ENTREPRENEURIAL ORIENTATION AND PERFORMANCE IN MALAYSIAN FAMILY FIRMS

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Declaration

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

Name ______________________________

Date _______________________________

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List of Abbreviations

AU	**Autonomy**
CA	**Competitive Aggressiveness**
ED	**Environmental Dynamism**
EO	**Entrepreneurial Orientation**
GDP	**Gross Domestic Product**
IN	**Innovativeness**
PER	**Performance**
PLS-SEM	**Partial Least Square Structural Equation Modeling**
PR	**Proactiveness**
R & D	**Research and Development**
ROA	**Return on Assets**
ROI	**Return on Investment**
RT	**Risk Taking**
SMEs	**Small Medium Enterprises**

Abstract

Family business is one of the main contributors to the country's economy. As it has different dynamics compared to nonfamily businesses; a lot of researches have been done on the family business factors such as family succession, corporate governance, family ownership and performance. To strive in the current market, the family firm with all their complexities would need to be more entrepreneurial in their activities to improve their firm performance. This paper intends to investigate the relationship between entrepreneurial orientation (EO) and family firm performance. At the same time, as the situation changes the paper would also look into the moderation effect of the environment and the relationship of entrepreneurial orientation and family firm performance. For the data collection, questionnaires were distributed via mail to the respondents in the country. A total of 350 Malaysian family firms where studied using the PLS-SEM software to analyse the data. The main findings of the research revealed that all the five factors of entrepreneurial orientation which are innovativeness, proactiveness, risk taking, autonomy and competitive aggressiveness have a positive relationship with family firm performance. On the other hand, the only factor that is moderated by environmental dynamism and family firm performance would be proactiveness. The study contributes theoretical, methodological to the family theory as well as managerial implication. The limitations and future suggestions were also included in the research.

Chapter 1: Introduction

1.0 Introduction

This chapter would be the outline for the research project. It would include the discussion on research background, problem statement, research questions, research objectives, research hypotheses, significance of study and the overall conclusion for this chapter.

1.1 Background of the study

The economy is ever changing. In Asia, the market changes with the rapid technological changes and the uncertainty of financial market would prompt the firm to look for ways to keep up with the current changes. Dess, Picken and Lyon (1998) states that with the global competition and corporate downsizing the firm would change their strategy to be more entrepreneurial in order to survive. The topic of entrepreneurship mainly focused on individual traits of the entrepreneur himself not the organization. Schumpeter (1942) states that a firm should have entrepreneurial activity, to increase a firm's income level which would in turn boost country's economy. Entrepreneurship is essential in a high performing organization (Covin & Slevin, 1991). A firm would look for ways to improve their current situation by looking for opportunities in the current market condition.

According to Lumpkin and Dess (1996) one of the main models for the entrepreneurship literature would be entrepreneurial orientation. It is considered as the key for success in an organization. There are studies done that show entrepreneurial orientation would strongly influence the organization’s performance (Covin & Slevin, 1989, 1991; Wiklund, 1999; Wiklund &

Shepherd, 2005; Zehir, Can & Karaboga, 2015; Arzubiaga, Iturralde, Maseda & Kotler, 2017). Lumpkin and Dess (2001) suggested that the support of new ideas, novelty, experiment and creative processes would make the firm more innovative. On the other hand, proactiveness would mean that the organization would be able to relate the opportunities in the current market situation. Autonomy would be the idea/vision of the company that is able to function on its own.

Family business has been contributing to the economy of a country in terms of Gross Domestic Product (GDP). As stated in the MalayMail Online (2015), Malaysia's family business plays an important role in the economic development of the country as it contributes about 76% of the country's GDP. Studies on family business stated that more than 90% of businesses in a democratic country are family businesses (McCann, Leon-Guerrero & Haley, 2001; Davis & Harveston, 2001; Voithofer & Mandl, 2004). On the employment front as of 2016, Small Medium Enterprises (SMEs) contributes 65.3% to the total job employment. SMEs in Malaysia are made up of family businesses which are about 55% of small enterprises, 35% are medium enterprises and 10% are large scale (Jasani, 2002).

Previous research has stated that in certain situation, the organization with high level of entrepreneurial orientation would have superior performance compared to those with low level of entrepreneurial orientation. The relationship between entrepreneurial orientation and firm performances would be sustainable over time (Wiklund, 1999; Gupta & Batra, 2016). The environmental context would influence the entrepreneurial orientation of the organization (Zahra & Covin, 1995; Lumpkin & Dess, 1997; Wiklund & Shepherd, 2005; Ensley, Pearce & Hmieleski, 2006; Van Doorn, Jansen, Van den Bosch & Volberda, 2013).

In the research by Covin and Slevin (1991), a company with high performance would have all three dimensions in the entrepreneurial orientation. However, there are some studies that suggest there are different impacts of the sub dimension in the entrepreneurial orientation of the organization, making it multidimensional instead of one dimensional (Lumpkin & Dess, 1996). A study on all five dimensions as stated by Lumpkin and Dess (1996) would be essential in understanding how the dimensions affect the organization performance.

1.2 Problem Statement

Family firms have been one of the long standing companies in a country. Nowadays with globalization they face high competition. They would need to find ways to overcome this in order to survive in the current market situation.

The family firm in Malaysia has been established in the country and contributes to the country's GDP. Over the years, the family firm in the country has been established, from rags to riches story, listed in the Bursa Malaysia. Family firm ownership is important to achieve superior performance (Ong & Gan, 2013). 65% of the companies in SMEs are still managed by the founder himself (Buang, Ganefri & Sidek, 2013). In a research done by Credit Suisse Research Institute, Malaysia is currently at seventh place in the global ranking for family-owned business and ranked eleventh in Asian Pacific excluding Japan with an asset of USD 3.8 billion in the market (News Straits Times, 2017). Bearing this in mind, it would be interesting to understand how entrepreneurial orientation has an impact towards the company.

Welsh, Munoz, Chan and Raven (2012) did a study on entrepreneurial orientation in microenterprises in Malaysia, family firms has a proactive role in entrepreneurial orientation as the main goal would be to grow and sustain the firm for future generations. However, the study suggested that a broader research would need to be carried out in the Malaysia to have a sense of it all. The family businesses are 61% more entrepreneurial compared to non-family business (Pricewaterhouse Coopers, 2016). In view of this, the research on entrepreneurial orientation in Malaysian family firms is limited.

Malaysia's family business is under the SMEs that contribute to the country's GDP that it would be vital to understand how it can further improve in its' business. A survey done by PricewaterhouseCoopers on Malaysia family business in 2016, found that 19% of Malaysia family business aim to grow quickly and aggressively. Family firm tend to emphasize on long term growth based on a research by Credit Suisse Research Institute (News Straits Times, 2017). Malaysian family firm focuses on strategic planning to sustain their legacy. Entrepreneurial orientation is a strategy that the company can use to improve their performance.

PricewaterhouseCoopers (2016) states that the family firms are 61% more entrepreneurial where they are 40% more likely be risk takers and 55% take a longer approach to making decisions. The same study also concludes that one of the major concerns of the family firm in the next five years would be to continually stay up to date in the market by being innovative. This is the problem faced by 64% of the family firms. Based on this, it would be interesting to see how the different factors and to what degree is the performance of family firms affected by looking at the sub dimensions independently as entrepreneurial orientation is made up of five different factors as suggested by Lumpkin and Dess (1996).

Most of the research on family firm in Malaysia is on succession planning or governance of the company rather than on entrepreneur activities done in the company. In the Malaysian context, there are not many studies done on family firm's performance (Ong & Gan, 2013). The family firm has a better performance compared to non-family firm as well as their sales growth is steadily growing in a report by Credit Suisse Research Institute (News Straits Times, 2017). Besides that, the Malaysian family business is considered young compared to the business in other Western countries that have a business spanning five generation (Fung, 2015).

Family businesses in Asia are considered to be in their infancy age that they would have challenges when faced with succession planning. There is no proper way of sustaining the business as most companies are only in their 2nd or 3rd generation (Deloitte, 2015). Malaysian family firm are also in their early stage of the life cycle. According to the study done by Pricewaterhouse Coopers

(2015), family businesses in Malaysia that are run by the 2nd or 3rd generation are more active. 34% of family businesses felt that competition is one of the important issues in the coming year (Dimyati, 2015). The family firm is to be more innovative (Craig & Dibrell, 2006). Innovation in family firm research should be advanced to understand how innovation affects the family firm (Craig & Dibrell, 2006). As being innovative ranks 7th in the family firm business objective but if there are competitors with the other firms it would rank 3rd in their objective (KPMG, 2015). There is an importance for a family firm to be innovative. However, the top challenge that Malaysian family business face in the next five years would be to continually innovate and draw the right people into their business that is suitable for them.

In terms of the entrepreneurial orientation construct, most of the researchers focus on it being a one dimensional construct. Based on this, there are researches that argue it would be a multidimensional rather than just one dimensional (Kraus, Rigtering, Hughes & Hosman, 2012b; Hanafi & Mahmood, 2013). Factors like proactiveness, innovativeness and risk taking are interconnected but independent on their own (Kraus, 2013). Limited studies have been done using all the dimensions of entrepreneurial orientation construct (Hughes & Morgan, 2007; Kusumawardhani, McCarthy & Perera, 2009; Callaghan & Venter, 2011). The dimensionality of the entrepreneurial orientation construct has been argued by different researchers (Anderson, Kresier, Kuratko, Hornsby & Eshima, 2015) that it would help to have a clearer understanding of the multidimensional side of it. This study aims to have a multidimensional approach in the entrepreneurial orientation construct to fully understand each of the factors. The different factors of entrepreneurial orientation will give a different impact towards the firm performance (Lumpkin & Dess, 2001) as it has various combinations. The five entrepreneurial orientation factors can vary in different ways from each other (Wales, Gupta & Messersmith, 2011) that it is important to treat the factors separately. It is affected by the internal and external context in the similar manner (Shan, Song, & Ju, 2016).

There are some firms that still vary in terms of their entrepreneurial orientation strategy to deal with dynamic environments (Ruiz-Ortega, Parra-Requena, Rodrigo-Alarcon & García-Villaverde, 2013). As the firm would have dynamic environment at certain stage in their lifecycle, family firm would have to respond positively with it. A research by Ward (1988) states that family firm would be less affected by the dynamic environment as they focus on the long run objective for the firm. Family firms are known to be resistance in the different environment that is one of the reasons they are able to sustain through different generations. Family firms would react quickly to sustain their competitive advantage (Habbershon & Williams, 1999). This study looks into the individual entrepreneurial orientation factors in family firm that would be moderated by environmental dynamism to understand how it is affected.

1.3 Research Questions

This study aims to answer a few questions in regards to entrepreneurial orientation and family firm performance in Malaysia. Given the factors that would affect performance of family firm the following questions are formed:

1. Which of the five entrepreneurial orientation factors have a positive relationship with family firm performance?

2. Does environmental dynamism moderate the relationship between all the entrepreneurial orientation factors and family firm performance?

1.4 Research Objectives

Based on the proposed research questions, the primary goal is to investigate the unique relationship between entrepreneurial orientation and family firm performance and the moderating impact of environmental dynamism on the aforementioned relationship. This study attempts the following:

- To examine the different relationship between entrepreneurial orientation factor affect family firm performance

- To assess the significance of environmental dynamism in moderating the relationship between entrepreneurial orientation and family firm performance.

1.5 Research Hypotheses

The following hypotheses are developed for testing:

H1a There is a positive relationship between innovativeness and family firm performance.

H1b There is a positive relationship between proactiveness and family firm performance.

H1c There is a positive relationship between risk taking and family firm performance.

H1d There is a positive relationship between autonomy and family firm performance.

H1e There is a positive relationship between competitive aggressiveness and family firm performance.

H2a The relationship between innovativeness and family firm performance is positively moderated by environmental dynamism.

H2b The relationship between proactiveness and family firm performance is positively moderated by environmental dynamism.

H2c The relationship between risk taking and family firm performance is positively moderated by environmental dynamism.

H2d The relationship between autonomy and family firm performance is positively moderated by environmental dynamism.

H2e The relationship between competitive aggressiveness and family firm performance is positively moderated by environmental dynamism.

1.6 Significance of Study

1.6.1 Theoretical Contributions

This study aims to contribute theorectical to the entrepreneurial orientation construct in different ways. Firstly, Covin and Slevin (1989) stated that the entreprenuerial orientation construct would be one dimensional as the firm would need all the three subdimensions (innovativeness, proacticeness and risk-taking) to be entreprenuerial. However, there are some studies that state the subdimensions of entrepreneurial orientation construct do not have equal weightage (Lumpkin & Dess, 1996; Knight, 1997; Cossio-Silva, Vega-Vazquez & Revilla-Camacho, 2014). Kreiser, Marino and Weaver (2002) states that the subdimensions of proactiveness and competitive aggressiveness is differently related to the business success of the firm. The innovation and proactive subdimension are not equally critical in determining the firm's success (Kreiser et al., 2002). As the entrepreneurial orientation is treated as a multidimensional construct rather than a one dimensional construct in this study, it would be able to rank the importance of the variables against family firm performance.

The studies on entrepreneurial orientation are mostly done in the western context that it would be interesting to see how this construct pans out in an Asian context. Malaysia is a developing country that most of the GDP is made up of SMEs where the majority are of it are family firms that the entrepreneurial orientation construct as part of the study would help the researcher understand how has entrepreneurship affect the family firms that make up the SMEs in the country. On top of that, the Malaysian family firm is considered young by only having the second to third generation in the business (Fung, 2015) that the effect of entrepreneurial orientation to family firm performance may be different.

The research would narrow down the target population to family business in the SME sector. Family businesses are a different type of business compared to the non-family businesses as there are a lot more to consider from the structure of the company to the organization of the company. This research would include the different types of family business and how would entrepreneurial orientation affect the family firm performance.

1.6.2 Methodological Contribution

This research can contribute to the methodological in terms of the analytical software used. The software chosen for the research would be PLS-SEM software. One of the reasons that it can contribute would base on the target population of the study that is family businesses. Not many studies on family business used the software for their analysis that it is encouraged (Astrachan, Patel & Wansenried, 2014). Another reason would be the fact that the sample size of the family business would be smaller than the other types of business as it would need to fulfil the criteria of being a family business (Sarstedt, Ringle, Smith, Reams & Hair, 2014). The PLS- SEM software would be used to run on a smaller size of data. Given that the research is done in the Malaysian context, it would contribute methodologically when PLS-SEM software is used to run the data. The research would include moderator as part of the framework that it contributes when using PLS-SEM to run the analysis as it is treated as a quasi-moderator.

1.6.3 Managerial Contribution

The research aims to highlight the different entrepreneurial orientation factors and how it would affect the family firm performance. The managers would have a better understanding of the construct and its' effect on family firm performance. This would help the management of the family firm choose which of the variables to focus on when making decisions in regards to the entrepreneurial structure of the company to improve the family firm performance.

1.7 Summary of the chapter

This chapter highlighted on the research background and the research problems. Besides that, the goals of research, research questions as well as the significance of study had also been included. The next chapter would include a review of literature related to the relevant theoretical model, and hypotheses will be discussed in response to the respective research questions.

Chapter 2: Literature Review

2.0 Introduction

This chapter presents the definition of family business, performance of family firm, environmental dynamism and the factors of entrepreneurial orientation that could affect the family firm performance. This section would also review the previous studies on entrepreneurial orientation and develop the theoretical framework and hypotheses.

2.1 Literature Review

2.1.1 Family Firms Definition

Family firms are like any different type of business that would strive to survive in the economy. One of the major differences for family firm would be the company is controlled by a family. It can be illustrated as a system which has interrelated subsystems such as the family and enterprise (Gersick, Davis, Hampton & Lansberg, 1997; Moores, 2009). Hence, there is the family enterprise. This would have an impact on the firm as well as its performance. As there are many types of family firms there are different definitions as to what makes a family firm.

Researchers have a broad definition for family owned business such as a business that is controlled by a family or family owned business. Family business can be controlled by few dominant families that have a vision. It has the intention to keep the vision to sustain across generations. A typical family business can be listed as an organization that is controlled and managed by multiple family members from multiple generations (Anderson & Reeb, 2003). Another way to define would be according to Chrisman, Chua and Sharma (2005), it is divided into four different parts which are (1) family's influence over strategic direction of a firm; (2) the intention of the family to keep control; (3) family firm's behaviour; and (4) unique inseparable, synergistic resources and capabilities arising from family involvement and interaction. This would sum up the meaning of family businesses. Another definition of family firms would be the presence of family members in the board of directors (Anderson & Reeb, 2003). The founding family would have a large stake of equity as well as be in the senior management (Saito, 2008). As described by Chua, Chrisman and Sharma (1999) family firms can be defined as follows: (1) family owned and family managed; (2) family owned but not family managed and (3) family managed but not family owned. This would be the basis on the definition of family firm that the research would be using.

2.1.2 Classification of family firms

There are many types of family firm. It is divided into a few different types which are (1) captain model - small companies mainly SMEs and are all based on the one person's effort that is the person owning the company; (2) the emperor model - the business and the families are united under a leader; (3) the family team - the extended family are working in the small firm; (4) the professional family- few members would be involved in the management of the complex business; and (5) family investment group- the family with different complexities would invest together (Gimeno, Baulenas & Coma-Cros, 2010).

According to Saito (2008), family firms can be divided into three different types which are (1) the senior manager is the founder of the family firm; (2) the founding family has the largest shareholder but not the senior manager; and (3) the senior manager is from the founding family but not the largest stakeholder. Another way of categorizing family would be where the family has more than 50% of the capital and that one of the families has a major stake in the firm

(Sharma, Chrisman & Chua, 1997; Westhead & Cowling, 1998, Chrisman, Chua, & Steier 2003; Durendez, Ruiz-Palomo, Garcia-Perez-de-Lema & Dieguez-Soto, 2016).

