project in Malaysia

There are many industries involved in the Small and Medium-sized Enterprise in Malaysia. According to the SME Corp Malaysia, there are five main sectors in SMEs Malaysia which are service sector, construction sector, manufacturing sector, agriculture sector and mining sector (SME Corporation Malaysia, 2016) as stated below :

Sector	All	SMEs	Percentage	Percentage
	Establishment		of SMEs	of
				Structure
Service	818,311	809,126	87.9	89.2
Manufacturing	49,101	47,698	5.2	52.3
Construction	40,558	39,158	4.3	4.3
Agriculture	11,628	10,218	1.1	1.1
Mining & Quarrying	1,062	865	0.1	0.1
Overall Total	920,624	907,065	98.5	100.0

 Table 2.1: Status of Malaysia Small Medium Sized Enterprise

Other than that, SMEs in Malaysia play an important role in economic. They covered up to 60% (6.6 million workers) of the employment and 40% of the national income - Gross domestic product (GDP). In Malaysia, Chinese entrepreneurs owned the most SMEs, yet the Malays and Bumiputra entrepreneur owns only a small part. A study shows that 60% of the overall industrial growth in the early years of Malaysia independence is come from the resource-based product which from mining sector and agriculture sector. Lastly, 60% of the SMEs start-up in Malaysia fail which mean the business cannot make it to the sixth year of operation. However, the main reason of startup fail in Malaysia still remains unclear and there is a need to investigate the reason that causing startups fail in Malaysia (Ahmad & Seet, 2014).

2.3 Success Factors of Small & Medium-sized Enterprise Start-up Project

Good management Skill

Earlier research has mentioned that management skills is important for business success (Benzing, Chu, & Kara, 2009). This is a research that has surveyed 139 entrepreneurs in Ankara, Turkey to understand what are the factors that is important to their business success. They conclude that good management skill is one of the important factors that drives business success. Some of the papers indicate that culture (Busenitz & Lau, 2018), gender (Hughes, 2003), and religion (Freel, 2014) might play an important role in entrepreneur's behaviour that contributes to business success. In terms of religion, most of the Malays in Malaysia are Muslims (60% of the Malaysia's population) while the Chinese Malaysian has different type of mixed religion. In terms of Malay culture, they are lack of individual decision-making. Other than that, they are also very respect the people with authority position and believe in strict tradition (Ness & ein Mohamad, 2006).

There is a study between Malay and Chinese woman entrepreneur in Malaysia found out that because of their tradition culture, they are learnt to depend on the large human group and have low masculinity and usually uncertainty avoider (Idris, 2008). However, Chinese respondents have a higher score on Hofstede's Masculinity Index that indicates they are tougher, more dependent, decision maker and potential to have great leadership. Therefore, these studies believe that gender, culture and religion act a part of the business success factor and this research will investigate it. Hard work entrepreneur

According to a study, hardworking personal trait that may lead entrepreneur to success (COY, SHIPLEY, OMER, & KHAN, 2007). This is a survey study from 265 Pakistan's SMEs entrepreneurs. This survey paper was designed to find out the factor of starting a successful business from Pakistani Businessperson.

Reputation for honesty

A study from Chawla claims that reputation for honesty is one of a very important factor that drives to business success (Chawla, Khanna, & Chen, 2010). This paper was designed to exanimate whether the success factor of start up a business in US and Mexico same in China. Conclusion of this study is that they found out there are differences in the factor of success among various country.

Friendliness

Friendliness of Entrepreneur drives success to a startup business (BENZING, CHU, & CALLANAN, 2005). This is a research study from 378

Vietnamese entrepreneurs in Hanoi and Hachiman. Vietnamese Entrepreneur believe being friendly to customer and suppliers play an important key to business success. However, they mentioned about the price should be 'friendly' as well that means the price should be fair to the consumer.

Social Skill

A survey on Kenya entrepreneur, social skill is one of the key to business success (HUNG MANH, BENZING, & MCGEE, 2007). This research is designed to examine their motivation and success factor in Kenya.

Level of Education

A 2008 survey indicate that education level of entrepreneur affect to business success (Van Der Sluis, Van Praag, & Vijverberg, 2008). This study surveyed over hundreds of students and relate their level of education to their success rate in Entrepreneurship. However, this result show that the impact of education to entrepreneurship is insignificant in Europe. This research will find out whether it is important towards the entrepreneurship in Malaysia. Success Factors from Serbia

A study from Serbia indicate that there are 5 success factors to a SMEs business (Stefanovic, Prokic, & Rankovic, 2010). These success factor include Interpersonal Skills, Position in Society, Leadership Skill, Interpersonal Skills, Competitive product or services and Approval and support. This paper was designed to investigate the motivation and success factor through studies the local successful entrepreneur.

Financing Skills

Many time the Malaysian business owner fail on business due to lack of proper financing management, thus finance skill is important to the succession for SME in Malaysia (Katila et al., 2012). With proper finance skill allow the company to run longer and more financially secure.

Creativity & Innovation Orientation

When we talk about innovation, Malaysian entrepreneurs are lack of innovation and keep repeating the foreign country's business idea. An Africa research evidence that innovation and creativity orientated business owner may have better success rate in doing business (Klapper & Richmond, 2011).

Good Customer Services, Good product quality, Environment Condition

Studies from Pakistan and Turkey have shown that good customer services, good product quality and environment condition drives business into success in Pakistan (COY et al., 2007) (Benzing et al., 2009).

Business Location

Business location is a key factor which lead to business succession in Malaysia (Chong, 2012). Supplier, consumer would consider a convenient place to consume product, having business meeting, or delivery product. Below is the figure of 20 success factors for better understanding:

Table 2.2: Literature review; Success Factors of SME business

Entrepreneur's Personal Trait

1. Good M (Benzin) (Carter o	Management Skill 2. g et al., 2009) et al., 1996)	Religion 3 (Carter et al., 1996) (Benzing et al., 2009) (Chawla et al., 2010)	3. 1	Hardworking Entrepreneur (COY et al., 2007) (Stefanovic et al., 2010)	4.	Gender (Carter et al., 1996) (BENZING et al., 2005)
5. Cultur (Freel, 1 (Benzir (Chawl	e 6. 2014) ng et al., 2009) a et al., 2010)	Reputation for Honesty (Chawla et al., 2010) (BENZING et al., 2005)	7.] ((Friendliness (Chawla et al., 2010) (BENZING et al., 2005)	8.	Social Skills (Chawla et al., 2010) (HUNG MANH et al., 2007)
9. Level o (Van D (Carter (HUNC	of Education 10 Per Sluis et al., 2008) et al., 1996) G MANH et al., 2007)	 Leadership Skill (Stefanovic et al., 2010) (COY et al., 2007) (HUNG MANH et al., 2007) 	11.] (2 (Financing Skill (Beck & Demirguc-Kunt, 2006) (HUNG MANH et al., 2007)	12.	Creativity & Innovation Oriented (Klapper & Richmond, 2011) (Campos et al., 2017)
13. Interpe (Stefan- (Benzir	ersonal Skills 14 ovic et al., 2010) ng et al., 2009)	A. Position in Society (Stefanovic et al., 2010) (COY et al., 2007) (Chawla et al., 2010)				

Business Operation

15. Competitive	16. Good customer service	17. Good product quality	18. Approval and support
product/Service	(COY et al., 2007)	(COY et al., 2007)	(Stefanovic et al., 2010)
(Stefanovic et al., 2010)	(BENZING et al., 2005)	(Stefanovic et al., 2010)	(Chawla et al., 2010)
(BENZING et al., 2005)	(Chong, 2012)	(HUNG MANH et al., 2007)	

19. Environment Conditions

(Chawla et al., 2010) (Benzing et al., 2009) (Van Der Sluis et al., 2008)

20. Business location

(Chong, 2012) (HUNG MANH et al., 2007)

2.4 Barrier of Small & Medium-sized Enterprise Start-up Project

According to a research paper, there are 9 business barriers and challenges that might face by start-up entrepreneur as stated below (Ahmad & Seet, 2014):

- Lack of organization skill (Entrepreneur's trait)
- Failure to select reliable business partner (Entrepreneur's trait)
- Lack of Finance Management Skill (Entrepreneur's trait)
- Failure to select reliable supplier (Entrepreneur's trait)
- Poor selection of adviser (Entrepreneur's trait)
- Lack of ability to make good business judgement
- Human Resources management issues (Business's challenge)
- Failure to maintain close relationship with consumer
- Failure to select competent staff (Business's HR challenge)

This is a study that aimed to investigate the business challenges by survey and comparing the SME entrepreneur from Australia and Malaysia. This research conducted by qualitative method, and total of 20 SME entrepreneurs from Australia and 20 entrepreneurs from Malaysia participated in this survey. However, they found out that there is a different culture between Australia and Malaysia that making might limit the challenges (Ahmad & Seet, 2014).

Other than that, human have different emotional intelligent. Some of the entrepreneur make management decision based on their emotion therefore such irrational management behaviour may lead to business failure (Beaver & Jennings, 2005) . An Africa based research has suggest that business owner should be innovative in order to avoid the lack of competencies among business owners that may lead the business into failure (Kiggundu, 2002). Financial issues is one of the failure reason of SME startup (Colombo & Piva, 2008). People should take care of the company's financial statement in order to avoid business failure.

There is a research focus on early stage of software startup and study why the startups fail during this stage. They argue that no market fit and needs are the reason that these software startups fail in the early stage of startup (Giardino, Wang, & Abrahamsson, 2014). Moreover, they also mentioned that unclear business plan plays a critical role to business failure. Thus, they suggest that in order to decrease failure rate the owners should proper prepare a clear business plan that stating the market size, competitor and also the market needs. Additionally, high-dynamics market could be a blame of business failure (Giardino et al., 2014) (Potter & Adler, 2011).

A study of technology entrepreneurship in United States shows that inappropriate selling strategy and inappropriate marketing strategy could lead to business failure (Song, Podoynitsyna, Van Der Bij, & Halman, 2008). They also found out that only 36% of the technology venture survived after 5 years. Lastly, a study from Russia has shown that the key reason that startup business fail is due to lack of environmental element and little or none financial support (Beck & Demirguc-Kunt, 2006). Below shows the figure of challenges of business for better understanding:

Table 2.3: Literature review; Challenges and barriers of SME

1. Lack of organization Skill 2. Lack of competencies 3. Irrational management 4. Poor selection of advisers behaviour (Ahmad & Seet, 2014) among business owners (Ahmad & Seet, 2014) (Kiggundu, 2002) (Kiggundu, 2002) (Battistella et al., 2017) (Beaver & Jennings, 2005) (Battistella, Toni, Pessot, (Song et al., 2008) Toni, & Pessot, 2017) 6. Lack of financial 8. Lack of ability to make 5. Failure to select reliable 7. Failure to select reliable business partner management skill good business judgement supplier (Ahmad & Seet, 2014) (Ahmad & Seet, 2014) (Ahmad & Seet, 2014) (Ahmad & Seet, 2014) (Battistella et al., 2017) (Song et al., 2008) (Colombo & Piva, 2008) (Colombo & Piva, 2008) (Colombo & Piva, 2008) (Battistella et al., 2017) (Battistella et al., 2017)

Entrepreneur's Personal Trait

Product/ Business Operation

9. Financial issues 10. Human resources 11. Lack of access to support 12. Lack of environmental (Colombo & Piva, 2008) management issues mechanism elements (Giardino et al., 2014) (Ahmad & Seet, 2014) (Salamzadeh & Kawamorita (Bruton & Rubanik, 2002) (Song et al., 2008) (Salamzadeh & Kesim, 2015) (Song et al., 2008) Kawamorita Kesim, 2015) (Giardino et al., 2014) (Giardino et al., 2014) 14. High-dynamics market 16. Inappropriate marketing 13. No market fit & needs 15. Failure to maintain close (Giardino et al., 2014) (Giardino et al., 2014) relationship with customer strategy (Song et al., 2008) (Potter & Adler, 2011) (Ahmad & Seet, 2014) (Song et al., 2008) (Salamzadeh & Kawamorita (Nonaka, 2007) (Song et al., 2008) (Colombo & Piva, 2008) Kesim, 2015) 17. Inappropriate selling **18. Business location 19.** Little or none financial **20.** Failure to select competent staff (Giardino et al., 2014) support strategy (Ahmad & Seet, 2014) (Song et al., 2008) (Ahmad & Seet, 2014) (Ries, 2013) (Ahmad & Seet, 2014) (Song et al., 2008) (Colombo & Piva, 2008)

2.5 Potential solution to successful Small & Medium-sized Enterprise

There is a research that has generated 13 business solutions that could possible accelerate support the business startups into succession (Battistella et al., 2017). This is a case study base research that they generate these solutions through review business failures from previous literatures. Below are the 13 business solutions according to (Battistella et al., 2017):

- Investor Networking For startups founder to network investors
- Provision of office & Co-working space Reduce startup cost
- Tax and legal advice networking Assist in legal and tax moves
- Start-up networking For entrepreneur to network and learn from each other
- Tech partners networking Reduce cost and assist in productivity
- Business education Allow the entrepreneur to be clear what they are doing
- Customer interviews and feedback To improve the products accordingly
- Sales and marketing Masterclass Learning how to sales and marketing from the experienced entrepreneurs.
- Facebook advertising Masterclass Learn marketing from the social media marketing experts.
- Analytics tools Masterclass Analyse the all the data ranging from market data, consumer behaviour, to company financial data and etc.

- Pitch Coaching To guide the entrepreneurs how to pitch properly to attract investor.
- Mentors feedback Have a successful mentor that guide and give feedback along the way
- Raising capital Masterclass Mastering all the raising capital ways to a company that want to scale their business up.

There are three important assistant for startups which are financial assistance, knowledge assistance, and Market assistance (Razak et al., 2018). This is a paper that study the differences between SMEs in turkey and SMEs in Malaysia. They believe that these assistances might aid the SMEs to success in business startup.

Financial, Knowledge & Marketing Assistance

With proper financing SMEs businesses able to expand and grow. Initial stage the capitals are usually from person savings and family contributions. Then later on they would borrow, loan, or exchange equity for scaling their business. Other than that, paper also mentioned that knowledge seems to be has less impact compare to other assistance. However, assisting relevant knowledge can solve those problems that lead to business failure such as lack of effective management. Lastly, many of the business owners do not understand their selling points, market size and hiring the right people in marketing. Through marketing assistance, the owners can increase the success rate through proper marketing. Below shows a table of 16 potential solutions for better understanding:

Table 2.4: Literature review; Potential solution of SME				
1. Investor networking (Battistella et al., 2017) (Benzing et al., 2009) (Razak et al., 2018)	2. Provision of office & Co- working space (Battistella et al., 2017) (Katila et al., 2012)	3. Tax and legal advice networking (Battistella et al., 2017) (COY et al., 2007)	4. Start-up networking (Battistella et al., 2017) (Benzing et al., 2009)	
5. Tech partners networking (Battistella et al., 2017) (COY et al., 2007)	6. Business education (Battistella et al., 2017) (Benzing et al., 2009)	 7. Customer interviews and feedback (Battistella et al., 2017) (Razak et al., 2018) 	8. Sales and marketing masterclass (Battistella et al., 2017) (Katila et al., 2012)	
9. Financial assistance (Razak et al., 2018) (COY et al., 2007) (Stefanovic et al., 2010)	10. Knowledge assistance (Battistella et al., 2017) (Razak et al., 2018	11. Market assistance (Battistella et al., 2017) (Razak et al., 2018) (Katila et al., 2012)	12. Facebook advertising master class (Battistella et al., 2017) (COY et al., 2007)	
13. Raising capital masterclass (Battistella et al., 2017) (Stefanovic et al., 2010)	14. Mentor feedback (Battistella et al., 2017) (Katila et al., 2012)	15. Pitch coaching (Battistella et al., 2017) (Benzing et al., 2009)	16. Analytics tools masterclass (Battistella et al., 2017) (COY et al., 2007)	

2.6 Conclusion

In this chapter there are total 20 success factors, 20 challenges and 16 solutions to a successful SMEs startup discovered from literature review. Success factors might be various country to country due to different culture. For example, the critical success factor of SMEs startup in Serbia is position in society but different result in Malaysia.

Researches show that in terms of entrepreneur's traits, he has to work hard, good in social skill, management skill and so on. In terms on product and business, product has to meet the market needs and hire effective employees in the business. Other than that, barrier of SMEs that mostly mentioned by many literatures are high dynamic market and poor human resources management. Additionally, there are few researches that generated the solutions to accelerate the startup into success and these solutions would be used in this study.

In the nutshell, there has been lack of research on identifying the success factor, barriers and solution to successful SMEs in a start-up perspective. Therefore, this research will study the success factor, barriers and solution to a successful SMEs in a start-up perspective and study location is in Malaysia. To study the factor, barriers and solution to a successful SMEs in a start-up perspective could possibly improve the high failure rate of business start-up in Malaysia.

CHAPTER 3

METHODOLOGY

3.1 Overview

This research is aimed to find out the success factor, barriers and solution to a successful SMEs start up project in Malaysia. Other than that, this research will also study the relationship between gender, age and each success factor using Mann Whitney test and Kruskal Wallis test. Other than that, this chapter discusses about the method that would be use to complete this survey research. Below are the contents that will be discuss in this chapter:

- Research method
- Survey sample
- Survey questionnaire
- Survey instrument
- Data analysis method (Alpha, Ranking, Mann Whitney & Kruskal Wallis Test)

3.2 Research Method

According to (Walliman, 2014), research method is a tool that use in analyse and collect data. Some others research also show that there are four types of research method as stated below (Kothari, 2004);

- i. Descriptive and Analytical Research
- ii. Applied and Fundamental Research
- iii. Quantitative and Qualitative Research
- iv. Conceptual and Empirical Research

Descriptive method usually applies on the existing circumstances. More focus on the reporting of case that happened and happening but no discussion on the causes behind the phenomenon of research. Applied research is usually study on the human behaviour and finding more information about a phenomenon. Quantity survey applies in the study that could be expressed in quantity terms. Core purpose of quantity survey is to test the result mathematically and researchers are able to do measurements on it. Questionnaire is the example of quantitative research. Additionally, qualitative research is more focus on the investigating the reason behind some kind of human behaviour. For example, like conducting interview and ask their opinion and record down on the paper. Last is conceptual research, philosophies usually use this method to introduce the new concept or reinterpret the existing one (Kothari, 2004).

However, this research would conduct a quantitative method. This is the most suitable method to conduct in this survey because it can collect large size of research samples and tend to save money and time in collecting data. Other than that, this method is convenient for busy people nowadays to involve in this study. The primary data would be collected through questionnaire survey and secondary data would be literature review, academic books and relevant source. Other than that, Likert Scale will be conduct in this quantitative survey. Respondents are required to answer the question by selecting Strongly disagree, disagree, neutral, agree or strongly agree. The researcher will develop a statistic means score to compare and determine the critical factors, barriers, and solution.

3.3 Survey Instrument

One researcher mentioned that there are two type of questions which are openended question and close ended question (Reja, Manfreda, Hlebec, & Vehovar, 2003). He mentioned that the respondent will have no restriction on question by answering open-ended question rather than close ended question. However, study shows that when comparing open and close ended question, open ended question tends to have more missing data and uncertainty. Other than that, closeended question no writing requirement and it is easier for respondent to answer (Pandey, 2016). Thus, close ended question will be conduct in this study.