Using the agency cost and family asset to divide the family firms, Dyer (2006) came out with the following family types which are the (1) clan family- the family firm would have the skill of survival, as it has low agency cost but high family asset; (2) professional- the family firm has a professional code of conduct and the family asset is protected; (3) mom and pop family- there is no physical/financial asset for the business and would need to make effort to grow the business; and (4) the self-interested family- it has family ownership and there is a growth in the business.

2.1.3 The interest in family firms

A family business has different dynamics compared to nonfamily business. The complicated dynamics not only contribute to the growth of the company but to the company's performance as well. As the dynamics of a family firm is more complicated it has prompt researches on the family business "factors" such as family succession, corporate governance, family ownership, and performance.

Family involvement in the business is unique; it has popular variations of the family of it as the family firm would pursue a vision (Chua et al., 1999). The family business would have a vision to help it achieve sustainability through the generations to come. Family firm has concentrated ownership. A U.S research on family firm has found that it has superior performance in major industries (Miller, Le Breton-Miller, Lester & Canella Jr, 2007). Seventy to ninety percent of the worldwide GDP annually is contributed by the family firm (Tharawat Magazine, 2014). There are high percentages of family firms in the emerging market economy (Welsh et al., 2012).

The behaviour of the shareholders can be affected by the ownership of the family firm as well (Miller et al., 2007). Chrisman, Chua and Steier (2002) suggested that 80% of the family firms display entrepreneurial characteristics. The family would have strategic management to be entrepreneurial in their firm (Chrisman, Bauerschmidt & Hofer, 1998).

A firm that is entrepreneurial oriented would need to be strategic to match the opportunity and resources it has (Sharma & Chrisman, 1999). To have a successful business the firm would need to have an entrepreneurial leader (Chrisman et al., 2003). A firm that is new would have a leader who is entrepreneurial. The family involvement in the firm would bring different types of strategies to help the firm to advance. However, the role of entrepreneur and family members will lead to a conflict (Brannon, Wiklund & Haynie, 2012).

Family firm would look into having a long term strategy for their business. They would not want to focus on short term financial gains which they feel would spoil the image of the company (Ibrahim & Samad, 2010). According to Pricewaterhouse Coopers (2016), 55% of family firms look at the long term perspective when making a decision. Businesses that are family based would have multiple generations running the business that would see them having an entrepreneurial attitude in maintaining the business (Nordoqvist & Melin, 2010; Sieger, Zellweger, Nason & Clinton, 2011).

Family members take pride in their business as family values run alongside the business values. The business that started in the community would have a sense of commitment to training the workforce for the future. The firm would be nurturing talent in the company in terms of being entrepreneurial to uphold the values of the business (Poutziouris, 2001). On the same note, the family business place trust as a big part of their business values (Casson, 1999). As trust is important, the family in the business would be the buffer between the market and business. Family business would also take into account the family's lifestyle objectives. In some family businesses, family harmony would take into the account the entry into the international market. All this would make a family business different in terms of their entrepreneurial stance as the value they place in the business has family values.

The percentage of the family firm occupying the board will not have similar firm characteristics in terms of strategy, structure and human resource system (Dyer, 2006). The top management in the family firm would be more cohesive than non-family firm (Dyer, 2006). Family firm would pursue wealth creations as their primary goal (Habbershon, Williams & MacMillan, 2003) based on its' effective structure (Anderson & Reeb, 2003). As their primary goal is wealth creation it would be important for the family to stick together to move towards the same goal.

In an ever changing world, family firms have sustained and are one of the major contributors to the economy of the country. There are family firms that are publicly listed in the Bursa Malaysia. On top of that according to the MalayMail Online (2017), 76% of the GDP in Malaysia is contributed by family firms. Family firms would have a large multiplier effect and is present in the country's economy. It would be the provider of capital and employment at the same time help to achieve economic success of the country.

2.2 Entrepreneur, Growth and Performance in family firm

Creation of business is the development of an entrepreneurial project. The strategic renewal that the family group has would help it be entrepreneurial to have the ability to take new ventures within the group. It would mean that the whole organization would need to be entrepreneurial not only the family members controlling the firm (Gimeno et al., 2010). To be cohesive, the family members would need to be entrepreneurial to be sustainable. It would have the entrepreneurial spirit by promoting an innovative company by creating a family culture that would give meaning to business innovation (Gimeno et al., 2010).
Entrepreneurial orientation positively influences the growth of the family firm. The second generation of the family management has higher growth when EO

is employed on a study done on Spanish family firms (Casillas, Moreno & Barbero, 2011). Firms that want to drive the firm growth would need to have a strategy focused on EO move forward (Eggers, Kraus, Hughes, Laraway & Snycerski, 2013). On top of that, firms that want to grow would be able to use EO as part of their strategy (Reijonen, Hirvonen, Nagy, Laukkanen & Gabrielsson, 2015). When a firm wants to employ EO as part a strategy they would need to have the relevant financial resources (Eggers et al., 2013).

Family firm has become an important instrument in the nation as it helps the country to grow. Founding families are prevalent and important class of shareholders and senior managers in Japan (Saito, 2008). Family firm outperform non family firm in Japan (Saito, 2008). According to Anderson and Reeb (2003) the common characteristic the family members would be to align firm interest with the family interest. For example the family ownership would be higher if the CEO is a family member. The family has a strong incentive to firm profitability. Return on Assets (ROA) is slightly different from a non-family business. The relation between the firm performance and founding family ownership is non-linear. Family firms perform better than non-family business; the performance would increase if there is lower percentage in ownership.

Large US family business did not outperform the market valuations. The lone founder of business would outperform in market valuations (Miller et al., 2007). Family firms surpassed non family business in the rate of sales and profit margin increase. The family financial structure is different (Gallo, Tapies & Cappuyns, 2004).

The nature of the family relationship would play a role in influencing the outcome of the company (Brannon et al., 2012). The company that has close relationship would be able to perform better. Families would influence the firm performance by using the family goals, relationship, family resources and assets. The top management team in the family would be more cohesive than nonfamily firms (Dyer, 2006). Firm survival is one of the most important issues in a family firm (Ang, Rebel & Lin, 2000).

The family firm would operate and make organizational decisions that would preserve the family business. It would want to promote the family longevity, survival and financial security (Lumpkin, Martin, & Vaughn, 2008). Family firms would generate entrepreneur resources and contribute to generating returns to grow the family business (Welsh et al., 2012).

In 2014, a survey done by Pricewaterhouse Coopers (PWC), 70% of family businesses interviewed would expect to grow steadily in the next five years. Family business would need to think of other avenues to grow the business as they do not rely on bank or capital funding. At the same time, the talent in the company more often than not come from their own family members (Pricewaterhouse Coopers, 2015). In the last few years, family firms have shifted their focus to making the company profitable. However, due to the way family firms are made they may find difficulty to reinvent themselves as they want to reinvent but not lose their identity (Pricewaterhouse Coopers, 2015). By understanding the entrepreneurial orientation it would help the family focus on factors that best suit their firm. Despite the issues that the Malaysian family business are facing they are growing steadily at about 64% and expecting to have the right pace of growth over the next five years (Dimyati, 2015).

2.3 Malaysia's Family Firm

In Malaysia, family businesses are plays an important role in the economy and development of the country. The number of family business are at 70% of the country's family enterprises (FBN, 2018).On top of that, there are 3 companies in the top 30 family firms in a global report (NST,2018). In the 2018 report by Credit Suisse Research Institute, Malaysian family firms generated a share price of 10.2 percent annually and a market share capitalization at US $ 4.4 billion (NST, 2018). Family firms in Malaysia is ranked seventh globally in 2017 in a report by CSRI (CSRI, 2017). In Malaysia, family businesses are considered younger (Ibrahim & Samad, 2011; Borneopost, 2018) compared to their counterparts and most would be in the first and second generation. According to Appaduray (2017) in a 2016 survey done on Malaysia's family business, 19% of the businesses would grow quickly and aggressively in the next five years.

In a study by Hamid, Abdullah and Kamaruzzaman (2015) Malaysia's family firms are more profitable than non-family firms. This study is in line with the study done by Jorissen et al. (2001) that states family firm performed better than non-family firm. Family firm will put not only their own interest but the interest of the firm to achieve better profitability. During the 2007 to 2011 economic crisis, the Malaysian family firms are able to withstand the same performance (Tharawat Magazine, 2013). This shows that they are flexible a turbulent situation.

In terms of the return of asset (ROA) of the business, family firm has a higher level of ROA compared to non-family business at 7.11% for family firms compared to non-family at 7.07% (Tharawat Magazine, 2013). Family firms have better efficiency compared to non-family firms (Gorriz & Fumas, 1996) that they would use the assets wisely to have better returns.

Besides that, as family firms are more profitable, it would attract more investment from shareholders that has a minimum share compared than the non-family firms (Anderson & Reeb, 2003). Investors are willing to put more money into Malaysian family firm as the annual average for the family firm share price would be 10% annually (Borneopost, 2018). The investors would put their faith into Malaysia's family firm to increase their revenue.

The ROE of the family firm is higher at 10.52 percent compared to non-family firm at 7.89 percent. This shows that the return for non-family firm is less than the family firm in Malaysia (Hamid, Abdullah & Kamaruzzaman, 2015). Malaysian family firm would use their equity wisely compared to non-family firm (Hamid et al., 2015). As family firm would use the internal cash flow instead of external debt for the company's investment compared to non-family firm that use debt financing (Chu, Lai & Song, 2016; Jong & Ho, 2018). Malaysian family firm perform better than the firms in Malaysia (Jong & Ho, 2018). The management in family firm are prudent using the finances of the company (Shubita & Alsawalhah, 2012) as it would be to keep the company sustainable and profitable in the long term. This can be seen as the family firm outperformed in the long term basis in a report by Credit Suisse Research Institute (2018).

2.4 What is Entrepreneurial Orientation?

The root word for entrepreneurial orientation comes from the word entrepreneurship. The word "entrepreneurship" definition has been around for at least 200 years (Hebert & Link, 1988). This means that entrepreneurship has been a subject that interest researchers. The scope of early entrepreneurship research would be focused on the traits and behaviours of the entrepreneur (Schumpeter, 1942). This person can be defined as one who is sensitive to identify and expand entrepreneurial opening to develop the business (Fillion, 2011).

A firm would strive to be more entrepreneurial with the intensifying global competition, corporate downsizing and delayering, rapid technological progress and other organization environmental process to survive and prosper (Dess, Lumpkin & McGee, 1999). Entrepreneurship can be measured based on the size of the firm as per the study done by Miller (1983). It can also be seen from the organization perspective (Schumpeter, 1942).

In his work, Miller (1983) stated that organizational performance would be the assessment of an organizations activity in terms of product innovation, proactivenesss and risk-taking. As this is part of the locus control of the firm and the entrepreneur characteristics. Covin and Slevin (1991) in their study discuss that the firm's performance would be affected if the firm act innovatively, take risk and are proactive in combating the various situation that they are in. Another study done by Lumpkin and Dess (1996), suggested that there are two more variables to be added into the entrepreneurial orientation which are autonomy and competitive aggressiveness.

By using this framework, Wiklund (1999) in his study noted that entrepreneurial orientation may influence performance of the firm. If a firm's entrepreneurial intensity exceeds the industry average, the performance of the firm will be enhanced (Ireland, Kuratko, & Michael, 2006). Entrepreneurial orientation can be used in different context to understand the situation of the company (Kurtulmus & Warner, 2015). Besides that, EO under entrepreneurship is defined as a belief to access how the company's approach to entrepreneurship (Jelenc, Pisapia, & Ivanusic, 2015). Thus, a firm that is entrepreneurial will have innovativeness, proactiveness, risk-taking, competitive advantage and autonomous behaviour when dealing with activities in the firm.

Entrepreneurial orientation can be classified as an activity, according to Schumpeter (1934) stated that innovation is the combination of new goods, new method of production, opening of new market, new sources/supply and organization. EO can be considered as an activity in the organization as innovation or innovativeness is part of the EO construct. The firm would have an act of innovation while working on existing resources with new wealth producing capacity (Drucker, 1985).

Besides that, entrepreneurial orientation can be used as a strategy in the firm as a firm that is assertive in their strategy making would be proactive and a risk-taking organization (Dess, Lumpkin & Covin, 1997). In major operating and decision making process, the firm would require an individualistic and autocratic process (Covin, Green, & Selvin, 2006).

A firm that has the commitment to strategize would lead in and have the entrepreneurial mode according to Mintzberg (1973). The planned strategy that the firm has would accurately predict the future business of the company by using innovativeness, risk-taking and proactiveness (Covin et al., 2006). The firm would use this for future decision making process. Nowadays, entrepreneurial orientation is considered as a strategic construct of a company (Anderson at al., 2015). As EO is a strategic construct it needs to be accurately used to reach its’ highest potential (Wales, Patel, Parida & Kreiser, 2013;

Engelen, Schmidt & Buchsteiner, 2015). By understanding this, we would need to understand the different factors of the entrepreneurial orientation.

2.5 Why was Entrepreneurial Orientation chosen?

Entrepreneurial orientation construct was chosen as it is considered a reliable construct to use when measuring the context of entrepreneurship (Schillo, 2011). Other less popular constructs/variables may not provide the strong basis to understand the entrepreneurial behaviour of the firm. As the main research question of the research would be to understand entrepreneurial orientation and family firm performance, this construct is chosen.

The construct by Lumpkin and Dess (1996) was chosen as it would be able to show the individual effect of entrepreneurship. In this study, the different variables that make up entrepreneurial orientation of the firm are treated differently. This research would also aim to understand the importance of each factor contributing to the entrepreneurship stand of the company that is why the construct is chosen.

Another reason that the entrepreneurial orientation construct is chosen would be the fact that this construct is not context specific and focuses on new entry (Lumpkin & Dess, 1996). EO varies between industries (Rauch, Wiklund, Lumpkin & Frese, 2009) as well as structure (Lomberg, Urbig, Stöckmann, Marino, & Dickson, 2017) that it would be important to see how it affects the family firm. Hence, the research uses the construct in its study to understand how family firm performance fair against the entrepreneurial orientation of the company.

Most of the family business is in small to medium sized firms that EO is chosen as the entrepreneurial construct. EO's contribution can be clearly seen in SMEs (Kraus, Harms & Fink, 2009) as there are less hierarchy in the decision making process (Daft, Murphy & Willmott, 2010).

2.6 Review of Key Models on Entrepreneurial Orientation

There are a few models on the theory of entrepreneurial orientation. The EO construct that is relevant to the study is discussed in the following section.

2.6.1 Mintzberg (1973)

The construct of entrepreneurial orientation originated from the works of Mintzberg (1973) where firms were found to be entrepreneurial in their strategy-making when there is a high uncertainty in the market.

In his paper, the researcher has three modes of strategy making namely the entrepreneurial, adaptive and planning mode at the firm level. Entrepreneurial mode is known as strategy-making in business where the entrepreneur would not only create new firms but would be running the on-going firm. It would also be the act of taking risk. In the adaptive mode, the policy-maker would constantly seek to avoid uncertainty by developing short instead of long-run strategies. This model would only be able to work in an environment that is uncertain. Firms using this model would be seeking conditions that are certain and reducing the existing uncertainties. A series of steps is used to be adapted to any environment. Planning model would be using the formal model to have a systematic attainment of the goals to achieve quantitative goals of the firm. A systematic and structured process is carried out to search for new opportunities and to find a solution for the existing problems. As this is a more formal process, the firm adopting this method has a clearer understanding of the environment.

One of the important points of his work would be on the literature in policy and organizational theory. The firms will proactively search for new opportunities to increase their growth. According to Mintzberg (1973), the decision making and strategy factors are the ones that would drive a firm to be entrepreneurial. The author stated that the firms would be able to make their decisions on being entrepreneurial when the firm has the environment as well. This would be part of the entrepreneurial strategy (Mintzberg, 1983).

However, there were some limitations to using the model proposed by Mintzberg (1973). One of its limitations was that the concept suggested by him was not empirically tested. It was just a conceptual paper. The concept proposed by Mintzberg (1973) had no direct link between the strategy making modes and the structures stated by him (Miller, 1983).

The model proposed by Mintzberg (1973) has sparked a lot of interest and one of the pioneers for research in entrepreneurial orientation (Basso, Fayolle & Bouchard, 2009; Anderson et al., 2015). It is the basis of the research of Miller in 1983 (Miller, 1983).

2.6.2 Khandawalla (1977)

In his work, the organization would be able to have a contingency explanation to achieve better results. Based on this idea, the researcher studied basic elements on manager judgments that compared the situation. A manager would have beliefs and norms that are multidimensional. The researcher studied about the profitability, products, markets and personnel. By studying the following areas profitability would be the main focus for measurable purpose. The original source for entrepreneurial orientation would be the strategy of the firm in relation to performance. Strategy would be in the dependent variable position. According to Khandawalla (1977) the researcher noted that the top managers would be taking risk when a decision is made which is in contrast to a more cautious, conservative, stability-oriented style of decision making.

According to the author, there is a strategy to response to an uncertainty that the company is facing and it is related to the environmental task. The organization would react to external environment using their entrepreneurial activities which has created opportunities (Khandwalla, 1987; Rosenbusch, Rauch, & Bausch, 2013). A set of scale was collected by the author and published as the original source for entrepreneurial orientation. The researcher suggested that it would be the strategy of the company in relation to the firm's performance.