Example of close-ended question are two-choice questions and multiplechoice questions (Statistics Canada, 2017). A two-choice question is use to split the respondents into two major groups such as male or female, yes or no and so on (Statistics Canada, 2017). Other than that, Multiple-choice question will be adopt in this survey because some of the question might have more than 2 answer that respondent want to select (Statistics Canada, 2017). In a nutshell, close-ended question will be select in this study survey because it allows the respondent to answer it easily and conveniently. However, a clear instruction would be given in terms of answering two-choice question and multiple question.

3.4 Survey Sample

Sampling is so called the statistic process of picking a group of people that targeted to conduct observation on them (Rotolo et al., 2016). There are usually two types of sample which are probability sampling and non-probability sampling. In probability sampling that everyone has a given probability to get a survey and a non-probability is only a certain group of people have chance to get the survey.

Other than that, there are three techniques under probability sampling which are random sampling, stratified sampling and cluster sampling. On the other hand, there are also three sampling approach under non-probability sampling which are convenience sampling, judgemental sampling, and quota sampling. Convenient sampling is a method that selected based on the convenient of researcher and it is the most cost-and-time-effective sampling method. Other than that, judgement sampling is when research select the sample based on judgement. This is an extension of convenience sampling.

Thus, non-probability-based judgement sampling will be conduct in this survey due to the cost & time efficient benefit and more accurate than convenient

method. However, the reason of not selecting the probability sampling method is because of the limited ability of researcher to conduct a qualified probability random sampling. A research shows that 30 respondents is the minimum criteria to become a reliable research, therefore 100 respondents are targeted in this survey (Krejcie & Morgan, 2017).

3.5 Survey Questionnaire

As mentioned above quantitative research approach will be conducted in this research study paper and questionnaire is the main survey technique. Questionnaire survey will study the respondent's age, gender, experience in entrepreneurship, ownership of company and so on. Other than that, the questionnaire survey would also determine the success factor, barriers, and solution to a successful SMEs start up by answering the multiple-choice answers that has studied through literature review.

Other than that, distribution method of the questionnaire that use in this research paper will be E-mail, google form survey, and manually survey by paper. This questionnaire will only target on the employer in any kind of business. Summary, this survey questionnaire separated into five categories which are individual survey, business background survey, success factor survey, barriers survey and solution survey.

3.5.1 Section A & B: Individual Profile & Business background Survey

In this section, respondent will be asked to identify their background such as age, gender, experience in entrepreneurship and ownership of company. Two choice and multiple-choice question have conducted in this section. However, primary purpose of this individual profile survey is to make sure the respondent has the right background to answer this survey paper. For example, this paper is targeted employer to answer based on their entrepreneurship experiments that employee might not have.

Below show the designed questions:

- 1. What is your gender? Please select one.
 - Male
 - Female
- 2. How old are you? Please select one
 - Below 18 years' old
 - 18 to 29 years' old
 - 30 to 49 years' old
 - Above 50 years' old

3. Which of the following best describe your highest academic qualification?Please select one

- SPM/STPM (Equivalent to GCE O-Level/A-Level)
- Diploma/Bachelor degree
- Master degree
- PHD
- Other:

4. Which of the following best describe your entrepreneurship experience? (Entrepreneurship experience shall include decision making, problems solving and so on activities that bring values to your own startup company.) Please select one.

- Less than 2 years
- 2 to 5 years
- 6 to 10 years
- More than 10 years

5. Which sector best describe about your company? Please select one

- Mining Sector
- Construction Sector
- Manufacturing Sector
- Service Sector
- Other:

6. Which of the follow best describe your company's annual sales turnover?

- Less than RM 300,000 annually
- RM 300,000 to RM 3,000,000
- RM3,000,001 to RM 20,000,000
- More than RM 20,000,000
- 7. How many employees currently working for your company?
 - Less than 5 employees
 - to 30 employees
 - 31 to 75 employees
 - More than 75 employees
- 4. How many percentages of shares do you own for your company?
 - Less than 50%
 - 50% to 75%
 - 76% to 99%
 - 100%
- 9. Which of the follow state describe your company's location?
 - Selangor
 - Kuala Lumpur
 - Johor
 - Perak
 - Pulau Pinang
 - Other:

3.5.2 Section C: Critical Success Factor of a SME start-up Survey

This is the section that focus on the critical success factor of a SMEs start up project in Malaysia. All the selections are based on the literature review and total of 20 of them will apply in the multiple choice of this section. Other than that, Likert Scale will be conduct in this quantitative survey. Respondents are required to answer the question by selecting Strongly disagree, disagree, neutral, agree or strongly agree.

3.5.3 Section D: Barrier of a SME start-up Survey

This is the section that focus on the barriers of a SMEs start up project in Malaysia. All the selections are based on the literature review and total of 20 of them will apply in the multiple choice of this section. Other than that, Likert Scale will be conduct in this quantitative survey. Respondents are required to answer the question by selecting Strongly disagree, disagree, neutral, agree or strongly agree.

3.5.4 Section E: Possible Solution to a Successful Start-up Survey

This is the section that focus on the potential solution to a successful SMEs start up project in Malaysia. All the selections are based on the literature review and total of 16 of them will apply in the multiple choice of this section. Other than that, Likert Scale will be conduct in this quantitative survey. Respondents are required to answer the question by selecting Strongly disagree, disagree, neutral, agree or strongly agree.

3.6 Analysis of Data

The main tool that use to analysis the collected data in this research is Statistical Package for Social Science (SPSS). The analysis and tests that would use by this tool would be frequency test, alpha Cronbach test, Ranking of Factors analysis, Mann Whitney Test, and Kruskal Wallis Test.

3.6.1 Demographics of Respondents

This section will analyse the demographic of respondents. Respondents' individual background details is important because it determine the quality of this research study. The researcher has to make sure they targeted the right person to involve in the survey.

3.6.2 Cronbach Alpha Test

This is a test that study and examine the consistencies of data and shows an index of consistencies. Significant level of Cronbach's Alpha test is around 0.700 to 1. The larger the number is the more reliable the data is (Laerd Statistics, 2013). This analysis will be applied on the questionnaire section B C and D. This is because Cronbach's alpha test is usually use to determine the reliability of multiple Likert's scale question. Therefore, the success factor, barriers and solution section are suitable to use Cronbach alpha test to test the reliable level.

3.6.3 Mann Whitney Test

This test is a non-parametric test. In this research study, Mann White Test would be use to compare the gender of respondent towards the factors, barriers, or solution. A gender male and female are two independent variables and factors of success, barriers of startup or solution to successful SMEs start up is the dependent variable. This test is used to test whether male and female thinking the same towards success factor, barriers and solution on SMEs start up. Some researchers define the conditions to use Mann Whitney test as following:

Condition 1: Dependent variable measured at ordinal or continuous level. Example of ordinal variables include a 5-point Likert Scales from Strongly Disagree to Strongly agree.

Condition 2: When the independent variable involve only TWO categorical groups. Example of 2 groups is like gender groups that shows male or female.

Thus, this test is welly picked to test the collected data because it fits the abovementioned conditions. Mann Whitney test would be a great tool to find out the dissimilarities between these 2 groups. Other than that, this test will show the mean ranks and standard deviation ranks of independent variables. When there are two groups of gender answering the survey, we would know are there any different perspective towards male and female using this test.

3.6.4 Kruskal Wallis Test

This is similar to Mann-Whitney test but however it uses to test the data that has more than 2 groups of dependent variables. For example, in this research there are 4 age groups targeted in this questionnaire survey. Group 1 would be age 0 to 18, group 2 would be age 19 to 30, group 3 would be age 31 to 49, and group 4 is age 50 and above. For this reason, Kruskal Wallis would be a great tool to find out the dissimilarities among these four groups.

3.7 Conclusion

As conclusion, this chapter has discussed about the all the method that will be use to collect and analysis in this research paper. The quantitative approach is selected because of the cost-effective advantage. Other than that, questionnaire survey technique will be use in this research and distributing method include online & offline platform like E-Mail, google form, or hand in manually. In this questionnaire survey there are 4 major parts that survey about the background of individual respondent (Section A), and their opinion towards successful factor of SMEs start up in Malaysia (Section B), opinion towards barriers of SMEs start up in Malaysia (Section C), and opinion towards solution to a successful SMEs start up in Malaysia (Section D). Lastly, SPSS will act as an analysis tool in this research and the test include Cronbach Alpha test, Mann Whitney test and Kruska Wallis test.

CHAPTER 4

RESULT AND DISCUSSIONS

4.1 Overview

A minimum of 30 respondents are required to form a reliable data analysis (Krejcie & Morgan, 2017). This research study target to receive around 100 respondents to respond. There are 300 sets of questionnaires sent out to the entrepreneur around Malaysia. Within the 200sets of questionnaire, 150 were sent out through emails and google link, other 50sets were send out by hand. In result, out of 300 sent out questionnaire, total number of 143 sets respond questionnaire have been received. As stated, table 4.1 below, this report has 48% of the respondent rate and this can be considered as a satisfy result.

 Table 4.1: Data Distribution and Collection

Distributed	300 sets
Collected	143 sets
Rate of return of successful Survey	48%

4.2 Demographics of Respondent

The profile of 108 respondents were analysed through frequency analysis method. All the respondents are categorized into four sections, which include:

- Gender of Respondents
- Age group of Respondents
- Academic Qualification
- Experience in Entrepreneurship

Additionally, there will be four questions to ask about the company background of the respondent to make sure they are entitled; as stated below:

- Percentage of shares on hand
- Business sector
- Business Location
- Full time employees
- Company's annual sales turnover

However, those respondents who are not meeting the requirement will be filtered out. For example, as a qualified SME the company should not have more than 75 employees in the company. Other than that, for the respondents who never answer the questionnaire in a proper way, their questionnaire will also be filter out. For example, the respondent simply selects the same answer as 'strongly disagree' during the 5-points Likert Scale question.