2.6.3 Miller (1983)

The model proposed by Miller is based on the work of Mintzberg in 1973. According to Miller (1983), entrepreneurship would be at firm level (Basso et al., 2009). It focused on entrepreneurial decision-making that a firm would make based on firm types and factors. According to the author, there were three types of firms in the entrepreneurial construct namely the simple firms, the planning firms and the organic firms (Miller, 1983).

In this model, the author claims that the entrepreneurial activity in regards to growth will push the managers to seek new opportunities in terms of renewal, innovation, and constructive risk-taking. The author states that a firm would not be called entrepreneurial if it changed its technology or product-line just by copying the competitors if there is no risk taken. Some level of proactiveness is needed in the mix as well. A firm that is risk taking but not engaged in product market or technological innovation would not be considered an entrepreneurial firm. To some degree it would need to include all to be an entrepreneurial firm (Miller, 1983).

By stating this, Miller in his work suggested that the study of entrepreneurial orientation should be explored from an organization activities/behaviour by including product innovation, proactiveness and risk-taking. An entrepreneurial firm would be innovative, risk taking and proactive (Covin & Wales, 2012) which is part of the firm strategy according to the study (Edmond & Wiklund, 2010; Miller, 2011) Entrepreneurship should be related to the strategy and structure of the firm and it varies differently from one type of firm to another (Miller, 1983). All the three constructs cannot be separated from each other and it is related. This is considered as a unified structure that was started by the study of Miller in 1983 (Etemad, 2015).

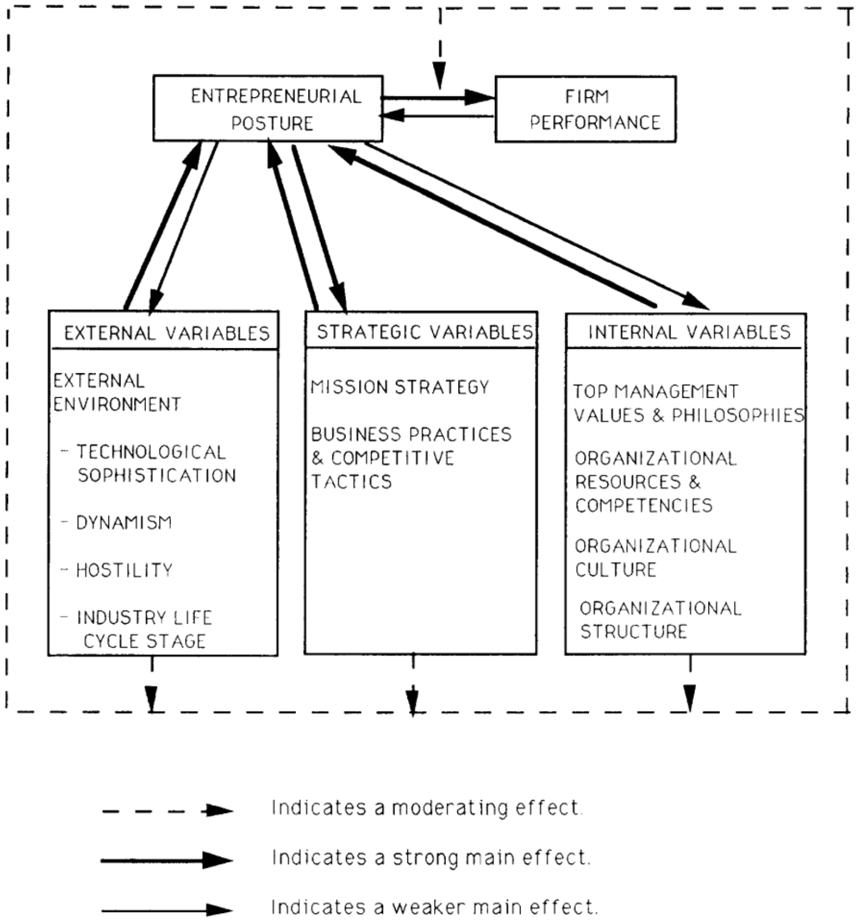
However, there are some factors that were not included in the research done by the author which are the factors of the organization/structure and environmental dimensions of an entrepreneurial firm. This factors has since become a basis in entrepreneurial orientation testing.

2.6.4 Covin and Slevin (1991)

The term of entrepreneurial orientation was used more often in the later studies. It would be used as a concept of the organizational strategy that would place it as an independent variable to performance. The original scale of Khandawalla (1977) was used as the basis for the entrepreneurial orientation for the performance of the firm.

In this study, entrepreneurial orientation was used as a one dimensional construct and the relationship between entrepreneurial orientation and performance was moderated by organizational and environmental variables. This would profile a firm's behaviour (Covin & Slevin, 1991). The authors suggested the following:(1) performance of the firm is the dependent variable, (2) variables has to be clear, (3) there are other factors to be included namely environmental, organizational and individual-level and (4) it should have the moderator effects. This can be seen in the figure one.

Figure 1: A conceptual model of entrepreneurship on firm behaviour



Based on Miller's study, the economic and industrial setting would influence the firm's entrepreneurial orientation. If a firm has high level of entrepreneurial orientation but does not know how to use it wisely, it would have lower performance. Thus, in the study, the understanding of firm and environmental factors plays a role in the entrepreneurial of the firm. A firm's strategic effect would be the entrepreneur posture on organizational performance in the different variables (innovation, proactiveness, risk taking). The dependent variable of performance has two dimensions: growth and profitability. These performance indicators are measured using sales growth rate, return on assets, and the profit-to-sales ratio.

This study made an impact on the entrepreneur studies as there is an established dimension for entrepreneurial orientation which are innovation, risk-taking and proactiveness. Besides that, a scale set has been included in the study which is known as the Miller/Covin-Slevin scale. The three items are included in the scale and can be used for the firm and adapted to include environmental factors. It is known as the more popular entrepreneurial orientation construct where the dimensions of innovativeness, risk-taking and proactiveness are treated as one in the construct (Rauch et al., 2009; Rosenbusch et al., 2013). It is treated as a one dimensional (Covin & Wales, 2012).

2.6.5 Lumpkin and Dess (1996)

The study by Lumpkin and Dess (1996) based entrepreneurial orientation as an independent variable which has is based on the study of Miller's 1983 (Covin & Lumpkin; 2011, Covin & Miller, 2014). It is known as the strategic process where the firm would increase their entrepreneurial action and expand new opportunities (Dess & Lumpkin 2005). It stated that the entrepreneurship would mean the new entry whereas entrepreneurial orientation would be the strategy the new entry is using. The authors focused on the decision-making roots of the firm by introducing two more factors: autonomy and competitive aggressiveness. By introducing two new factors to entrepreneurial orientation it shifted the view to the firm/business unit level. It is considered a firm-level approach compared to small business which is an extension of the individual at the top.

Lumpkin and Dess (1996) in their study changed the dimensionality of the construct. Previous study done by Covin and Slevin (1991) concentrated on entrepreneurial orientation as a one dimensional construct (innovativeness, proactiveness and risk-taking) but Lumpkin and Dess (1996) in their study added two new factors autonomy and competitive aggressiveness and dimensional space of entrepreneurial orientation has been changed. The two new factors of autonomy and competitive aggressiveness can be treated individually but not as a competitive factor (Covin & Lumpkin 2011). In their study, they argued that not all the construct would relate to the performance of the firm in the same manner. They regard that the study done by Covin and Slevin (1991) that if a firm is entrepreneurial it exhibits high levels in all three dimensions too narrow (Lumpkin & Dess, 1996). It would depend on the situation that the firm is going through. At the firm level, the different variables of entrepreneurial orientation would be independent dimension. The variables can have different combinations depending on the type of the firm (Lumpkin & Dess, 1996).

The authors suggested the following:(1) performance of the firm is the dependent variable; (2) variables has to be clear; (3) there are other factors to be included namely environmental, organizational; and (4) it should have the moderator effects. The performance of the firm can be measured by sales growth, market share, profitability and overall performance and stakeholder satisfaction. It can be seen in the figure two and three.

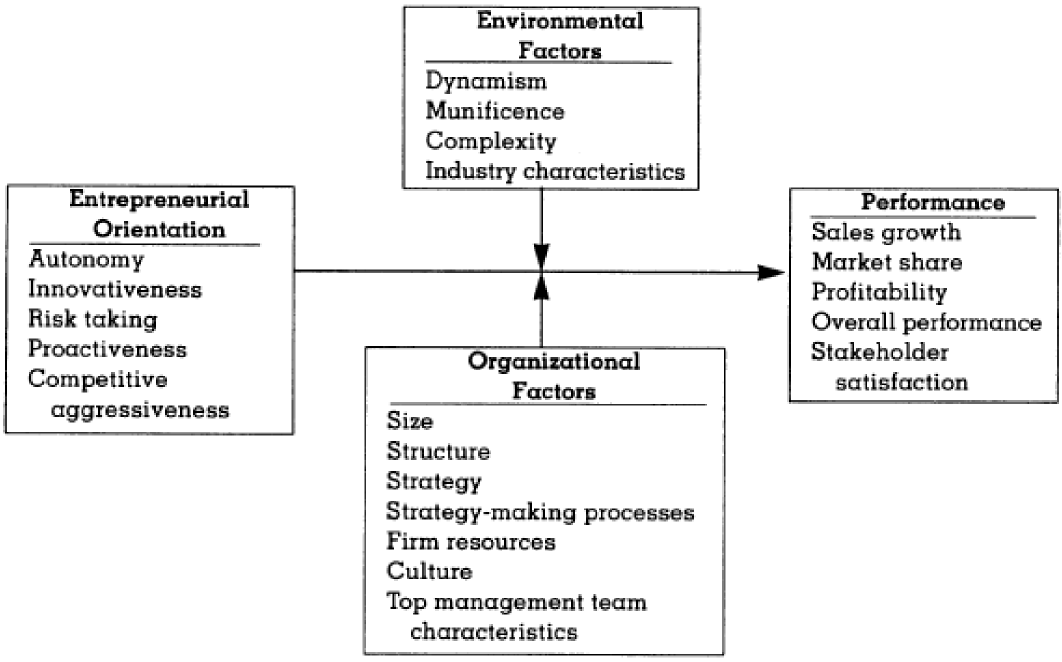


Figure 2: Conceptual Framework of Entrepreneurial Orientation

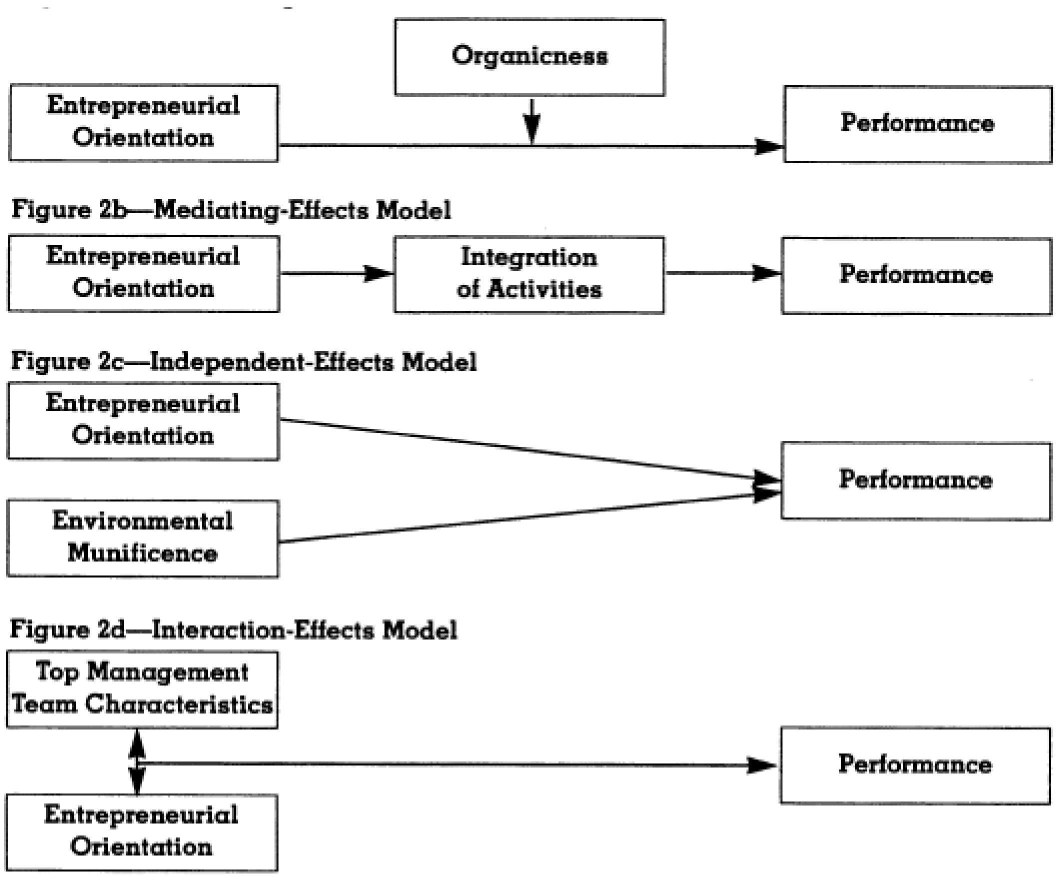


Figure 3: Alternate Contingency Models of the Entrepreneurial Orientation-Performance Relationship

As a result of the study done by Lumpkin and Dess (1996), the entrepreneurial orientation can be treated as a multidimensional construct where the variables would be independent of each other (Rauch et al., 2009). Its conceptual framework of entrepreneurial orientation and alternate contingency models of the entrepreneurial orientation performance relationship have been used in the literature of entrepreneurship.

2.7 Resource Based View

The resource-based view started from the work of Penrose (1959) who argued that the firm's productive resources and process would help the firm growth and it will increase its resources. A firm's productivity opportunities are rare that a firm would be able to excel in the market when the resources are used wisely and the competency of the management. Wenerfelt (1984) coined the term "resource based" which proposed that a firm can have competitive advantage with its unique resources. This theory has been widely used in the academics (Collins, 1991; Grant, 1991). The resources would affect the entrepreneurial behaviour of the firm (Martins & Rialp, 2013).

In the organisation, 'resource' can be categorised into three sections which are the physical capital, human capital and organisational capital. Each of these would have different impacts on firm performance (Barney, 1991). It can be defined as tangible and intangible resources (O‘Regan & Ghobadian, 2004). The resources in each of these firms are unique to the firm in itself that cannot be replaced by other resources which can contribute to the firm's sustainable competitive advantage. Besides that, other tangible and intangible resources are the building block of the competitive advantage of the firm. Intangible resources that are in the theory are the past history, managerial characteristics and organisational process, knowledge and capabilities (Zou & Cavusgil, 1995). The family asset in family firm would be part of the physical asset like the capital that the company has. The firm would be able to take risk and borrow from banks to finance their company (Baird & Thomas, 1985). This would mean that the firm is taking risk as they have the right asset. The banks would fund the company thus helping the company be competitive in the industry (Moss, Neubaum, & Meyskens, 2015) that they are in as they have the finances to do it. This means that the company would have competitive aggressiveness. The resources that the company have as an intangible resource would be difficult to copy as it solely belongs to the company (Day, 2011). One of the intangible resources that the family firm have would be the managerial characteristics of the firm. The managers in family firm would give the liberty to their employees to make their own decision rather than make it for them as they would trust their people (Rahman, Civelek & Kozubíková, 2016). Those that they employ are committed to the company. They have autonomy as part of their competitive advantage when utilising firm resources. A company that has intangible asset would be more proactive in pursuing the firm performance (Anderson & Eshima, 2013). Both the tangible and intangible assets of the company would be utilized for the firm to have an advantage over its competitors in the industry.

Two of the fundamental basis of resource-based view would be competitive advantage and business strategy (Barney, 1991). The resources used would be valuable and rare that is difficult to replicate that they can use it for the competitive strategy. Based on this, resources would be used wisely to generate better economic position for the company. At times, the resources that are valuable and rare would enable the company to reinvent and pursue research and development as they are the only ones that are able to do it (Auh & Menguc 2009). The company would be more innovative in their product and processes to achieve better firm performance. On the other hand, to have resources that are rare and valuable the company would take risk to acquire the resources for their competitive strategy (Hughes & Morgan, 2007). The firm understands the importance of resources that are valuable and rare.

Resource-based view is closely associated with the proactive environmental strategy (Hart, 1995). The company would utilize the resources and capabilities of the firm to make it in line with the company's environmental strategy and organizational performance. Young firms would use resource-based view in their strategic alliances to strive in the economy. Resources that the firm has would enable the firm to be proactive in building strategic alliances (Das & Teng, 2000) with other firms to have expansion in the new market. Firms that have unconventional marketing capabilities would have competitive aggressiveness. Walmart adopted a pricing strategy against their competitors to increase the market share that they have (Rahman et al., 2016). The firms that adopt these strategic alliances due to lack of resources would pursue innovative strategies that help them in their firm (Eisenhardt & Schoonhoven, 1996). In a study done on Chinese firms, a company that has effective entrepreneurial strategy will have high flexible employed resources as part of their resources portfolio (Su, Xie, Wang & Li, 2011). Flexibility in using the resources would make the firm innovative in their products and services (Rahman et al., 2016).

This theory can be linked with entrepreneurial orientation that the entrepreneurial resources like human capital and networks would be needed to determine the success of the firm. Human capital in the family firm would enable the firm to be autonomous in their organization. Family firm give empowerment to their workers as they trust the workers to work well in the firm. Thus, workers would have a sense of belonging in the company and this would help in the competitive advantage of the firm. The network of the company is essential for the company to perform well (Teece & Pisano 1994; Wu, 2007). A firm that has entrepreneurial orientation in mind would be able to use the resource by looking at the strategic network that they have and recognizing the prospect that the resources have to offer (Messersmith & Wales, 2013). The company that is entrepreneurial would use their limited resources towards their advantage. Family firms have certain resources that can either facilitate or stifle the activities that are related to be entrepreneurial (Habbershon et al., 2003; Westhead & Howorth 2007; Nordqvist, Habbershon, & Melin, 2008; Zellweger, Mühlebach, & Sieger, 2008). A study by Manikutty (2000) states that the resource based view is a good theory to understand how family firm can perform in India's emerging economy. Resources in the firm are important for it to adapt with an environment that is not stable (Chang, Lin, & Hou, 2014). In a dynamic environment, the firm would be more entrepreneurial as they would use resources to adapt to the current situation (Li & Liu, 2014). The firm would renew and enhance the resources in the current environment to be part of the competitive strategy in increasing the firm performance. Hence, with this is mind, resource-based view of the firm can be used to provide greater insight into the entrepreneurial orientation and family firm performance.

2.8 Overview of performance measurement

2.8.1 Financial Measurement

Nowadays, there are different ways that a company would assess their performance. One of the most commonly used forms of measurement would be to use financial information. It is considered as a 'traditional' form of measuring performance as it is based on accounting using earnings, return of investment, economic value added and shareholder value added. By using accounting measures, the direction of the firm can be clearly seen. However there are some disadvantages when using it, according to Verbeteen and Boons (2009) it has been seen as historical and backward looking. The financial information derived would not have an overview picture of the particular firm as the data would only provide the short-term or incorrect behaviour. The idea of using the past to predict the future contradicts. This has motivated the studies on other forms of measurement like nonfinancial measurement.

2.8.2 Nonfinancial Measurement

What is non-financial performance? It is defined as performance that is not measured using monetary terms. Examples of non-financial would be market share, customer satisfaction, innovation/new product turnover and employee turnover. Nonfinancial measurement has been considered to be more forward looking (Dossi & Patelli, 2010) as it can better predict the future performance, less measure on fixed asset and less manipulation on financial data. With the use of non-financial measurement, the company is able to connect various objectives as there is strategic linkage. Non-financial measurement offers a more comprehensive picture as it measures beyond the financial performance. It can include managerial actions that cannot be seen in financial reports. Besides that, it has direct relevance to operations which makes it easier for all levels of the organization to understand the objectives and strategies. The firm's internal process and external information (customer purchasing behaviour and competitors actions) are included in nonfinancial measurement. There are some limitations to use nonfinancial measurement only as the management may not clearly state/link the objective with their performance. Hence it may not be used as a substitute to financial measurement but to complement financial measures of performance (Dossi & Patelli, 2010).

Companies that use specific non-financial performance measurement focus more on the growth of the firm which is related to organizational culture. Firms that use the financial measurement would put more emphasis on financial objectives. The study suggested that the performance measurement is affected by both the internal and external characteristics.

2.9 Environmental Dynamism

An entrepreneurial activity of an organization is usually associated with the external environment variables. Firm environment is of the factors that would affect the individual's behaviour in decision making for the firm (Duncan, 1972).

The environmental characteristics would be part of the entrepreneurial behaviour of a firm. If the firm is in a dynamic/hostile environment where a greater need for innovation is needed, the firms will innovate to suit the current situation (Miller & Friesen, 1982). However in a stable environment this scenario is not applicable as the firm can just function on its own without the need to innovate and to keep abreast the current market situation. Thus, the external environment plays a part in the firm being entrepreneurial in its stance (Aboidun & Rosli, 2014). As entrepreneurial orientation is considered as part of the firm strategy, it has been suggested that environment factor would be an important factor to moderate any successful strategy (Martins & Rialp, 2013). External environment is considered an important factor that will influence entrepreneurial orientation (Davis, 2007). Thus, to understand entrepreneurial orientation it would be best to include the external environment factor as part of the study (Ucbasaran, Westhear & Wright, 2001; Stephen & Uhlaner, 2010). External environment would help the firm come up with different ways to react towards the current market situation in a resourceful manner (Gathungu, Aiko & Machuki, 2014). Firms need to adopt their resources to compete in the dynamic environment (Teece, 2007). The capability of the firm would not only depend on the resources and its potential but also the current environment that it is in (Sirmon & Hitt, 2009).

Researchers state that the environment is a multidimensional and can be divided into four dimensions which are complexity, munificence, uncertainty and dynamism (Galbraith, 1973; Dess & Beard, 1984; Tan & Litschert, 1994; Fuentes-Fuentes, Albacete-Saez & Llorens-Montes, 2004). Environmental munificence would be the capability of the environment to have enough resources for the firm to compete within (Fuentes-Fuentes et al., 2004). On the other hand, environmental complexity would be to which degree is the environment understood by the firm (Fuentes-Fuentes et al., 2004). Environmental dynamism has many variables which are unpredictability and changes in the environment as can be seen in the rate of the industry and market change (Dess & Beard, 1984), changes in consumer behaviour (Li & Liu, 2014) and government policy (Jiao, Alon & Cui, 2011) that would contribute to uncertainty. It can also be defined as the speed of change (Carpano, Chrisman & Roth, 1994) or factors that are constantly changing (Tan & Litschert, 1994) which would lead to uncertainty in calculating the environmental changes and its' effect on the organization (Lumpkin & Dess, 2001; Zhang, 2007; Hmieleski & Baron, 2009, Eroglu & Hofer, 2014). The intensity of uncertainty is outside of the firm's control. When this happens, the firm would need to adapt accordingly to the environment of the firm (Kim & Lim, 1988; Roth & Van der Velde, 1991; Baron & Tang, 2011).

Dynamic environment would motivate the firm to enhance their current situation by improving their current products and processes. A study in China shows that the environmental dynamism is one of the key factors that affect the firm's competitive advantage (Li & Liu 2014). The environment that is dynamic would enable the firm to have new business opportunities (Carsrud, Brannback, Elfving & Brandt, 2009). Hence in such an environment, the firms must be quick in responding to the changes in customer's needs, competitors' actions (Combs, Ketchen, Ireland & Webb, 2011). Researchers have stated that when the firm faced a business environment that is not stable they have the tendency to be more entrepreneurial and accomplish better performance compared to mangers in a stable environment (Lumpkin & Dess, 2001; Aragón-Correa & Sharma, 2003). Firms that are in an environment that is constantly changing would need to be flexible according to the environment to guarantee that the company can survive (Mthanti, 2012). Most of the industries have an environment that is changing (Davis, 2007). Hence the research chooses to focus on environmental dynamism.

2.10 Summary of the Chapter

This chapter reviewed the past studies and with that the research model was formulated based on the literatures reviewed. The following chapter would include the review of the relevant hypotheses and the all the variables of interest.

Chapter 3: Theory Development and Hypotheses

3.0 Introduction

A business would use entrepreneurial orientation in their strategy making practices that would help it identify and launch new ventures and initiative (Dess, Lumpkin & Eisner, 2007). This section would also review the previous studies on entrepreneurial orientation and develop the theoretical framework and hypotheses.

3.1 Review of relationship between entrepreneurial orientation and firm performance

One of the main goal of an organization is to perform well. They have been pursuing this endlessly by looking for growth and competitiveness in the company. There are some theories that would help the firm to exploit the market opportunities to improve their performance. This is where entrepreneurial orientation would come in and help the firm. Entrepreneurial orientation would be used to enhance the entreperneurial activites of a firm. It would increase the product/service innovation, introduce new busines creation and have strategic renewal. These are consistent with the three dimensions that is part of entrepreneurial orientation which are innovativeness, proactiveness and risk taking (Miller, 1983; Covin & Slevin, 1991). Another two dimensions, competitive aggresiveness and autonomy where introduced by Lumpkin and Dess (1996) to be part of the entrepreneurial construct.

The organization would need to adopt entrepreneurial orientation to perform better. It shows that entrepreneurial orientation would be a positive predictor of net income to sales ratio (Wiklund, 1999). When strategic decisions are made in an autocratic manner, entrepreneurial orientation would have a positive impact on the firm performance (sales growth) (Covin et al., 2006). In the study done by Pratono and Mahmood (2015) on SMEs in Indonesia, it states that there is a positive direct and indirect relationship of entreprenuerial orientation and financial performance.

There have been studies done on family business but there are not many focusing on family business and entreprenuership. Some literature has stated that a family business can be entreprenuerial (Naldi, Nordqvist, Sjo¨berg, & Wiklund, 2007). To survive in the changing market situation a family business would need to be entrepreneruial to cope with the surrounding. Thus, it would be better if the family business would use the entreprenuerial approaches in doing so.

Entreprenuerial orientation has been used by reasearchers to analyze the family business context by using the different dimensions. It is a one of the main theory that is used to study the entreprenuership in a family (Wiklund & Shepard, 2005). Not only in business but in family businesses that entreprenuerial orientation has been used by researchers. In his study, Zahra (2005) examined how the different types of family business character and ownership structure would impact risk taking in a firm. Risk taking is considered as one of the key dimensions of entreprenuerial orientation. Naldi et al. (2007), researched on the impact of risk-taking in small Swedish family firms and it has an impact on the factors on entreprenuerial orientation which are being innovative and proactive.

Based on the studies above, the different characteristics of family firm would affect the entreprenuerial orientation. It would be good to use the entrepreneurial framework to study the entrepreneuial spirit in family firm. Family firm is a complex structure that there are still a lot of work to be done to understand the situation of entrepreneurship in the family firm. Earlier studies on entreprenerial orientation has looked at some of the key dimensions but not the whole construct of it. According to Rauch et al. (2009) the family firm would have positive relationship between entrepreneurial orientation and performance.

Research done has stated that entrepreneurial orientation does influence firm performance to a certain extent (Lyon, Lumpkin, & Dess, 2000). The researches done would suggest that entreprenuership orientation would relate to the financial performance of the company (Miller 1983; Zahra, 1993). There are some studies that compare the link between different configurations of entreprenuerial orientation and performance. Entreprenuerial orientation would contribute positively with the firm performance (Arief, Thoyib, Sudiro & Rohan, 2013; Abebe & Angriawan, 2014; Filser & Eggers, 2014) as well as international performance (Wach, 2015) and new venture performance (Su, Xie, & Wang, 2015). The organisation would need to employ strategic flexibility and entrepreneurial orientation in order to enhance thier firm performance (Arief et al., 2013).

In a study of 413 small business Swedish firms, the entreprenuerial orientation has a significant positive relationship with small business performance (Wiklund & Shepherd, 2005). SMEs that has entreprenuerial orientation would be able to use the exploratory and exploitative activities to increase their performance (Abebe & Angriawan, 2014). In terms of the financial availability within the SMEs, the company would need to think on how to use thier entreprenuerial skills in order to perform better financially. By using entrepreneurial orientation, the company would be able to increase thier company growth as well (Filser, Eggers, Kraus & Malovics, 2014).

Entrepreneurial Orientation has been viewed as important for a firm to achieve superior performance (Lumpkin & Dess, 1996). According to Rauch et al. (2009) and Arzubiaga et al. (2017) the family firm would have positive relationship between entrepreneurial orientation and performance. On a study of 230 Spanish family firms, the more entrepreneurial firm would perform better as the strategic involvement of the board would affect the decision to be entrepreneurial (Arzubiaga, Iturralde & Maseda, 2014).

3.2 Hypotheses development

3.2.1 Innovativeness

Peter F. Drucker (1985) states “innovation is the specific tool for entrepreneurs to create an opportunity in a different business or service. They would need to search for the sources of innovation, the changes and their symptoms that indicate opportunities for a successful innovation by applying the principles of it.”

A successful entrepreneurship would have new development of products, process, opening a new market, sourcing for new materials and carrying out a new organization (Schumpeter, 1934). Societal, technological and market imperfections can progress because of innovation (Schumpeter, 1934). Innovation is viewed as one of the main characteristics of an entrepreneurial firm (Drucker, 1985).

In measuring the firm-level entrepreneurship, innovation is considered as one of the essential variable in this type of research (Miller, 1983). It has been viewed as either product-market or technological (process) innovation. By focusing on innovation practices it would be on marketing, product design or market research (Miller & Friesen, 1978). Previously the definition of innovation would be to develop new technologies or practices which are not available in the market. Innovativeness is viewed as the effort the organization has in introducing new products, services, technology and process. In current research, it is seen as a response to the challenges that the firm faces by having development of products and services, new administrative techniques and technologies (Knight, 1997). Based on this Lumpkin and Dess (1996) define innovativeness as “a firm’s propensity to engage in and support new ideas, novelty, experimentation, and creative processes that may result in new products, services, or processes.” A study on Mexico SMEs states that innovativeness of the company has high level of entrepreneurial orientation in the firm (Guzman, Pinzon-Castro & Lopez-Torres, 2016). This would in turn affect the performance of the company.

On the international front, the firm that is innovative would be able to perform. Innovativeness would be able to help in the sales growth of the firm which is part of the firm performance (Dai, Maksimov, Gilbert & Fernhaber, 2014). Long term goals of the family firm will push the firm to invest in research and development as part of the company's goal (Kotlar, Fang, De Massis & Frattini, 2014). The company would be looking to the future of the maintaining the company forward.

Innovation has an impact on firm performance. In the construct of entrepreneurial orientation, innovativeness would increase the firm performance (Miller & Friesen, 1978). Innovativeness positively influence small business performance (Wiklund & Shepherd, 2005). A study on Korean service business states that the greater the innovativeness the higher the performance of the organization. Innovativeness has a direct impact on the firm performance.

However, in a study done on Sri Lankan insurance industry where organizational innovation is not significant with innovation performance (Rajapathirana & Yan, 2018) Besides that, innovation does not significantly influence the sales margin of the company which is part of the company’s performance (Lööf, 2000). The study on manufacturing and service firms in Catalonia states that firm size do affect the research and development of the company where smaller firms will be invested in it whereas the medium size company would have less research and development (Segarra-Blasco, 2010). This shows that in some cases, the relationship between innovativeness and firm performance are not positive.

In a family business, innovation is important to be sustainable in keeping with the company vision. A single owner would be more innovative and would show greater entrepreneurial orientation (Miller, Le Breton-Miller & Lester, 2011).

Family firm governance would influence the decision to innovate and improve the performance of the company (Chrisman, Chua, De Massis, Frattini & Wright, 2015). The firm would spend more on the research and development (Block, 2012) as innovativeness has a strong and positive relationship with research and development performance (Resaei & Ortt, 2018). Family firm would act boldly to be more innovative as it has entrepreneurial tendencies. It would be innovative by introducing product/process or market innovation (Naldi et al., 2007). Innovative capabilities are part of the family firm to perform as it would need to grow and survive for future generations. By striving to survive for the future generations, the family firm would have a longer time to innovate. A firm that is innovative would devote the resources to innovation to increase the firm's performance and growth (Spriggs, Yu, Deeds & Sorenson, 2012). A firm that has positive factor on product innovation would have firm success (Kraus, Pohjola & Koponen, 2012a). Therefore given what was stated, it is proposed that:

H1a There is a positive relationship between innovativeness and family firm performance.

3.2.2 Proactiveness

Proactiveness is the firm's intensity in identifying and capitalizing on the available market conditions as it can engage in opportunistic expansion. It can be defined as the anticipation of future problems, needs or changes. This shows proactiveness is an important factor to entrepreneurial orientation as it means that a firm is forward looking. Miller and Friesen (1978) discussed that the firm's decision to be proactive would be to ask how it can respond to the competitive environment. It would look for opportunities to be in the driving seat of its competitors.

A proactive firm would be able to succeed in the international front. By using proactiveness the company would be able to increase their firm performance namely the sales growth of the firm (Dai et al., 2014). In a study done by Rezaei and Ortt (2018) on 279 high-tech Dutch SMEs, proactiveness has a strong and positive relationship with sales and marketing performance. A firm that is proactive would steer the organization's innovation in the company that it would affect the company's performance (Ejdys, 2016). This is line with a multiple case study done on Brazilian start-ups that states the company are proactive towards open and inbound innovation (Carvalho & Sugano, 2016). The company that is proactive would be looking to increase its performance. Conversely there are some studies where the construct of proactiveness is not significant with firm performance as can be seen on a study of 310 service firms in Austria (Kraus, 2013). In a study of 335 Icelandic firms, there is no significance between proactiveness and firm performance (Lechner & Gudmundsson, 2012).

Proactiveness is how a firm would relate to market opportunities by meeting the demand of the customers. It would take the initiative by acting in the most opportunistic way to shape the environment. The initiative effort that the firm takes when it is proactive would be use the environment to its advantage. As a firm is entrepreneurial oriented, it can be proactive in pursuing opportunities and will react to the competitors aggressively. Quick thinking and moving would help the firm to achieve organizational success in emerging markets.

It is the internal process that a firm can use to pursue opportunity of a new entry in current market issues. Lumpkin and Dess (1996)’s definition will be used in the study where it is "taking the initiative by anticipating and pursuing new opportunities and by participating in emerging markets". Proactiveness would involve tracking and monitoring changes in the business environment, consumer taste and technologies (Lumpkin & Dess, 2001). A company that is proactive would gain benefits as they are the first to enter the new market, thus having a higher hand in the industry. They would be considered the leader in the given industry.

A small business would be greatly influenced when proactiveness is used as part of their organizational strategy (Wiklund & Shepherd, 2005). Coulthard (2007) suggested in the embryonic stage of the firm, proactiveness is a critical factor for the firm to have performance improvement. In a study done by Lumpkin and Dess (2001), proactiveness would have a strong relationship with performance.