4.2.1 Gender of Respondent





There are total of 143 respondents involved in this survey. As the figure 4.1 above has shown, majority of the entrepreneur respondent are males. Which is 110 numbers and 77% of the total respondent. Other than that, there are only 23% of the female involved in this questionnaire survey which is 33 numbers of the female. According to the SMEs Corp Malaysia, there are only 20.6% of the entrepreneur in Malaysia are female (SME Corporation Malaysia, 2016). Thus, this is quite common to have the figure within 20% to 30% of respondents are female.

However, another test would be carried out to test their similarity towards success factor, barriers, and solution to a successful startup business in Malaysia. This is quite important to know the respondents' gender because it might affect the outcome of the survey due to different culture.

4.2.2 Age of Respondent

Figure 4.2: Age of Respondents



Above figure 4.2 has shown the majority of the respondent's age is in 30 to 49 years old and 18 to 29 years old. There are 50 numbers and 35% of respondent are in 30 to 49 years old, and 60 numbers and 42 of respondents are in the 18 to 29 years old. Thus, majority of the respondent are young adult and middle-aged adult. Other than that, there are 21 numbers and 15% of the respondent are above 50 years old. Lastly, there are only 12 numbers and 8% of the respondent are below 18 years old.

To understand the age group of respondents is important, because different opinion from different generation might affect the outcome of the survey result. Thus, middle-age consider as neutral in a sense that not too old and not too young.

4.2.3 Academic Qualification of Respondent

Figure 4.3: Academic Qualification Respondents



Figure 4.3 has shown the academic qualification of respondent. Total of 143 respondent there are 44% and 63 numbers of respondent are diploma or degree holder. Other than that, 31% and 44 numbers of respondent have SPM/ SPTM (Malaysian Certificate of Education) certificate. 14% of the respondent are master degree holder and it equal to 20 numbers of respondent. Other than that, only 7% of respondent have PHD and only 4% of the respondent have other academic qualification.

There is a research stating the education level is one of the important factors towards successful business startup. However, if definition of high-level education is the individual must at least have a diploma certificate, then 65% of the successful entrepreneur respondents are highly educated person.



Figure 4.4: Respondents' Entrepreneurship Experience

Figure 4.4 shows the respondent's entrepreneurship experience. This is important because this indicating the expertise of the respondent of this report. To be a qualified respondent, they should have more than at least 2 years of experiences in this specific field. Thus, researcher has to make sure majority of the respondent are qualified.

As the figure above has shown, 52% (74numbers) of the respondent have the experience of 6 to 10 years in entrepreneurship. Other than that, 7% (10numbers) of the respondent has the experience more than 10 years, and 30% (43numbers) of the respondent have 2 to 5 years of experience. Only 11% (16numbers) of the respondent are less than 2 years of experience in entrepreneurship field. Thus, majority of the respondent (89%) are entitled and qualified to answer the questionnaire survey.

4.3 Respondent's Business Background

4.3.1 Business Sector





Figure 4.5 shows the business sector of the respondent's company. In Malaysia, there are 89.2% of the SMEs are in service sector, 5.3% from manufacturing sector, 4.3% from the construction, and 0.1% from the mining sector (SME Corporation Malaysia, 2016). Therefore, to simulate the whole business ecosystem in Malaysia, the report should not go into too far from those figures.

As we can see from the figure, there are around 84% (120numbers) of the respondent are in service sector, 10% (14numbers) in construction sector, 5% (7numbers) in manufacturing factor, and 1% (2numbers) are in mining sector. Most of the respondent's business sector has a gap of not more than 6% in different to the sector of SMEs in Malaysia. Thus, this is a reliable research study paper.
4.3.2 Annual Sales Turnover



Figure 4.6: Annual Sales turnover of Respondent's Company

Figure 6 shows the annual sales turnover of the respondents' company. As figure has shown 56% of the respondent company has around 300,000 Ringgit to 3 Million Ringgit in annual sales turn over. 35% of the respondent's company 3.01 million Ringgit to 20 million in annual sales turnover. Only 6% of the company has less than 300,000 Ringgit in annual sales turnover and only 3% of the company has annual sales turnover that is more than 20,01 million Ringgit.

This is very important for the researcher to know the annual sales turnover because according to SMEs Corp, small and medium sized company in Malaysia should not has more than 20 million and above in annual sales turnover else it will be categorized as large size company.

4.3.3 Full-time Employees

Figure 4.7: Full time working employees



Figure 4.7 shows the number of full-time working employees working in the company of respondent. According to SME Corp Malaysia, to be qualified as a SMEs they should not have employees that is more than 200 numbers in manufacturing sector and 75 in service or others sector. Therefore, the researcher should make sure the majority of respondent has employees not more than 75 or 200 depends on the sector.

Figure 4.7 has shown the majority 67% (96numbers) of the respondent's companies have 5 to 30 full time employees. And 19% (27numbers) has less than 5 employees in the company. When a company has no more than 5 employees it considers as micro business. Other than that, 12% of the respondent's company have 31-75 employees working for them.

4.3.4 Percentage of Shares on Hand

Figure 4.8: Percentage of Shares on Hand



Figure 4.8 shows that percentage of shares the respondents are holding on hand. 50% of the respondent has company shares around 76% to 99%. Other than that, 28% of the respondents are 100% fully own the company. There is 21% of the respondent have share between 50% to 75% in hand. Only 1% of the respondent has less than 50% of the company shares.

This is important to understand the respondents' ownership in the company and they should own at least 50% of the company shares to become entitled to join this survey. This is because usually the shareholder who has more than 50% of the share, they have the rights to decide and manage the company.

4.3.5 Business Company Location

Figure 4.9: Business Location



Figure 4.9 shows the business location of the respondents' company. Majority of the business are located in Kuala Lumpur and Selangor, which is 31% and 44% of the respondent. Other than that, there are 13% of the respondents' company located at others state that are not stated in the questionnaire. Other than that, 4% of the respondents' business located in Johor, 5% at Perak, and lastly 3% located in Pinang.

In this research, this is important to collect the data from a state that has many business activities. According to SME Corp Malaysia's statistic, Selangor and Kuala Lumpur are the top 2 areas that contain huge business activity (SME Corporation Malaysia, 2016). Therefore, this research data is considered solid and reliable.

4.4 Cronbach's Alpha Test

Cronbach's Alpha test is a measure of data consistency, which mean how closely related in a group data. According to the Cronbach's benchmark, the data should have a test that is more than 0.7 to be acceptable and 0.8 as consider good.

4.4.1 Cronbach's Alpha Test for Critical Success Factor

Cronbach's Alpha	Number of Items
0.884	20

 Table 4.2: Cronbach's Alpha Test for Critical Success Factor

There are 20 success factors in the questionnaire survey for the respondents to do the 5-points Likert scale. Table 4.2 shows the result of Cronbach's Alpha test for critical success factor by using SPSS software. Cronbach's alpha test value of success factor in table 4.2 is 0.884 and which mean success factor section has good internal consistency.

4.4.2 Cronbach's Alpha Test for Barriers

Table 4.3: Cronbach's Alpha Test for Barriers

Cronbach's Alpha	Number of Items
0.821	20

There are 20 barriers in the questionnaire survey for the respondents to do the 5points Likert scale. Table 4.3 shows the result of Cronbach's Alpha test for barriers of start-up SME business in Malaysia by using SPSS software. Cronbach's alpha test value of success factor in table 4.3 is 0.821 and which mean success factor section has good internal consistency.

4.4.3 Cronbach's Alpha Test for Solutions

Cronbach's Alpha	Number of Items
0.846	16

Table 4.4: Cronbach's Alpha Test for Solutions

There are 20 solution in the questionnaire survey for the respondents to do the 5-points Likert scale. Table 4.4 shows the result of Cronbach's Alpha test for solution to a successful start-up in Malaysia by using SPSS software. Cronbach's alpha test value of success factor in table 4.4 is 0.846 and which mean success factor section has good internal consistency.

4.5 Ranking of Factor using Mean & Standard Deviation (Descriptive)

4.5.1 Ranking of Critical Success Factor Data

	Number	Mean	Std.	Rank
			Deviation	
Good management Skill	143	4.7273	0.69385	1
Reputation of Honesty	143	4.6294	0.63555	2
Hard working	143	4.5664	0.70770	3
entrepreneur				
Social Skill	143	4.4755	0.76758	4
Creativity and Innovation	143	4.4545	0.76662	5
oriented				
Leadership Skill	143	4.1678	0.97132	6
Friendliness	143	4.0769	0.85643	7
Financing Skill	143	3.9441	1.00545	8
Position in society	143	3.7692	0.93968	9
Interpersonal Skill	143	3.7483	0.94548	10
Culture	143	3.6923	0.92104	11
Gender	143	3.6573	0.70316	12
Level of education	143	3.2587	0.64691	13
Religion	143	3.2448	0.75262	14

 Table 4.5: Ranking of Critical Success Factor Data (Entrepreneur's Trait)

As shown in the literature review section, researcher has separated the critical success factor into two parts. First part discusses on the factor in terms of the entrepreneur's trait, and second part discusses in terms of the business and

operation. Thus, result also analyse separated into two parts which are successful factor in terms of entrepreneur traits and in term of business operation. As table 4.5 above has shown, the top 5 critical success in terms of entrepreneur traits are good management skill, reputation for honesty, hardworking entrepreneur, social skill and creativity and innovation orientation. Other than that, the least important factor include religion, level of education and gender. Respondent believe these factors have nothing to do with business succession.

Good management skill is the top in ranking and it has the mean (μ) of 4.7832 and standard deviation (s) of 0.53260. Second factor that is in the top 2 of ranking is Reputation for honesty. It has a μ of 4.6783 and a (s) of 0.46876. Third factor to success in SMEs start up is to have a hardworking entrepreneur. It has a has a μ of 4.6224 and a (s) of 0.56673. Success factor that ranked in the top fourth out of 20 factors is social skill. It has a μ of 4.5315 and a (s) of 0.6479. Then rank number 5 is creativity and innovation oriented. It has a has a μ of 4.5035 and a (s) of 0.64866.