A family business that is proactive would capitalize on a trend to get ahead of the competition. Industries that would require the fast response of the company like the electronics industry would require the company to take advantage of the trend to be better than their competitors. A firm that reacts to the market first would have the benefit. As a family firm has long term goals to sustain the company, being proactive would enable the firm to invest in the future. The firm would be pursuing ahead of their time to be better than the competitors. An example would be Estee Lauder who envisioned her cosmetic products would be linked to fashion which she foresee the concept of luxury cosmetics counters in department stores that change the sales practices of the industry. Hence, it is proposed that;

H1b There is a positive relationship between proactiveness and family firm performance.

3.2.3 Risk-taking

The third component of the entrepreneurial orientation construct would be risk-taking. An entrepreneur is said to have the risk-taking behaviour as that is how the new firm is generated. What would make an entrepreneur different from the others would be the risk-taking component. A person who is an entrepreneur would want to be self-employed that he/she would take a lot of risk to work on their own. The variable of risk-taking has been well research (Miller, 1983). According to Lumpkin and Dess (1996) risk taking would include elements of opportunity capitalization, resource commitments, potential for returns, and uncertainty.

In the strategy context, Baird and Thomas (1985) would identify three different types of risk which are (1) venturing into the unknown, (2) committing a relatively large portion of assets, and (3) borrowing heavily. When a firm borrows heavily it would need to be able to pay back the debt that it borrowed. This would put the firm in a financially risky situation as it would have probability of loss or negative outcome (Lumpkin & Dess, 1996).

Another type of risk that a firm may face would be the resources that it has invested in a certain project. A firm can invest the resources in a specific product or it can be in terms of the financial amount put in the resources that is needed for a project. By being a risk taker the firm would be able to increase their motive to increase the organization's innovation that would help the performance of the firm in the long run (Dai et al., 2014). Service firms in Austria that are willing to take risk to innovate so that it would have a better performance in their company (Kraus, 2013). Brazilian start-ups have a moderate risk taking approach to open innovation (Carvalho & Sugano, 2016) which would impact the firm's performance.

There are some researches that do not support that risk taking and firm performance is significant. In a study on 331 Turkish firms in the manufacturing industry, risk taking does not have a significant relationship with firm performance (Zehir et al., 2015). This is can be seen as in a study on enterprises in North China, risk taking does not have a relationship with performance (Jia, Wang, Zhao & Yu, 2014). In terms of non-financial performance, risk taking does not have a positive relationship in a study on small Italian businesses (Milovanovic & Wittine, 2014). Not only does the relationship is insignificant it can also be negative as a research on 335 Icelandic firms show that the effect of risk-taking and performance is significant but negative (Lechner & Gudmundsson, 2012).

A firm that is venturing into the unknown would not be sure what is expected of them, that it is risky for the firm. It can be in terms of financial, resources or even venturing into the unknown market. If a firm has new development of products/services or even technology it would be considered as venturing into the unknown as the firm is not sure about the reaction of the market about the new ventures that it has.

Entrepreneurs are considered to be moderated or calculated risk takers. Most of the studies that are carried out look at risk-taking an individual construct of entrepreneurial orientation but it can be used at a firm-level. Zahra (1993) states that entrepreneurial activities like risk- taking would have an implication on firm performance. Risk taking would positively influence small business performance (Wiklund & Shepherd, 2005). A firm that is risk-taking would take on project with higher risk and this would in turn get a high level of return (Avlonitis & Salavou, 2007).

Family firms with a long term goal of surviving in the industry would have less risky types of contracts in terms of labour which is the resources of the organization (Gallo, 2004). This idea is supported by Dyer (2006) that states that the family firms has a limited pool for potential recruits as the family firm would only want to hire their own people. For example the DuPont family has been in the business for more than 200 years. A family firm that has a long horizon to invest in long term project which would make the firm invest more efficiently than non-family business (Anderson & Reeb, 2003). However, there are some studies that state that there is no genuine "long term" business policy that would make the firm not committed to take risk in order to survive (Gallo, 2004). Dess, Pinkham and Yang (2011) states that long term orientation of the family firm would avoid the firm from taking risk. Family firm that is risk adverse would negatively affect the business performance (Kim & Gao, 2013). This shows that when a family firm is willing to take risk it would affect the performance in a positive manner.

All businesses would be involved in certain degree of risk. The same goes for family firms in Malaysia. Thus, the family firm would need to take risk in order to pursue better performance. As such, this study proposed that:

H1c There is a positive relationship between risk-taking and family firm performance.

3.2.4 Autonomy

An entrepreneur would be someone who is single-minded enough to want to come up with their own business to challenge the current market situation. More often than not the entrepreneur would be self-employed. This shows that the organization would have the freedom for the individuals to express themselves in their creativity for entrepreneurship to occur. According to Lumpkin and Dess (1996) it is the independent action of individuals / team in developing an idea and or vision that would be fulfilled in the completion of the goal.

Autonomy can be used in the context of an individual or a team. In the organizational context, the firm would be able to pursue the project without being constricted by the organization. The factors that can constrict a firm from pursuing its project would be in terms of financial backing, resources or competitive rivals. The organization would be independent to pursue its project and make major decisions on its own. A firm that has autonomy would encourage innovation; promote the launching of entrepreneurial venture which would in turn increase the competitiveness and effectiveness of it.

There are two types of autonomy that has been supported by literature which are autocratic and generative mode. The autocratic mode would be the action of the individual in a firm. Autonomy is high when the entrepreneur is leading the firm accordingly. On the other hand, the generative mode would be the action of being entrepreneurial is being carried out by the members within the firm. The ideas that are generated would be given to the top management. A firm that is using this type of autonomy would have this action carried out by the lower level employees.

Mintzberg (1973) discussed that the decisive and risky action that a leader take would describe the entrepreneurial strategy that a firm has. It can be characterized as someone who has a centralized vision and strong leadership (Bourgeois & Brodwin, 1984).

The function of autonomy in the firm can be different according to the firm's size, management style or ownership (Lumpkin & Dess, 1996). A firm that has centralized leadership would be able to have a certain degree of autonomy. In his studies, Miller (1983) suggested that most entrepreneurial firms had autonomous leaders. Small simple firms have high level of entrepreneurial activity where the leader would have central authority and would be aware of the current technology in the market. The entrepreneurs in Czech Republic microenterprise that have a higher educational level would be more autonomous in their decision making (Civelek, Rahaman & Kozubikova, 2016). They know that there are some decisions that can be made without going through the whole company hierarchy. This would help the company in achieving better performance.

However, in a study of 39 listed Bahrain bourse, CEO’s duality or autonomy has a negative impact of the company’s return of assets which is part of the performance (Jain & Shao, 2015). The relationship of autonomy and non-financial performance is negative in a study on small Italian businesses (Milovanovic & Wittine, 2014). This reiterates the study as autonomy does not affect the performance of the firm in a study on small Icelandic firms (Lechner & Gudmundsson, 2012). The same goes for a research on 331 Turkish manufacturing firms where the autonomy factor of entrepreneurial orientation does not have a direct effect on innovation performance firms (Zehir et al., 2015). This is further enhance in a study on technology-based SMEs in Malaysia where there is no significance on autonomy and firm performance (Arshad, Rasli, Arshad & Zain, 2013). On top of that in a study on 248 companies in China, autonomy does not have a significant relationship with performance (Jia et al., 2014). This shows that sometimes autonomy and firm performance has an insignificant or negative relationship.

The autonomy given by the company would need to be aligned with the company core business so that the whole company is moving towards the same goal. Once the companies are moving towards the same goal, the company would be able to perform better. As a company that has autonomy would encourage its employees to work on side projects in concurrence with their work, the family firm would encourage it as it would be a source of creativity and entrepreneurial development (Lumpkin, Brigham & Moss, 2010). A family firm that has a goal to perform would be autonomous in their structure as to make enable long term investment and help key personnel in the company to make decision-making authority (Zahra, 2005). Autonomy would give independence to the firm to make decisions to strategize the assets without depending on strategic alliance. A firm would be able to do so as the company would have strategic planning.

A firm that has autonomy would motivate the employees to work in a positive manner which would lead to a higher performance in the firm. Research done by Coulthard (2007) suggested that the firm would not be entrepreneurial if the employees are not given autonomy in their work as it would be one of the factors that would improve the firm performance. Hence, this research proposed the following:

H1d There is a positive relationship between autonomy and family firm performance.

3.2.5 Competitive Aggressiveness

Competitive aggressiveness would be the firm's propensity to directly and intensively challenge its competitors to achieve a greater leverage in the market (Lumpkin & Dess, 1996). It is considered the reactive way that the firm enters the market with another competitor. An example of competitive aggressiveness is when a firm that come out with a new product would enhance the product to be better at and even lower price to outperform its competitors. It can also involve the energetically leveraging of other entrepreneurial activities of a firm like innovativeness/proactiveness to increase the competitive advantage (Lumpkin et al., 2010).

There are some studies that have no significance or a negative relationship between proactiveness and firm performance. Competitive aggressiveness and firm performance is not significant is a study done on Turkish manufacturing firms (Zehir et al., 2015).This reiterate the study on 248 enterprises in North China, competitive aggressiveness is not significant with corporate performance (Jia at al., 2014). Besides that, competitive aggressiveness does not have a positive effect on non-financial firm performance (Milovanovic & Wittine, 2014).

Family firm that has competitive aggressiveness would defend the position it has or enter the market aggressively in the same market as the competitor (Lumpkin & Dess, 2001). The factor of resources a firm that is competitive aggressive would defend the sources by using it wisely. Competitive aggressiveness would help the firm to create a niche for themselves and protect it from the new entrants in the market (Lumpkin & Dess, 2001). In study by Civelek et al. (2016) in Czech Republic micro enterprises, the decision makers that have a higher educational level would be have competitive aggressiveness as part of their company strategy. They understood the importance of striving to be the first in the business environment.

Porter (1985) suggested that there are three approaches to pursue existing firm which are (1) doing things differently; (2) changing the context and (3) outspending the industry leader. This shows that competitive aggressiveness would be the firms' reactive way to achieve a competitive advantage compared to their competitors.

In their study, Nordqvist et al. (2008) stated that there is little evidence that the business would have a head on rivalry with its competitors based on a study on multigenerational family firms. Family firm would have a competitive advantage compared to nonfamily firm as it can use the family's wealth and welfare to achieve the firm's goal (Anderson & Reeb, 2003). The family firm can use their personal asset to strengthen the firm (Dyer, 2006). The company that has family members in the firm would be able to capitalize on their strength at the same time understand their weaknesses (Brannon et al., 2012). Martinez, Stöhr and Quiroga (2007) state that family firms have the tendency to invest more efficiently as they would want to sustain the business in generations to come.

A firm has competitive aggressiveness when it wants to better than its rivals by having a responsive or reactive action (Kusumawardhani et al., 2009). This would translate into better firm performance. The greater is the competitive aggressiveness, the higher the performance of the organization. Lumpkin and Dess (2001) argued that competitive aggressiveness has certain significance on the firm performance. Therefore, the following hypothesis is proposed:

H1e There is a positive relationship between competitive aggressiveness and family firm performance.

3.3 Environmental Dynamism as the moderator

Environment dynamism is the unpredictable change in the a firm's environment. It is unpredictable as there is no patterns and regularities (Dess & Beard, 1984). Environmental dynamism would refer to the abiliy of the managers to predict the future events that would impact the organization (Khandawalla, 1977). A dynamic environment would foster the entrepreneurship behaviour of the firm (Khandawalla, 1987). When the firm is in a challenging environment it would look for ways to overcome this challenges by pushing itself to be more entreprenuerial (Miller, 1983). Technology and globalization would make changes in the firm's environment landcape that the firms would be more entrepreneurial to adapt to the changing environment (Kuratko & Audretsch, 2009). Small firm in a hostile environment would strive to have a higher financial performance (Dess et al., 1997). Entreprenuerial orientation would be affected by the external environment of the company (Abiodun & Rosli, 2014). This shows that environmental dynamism would play a part in the the entrepreurial activities of the firm.

Family businesses that are in different business environment would differ in terms of their business succesion strategy of continuity (Miller et al., 2007). Firms that have high EO has the tendency to strive for success in a dynamic environment that is affected by customer behaviour and would improve by giving innovative services (Miller, 1988). The more dynamic the environment, the more innovative the family firm would strive to be to innovating more products and services (Garg, Walters & Priem, 2003). Besides that, environmental dynamism that moderates the performance would provide more information for the top management for their firm strategy (Li & Simmerly, 1997). In a study on 87 SMEs in Namibia by Frese, Brantjes and Hoorn (2002), environmental dynamism moderates entrepreneurial orientation and firm success. According to Lumpkin and Dess (1996) an entrepernuerial firm that would be more risk-taking, have innovative products, proactive behaviour, competitive aggresiveness and autonomy to help it in the dynamic environment. Firms in a dynamic environment would have the tendency to make profits from innovation (Miller, 1988; Kreiser & Davis, 2010) and risky resources commitment (Kresier & Davis, 2010) compared to it being in a stable environment.

Using data from 102 companies by Zahra (1993), entreprenuership is said to have a positive influence on firm perfromance in a dyanmic growth and environment. However in a static environment the results were largely negative on the relationship of entreprenuership and firm performance. In a study by Ensley et al. (2006) enivronmental dynamism with entreprenurial leadership and new venture performance is linked. It would also have a positive impact on business performance in a dynamic environment (Frank, Kessler & Fink, 2010). A research by Wales, Shirokova, Sokolova and Stein (2016) stated that Russian SMEs have better entrepreneurial orientation in a firm that has dynamic environment. In terms of the strategy of the firm, environmental dynamism plays a part in the firm performance where it would affect the growth of the company.

3.3.1 Environmental dynamism and innovativeness

Environmental dynamism can be considered as a moderator as it would affect the entrepreneurial orientation of a firm (Covin & Slevin, 1989; Miller & Friesen, 1982). In terms of the innovativeness and environmetal dynamism, the more dynamic the firm is it would influence the decision makers to be more innovative (Miller & Friessen, 1982). A firm that is alert to the dynamic environment would be able to recognize the business opportunities and use it to their advantage to improve the firm's performance (Frank, Kessler, Mitterer & Weismeier-Sammer, 2012). The firm would be more innovative.

In Slovenia, environmental dyamism moderated innovativeness and the firm performance. The firm would look into making the products and process more innovative to compete in the market. The firm that is affected by the environment would be able to organize the resources of the firm wisely when planning to be more innovative (Abiodun & Rosli, 2014). In a dynamic environment, the company would employ high levels of innovativeness which would in turn increase the performance of the firm (Filser & Eggers, 2014). The family firm would look for more prospective to innovate according to the environment and not concentrate on old products but keep it fresh (Kessler & Chakrabarti, 1996). On the other hand, a study on Bulgarian firms shows that the relationship of entrepreneurial orientation and firm performance is not moderated by environmental dynamism (Davidkov & Yordanova, 2017). This can be seen in a research on Indonesian SMEs where the company would need a stable environment to innovate (Pratono & Mahmood, 2015). Environmental dynamism would not moderate innovativeness and firm performance as innovation would only happen in a stable environment (Perez-Luno, Gopalakrishnan, & Cabrera, 2014). Hence, the following hypotheses is proposed:

H2a The relationship between innovativeness and family firm performance is positively moderated by environmental dynamism.

3.3.2 Environmental dynamism and proactiveness

In a dynamic environment, the firm would need to be more proactive in order to have a better performance (Lumpkin & Dess, 2001). The external environment would affect the firm that one of the ways to improve would be to have proactiveness. When the environment and conditions are rapidly changing the firm would need to be more proactive to adapt as the changes are external. If they stay status quo, the firm would be left behind that it would have a negative impact on them. A firm that is proactive in an environment that is dynamic would be able to have a have a better firm performance (Sarkar, Echambadi & Harrison, 2001). However, in a research on small and micro business in Italy, it was stated that external environment does not moderate the relationship of performance and entrepreneurial orientation where proactiveness is one of the factors (Milovanovic & Wittine, 2014). This can also be seen in a study on firms in the Nairobi Securities Exchange where the external business environment is not significant with firm performance. On top of that in a study on 237 Taiwanese public firms, environmental dynamism partially moderate proactiveness and firm performance. A company that has high entrepreneurial orientation does not have a relationship with performance when environmental dynamism is low (Lee & Chu, 2014). This shows that there are some studies where proactiveness and firm performance is not moderated by environmental dynamism. Nevertheless, the manager of the firm that has a zeal for thier job would be more proactive in the dynamic environment (Adomako, Narteh, Danquah & Analoui, 2016) as they would like the best for their company. The family firm would also like to improve thier family firm performance in any environment they would be more aware of it. They would be more proactive in an environment that is dynamic. Hence, the relationship between family firm performance and proactiveness of the firm can be moderated by environmental dynamism. Therefore, the following hypotheses is suggested:

H2b The relationship between proactiveness and family firm performance is positively moderated by environmental dynamism.

3.3.3 Environmental dynamism and risk-taking

In the entreprenurial orientation construct, risk taking is part of the original construct suggested by Miller (1983). In a study done by Zahra and Pearce (1994), they concluded that the company that is risk-taking in and environmental dynamism would be positively related. The firm would want to strive in a dynamic environment that they would take risk in order to have better performance. However, in some studies, environmental dynamism would not moderate the relationship of risk taking and firm perfroamcne. In a study on 252 Korean SMEs, there is no moderating effect of environmental dynamism in the relationship between entrepreneurial orientation and firm performance (Kim & Kim, 2016). As risk-taking is part of the entrepreneurial orientation construct, environmental dynamism does not moderate the relationship between risk-taking and firm performance. This is further enhanced by a study where the relationship between risk-taking and family firm performance is not moderated by environmental dynamism (Hameed & Ali, 2011). According to Martins and Rialp (2013) environmental dynamism can moderate the strategy of the firm performance. Risk-taking is part of company strategy that it can be moderated by environmental dynamism. If they use the same methods in a stable environment, the firm may not be able to do well in their financial performance. This shows that there is relationship where environmental dynamism would be able to moderate risk taking and family firm performance. Hence, the following hypotheses is proposed:

H2c The relationship between risk taking and family firm performance is positively moderated by environmental dynamism.