As verified by the researcher (BENZING et al., 2005), a good management skill is required in order to success in business start-up. Without a proper management skill, the company or business might not be able to grow up and improve. Other than that, research also verified that a good reputation for honesty is really important as an entrepreneur's trait (BENZING et al., 2005)(Chawla et al., 2010). Without honesty the small and medium enterprise is hard to grow up because consumer cannot tolerant dishonesty. Next important factor in order to be successful in startup is to work hard (COY et al., 2007). A

lazy entrepreneur may not be competitive in the market without putting in the efforts. Next success factor is to have a good social skill (Benzing et al., 2009) (Chawla et al., 2010) (Campos et al., 2017). Good social skill of entrepreneur allows them to have more connection and rich networking helps the start up to grow. The fifth important entrepreneur's trait factor is to become creative and innovative (Campos et al., 2017)(Klapper & Richmond, 2011). A creative entrepreneur can think of something new and innovative and it leads to new market and least competition leads the start up to success.

	Number	Mean	Std.	Rank
			Deviation	
Competitive product or	143	4.7692	0.64669	1
service				
Good customer service	143	4.6364	0.59983	2
Good product quality	143	4.5944	0.64172	3
Environment Condition	143	4.3217	0.81561	4
Approval and Support	143	4.3077	0.81016	5
Business Location	143	3.9301	0.88533	6

 Table 4.6: Ranking of Critical Success Factor Data (Business Operation)

In terms of business and operation perspective, respondent thinks the number 1 factor of SME start up success is to have a competitive product or service. It has a has a μ of 4.8252 and a (s) of 0.46443. Secondly is to have a good customer service. It has a has a μ of 4.6643 and a (s) of 0.51654. Thirdly is to have a good product quality. It has a has a μ of 4.6224 and a (s) of 0.56673.

This result shows that a competitive product is one of the critical success factors in the startup. It helps the start up to grow and sustain (Stefanovic et al., 2010). Second factor is to have a good customer service (COY et al., 2007)(BENZING et al., 2005). Kindness and caring are great marketing strategies that business shouldn't ignore. Other than that, business should have good product quality in order to success in startup (COY et al., 2007). This brings good impression during the early stage of startup to the consumer.

4.5.2 Ranking of Barriers Data

Failure to select Reliable

Supplier

Tuble 4.7. Running of Durth		ip project (L	ner epreneur s	I I alt)
	Number	Mean	Std.	Rank
			Deviation	
Lack of Ability to Make Good	143	4.6713	0.65838	1
Business Judgement				
Lack of Organization Skill	143	4.6294	0.63555	2
Lack of Financial Management	143	4.4965	0.65943	3
Skill				
Poor Selection of Advisers	143	4.3986	0.84035	4
Lack of competencies among	143	4.2727	0.79772	5
Business Owners				
Irrational Management	143	3.7273	0.88955	6
Behaviour				
Failure to select Reliable	143	3.6364	0.22501	7
Business Partner				

Table 4.7: Ranking of Barriers of Startup project (Entrepreneur's Trait)

As shown in the literature review section, barriers of SME start up is separated into two parts. First part discusses on the barriers in terms of the entrepreneur's

143

3.3427

0.44884

8

trait, and second part discusses in terms of the business and operation. As table 4.6 above has shown, the top 5 critical success in terms of entrepreneur traits are Lack of ability to make good business judgement, lack of organization skill, lack of financial management skill, poor selection of advisers, and lack of competencies among business owners.

Lack of ability to make good business judgement is the top in ranking and it has the mean (μ) of 4.6713 and standard deviation (s) of 0.65838. Second barriers that is in the top 2 of ranking is lack of organization skill. It has a μ of 4.6294 and a (s) of 0.63555. Third barrier is lack of financial management skill. It has a has a μ of 4.4965 and a (s) of 0.65943. Barrier that ranked in the fourth is poor selection of adviser. It has a has a μ of 4.3986 and a (s) of 0.84035. Then rank number 5 is lack of competencies. It has a has a μ of 4.2727 and a (s) of 0.79772.

This result shows that the number one barrier that kills startup in term of entrepreneur's trait is lack of ability to make good business judgement. Lack of ability to make good business judgement can lead to business failure and entrepreneur need to learn from failure to improve it (Ahmad & Seet, 2014). Second rank of barrier that challenge start up is lack of organization skill. The third rank that start up fail is due to lack of financial management skill. Lack of financial management skill can lead to business failure because the business might run out of cash to operate (Ahmad & Seet, 2014). The fourth barrier that challenge the start-up is poor selection of adviser. When the business owner has listened to the wrong advice, it can lead the start up to fail. The top fifth barrier of SME start up is lack of competencies. Lack of competencies among the other entrepreneur can lead to business failure because entrepreneurship is like a competition game, only the strong player stays (Barr et al., 2001). However, the least agreed barrier in this Malaysia survey was failure to select the reliable supplier.

	Number	Mean	Std.	Rank
			Deviation	
No market fit and needs	143	4.6364	0.69754	1
Financial Issues	143	4.5175	0.71062	2
Failure to Maintain Close	143	4.4755	0.80344	3
Relationship with				
Customer				
Human Resources	143	4.4126	0.79902	4
Management Issues				
Inappropriate Selling	143	4.3706	0.85315	5
Strategy				
High Dynamics Market	143	4.0839	0.94568	6
Lack of Environmental	143	3.9930	0.79165	7
Element				
Lack of access to Support	143	3.6783	0.55158	8
Mechanism				
Failure to select	143	3.5524	0.68873	9
Competent Staff				
Inappropriate Marketing	143	3.4476	0.81083	10
Strategy				
Little or none financial	143	3.4126	0.68514	11
Support				
Unclear Business Plan	143	3.3217	0.65651	12

 Table 4.8: Ranking of Barriers of Startup project (Business Operation)

In terms of business and operation perspective, respondent thinks the number 1 factor of SME start up challenge is no market fit and needs. It has a has a μ of 4.6364 and a (s) of 0.69754. Second barrier that start up challenges is Financial issues. It has a has a μ of 4.5175 and a (s) of 0.71062. The third barrier that holding start up back is Failure to Maintain Close Relationship with Customer. It has a has a μ of 4.4755 and a (s) of 0.80344. Other than that, the fourth barrier in the rank is human resources management issues. It has a μ of 4.4126 and a (s) of 0.79902. Ranking number fifth of barrier is inappropriate selling strategy. It has an μ of 4.3706 and a (s) of 0.85315.

All of the barriers have verified by the literature review. In terms of business operation perspective. The number 1 barrier that SMEs start up in Malaysia facing is no market fit and needs. Market in Malaysia is consider small compare to Europe countries and it is the key reason that most start up fail (Giardino et al., 2014). Secondly, financial issue is one of the key barriers that SMEs start up in Malaysia facing. Financial issues can potentially kill start up due to running out of cash and funds to operate (Colombo & Piva, 2008). Other than that, result shows that failure to maintain close relationship with customer might be the reason of start-up fail in Malaysia. When an enterprise never listen to the customer and care for them, then the start-up would tend to fail (Ahmad & Seet, 2014). However, the least agreed barrier in terms of business operation is unclear business plan. Entrepreneurs in Malaysia think that no market fit and needs are more critical than unclear business plan in terms of barrier that start up facing.

4.5.3 Ranking of Solutions Data

	Number	Mean	Std.	Rank
			Deviation	
Mentors feedback	143	4.3916	0.86428	1
Start-up networking	143	4.2867	0.86905	2
Tech partners networking	143	4.2797	0.94501	3
Customer Interviews and feedback	143	4.2378	0.91126	4
Business Education	143	4.0559	0.94030	5
Investor Networking	143	3.8881	0.74214	6
Provision of office and Co- working space	143	3.6923	0.80693	7
Tax and legal advice networking	143	3.6503	0.84135	8
Sales and Marketing Masterclass	143	3.6014	0.74247	9
Pitch Coaching	143	3.5664	0.84386	10
Finance Assistance	143	3.5385	0.79407	11
Raising Capital Masterclass	143	3.2867	0.67784	12
Analytics tools Masterclass	143	3.2448	0.69421	13
Knowledge Assistance	143	3.1888	0.71158	14
Facebook Advertising Masterclass	143	3.1608	0.77505	15
Market Assistance	143	3.1189	0.77359	16

Table 4.9: Ranking of solution to start up project

As figure 4.7 has shown, the number 1 solution for SME start up in Malaysia is to have mentor feedback. It has a has a μ of 4.3916 and a (s) of 0.86428. Rank number 2 solution is to provide start up net-working to the entrepreneur. It has a has a μ of 4.2867 and a (s) of 0.86905. Third rank solution is having a tech partner networking. It has a has a μ of 4.2797 and a (s) of 0.94501.

As result above has shown, receive mentors feedback, provide start up net-working and tech partner networking are the TOP 3 solutions to success SME start up (Battistella et al., 2017). A mentor is the one who provide value guideline to the entrepreneur to success. Thus, this is important to have mentors' feedback as a startup accelerator. Other than that tech partner networking is very important in assisting start up to success because entrepreneurs now are in a digital world. Additionally, startup networking could assist in business success because it allows the entrepreneur to meet up like-minded people and work together. However, the least agreed solution in this survey result is market assistance.

Summary, the top 3 solutions to SME start up succession are receiving mentors' feedback, provide start up networking, and tech partner networking. With strong networking and proper guideline, start up in Malaysia may have better odd to success.

4.6 Mann Whitney Test

4.6.1 Relationship between gender and critical success factors

Table 4.10: Mann-Whitney U Test: Mean Rank of gender and critical success factors (Entrepreneur's Trait)

	Male Female							
				Sum of				Sum of
	Number	Mean	Rank	rank	Number	Mean	Rank	rank
Good management Skill	112	74.87	10	2321	31	71.21	5	7975
Reputation for honesty	112	56.84	13	1762	31	76.2	2	8534
Hard working Entrepreneur	112	56.11	14	1739	31	76.4	1	8556
Good Social Skill	112	60.66	12	1880	31	75.14	3	8415
Creativity and Innovation oriented	112	83.27	6	2582	31	68.88	9	7714
Leadership Skill	112	93.65	2	2903	31	66.01	13	7393
Friendliness	112	88.56	4	2745	31	67.42	11	7550
Financing Skill	112	97.26	1	3015	31	65.01	14	7281
Position in Society	112	72.77	11	2256	31	71.79	4	8040
Interpersonal Skill	112	84.39	5	2616	31	68.57	10	7680
Culture	112	79.66	7	2469	31	69.88	8	7826
Level of Education	112	76.11	9	2359	31	70.86	6	7936
Gender	112	78.24	8	2425	31	70.27	7	7870
Religion	112	91.73	3	2844	31	66.54	12	7452

Table 4.10a: Mann-Whitney U Test: Test Statistic of gender and critical success

	Male & Female					
	Mann Whitney U	Wilcoxon W	Z	Asymp. Sig. (2-tailed)		
Good management Skill	1647	7975	-0.632	0.527		
Reputation for honesty Hard working	1266	1762	-2.821	0.005*		
Entrepreneur	1243	1740	-2.885	0.004*		
Good Social Skill Creativity and	1385	1881	-1.977	0.048		
Innovation oriented	1386	7715	-1.951	0.051		
Leadership Skill	1065	7393	-3.622	0.000**		
Friendliness	12223	7551	-2.697	0.007*		
Financing Skill	953	7281	-4.054	0.000**		
Position in Society	1712	8040	-0.128	0.898		
Interpersonal Skill	1352	7680	-2.03	0.042*		
Culture	1499	7827	-1.233	0.217		
Level of Education	1609	7937	-0.804	0.422		
Gender	1543	7871	-1.097	0.273		
Religion	1125	7453	-3.34	0.001*		

factors (Entrepreneur's Trait)

As above table 4.8 and 4.9 shows the result of Mann-Whitney test of male and female for the chosen success factor of SME startup in terms of entrepreneur traits at 5% significant level. The standard of significant level that has effect is $p \le 0.05$. Thus, concluded result from above table is that the "Financing skill" in male and female group was statistically significantly higher than the success factor (U=1243, p=0.04). This indicate that male respondents are more believe and in finance skill while female respondents are not. Therefore, as a result the male might spend focus on the finance on their business while female would not.

Table 4.11: Mann-Whitney U Test: Mean Rank of gender and critical success

- (Business Operation)

	Male Female							
		Sum of				Sum of		
	Number	Mean	Rank	rank	Number	Mean	Rank	rank
Competitive Product / Service	112	71.9	6	8053	31	72.37	1	2244
Good customer Services	112	77.41	1	8670	31	52.47	6	1627
Good product Quality	112	76.61	2	8581	31	55.34	5	1716
Environment Conditions	112	72.67	5	8139	31	69.6	2	2158
Approval and Support	112	72.86	4	8160	31	58.9	3	2136
Business Location	112	76.39	3	8556	31	56.13	4	1740

Table 4.11a: Mann-Whitney U Test: Taste Statistic of gender and critical success

		Mal	e & Female	
	Mann	Wilcoxon		Asymp. Sig.
	Whitney U	W	Z	(2-tailed)
Competitive Product /				
Service	17245	8053	-0.088	0.930
Good customer				
Services	1131	1627	-3.600	0.000**
Good product Quality	1220	1716	-3.045	0.002*
Environment				
Conditions	1662	2158	-0.400	0.690
Approval and Support	1640	2136	-0.516	0.606
Business Location	1244	1740	-2.883	0.004*

(Business Operation)

As above table 4.10 and 4.11 shows the result of Mann-Whitney test of male and female for the chosen success factor of SME startup in terms of business operation at 5% significant level. The standard of significant level that has effect is $p \le 0.05$. Thus, concluded result from above table is that the "Good customer service" in male and female group was statistically significantly higher than the other success factor (U=1131, p=0.000). This indicate that male respondents are more believe and in good customer service while female respondents are not. Therefore, as a result the male might have more focus on the customer service while female would not.

4.6.2 Relationship between gender and barriers

Table 4.12: Mann-Whitney U Test: Mean Rank of gender and Barriers

- (Entrepreneur's Traits)

	Male			Female						
	Number	Mean	Rank	Sum of rank	Number	Mean	Rank	Sum of rank		
Lack of Ability to Make Good Business Judgement	112	73.57	3	8240	31	66.32	6	2056		
Lack of Organization Skill	112	70.30	5	7874	31	78.13	4	2422		
Lack of Financial Management Skill	112	67.87	7	7601	31	86.94	2	2695		
Poor Selection of Advisers	112	71.96	4	8059	31	72.16	5	2237		
Lack of Competencies among Business Owners	112	68.71	6	7695	31	83.90	3	2601		
Irrational Management Behaviour	112	77.53	1	8683	31	53.03	8	1613		
Failure to Select Reliable Business Partner	112	65.93	8	7384	31	93.94	1	2912		
Failure to Select Reliable Supplier	112	77.24	2	8651	31	65.01	14	7281		

Table 4.12a: Mann-Whitney U Test: Test Statistic of gender and Barriers

		Male &	Female	
	Mann	Wilcoxon		Asymp. Sig.
	Whitney U	W	Z	(2-tailed)
Lack of Ability to Make				
Good Business Judgement	1650	2056	-1.139	0.255
Lack of Organization Skill	1546	7874	-1.149	0.251
Lack of Financial				
Management Skill	1273	7601	-2.599	0.009*
Poor Selection of Advisers	1731	8059	-0.028	0.978
Lack of Competencies				
among Business Owners	1367	7695	-1.978	0.048*
Irrational Management				
Behaviour	1117	1613	-3.243	0.001*
Failure to Select Reliable				
Business Partner	1056	7384	-3.456	0.001*
Failure to Select Reliable				
Supplier	1150	1646	-2.994	0.003*

- (Entrepreneur's Traits)

As above table 4.12 and 4.13 shows the result of Mann-Whitney test of male and female for the chosen barriers of SME startup in terms of entrepreneur's trait at 5% significant level. The standard of significant level that has effect is $p \le 0.05$. Thus, concluded result from above table is that the "failure to select reliable business partner" in male and female group was statistically significantly higher than the other barriers (U=1056, p=0.001). This indicate that male respondents are less agree on failure to select reliable business partner as a main barrier of SME start up while female respondents are believing it is. Therefore, as a result the female might have more focus on the business partner while male would not.

Table 4.13: Mann-Whitney U Test: Mean rank of gender and Barriers

(Business Operation)

	Male							
	Sum of							
	Number	Mean	Rank	rank	Number	Mean	Rank	rank
No market fit and needs	112	70.81	7	7931	31	76.31	6	2366
Financial issues	112	72.36	5	8104	31	70.71	8	2192
Failure to maintain close relationship with client	112	72.62	4	8134	31	69.76	9	2162
Human Resources management issues	112	70.43	8	7888	31	77.68	5	2408
Inappropriate selling strategy	112	73.19	3	8198	31	67.69	10	2099
High dynamics market	112	69.88	9	7826	31	79.68	4	2470
Lack of environmental element	112	79.93	1	8952	31	43.35	12	1344
Lack of access to support mechanism	112	72.04	6	8069	31	71.85	7	2228
Failure to select competent staff	112	76.26	2	8542	31	56.6	11	1755
Inappropriate marketing strategy	112	65.68	12	7657	31	94.82	1	2940
Little or none financial support	112	68.43	10	7665	31	84.89	3	2632
Unclear business plan	112	67.27	11	7535	31	89.08	2	2762

Table 4.13a: Mann-Whitney U Test: Mean Rank of gender and Barriers

- (Business Operation)

	Male & Female											
	Mann			Asymp.								
	Whitney	Wilcoxon		Sig. (2-								
	U	W	Z	tailed)								
No market fit and needs	1603	7931	-0.82	0.412								
Financial issues	1696	2192	-0.228	0.820								
Failure to maintain close												
relationship with client	1667	2163	-0.394	0.694								
Human Resources management												
issues	1560	7888	-0.971	0.332								
Inappropriate selling strategy	16003	2099	-0.731	0.465								
High dynamics market	1498	7826	-1.249	0.212								
Lack of environmental element	848	1344	-4.714	0.000**								
Lack of access to support												
mechanism	1732	2228	-0.028	0.978								
Failure to select competent												
staff	1259	1755	-2.784	0.005*								
Inappropriate marketing												
strategy	1029	7357	-4.003	0.000**								
Little or none financial support	1337	7665	-2.188	0.029*								
Unclear business plan	1207	7535	-2.907	0.004*								

As above table 4.14 and 4.15 shows the result of Mann-Whitney test of male and female for the chosen solution to a successful SME startup in Malaysia at 5% significant level. The standard of significant level that has effect is $p \le 0.05$. Thus, concluded result from above table is that the "Lack of environmental element" in male and female group was statistically significantly higher than the other success factor (U=1131, p=0.000). This indicate that male respondents are more believe in good customer service while female respondents are not. Therefore, as a result the male might have more focus on the customer service while female would not.