3.3.4 Environmental dynamism and autonomy

Autonomy is part of the entreprenuerial orientation construct that would be used to enhance the family firm performance. In a study on Chinese private firms, it was found that they would have the autonomy to make decisions when the environment is dynamic to improve thier performance (Tan, 1999). The firms know the importance of making the right decisions on thier own without relying on the other parties when the environment is dynamic. Trust is important for family business to survive in a changing environment to increase their innovative capabilities (Wang, 2016). On the other hand, entrepreneurial orientation and firm performance is not moderated by environmental dynamism in a study on Bulgarian firms (Davidkov & Yordanova, 2017). This shows that autonomy and firm performance would not necessarily be moderated by environmental dynamism. In family business it is improtant to have the trust to do business and make autonomy decisions. This shows that environmental dynamism can be used to moderate the relationsip between autonomy and firm performance, it would be related. Therefore, the following hypotheses is suggested:

H2d The relationship between autonomy and family firm performance is positively moderated by environmental dynamism.

3.3.5 Environmental dynamism and competitve aggressiveness

The last construct in the entreprenuerial orientation would be competitive aggressiveness. The firm that has competitive aggressivenes would seek to be one step ahead of other firms in the same market. Studies show that the company would align their competitive strategy of the firm according to the environment (Wijbenga & Witteloostuijn, 2007). According to Lumpkin and Dess (2001), the firm would use competitive aggressiveness in an environment that is dynamic. In a dynamic environment, managers would be more competitive in the way that they do business to survive and thrive (Schilke, 2014). The firm would strive to survive that they would not sit on their laurels while the dynamic environment would affect their performance but be competitive. Some studies where environmental dynamism does not moderate the relationship of entrepreneurial orientation and firm performance as can be seen in a research on Korean SMEs (Kim & Kim, 2016). In terms of competitive aggressiveness and firm performance, environmental dynamism would not moderate the relationship as it would be low in a dynamic environment (Schilke, 2014). In a study by Chirico and Bau (2014), the family management would be more likely to be competitive in a dynamic environment. Firms that are more aggressive competitively would be able to perform better in an environment that is dynamic. This shows that environemtal dynamism would moderate competitive aggresiveness and family firm performance. Hence, the following hypotheses is suggested:

H2e The relationship between competitive aggressiveness and family firm positively performance is moderated by environmental dynamism

3.4 Theoretical Framework

Theory on entrepreneurial orientation has been developed and discussed in the past decades. External factors that would moderate the relationship between entrepreneurial orientation and family firm performance would be environmental dynamism (Wiklund & Shepherd, 2005).

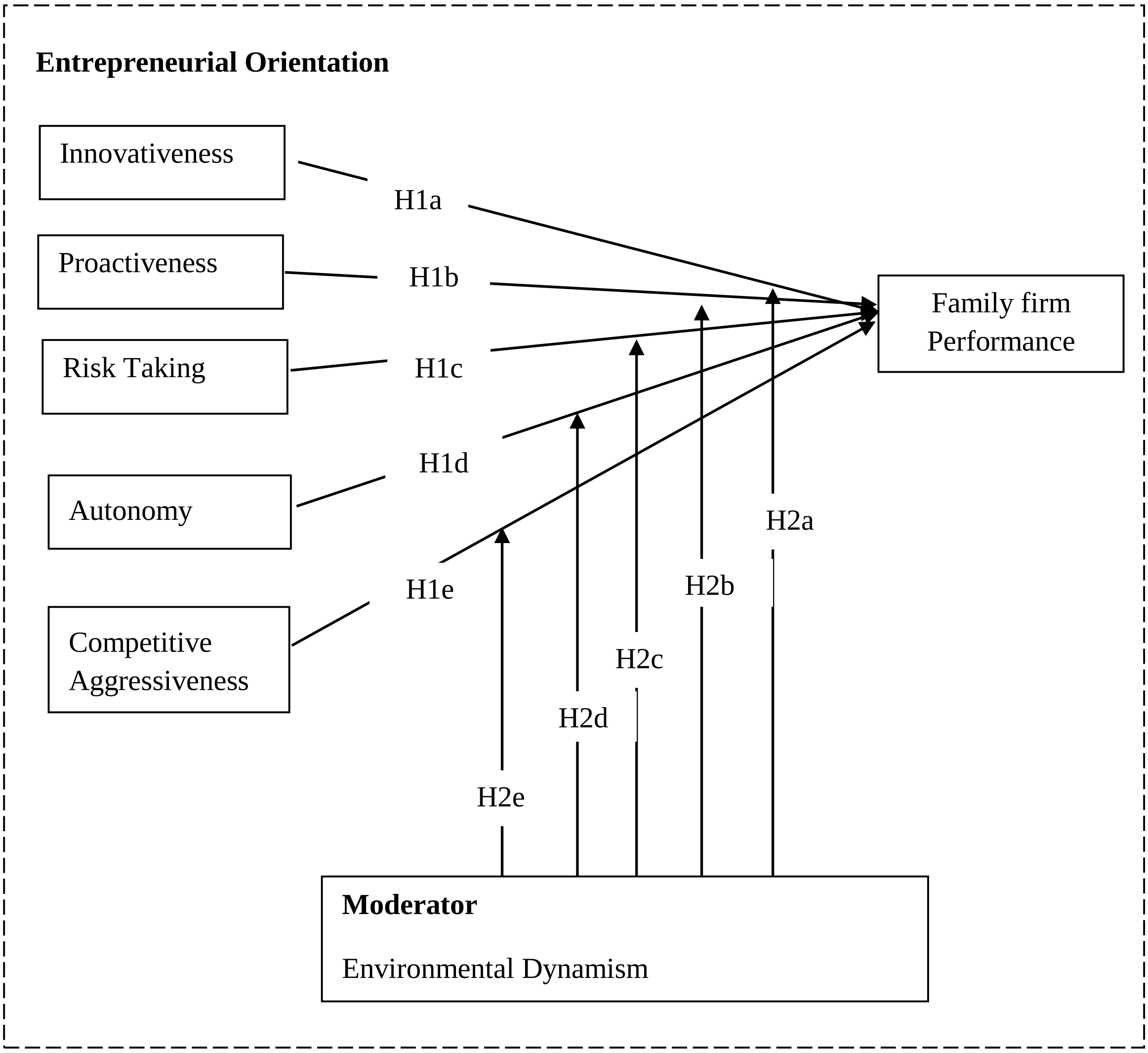


Figure 4: Proposed Conceptual Framework

In this study, the proposed framework would adopt the entrepreneurial orientation construct where the variables which are innovativeness, proactiveness, risk taking, competitive aggressiveness and autonomy would be treated as the independent variable. Family firm performance would be the dependent variable and environmental dynamism would be the moderator. This means that the family firm performance depends on the entrepreneurial orientation of the family firm. Depending of the environment of the company it would relate to the firm performance different.

3.5 Summary

The third chapter focused on the hypotheses development and the proposed theoretical framework based on the previous studies reviewed in chapter 2 under literature review.

Chapter 4: Research Methodology

4.0 Chapter Initiation

This chapter would focus on the research design, data collection method, sampling design, research tools, variables and measurement for the questionnaire and data analysis technique of this study.

4.1 Research Design

This section would focus on the research design. There are many ways to carry out a research that it would need to be designed in accordance to the objectives that is set out to be studied. This is in line with the study by Burns and Bush (2014) that states the research design would be a structured and organized plan that would focus on the research goals. In order to achieve the research goals, the quality research design would need to include specific details and ways to get the information needed for the research objectives.

4.1.1 Types of Research Design

A research design can come in many forms which are quantitative, qualitative or mixed methods (Creswell, 2014). This research study uses the quantitative research design method. When the quantitative method is adapted numerical data would be collected and analysed using statistical tools. By doing this, the researcher would be able to explain the data collected in regards to the research questions and objectives. Sekaran and Bougie (2016) in their study states that the quantitative research design would help in establishing the impact of the hypothesis proposed. The degree of relationship between both the dependent and independent variable can be studied when the quantitative design approach is used. As this study employs the quantitative research, the data collection method used would be questionnaires. Questionnaires would be distributed to the target respondents to collect the necessary information needed to carry out the research.

4.1.2 Nature of Research Design

There are types of research designs which are exploratory or conclusive research. Conclusive research can be further divided into two categories which are causal or descriptive research. An exploratory research design would be the way information that is collected in an informal and unstructured way (Burns & Bush, 2014). This method is used when the researchers have little information about the issue or the elements involved. On the other hand, the conclusive research would focus on the expanding the theory, hypotheses and relationship between the variables. It would be done by collecting data using the quantitative method and large data samples are used for a better accuracy analysis (Malhotra, Birks & Wills, 2017). Causal research would be emphasising on the cause and effect of the relation. Descriptive research is used to describe the descriptive data of the population studied while not having a causal relationship between the elements (Brannon, 1992). It can be used to investigate the society's behaviour towards the problem, definition of a problem or occurrence (Sekaran & Bougie, 2016). This type of research design is on explaining the happening or event in the target population in a factual and accurate way. However, descriptive research would be used to measure the population as it. The research objective of the study is on understanding to what extend does environmental dynamism moderate the relationship between entrepreneurial orientation and the positive relationship between entrepreneurial orientation and family firm performance. Hence, the descriptive method is used.

4.1.3 Time Horizon of Research Design

Time horizon in research design would be the time that is used for the research. There are generally two types of time horizon which are the longitudinal or cross-sectional study. This research would use the cross-sectional study due to the constraints in time and the structure of the research. The research intends to look at an event or issues at a certain time frame that the cross- sectional study would be the most suitable method.

4.2 Data Collection Methods

Data collection method would be the procedures that the researcher uses to collect and measure the information from the target population. The data collected can be classified as being a primary or secondary data (Sekaran & Bougie, 2016).

4.2.1 Primary Data

According to Malhotra et al. (2017), the information that is collected directly from the target population to analyze certain objectives and an issue would be considered as primary data. This type of data can be obtained through different types of ways like questionnaires, survey, interviews, observation and the list goes on. In order to get the information from the respondents in regards to the objective of the study the researcher would collect it from individuals and focus groups. As the way of collecting data is more on a personal basis in primary data collection, the cost incurred would be higher compared to the secondary data collection method (Malhotra et al., 2017). This research study uses a set of survey questionnaire to collect relevant data from the target respondents. Questionnaire is an instrument that has questions designed to collect information which can be measured in accordance to the scale given (Sekaran & Bougie, 2016).

4.3 Sampling Design

Sampling would mean the taking a sufficient amount of the components from the whole population (Sekaran, 2003). The sample obtained from the total population would have the general characteristics that can be used by needed by the researchers in assuming the characteristics is the same as per the whole population (Sekaran & Bougie, 2016). This would be a better approach rather than collecting from the whole population which would be near impossible to do so as the cost and time incurred would be high. The sampling is the representative from the whole population. There are different types of sampling designs which are known as nonprobability or probability sampling. When designing the sampling needed for the study, the researcher would need to have the population of study, sampling location, sampling element, techniques used for sample size to have a more conclusive sample (Malhotra & Peterson, 2009).

4.3.1 Target Population

Target population would be the set of data used by the research to make implications related to the study (Lavrakas, 2011). However, based on Malhotra (2009) study, the target population would be the overall elements of the group involved. The target population of the study would be Malaysia's SMEs that fulfil the criteria of being a family business. SMEs are referred to as the small medium size companies. One of the reasons that family businesses falls into the category of SMEs were chosen as part of the study as it is the driving force of the country's economy contribution to the GDP. The focus of this research is on the entrepreneurial orientation of the company and firm performance. Hence, family businesses in SMEs are the target population of the research.

4.3.2 Sampling Element

Respondents in the sample from the target population are known as the sampling elements (Malhotra & Peterson, 2009). There are many samples that can be obtained from the target population that the characteristics that is needed for the study needs to be narrowed down to provide a better understanding of the data collected. In this study the target population is Malaysian SMEs. There are many different types of SMEs in Malaysia that the main element that is needed to find the right SMEs would be the family firm based on the definition by Chua et al. (1999) which are as follows: (1) family owned and family managed; (2) family owned but not family managed and (3) family managed but not family owned. The main research topic of this particular study is on the entrepreneurial orientation and family firm performance. The right person to answer the questionnaire is important in the sampling element. In this case, the person would be from the middle management and above as they would be dealing with the strategy making activities. The manager and above is the right person chosen as part of the sample as they have the actual situation reflected of the entrepreneurial orientation and family firm performance.

4.3.3 Sampling Size

As the name suggest, sampling size would be the number of samples needed in the research study (Sekaran & Bougie, 2016). According to Malhotra et al. (2017), the number needed for the research can be based on certain factors such as importance of the decision, nature of research, nature on analysis and limitation on resources. In this research study, partial least squares structural equation modeling (PLS-SEM) is used. When this method is used, the sample size needed to run PLS-SEM would be based the different elements such as significance level, statistical power, minimum coefficient of determination (values) used in the model and maximum quantity of arrows pointing at a latent variable (Hair, Hult, Ringle & Sarstedt, 2013a). Looking at the different criteria, the minimum sample size would be based on the number of arrows pointing to the variable in the model shown in the table below (Marcoulides & Saunders, 2006). As there are a total of five arrows pointing to the dependent variable, the sample size for this study would be at least 70. Hoyle (1995) in his study suggested that the sample size that is effective in carrying out the study would be between 20-100 samples.

Table 1

Sample size effective for the study

Minimum sample size required	**Maximum number of arrows pointing at a latent variable in the model**
52	2
59	3
65	4
70	5
75	6
80	7
84	8
88	9
91	10

Source: Marcoulides and Saunders (2006)

4.3.4 Sampling Location

Sampling location would be the place where the survey questionnaire is administered to the target respondents to get the information needed for the study. This research study was conducted in different states in the country such as Kuala Lumpur, Penang, Perak, Sabah, Sarawak and Johor. It is mostly done in the major cities as according to the Economic Census, Department of Statistics Malaysia (2016) it has the highest concentration of SMEs. The concentration of SMEs in the six states are Kuala Lumpur at 14.7%, Johor at 10.8%, Perak at 8.3%, Penang at 7.4%, Sarawak at 6.7% and Sabah at 6.2%. The questionnaires were disseminated by mail to the SMEs nationwide.

4.3.5 Sampling Frame

Sources or complete list of information that could denote the target population would be known as the sampling frame (Malhotra et al., 2017). The list can be found in an electronic database, customer database, company registrar, telephone directories, and mailing list just to name a few. As this research focuses on the family SMEs in Malaysia, the database employed for the sample would be from the SME Corporation Malaysia database as they would have the list of the different types of SMEs in Malaysia. This website has a record of the SME businesses in the country. At the same time, it states the different industry that the company is in. The database used for the sample would be in the year 2017.

4.3.6 Sampling Technique

There are methods to collect the sample of the study for the research that it would be the sampling technique. According to Sekaran and Bougie (2016), there are two types of sampling design that can be adopted for the research study known as probability sampling and nonprobability sampling. As this particular research has a sampling frame, the research would use the probability technique to collect the data needed. In probability sampling, there are two methods which are the unrestricted or simple random sampling and the restricted or complex probability sampling plans (Sekaran & Bougie, 2016).

Based on both of the sampling method for probability sampling, the simple random sampling method was chosen to be used in this study based on the SME database. The reason simple random sampling was chosen would be the fact that all the elements in the population have an equal chance of being chosen as part of the study (Sekaran & Bougie, 2016). This type of sampling method would also have the least bias as well as generalization of the elements needed for the data. As the database in the system is available this technique is the most favourable sampling method.

4.4 Questionnaire

This study would use questionnaire as the main research instrument. Questionnaire is a set of questions that have been set to collect the relevant information needed to gauge the relationship of entrepreneurial orientation and family firm performance from the SMEs in Malaysia (Sekaran, 2003). There are a few ways in setting the questions in the questionnaire which would be the structured and unstructured question. In the study, the questions were structured in close ended questions. Besides that, the respondents would need to select the answers based on the multiple choice given that would best portray their situation. This type of questions were used as part of the questionnaire as it would ease the respondents in answering the questions as they would need less time and effort in doing it (Malhotra et al., 2017).

4.4.1 Questionnaire Design

Questionnaire design is an important factor into getting the relevant information needed for the research study. It would be the process where the researcher would need to analyze the format of the questions by listing down the number of questions needed for each factor, design the way questions is expressed, arrangement of the questions in the survey as well as a logical layout of the questions to collect the information from the respondents (Burns & Bush, 2014). A lot of thought is put into organizing the questionnaire as it is an important tool that the researcher would need to make sure that it is reliable and valid (Burns & Bush, 2014). The questionnaires would not be complicated and difficult to fill in so that the target respondents would be able to fill in the valid response needed for the research study. A questionnaire design that is poor would be ineffective in serving its purpose towards the research.

Language in the questionnaire plays an important part in the questionnaire. English is used as the language for the research study as it is a universal language as well as the second most common language in Malaysia. Most of the people in Malaysia would understand the language. The questions that are set are based on the past researchers study. According to Leong, Hew, Tan, and Ooi (2013), questions adapted from past researchers as the questions are valid and reliable thus, it is used in this research. The questions were set in a language that is easy to understand using the layman's term so that the target respondents can answer accordingly. Besides that, the instructions given to the respondents were clear to follow. The table on the next page lists the summary of the questionnaire design.