4.6.3 Relationship between gender and Solutions

	Male							
				Sum of				Sum of
	Number	Mean	Rank	rank	Number	Mean	Rank	rank
Mentors Feedback	112	83.8	1	9386	31	29.35	16	910
Startup Networking	112	81.19	2	9093	31	38.81	15	1203
Tech Partners Networking	112	74.25	6	8316	31	63.87	11	1980
Customer Interviews and Feedback	112	73.96	7	8284	31	64.92	10	2013
Business Education	112	79.97	3	8952	31	43.35	14	1433
Investor Networking	112	75.47	4	8453	31	59.45	13	1843
Provision of office and Coworking space	112	72.75	8	8148	31	69.29	9	2148
Tax and legal advice networking	112	67.75	13	7588	31	87.37	4	2709
Sales and Marketing Masterclass	112	75.12	5	8414	31	60.73	12	1883
Pitch Coaching	112	68.67	11	7691	31	84.03	6	2605
Finance Assistance	112	67.97	12	7613	31	86.55	5	2683
Raising Capital Masterclass	112	66.29	15	7425	31	92.61	2	2871
Analytics tools Masterclass	112	65.73	16	7362	31	94.65	1	2934
Knowledge Assistance	112	70.74	9	7923	31	76.55	8	2373
Facebook Advertising Masterclass	112	69.31	10	7763	31	81.73	7	2534
Market Assistance	112	67.47	14	7557	31	88.35	3	2739

Table 4.14: Mann-Whitney U Test: Mean Rank of gender and Solution

		Male	& Female	
	Mann			
	Whitney	Wilcoxon		Asymp. Sig.
	U	W	Z	(2-tailed)
Mentors Feedback	414	910	-7.316	0.000**
Startup Networking	707	1203	-5.524	0.000**
Tech Partners Networking	1484	1980	-1.369	0.171
Customer Interviews and				
Feedback	1517	2013	-1.168	0.243
Business Education	848	1344	-4.609	0.000**
Investor Networking	1347	1843	-2.118	0.034*
Provision of office and				
Coworking space	1652	2148	-0.454	0.650
Tax and legal advice				
networking	1260	7588	-2.549	0.011*
Sales and Marketing				
Masterclass	1387	1883	-1.978	0.048*
Pitch Coaching	1363	7691	-1.991	0.046*
Finance Assistance	1285	7613	-2.435	0.015*
Raising Capital Masterclass	1097	7425	-3.497	0.000**
Analytics tools Masterclass	1034	7362	-3.823	0.000**
Knowledge Assistance	1595	7923	-0.764	0.445
Facebook Advertising				
Masterclass	1435	7763	-1.609	0.108
Market Assistance	1229	7557	-2.667	0.008*

Table 4.14a: Mann-Whitney U Test: Test Statistic of gender and Solution

As above table 4.10 and 4.11 shows the result of Mann-Whitney test of male and female for the chosen success factor of SME startup in terms of business operation at 5% significant level. The standard of significant level that has effect is $p \le 0.05$. Thus, concluded result from above table is that the "Mentor feedbacks" in male and female group was statistically significantly higher than the other solutions (U=414, p=0.000). This indicate that male respondents are more believe in mentor feedback while female respondents are not. Therefore, as a result the male might more agree on listening to mentor's feedback service while female would not.

4.7 Kruska Wallis Test

4.7.1 Relationship between age group and critical success factor

Table 4.15: Results of Kruskal Wallis One-Way AVOVA test for critical success factor (Entrepreneur's Traits)

Success Factor	Overall mean score	rank	Age 0-17 (N=11)	rank	Age 18-29 (N=61)	rank	Age 30-49 (N=52)	rank	Age 50 and above (N=19)	rank	Kruskal- Wallis H	Asymp. Sig.
Good management Skill	4.7273	1	86.00	7	75.08	5	60.31	11	86.00	4	16.62	0.001*
Reputation for honesty	4.6294	2	95.50	6	88.95	1	50.76	14	62.11	13	42.787	0.000**
Hard working Entrepreneur	4.5664	3	97.00	5	77.30	3	57.90	12	79.24	9	16.598	0.001*
Good Social Skill	4.4755	4	102.00	2	75.11	4	57.48	13	84.37	6	18.702	0.000**
Creativity and Innovation oriented	4.4545	5	102.00	2	74.39	6	60.58	10	78.24	10	13.439	0.004*
Leadership Skill	4.1678	6	47.68	14	66.49	9	78.50	5	85.94	5	10.088	0.018
Friendliness	4.0769	7	78.64	11	54.31	12	83.78	4	92.71	2	23.401	0.000**
Financing Skill	3.9441	8	84.50	8	45.29	14	91.07	1	98.34	1	50.346	0.000**
Position in Society	3.7692	9	53.77	12	82.18	2	60.81	9	80.50	7	12.384	0.006*
Interpersonal Skill	3.7483	10	115.23	1	71.24	7	61.56	8	78.00	11	18.284	0.000**
Culture	3.6923	11	81.00	10	62.28	11	87.49	2	55.61	14	15.875	0.001*
Level of Education	3.6573	12	82.59	9	64.79	10	77.06	7	75.18	12	5.721	0.126
Gender	3.2587	13	52.50	13	67.69	8	78.08	6	80.50	7	6.717	0.081
Religion	3.2448	14	99.95	4	49.07	13	85.53	3	92.42	3	42.096	0.000**

The Kruskal-Wallis H test (sometimes also called the "one-way ANOVA on ranks") is a rank-based nonparametric test that can be used to determine if there are statistically significant differences between two or more groups of an independent variable on a continuous or ordinal dependent variable. It is considered the nonparametric alternative to the one-way ANOVA, and an extension of the Mann-Whitney U test to allow the comparison of more than two independent groups. It is important to realize that the Kruskal-Wallis H test is an omnibus test statistic and cannot tell which specific groups of the independent variable are statistically significantly different from each other; it only tells that at least two groups were different.

Table 4.18 determines the results of the Kruskal-Wallis One Way ANOVA test for a k independent sample. Out of 14 success factors in terms of entrepreneurs' trait, 143 respondents have statistically significant difference of opinions on Financing Skill as a success factor towards SMEs start up in Malaysia at the five percent of significant level. This success factor has a statically test of (x2=50.346, p=0.000. For people who age 30 and above, they believe financing skill are the critical keys and youngster below they don't believe it.

Success Factor	Overall mean score	rank	Age 0-17 (N=11)	rank	Age 18-29 (N=61)	rank	Age 30-49 (N=52)	rank	Age 50 and above (N=19)	rank	Kruskal- Wallis H	Asymp. Sig.
Competitive Product / Service	4.7692	1	83.50	4	78.36	3	57.90	4	83.50	3	24.003	0.000**
Good customer Services	4.6364	2	95.00	2	88.90	1	53.13	6	56.05	6	40.971	0.000**
Good product Quality	4.5944	3	96.50	1	78.21	4	57.12	5	78.61	4	17.980	0.000**
Environment Conditions	4.3217	4	91.05	3	66.27	6	67.17	2	92.58	1	10.648	0.014*
Approval and Support	4.3077	5	38.18	6	76.64	5	66.42	3	91.95	2	16.199	0.001*
Business Location	3.9301	6	43.50	5	82.83	2	67.66	1	65.61	5	14.870	0.002*

Table 4.16: Results of Kruskal Wallis One-Way AVOVA test for critical success factor (Business Operation)

The Kruskal-Wallis H test (sometimes also called the "one-way ANOVA on ranks") is a rank-based nonparametric test that can be used to determine if there are statistically significant differences between two or more groups of an independent variable on a continuous or ordinal dependent variable. It is considered the nonparametric alternative to the one-way ANOVA, and an extension of the Mann-Whitney U test to allow the comparison of more than two independent groups. It is important to realize that the Kruskal-Wallis H test is an omnibus test statistic and cannot tell which specific groups of the independent variable are statistically significantly different from each other; it only tells that at least two groups were different.

Table 4.19 determines the results of the Kruskal-Wallis One Way ANOVA test for a k independent sample. Out of 6 success factors in term of business operation, 143 respondents have statistically significant difference opinions on good customer service as key success factor towards SMEs start up in Malaysia at the five percent of significant level. This success factor has a statically test of (x2=40.971, p=0.000). For people who are younger than 30 years old, they believe customer service are the critical keys.

4.7.2 Relationship between age group and barriers

Cable 4.17: Results of Kruskal Wallis One-Way AVOVA test for Barriers (Entrepreneur's Traits)	

Barriers	Overall mean score	rank	Age 0- 17 (N=11)	rank	Age 18- 29 (N=61)	rank	Age 30- 49 (N=52)	rank	Age 50 and above (N=19)	rank	Kruskal- Wallis H	Asymp. Sig.
Lack of Ability to Make Good Business Judgement	4.6713	1	90.00	3	90.00	1	46.83	8	72.68	5	57.195	0.000**
Lack of Organization Skill	4.6294	2	63.14	8	70.82	6	72.82	2	78.68	3	1.627	0.653
Lack of Financial Management Skill	4.4965	3	75.82	5	72.80	5	64.66	5	87.29	2	5.693	0.128
Poor Selection of Advisers	4.3986	4	74.64	7	78.13	3	65.84	4	67.66	6	3.504	0.320
Owners	4.2727	5	76.82	4	68.33	8	73.11	1	77.97	4	1.269	0.736
Irrational Management Behaviour	3.7273	6	130.50	1	76.16	4	63.47	6	48.11	7	35.534	0.000**
Pailure to Select Reliable Business Partner	3.6364	7	104.32	2	70.77	7	59.35	7	91.87	1	17.185	0.001*
Failure to Select Reliable Supplier	3.3427	8	74.95	6	82.12	2	68.71	3	46.79	8	12.016	0.007*

The Kruskal-Wallis H test (sometimes also called the "one-way ANOVA on ranks") is a rank-based nonparametric test that can be used to determine if there are statistically significant differences between two or more groups of an independent variable on a continuous or ordinal dependent variable. It is considered the nonparametric alternative to the one-way ANOVA, and an extension of the Mann-Whitney U test to allow the comparison of more than two independent groups. It is important to realize that the Kruskal-Wallis H test is an omnibus test statistic and cannot tell which specific groups of the independent variable are statistically significantly different from each other; it only tells that at least two groups were different.

Table 4.20 determines the results of the Kruskal-Wallis One Way ANOVA test for a k independent sample out of 8 barriers in terms of entrepreneur's personal trait, 143 respondents have statistically significant difference of opinions on 'failure to select reliable business partner' as a barrier at the five percent of significant level. This barrier has a statistic test of (x2=91.87, p=0.000). For people who are age between 18 to 49, they do not believe that reliable business partner is the main barrier to SMEs start up.

Barriers	Overall mean score	rank	Age 0- 17 (N=11)	rank	Age 18- 29 (N=61)	rank	Age 30- 49 (N=52)	rank	Age 50 and above (N=19)	rank	Kruskal- Wallis H	Asymp. Sig.
No market fit and needs	4.6364	1	68.00	7	68.25	7	75.59	5	76.50	4	1.907	0.592
Financial issues	4.5175	2	38.36	12	73.31	4	79.88	3	65.68	9	13.000	0.005*
Failure to maintain close relationship with client	4.4755	3	76.36	3	73.12	5	72.05	9	65.74	8	0.805	0.848
issues	4.4126	4	71.91	6	69.87	6	73.52	7	74.74	5	0.399	0.941
Inappropriate selling strategy	4.3706	5	56.55	8	74.79	3	73.10	8	69.00	6	2.427	0.489
High dynamics market	4.0839	6	39.64	11	51.97	11	106.88	1	59.58	11	68.309	0.000**
Lack of environmental element	3.993	7	56.45	9	83.39	1	71.73	10	45.18	12	16.580	0.001*
Lack of access to support mechanism	3.6783	8	86.59	2	67.57	8	76.33	4	65.92	7	4.854	0.183
Failure to select competent staff	3.5524	9	73.18	4	76.60	2	69.26	12	64.05	10	2.391	0.495
Inappropriate marketing strategy	3.4476	10	40.50	10	49.36	12	97.50	2	93.13	3	66.661	0.000**
Little or none financial support	3.4126	11	88.32	1	61.16	9	69.63	11	103.82	2	21.568	0.000**
Unclear business plan	3.3217	12	72.00	5	59.26	10	73.76	6	108.08	1	25.453	0.000**

Table 4.18: Results of Kruskal Wallis One-Way AVOVA test for Barriers (Business Operation)

The Kruskal-Wallis H test (sometimes also called the "one-way ANOVA on ranks") is a rank-based nonparametric test that can be used to determine if there are statistically significant differences between two or more groups of an independent variable on a continuous or ordinal dependent variable. It is considered the nonparametric alternative to the one-way ANOVA, and an extension of the Mann-Whitney U test to allow the comparison of more than two independent groups. It is important to realize that the Kruskal-Wallis H test is an omnibus test statistic and cannot tell which specific groups of the independent variable are statistically significantly different from each other; it only tells that at least two groups were different.

Table 4.21 determines the results of the Kruskal-Wallis One Way ANOVA test for a k independent sample, out of 12 barriers in terms of entrepreneur's traits, 143 respondents have statistically significant difference of opinions on 'high dynamic market' is the barrier of successful SMEs start up in Malaysia at the five percent of significant level. This high Dynamic Market barrier has a statistic test of (x2=68.309, p=0.000). For people who age 30-49, they are the only group of people believe high dynamic market is the barrier that SME start up facing.

4.7.3 Relationship between age group and solutions

Success Factor	Overall mean score	rank	Age 0-17 (N=11)	rank	Age 18-29 (N=61)	rank	Age 30-49 (N=52)	rank	Age 50 and above (N=19)	rank	Kruskal- Wallis H	Asymp. Sig.
Mentors Feedback	4.3916	1	70.59	11	85.48	3	74.53	5	22.63	16	42.935	0.000**
Startup Networking	4.2867	2	76.23	7	90.76	1	65.69	10	26.58	15	44.038	0.000**
Tech Partners Networking	4.2797	3	71.68	10	82.98	6	71.42	7	38.53	13	20.521	0.000**
Customer Interviews and Feedback	4.2378	4	69.59	12	83.66	4	56.92	15	77.24	7	14.221	0.003*
Business Education	4.0559	5	86.14	3	88.66	2	63.15	14	34.53	14	32.634	0.000**
Investor Networking Provision of office and Coworking	3.8881	6	109.23	2	81.87	7	55.88	16	62.87	12	26.115	0.000**
space	3.6923	7	85.68	4	74.68	9	65.69	10	72.74	9	3.245	0.355
	3.6503	8	66.95		72.55		68.17		83.63		2.522	0.471

Table 4.19: Results of Kruskal Wallis One-Way AVOVA test for Solution

Tax and legal advice networking				14		10		8		1		
Sales and Marketing Masterclass	3.6014	9	48.91	16	83.55	5	65.25	12	66.76	11	13.138	0.004*
Pitch Coaching	3.5664	10	120.86	1	67.84	12	64.56	13	77.42	6	21.285	0.000**
Finance Assistance	3.5385	11	58.50	15	77.12	8	66.06	9	79.63	3	4.636	0.200
Raising Capital Masterclass	3.2867	12	74.41	9	61.11	15	82.01	2	78.16	4	9.614	0.022*
Analytics tools Masterclass	3.2448	13	76.18	8	63.52	14	77.94	3	80.53	2	5.609	0.132
Knowledge Assistance	3.1888	14	78.55	6	66.74	13	74.59	4	78.03	5	2.278	0.517
Facebook Advertising Masterclass	3.1608	15	79.73	5	69.08	11	72.69	6	75.00	8	0.949	0.814
Market Assistance	3.1189	16	69.05	13	53.93	16	94.81	1	69.32	10	31.715	0.000**

Table 4.19 determines the results of the Kruskal-Wallis One Way ANOVA test for a k independent sample. Out of 16 solutions toward successful business, 143 respondents have statistically significant difference opinions on start-up networking as key solution towards successful SMEs start up in Malaysia at the five percent of significant level. This solution has a statically test of (x2=44.038, p=0.000). For people who are older than 30 years old, they tend to not believe start up networking are the key solution to business succession.

4.8 Conclusion

In conclusion, this chapter has detailly explained and analysed all the section and questions from questionnaire and 143 questionnaire respondents' answer. Cronbach's Alpha test for the succession was statistically tasted as 0.884 which is significant and reliable. Other than that, Cronbach's Alpha test for the barriers was statistically tasted as 0.821 which is significant and reliable. And Cronbach's Alpha test for the solution was statistically tasted as 0.846 which is significant and reliable.

Other than that, detail analyse on the respondent's individual background and company background has conducted. Individual background analysis include gender, age group, entrepreneurship experience and so on. Company's background includes sectors of business, percentage of company shares in hand and so on.

Following by the Descriptive test on ranking of succession factor, barriers and solution. The top 3 success factor that base on entrepreneur's traits
are good management skill, reputation for honesty and hard-working entrepreneur. Top 3 success factor that base on business operation are to have a competitive product/service, good customer service, and good product quality. Top 3 barriers base on entrepreneur's traits are lack of ability to make good business judgement, lack of organization skill and lack of financial management skill. The barriers of SME start up base on business operation are no market fit and needs, financial issue and failure to maintain close relationship with customer. Lastly, the top 3 solution to a successful start up is to have mentors' feedback, tech partners networking and start up networking.

CHAPTER 5

CONCLUSION AND RECOMMENDATIONS

5.1 Overview

This chapter conclude and summarize all the findings that has collected from this study research. Other than that, this conclusion is make by reviewing back the research aim and research objectives. Lastly, the limitation and recommendation also involve in this chapter.

5.2 Conclusion

In conclusion, this research study result shows that that good personal traits of entrepreneur are the success factor of SMEs start up project in Malaysia. Including good management skill, good reputation for honesty, hardworking, good social skill and creativity. In terms of business operation, competitive product, good customer service and good productivity is the key to win on business startup. Other than that, all of the results are verified by the literature review. Furthermore, result also shows that the lack of ability to make good business judgement, lack of financial management skill, lack of organization skill and lack of competencies among business owners are the barriers of business start-up in terms of entrepreneurs' personal trait. In terms of business operation, no market fit and needs, failure to maintain close relationship with customer and financial issues are to reason that start up fails.

Moreover, the solutions towards a successful SME start up in Malaysia include to have mentors' feedback, involve in start-up networking, involve in tech partner networking, involve in business education and conduct customer interviews and feedback to improve the product.

This study research has successfully achieved the three objectives which the success factor, barriers, and solution towards a successful SMEs start up in Malaysia has found out through this study. This research could potentially provide a guidance for the new entrepreneur to reduce start up failure rate.

5.3 Limitations

5.3.1 Region

This research paper is limited to Malaysia and mostly on Selangor and Kuala Lumpur. The result might not be the same if apply to other country that has different culture than Malaysia.

5.3.2 Sector of business

This research paper is limited to mostly service sector, manufacturing sector and construction sector. This Is because the respondents of this research paper are mostly come from service sector, construction sector and manufacturing sector.

5.4 Recommendations for Future Research

Future research could set up the success factor of business research that targeted in developing state in Malaysia such as Johor or Sabah. Other than that, the future research could try to do a similar survey on a qualitative type which conduct interviews and feedback. This is recommended that to conduct similar survey on focusing one sector only such as construction.

Other than that, this is recommended to collect more respondent on the next research study because the more respondent the more accurate the result is. Unfalteringly due to time limit therefore 143 was the maximum number this research paper can go. Besides, this is recommended to conduct a similar survey in comparison of success factor within states that has different culture such as Kuala Lumpur and Kedah.

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APPENDICE

Appendix 1 Turnitin Report

Appendix 2 Questionnaire Survey