Table 2

Summary of the questionnaire design

Section	Questions quantity	Questions	Types of scale used
A	8	Questions under this section would be on the firm information	Nominal and Ordinal scale
B	30	Questions under this section would be on the independent variable of the research study	Interval scale
C	6	Questions under this section would be on the moderator of the research study	Interval scale
D	11	Questions under this study would be on the dependent variable of the research study	Interval scale
E	9	Questions under this study would be on the demographic of the respondent	Nominal and Ordinal scale

4.4.2 Pretesting

Pretesting is when a small scale of the respondents answers the questions to test the suitability of the questions and respondents understanding on the questions**.** This step is important before the questionnaire is administered to the target population as it would make sure that the questions listed in it can be easily understood. It would limit the vagueness in the questions and the issue that would arise when the questions are not properly structured (Sekaran & Bougie, 2016). By doing this step, the researcher would be able to identify the problems beforehand and amend the questionnaire before administering it to the target population. In this research study, a total of 35 respondents from the target population were randomly selected to contribute their feedbacks for the pretesting of the questionnaire. The respondents that were selected gave their feedback on the clarity to the instructions, grammar of the questions, and the logic of the questions set as well as the overall effort in providing answers to the questions. The overall feedback of the respondents was positive that the questionnaires were used for large data collection.

4.5 Constructs Measurement

4.5.1 Instruments on measuring Entrepreneurial Orientation

The construct of entrepreneurial orientation is divided into three dimensions which are risk-taking, proactiveness and innovativeness (Covin & Slevin, 1989) and another two more dimension added which are competitive aggressiveness and autonomy (Lumpkin & Dess, 1996). There is a lot of research that focuses on the entrepreneurial orientation in terms of innovativeness, proactiveness and risk-taking (Swierczek & Ha, 2003; Richard Barnett, Dwyer & Chadwick, 2004; Dai et al., 2014; Lisboa, Skarmeas, & Saridakis, 2016).

In Covin and Slevin (1989)'s instrument, the items of innovativeness, proactiveness and risk taking dimension were assessed coming up to a total of a nine-item construct. There are some studies that assume that all sub dimensions would make equal contributions to the overall level of the entrepreneurial firm construct (Krieser et al., 2002).

Nonetheless, there are some scholars that state that entrepreneurial construct is not one dimensional as some firms may be more innovative rather than risk-taking or proactive (Lumpkin & Dess, 1996). Following this, the entrepreneurial orientation would be based on the multidimensional approach.

4.5.2 Instrument on measuring Innovativeness

There has been extensive amount of research on the measurement of innovativeness of a company. It can be measured by looking at how the company employs technological in their business in terms of the product/market. In the study done by Wiklund and Shepherd (2005) a firm that has innovation would be keen to have innovative practices. The questionnaire is designed with the Likert scale of one to seven. According to Lumpkin and Dess (1996) the firms would have innovativeness if it is willing to try a new product line or other new technology will lead in the technological advancement in the product. Calatone et al. (2002) states that innovativeness can be measure by trying out for new business ideas, having new process and using new and creative ways. It can also be measured by the research and development in a firm by calculating the number of R&D employees in the firm, the number of new products and services and the changes in the product/process lines that are quite dramatic (Covin & Selvin, 1989; Naldi et al., 2007).

4.5.3 Instrument on measuring Proactiveness

The study uses the Lumpkin and Dess (1996)'s definition of proactiveness which is "the firm would take the initiative by anticipating and pursuing new opportunities by participating in emerging markets". The questionnaire is designed with the Likert scale of one to seven. According to Venkatraman and Ramanujam (1986) a proactive firm would seek out new opportunities that may or may not be related to the present and is constantly on the lookout for business that can the acquired. Firms that have procativeness as part of their entrepreneurial orientation would have a strong tendency to be ahead of other competitors in coming up with new ideas or products, be the first organization to introduce new products/services, administrative techniques and initiate actions which competitors respond to (Colvin & Selvin, 1989; Naldi et al., 2007). Acedo and Jones (2007) states that a proactive firm will believe in an idea and no obstacle will prevent them from implementing it.

4.5.4 Instrument on measuring Risk-Taking

There are different ways to measure the risk-taking construct. Organizational threats are prevalent in every organization. According to Lumpkin and Dess (1996) there is no firm that has no risk in their organization. In most cases, the organization would have risk as when it first started. The entrepreneur would need to take risk to start a new business, be it the acceptance of the products in the current market down to the changing market environment. The three risk that a firm would have to take into account that it wants to have are the heavy borrowing, the resources that is used in the firms' project and unknown market environment.

The questionnaire is designed with the Likert scale of one to seven. Miller (1983), Covin and Selvin (1989) and Naldi et al. (2007) suggested to measure risk by the number of risky R&D projects that the company is undertaking and the resources that the company commit to pursue new projects. Firms that are risk takers would be opened to new ideas that have not been used Hornsby, Kuratko and Zahra (2002) and selling within new markets that have high risk (Acedo & Jones, 2007). A risk taking firm would take bold acts according to the nature of the environment and adopt bold aggressive posture to maximize the probability of exploiting potential opportunities (Covin & Selvin, 1989; Naldi et al., 2007). According to Venkatraman and Ramanujam (1986), risk taking firms would encourage their workers to take calculated risk with new ideas.

4.5.5 Instrument on measuring Autonomy

In an organizational setting, the firm would be autonomous when it would use resources, go out the lines of authority and promote risk taking based on new ideas and promising breakthrough (Lumpkin & Dess, 1996). The questionnaire is designed with the Likert scale of one to seven. The firm would have a high number of corporate venture conducted by R & D department that is not part of the company strategy, has a high effect that employees initiate to the top management to help the firm strategic direction, involves workers in implementing innovation even by ignoring procedures and promotes risk taking based on new ideas and promising breakthrough (Covin & Selvin, 1989; Naldi et al., 2007). According to Hornsby et al. (2002), autonomy can be measured by providing freedom in using their own judgment and give responsibility to the workers on how the job is done.

4.5.6 Instrument on measuring Competitive Aggressiveness

There are several ways to measure competitive aggressiveness. The questionnaire is designed with the Likert scale of one to seven. Covin and Slevin (1989) and Naldi et al. (2007) suggested that the firms can be measured by being very aggressive and intensely competitive and one that typically adopts a very competitive "undo-the competitors" posture. The firm's competitive aggressiveness can be measured by seeing if they set ambitious market-share goals and take steps to achieve them, spend aggressively compared to competitors and have high investments to improve market share and competitive position (Venkatraman & Ramanujam, 1986). One of the measurements under competitive aggressiveness would be to see if the firm has high allocation of resources for improving market positions faster than competitors (Lumpkin & Dess, 1996).

4.5.7 Instrument on measuring Environmental Dynamism

In this research, environmental dynamism would be considered as a moderator between the entreprenuerial orienation construct and firm performance. It would be measured on a one to seven Likert scale in the questionnaire. According to Jaworski and Kohli (1993), it can be measured by using the following, "the actions of competitors (local and foreign) in our major markets were changing rapidly", "technology changes in our industry were rapid and unpredictable", "the market competitive conditions were highly unpredictable", "customers' product preferences changed quite rapidly", "changes in customers' needs were quite unpredictable" and "the business cater to the same customer base that we have in the past".

4.5.8 Instrument on measuring Firm Performance

Performance can be assessed using the single item measures like asking the respondents to evaluate their firm performance over the last three years that is relative to competitors (Lumpkin & Dess, 2001). Net profit and gross profit would be used to average out the profitability of the firm (Lumpkin & Dess, 2001). A subjective method of measurement of performance can be chosen as there are firms that are hesitant to give the financial data (Firoirto & LaForge, 1986). The studies done in this are from different industries that it would be difficult to directly compare between the companies (Gul, 2011).

Matsuno and Mentzer (2000) states that the scale for firm performance would include the business unit's sales growth relative to major competitors over the past 3 years, ROI of the business unit and the percentage of sales generated by new products over the past 3 years relative to major competitors. In a study by Jaworski and Kohli (1993) the overall performance of the company in relation to competition would need to be measured in a firm performance.

Table 3

Brief overview of the adaptation on the instruments for questionnaire

Constructs	Section in questionnaire	No. of items	Source
Innovativeness	Section B	6	Covin & Slevin (1989) Calantone, Cavusgil, & Zhao (2002) Naldi et al. (2007)
Proactiveness	Section B	6	Venkatraman & Ramanujam (1986) Covin & Slevin (1989) Acedo & Jones (2007) Naldi et al. (2007)
Risk-Taking	Section B	6	Venkatraman & Ramanujam (1986) Covin & Slevin (1989) Hornsby, Kuratko & Zahra (2002) Acedo & Jones (2007) Naldi et al. (2007)
Competitive Aggressiveness	Section B	6	Venkatraman & Ramanujam (1986) Covin & Slevin (1989) Lumpkin & Dess (1996) Naldi et al. (2007)

Autonomy	Section B	6	Covin & Slevin (1989) Hornsby, Kuratko & Zahra (2002) Naldi et al. (2007)
Environmental Dynamism	Section C	6	Jaworski & Kohli (1993)
Performance	Section D	11	Firoirto & LaForge (1986) Jaworski & Kohli (1993) Lumpkin & Dess (2001) Matsuno & Mentzer (2000) Gul (2011)

4.5.9 Scale of Measurement

The scale of measurement is used to identify the weightage of the each variable in the research study (Sekaran & Bougie, 2016). In general, there are 4 types of measurement of scale which are nominal, ordinal, interval and ratio. The way to measure the construct would be by giving numbers to each of the variables according to certain rules (Hair, Money, Samouel & Page, 2007). The scale that is set for each construct would ease the data analysis which would be able to give the data needed to answer the research question (Sekaran & Bougie, 2016).

4.5.9.1 Nominal Scale

Nominal scale is where the subjects would be allocated a category (Sekaran & Bougie, 2016). The purpose of this scale would be to identify the data but not suitable if the data is to be listed according to its importance (Hair et al., 2007). This scale is used in Section A and Section E to find the firm information and demographic of the target respondents. Two types of scale were used which are the category scale and dichotomous scale. The category scale is where it contains multiple items for the respondent to give one answer. On the other hand, dichotomous scale would be where the respondents would choose either one of the two answers list such as gender which would be divided into male or female which would list either "yes" or "no" (Sekaran & Bougie, 2016).

4.5.9.2 Ordinal Scale

The arrangement of the variables to show the differences among the answers would allow them to be categorized to its' priority is known as the ordinal scale (Sekaran & Bougie, 2016). The ordinal scale would help the researcher to rank the subject according to its importance. This scale is used in both Section A and Section E where the questions are used to collect the firm information and the respondents' demographic profile. In the questions set in this section, the respondents were to give one answer from the multiple options stated.

4.5.9.3 Interval Scale

Interval scale would allow the researchers to collect data that can be used in arithmetical operations in statistics (Sekaran & Bougie, 2016). By employing this scale, the researcher would be able to calculate the means and standard deviation on the information given by the respondents on the variables in the research study (Sekaran & Bougie, 2016). Section B, C and D uses the interval scale. The seven-point Likert scale for measurement is used to mark the answers given in the data collection. The level of agreement and disagreement towards the questions can be measured by the researcher based on the answers given by the respondents in the scale. According to Burns and Bush (2014), a seven- point Likert scale includes the following option, Strongly Disagree, Disagree, Slightly Disagree, Neutral, Slightly Agree, Agree, and Strongly Agree.

4.5.9.4 Summary of Scales used in Questionnaire

Table 4: Summary of Scales used in Questionnaire

Item	Type of scale used	Type of rating scale used
Family members in the firm	Nominal scale	Category scale
Type of business ownership	Nominal scale	Category scale
Position in the company	Ordinal scale	Category scale
Number of years in the company	Ordinal scale	Category scale
Number of employees	Ordinal scale	Category scale
Company's industry	Nominal scale	Category scale
Company age	Ordinal scale	Category scale
Company sales turnover	Ordinal scale	Category scale
Age	Ordinal scale	Category scale
Gender	Nominal scale	Dichotomous scale
Marital Status	Nominal scale	Dichotomous scale
Ethnic group	Nominal scale	Category scale
Age (business started)	Ordinal scale	Category scale
Education level	Ordinal scale	Category scale
Innovativeness	Interval scale	Likert scale
Proactiveness	Interval scale	Likert scale
Risk-Taking	Interval scale	Likert scale
Competitive Aggressiveness	Interval scale	Likert scale
Autonomy	Interval scale	Likert scale
Environmental Dynamism	Interval scale	Likert scale
Profitability	Interval scale	Likert scale

4.6 Data Processing

Data that is collected from the respondents is known as raw data as it has yet to be processed and analyzed (Saunders, Lewis & Thornhill, 2009). The data would need to turn from raw data to data that can be used for statistical analysis. It would need to go through a certain steps before it can be considered useful. The data would be checked, edited, coded, transcribed and clean. This step is essential to ensure that the data is complete, precise and suitable for analysis and interpretation.

4.6.1 Data Checking

The first step of data processing would be to check the data. According to Malhotra et al. (2017), the questionnaires would be checked and reviewed to make sure the answers given would be up to the standard needed in the research. At this stage, questionnaires that are not complete or received after the last date would not be accepted into the next stage. This would help the researcher in discovering the problems in the early stage of the data processing (Malhotra & Peterson, 2009) as they would be able to take the necessary steps before the other stage.

4.6.2 Data Editing

The next stage would be data editing where the data would be reviewed to increase the accuracy of the data collected (Malhotra, 2009). The questionnaires that reach the stage but have certain outliers would not proceed to the third stage.

4.6.3 Data Coding

The third stage would be data coding. At this stage, the answers collected through the questionnaires would be assigned numerical codes (Saunders et al., 2009). By assigning a code to the data, the researchers' time and errors in entering the data into the system would be reduce. It would ease the researchers in data entry into the system as well.

4.6.4 Data Transcribing

In the data processing process, data transcribing would be the fourth step. Once the code is given to the data collected from the respondents the data would be inputted into the computer (Malhotra & Peterson, 2009). The data in this research study was inputted in the excel sheet format and then transferred into the SmartPLS software application**.**

4.6.5 Data Cleaning

The last stage in the data processing would be data cleaning. In this stage the researchers would identify and discard questionnaires that contain errors or have inconsistencies from being further analyzed. This is essential to maintain the quality of the data (Devi & Kalia, 2005). According to Malhotra (2009), this stage is similar to the data editing which is known as the second step in data processing. Nevertheless, this stage is done to ensure that the data analyzed would be right as data cleaning includes more details in ensuring the right data is used.

4.7 Data Analysis

Data analysis is the systematic process where the statistical techniques are used to change the data into useful information (Sekaran & Bougie, 2016). Based on the transformed data, the researcher would be able to have a better understanding which would help in the research study. This step is important as the data would confirm if the hypothesis stated in the research is supported or not (Sekaran & Bougie, 2016). The statistical tool used to analyze the data would be the SmartPLS software version 2.0.

4.7.1 Descriptive Analysis

Descriptive analysis is used to explain the sample dataset. It would reveal the general respond from the target population (Burns & Bush, 2014). The descriptive measure in this study is employed to summarize the basic findings from the sample.

4.7.1.1 Frequency Distribution

Frequency distribution is usually used to categorize the personal data or demographic of the target respondents (Sekaran & Bougie, 2016). It can be shown in a few ways such as tabular or graphical format. This style of presentation would clearly show the number of frequency for each category. In this research, frequency distribution was used for both the respondent's demographic and firm profile.

4.7.2 Statistical Analysis

The software Partial Least Squares Structural Equation Modeling (PLS-SEM) from SmartPLS is used in this research study. It was developed by Ringle, Wende and Will (2005). This structural equation modeling is known as the second generation multivariate data analysis which is widely used in business research. One of the reasons that structural equation modeling is widely used would be a researcher would be able to have the complete statistical means that can help in evaluating and modifying the theoretical model. On top of that, it can help in developing further theory (Anderson & Gerbing, 1988). However, in this study, PLS-SEM is used for the theory development. This software would be able to highlight the signs that would explain the variance in dependent variables depending on the measurement model features. Another reason that PLS-SEM is a good substituted to covariance – based (CB-SEM) would be PLS-SEM can run on small sample size. Besides that it would be able to have a greater predictive accuracy and adopt applications that do not have a strong theory background and model specification is vague (Hwang, Malhotra, Kim, Tomiuk & Hong, 2010). When adopting, PLS-SEM as a tool, the two step approach was strictly adhered to as recommended by Anderson and Gerbing (1988).

Bootstrap is one of the methods used under PLS-SEM. It assumes that the data is not normally distributed by using a repetitive random sampling that replaces it from the original sample. By doing this, it would have the standard errors needed for hypothesis testing (Hair, Ringle & Sarstedt, 2011). This method would help the researcher to determine the significance of the estimated coefficient (Henseler et al., 2009).

4.7.2.1 Measurement Model Evaluation

The first step in the statistical data analysis would be to validate the model. Besides that the model should be reliable. It has to be examined comprehensively (Hair, Ringle & Sarstedt, 2013b). This research study would use the composite reliability (CR) test to determine the reliability of each construct. Cronbach's coefficient alpha would be used to measure the internal reliability consistency. According to Bagozzi and Yi (1988), the threshold for the composite reliability would be 0.60. On the other hand, Cronbach's alpha coefficient would be between zero and one. The α value would need to have a minimum of 0.70 (Nunnally & Bernstein, 1994). It would be better if the coefficient has a higher value. The table below shows the values of the different Cronbach's alpha.

Table 5

Scale of Cronbach's alpha range

Level of Reliability	Alpha Range
Poor reliability	0.60 and less
Fair reliability	0.61 to 0.70
Good reliability	0.71 to 0.80
Very good reliability	0.81 to 0.95

Source: Sekaran and Bougie (2016)

The measurement for the validity of the reflective model would be both the convergent and discriminant validity. Convergent validity would show the degree the two measures of a common construct would have (Carlson & Herdman, 2010). This can be measured by using the average variance extracted (AVE) test. When the latent variable of each construct is measured, the minimum of 0.50 would be needed to ensure that the construct is valid (Kline, 2015). For the measurement of the discriminant validity of the model, the heterotrait-monotrait ratio of correlations (HTMT) is used. HTMT would be the estimation of the correlation among the construct. To ensure that the reflective model has the discriminant validity, the HTMT value would need to be smaller than one. This test would also make certain that the construct measure is exclusive in representing the variables of interest and not overlap the other construct measurement in a particular structural equation model (Hair, Black, Babin & Anderson, 2010).

4.7.2.2 Structural Model Evaluation

Generally, PLS-SEM would be the statistical tool used when the structural model is more complex and the sample size is smaller (Hair et al., 2011). The core objective of the PLS-SEM would be to measure the coefficient of determination and the level of significance of the path coefficient. When it is measured, it would be able to clarify the variance of the target variable. The acceptable level of the research would be as follows, 0.75 is considered substantial, 0.50 would be moderate and 0.25 is weak (Hair et al., 2011). Each indicator of the coefficient parts were measured and concluded as the standardized beta coefficient. Once the coefficients path is measured, t-statistics and p-value were measured. It would determine if the developed hypothesis are significant.

4.7.2.3 Assessing the Predictive Power

To ensure that the structural model can determine the variables there would have a Q^2 value to the model according to Hair, Sarstedt, Hopkins and Kuppelwieser (2014). The Q^2values can be classified into three levels which are small (0.02), medium (0.15) and large (0.35) (Cohen, 2013).

Effect size would be to examine the intensity of the relationship between the variables. The part that has a high value of effect size would suggest that the variable can be explained by the particular variable. It is also classified in a similar manner as the Q^2 value which are small (0.02), medium (0.15) and large (0.35) (Hair et al., 2014).

4.8 Conclusion

This chapter focuses on the methodology of the research study which is the research design, data gathering methods, sampling design and research tools. On top of that it includes the construct measurement, data processing and analysis of data. The next chapter would be on the analysis and interpretation of data.

Chapter 5: Data Analysis

5.0 Chapter Overview

The results of the analysis were computed using the SmartPLS version 2.0 software. This chapter would include the patterns and analyses of the results from the various analysis techniques. This would be applicable to the research questions and proposed hypotheses.

5.1 Response rate

A total of 1000 questionnaires were distributed via mail to the SMEs around the country. Out of the questionnaires sent to the companies, 410 were returned and usable. Bearing that in mind, the response rate for the research study was about 41%. According to Sekaran and Bougie (2016), for a research study to be sufficient a minimum of 30% is needed as the response rate. A good response rate is important as it can contribute an accurate and meaningful result. This would also show the results of the entire target population. Further analysis of the questionnaires showed that there was missing values of more than 5% and were discarded. The questionnaires were discarded as the first criteria of the questionnaire which is to be a family business was not fulfilled. The remaining questionnaires which are 350 were sent for further analysis using the SmartPLS software.

5.2 Descriptive Analysis

5.2.1 Frequency Distribution of Respondents' Demographic Profile

Section E of the questionnaire is based on the personal background information of the target respondents.

5.2.1.1 Gender

Table 6

Gender

Gender	Frequency	Percentage
Male	263	75.1%
Female	87	24.9%
Total	350	100%

Table 6 presents the gender information of the target respondents. The majority of the target respondents are male, which they constitute of 75.1% of the total target respondents while female accounted for the remaining 24.9%.

5.2.1.2 Age

Table 7

Age, frequency and percentage of the respondents

Age	Frequency	Percentage
Below 20 years old	10	2.9%
Between 21 to 30 years old	46	13.1%
Between 31-40 years old	81	23.1%
Between 41-50 years old	115	32.9%
Between 51-60 years old	85	24.3%
61 years and above	13	3.7%

The table 7 presents the age of the respondents. Most of the target respondents are between 41to 50 years old at 32.9%. The second highest would be those between the ages of 51 to 60 years old at 24.3%, followed by 31 to 40 years old at 23.1%. Respondents between the ages of 21 to 30 years old are at 13.1%, while those 61 years old and above have a frequency of 3.7%. The smallest percentage would be for the respondents below 20 years old at 2.9%.

5.2.1.3 Marital Status

Table 8

Marital status of the respondents

Marital Status	Frequency	Percentage
Married	282	80.6 %
Single	68	19.4%

Of the total respondents in table 8, 282 are married at 80.6% and 68 are single at 19.4%.

5.2.1.4 Education Level

Table 9

Education level of the respondents

Education Level	Frequency	Percentage
High School	112	32.0 %
Certificate	66	18.9 %
Diploma	85	24.3 %
Bachelor Degree	79	22.6 %
Post-graduate	8	2.3 %

Table 9 shows the highest education level of the respondents are high school at 32%. The second would be at diploma level at 24.3% followed by bachelor degree at 22.6%. Respondents who have certificate level would be 18.9%. Lastly, level of education of the respondents at post-graduate level is at 2.3%.

5.2.1.5 Ethnic Group

Table 10

Ethic group of the respondents

Ethnic Group	Frequency	Percentage
Malay	41	11.7 %
Chinese	282	80.6 %
Indian	26	7.4 %
Others	1	0.3 %

Table 10 shows the ethnic group details of the target respondents. The majority of the target which is 80.6% is Chinese. The second would be Malay at 11.7% and Indian at 7.3%. Other types of ethnic group would be 0.3%.

5.2.1.6 Age when the business was started

Table 11

Age of the respondents when the business started

Age when the business was started	Frequency	Percentage
Below 20 years old	35	10.0 %
Between 21- 30 years old	206	58.9 %
Between 31-40 years old	95	27.1 %
Between 41-50 years old	13	3.7 %
51 years and above	1	0.3 %

Table 11 illustrates the age when the respondents started the business. The majority of the respondents that started the business would be between 21-30 years old at 58.9%. The second would be between 31- 40 years old at 27.1%, followed by below 20 years old at 10%. Respondents that started the business between 41-50 years old make up about 3.7%. There is one respondent at 51 years old and above which is about 0.3%.

5.2.2 Frequency Distribution of Firm Profile

Section A of the questionnaire is based on the family firm profile.

5.2.2.1 Family members in the firm

Table 12

Family members in the firm

Family members in the business	Frequency	Percentage
1-4	140	40 %
5-10	97	27.8%
11-14	75	21.4%
15-20	26	7.4%
More than 20	12	3.4%

Table 12 shows the number of family members in the firm. Most of the firms have 1-4 family members in the firm at 40%. The second would be 5 to 10 family members at 27.8%. The third would be 11 to 14 members at 21.4%. Firms that have 15 to 20 family members is at 7.4 % of the total percentage. The lowest percentage would be firms that have more than 20 family members at 3.4%.

5.2.2.2 Type of business ownership

Table 13

Type of business ownership for family firm

Type of business ownership	Frequency	Percentage
Family owned and family managed	239	68.2 %
Family owned not family managed	56	16 %
Family managed but not family owned	55	15.8 %

The type of business ownership is presented in table 13. The highest percentage for type of business ownership is family owned and family managed at 68.2 %. The second would be family owned not family managed at 16%. The smallest percentage would be family managed but not family owned at 15.8%.

5.2.2.3 Position in the company

Table 14

Position of the respondent in the company

Position in the company	Frequency	Percentage
Business Owner	175	50 %
Business manager	99	28.2 %
Company Founder	59	16.9 %
Other	17	4.9 %

Table 14 presents the information of the respondent's position in the company. The highest would be business owner at 50 %. The second would be the business manager at 28.2 %, followed by the company founder at 16.9 %. The smallest would be other where the position of the respondent is at the managerial level with the percentage of 4.9 %.

5.2.2.4 Number of years in the company

Table 15

Number of years in the company

Number of years in the company	Frequency	Percentage
2 years or less	20	5.7 %
3 to 5 years	57	16.3 %
6 to 10 years	108	30.9 %
11 to 20 years	119	34 %
21 years or more	46	13.1 %

Table 15 presents the number of years the respondents are in the company. The highest would be 11 to 20 years at 34 %. The second would be 6 to 10 years at 30.9 %. The third would be 3 to 5 years at 16.3 %. This is followed by 21 years or more at 13.1 %. The lowest would be 2 years or less at 5.7%.

5.2.2.5 Number of full time employees

Table 16

Number of full time employees in the company

Number of full time employees	Frequency	Percentage
Fewer than 5	57	16.3 %
5 to 30	138	39.4 %
31 to 75	111	31.7 %
76 to 200	26	7.4 %
More than 200	18	5.2 %

Table 16 presents the number of full time employees in the company. Most of the company has 5 to 30 employees at 39.4 %. The second would be 31 to 75 employees in the company at 31.7 %. The third would be fewer than 5 employees at 16.3 %. The fourth would have 76 to 200 employees in the company at 7.4 %. Companies that have more than 200 employees would be the smallest number at 18 with a percentage of 5.2%.

5.2.2.6 The business industry of the family firm

Table 17

The business industry of the family firm

Industry	**Frequency**	**Percentage**
Manufacturing	31	8.9 %
Primary Agriculture	23	6.5 %
Construction	24	6.9 %
Mining and Quarrying	18	5.1%
Entertainment	18	5.1 %
Manufacturing-related services (research and development (R&D), warehouse etc..)	16	4.6 %
Hotels and Restaurants	52	14.9 %
Professional and ICT services	29	8.3 %
Business Activities	70	20 %
Private Education and Health	22	6.3 %
Financial Intermediation	13	3.7 %
Other	34	9.7 %

The table 17 presents the business industry of the family firm. Most of the family firm are in the business activities at 20 %. The second would be in hotels and restaurant industry at 14.9%. The third would be other types of industry at 9.7 %, followed by manufacturing industry at 8.9 %, professional and ICT services industry at 8.3 %, construction industry at 6.9 %, primary agriculture industry at 6.5 % and private education and health at 6.3%. Mining and quarrying industry has the same percentage with the entertainment industry at 5.1 %. However, manufacturing-related services are lower than manufacturing at 4.6 %. The smallest would be financial intermediation at 3.7%.

5.2.2.7 Age of the company

Table 18

Age of the company

Age of the company	Frequency	Percentage
Less than 5 years	30	8.6 %
6-10 years	104	29.7 %
11-15 years	130	37.1 %
16-20 years	34	9.7%
more than 21 years	52	14.9 %

The table above (table 18) presents the information of the family firm's age. Most of the company is 11 to 15 years at 37.1 %. The second would be 6 to 10 years at 29.7%. The third would be more than 21 years at 14.9 %. Companies that are 16 to 20 years are at 9.7 %. The smallest would be companies that are less than 5 years at 8.6 %.

5.2.2.8 Yearly sales turnover rate of the company

Table 19

Yearly sales turnover rate of the company

Sales turnover rate yearly	Frequency	Percentage
Less than RM 300,000	57	16.2 %
RM 300,001- RM 3,000,000	72	20.6 %
RM 3,000,001-RM 15,000,000	98	28 %
RM 15,000,001- RM20,000,000	86	24.6 %
RM 20,000,001-RM50,000,000	27	7.7 %
more than RM 50,000,000	10	2.9 %

Table 19 shows the yearly sales turnover rate of the company. Most of the companies have a yearly sales turnover rate of RM 3, 000, 001 to RM 15, 000, 000 at 28 %. The second would be RM 15, 000, 001 to RM 20, 000, 000 at 24.6 %. The third would be RM 300, 001 to RM 3, 000, 000 at 20.6%. This is followed by the yearly sales turnover rate of less than RM 300, 000 at 16.2 %. Yearly sales turnover rate of RM 20, 000, 001 to RM 50, 000, 000 has a percentage of 7.7 %. The smallest would be yearly sales turnover rate at more than RM 50, 000, 000 at 2.9%.

5.3 Statistical Analysis

The research model is examined using the Partial Least Squares Structural Equation Modelling (PLS-SEM) to analyze the research hypotheses. There are several reasons as to why this has been chosen. This approach (PLS-SEM) can be used for both the reflective and formative measurement model (Diamantopoulos & Winklhofer, 2001). This statistical approach is used as it has the ability to analyze a small sample size (Hensler, Ringle & Sinkovics, 2009; Chin, Marcolin & Newsted, 2013). It is recommended that in the family firm research where the sample size is smaller and the path model has a complex construct (Sarstedt et al., 2014).

5.3.1Common Method Bias Test (CMB)

Data collected has the tendency to be bias as it is a self-reported data. There are some ways to ensure that the data collected has the quality needed to carry out the research. This would be the common method bias test. In this study, the correlation matrix method was used. According to Bagozzi, Yi and Phillips (1991), the common method bias is usually evidenced by extremely high correlations ($r > 0.9$). The correlation matrix shows that the highest interconstruct correlation in each subsample is below 0.9. The research study has communicated with the respondents clear instructions on the questionnaire and provides the respondents anonymity to lower the possibility of CMB issue. Thus, the CMB issue does not exist.

Table 20

Correlation matrix

	Innovativeness	Proactiveness	Risk Taking	Competitive Aggressiveness	Autonomy	Environmental Dynamism	Firm Performance
Innovativeness	1						
Proactiveness	.796**	1					
Risk Taking	.784**	.832**	1				
Competitive Aggressiveness	.790**	.826**	.858**	1			
Autonomy	.727**	.783**	.801**	.811**	1		
Environmental Dynamism	.573**	.583**	.620**	.614**	.653**	1	
Firm Performance	.717**	.696**	.763**	.763**	.761**	.572**	1

**. Correlation is significant at the 0.01 level (2-tailed).

5.3.2 Multicollinearity

Table 21

Multicollinearity of the data

Independent Variables	VIF
Autonomy	4.436
Competitive Aggressiveness	5.504
Environmental Dynamism	2.020
Innovativeness	3.749
Proactiveness	5.085
Risk Taking	5.503

Variance inflation factor (VIF) and tolerance values were used to examine the multicollinearity problem in the research. Multicollinearity will arise when the coefficients between the independent variables are too high. The testing in this research is done to ensure that this does not happen. As can be seen in Table 21, all the VIF values are less than 10 (Nunnally, 1978) and the tolerance values are greater than 0.10 as suggested by Kline (2015).Thus, based on this assumptions it can be concluded that multicollinearity problem does not exist.

5.3.3 Measurement Model Evaluation

Construct reliability needs to be evaluated using both the Composite Reliability (CR) and Cronbach's alpha to estimate the internal consistency of the construct. Table 22 shows the values for all the 7 constructs. As can be seen in the table all the constructs exceed the satisfactory range of 0.70. The reliability of the coefficient of Cronbach's alpha would normally be in the range of 0 to 1. The closer the coefficient of Cronbach alpha is to 1.0 the greater would be the consistency of the internal items of the scale (Gliem & Gliem, 2003). It would be better if the coefficient has a higher value. This shows that the values have a good to excellent range.

Table 22

Composite Reliability (CR) and Cronbach's α of the data

Constructs	No. of items	Composite Reliability (CR)	Cronbach's α
Autonomy	6	0.935	0.916
Competitive Aggressiveness	6	0.950	0.937
Environmental Dynamism	6	0.941	0.926
Firm Performance	11	0.976	0.973
Innovativeness	6	0.943	0.927
Proactiveness	6	0.933	0.914
Risk Taking	6	0.939	0.922

Table 23

Average Variance Extracted (AVE) test of the data

Constructs	**AVE**
Autonomy	0.705
Competitive Aggressiveness	0.759
Environmental Dynamism	0.728
Firm Performance	0.790
Innovativeness	0.734
Proactiveness	0.700
Risk Taking	0.720

The validity of the research model needs to be established that both the convergent and discriminant validity test were used on the data collected. To test the convergent validity, Average Variance Extracted (AVE) test were carried out. Table 23 shows the values for AVE for all the constructs. According to Hari et al. (2011), the AVE value should be at least 0.50. As can be seen in the table, all the values are well above 0.50. This shows that the convergent validity of the research model has been achieved.

Table 24

HTMT inference test on the data

	Original Sample (O)	Sample Mean (M)	Bias	2.50 %	97.50%
Competitive Aggressiveness -> Autonomy	0.875	0.875	0.000	0.822	0.915
Environmental Dynamism -> Autonomy	0.709	0.708	-0.001	0.621	0.786
Environmental Dynamism -> Competitive Aggressiveness	0.659	0.658	-0.001	0.559	0.747
Firm Performance -> Autonomy	0.805	0.805	0.000	0.747	0.854
Firm Performance -> Competitive Aggressiveness	0.799	0.799	0.000	0.745	0.843
Firm Performance -> Environmental Dynamism	0.601	0.601	-0.001	0.496	0.695
Innovativeness -> Autonomy	0.787	0.787	0.000	0.724	0.840
Innovativeness -> Competitive Aggressiveness	0.848	0.847	0.000	0.794	0.890
Innovativeness -> Environmental Dynamism	0.618	0.617	-0.001	0.520	0.712
Innovativeness -> Firm Performance	0.754	0.754	0.000	0.689	0.806
Proactiveness -> Autonomy	0.855	0.855	-0.001	0.803	0.898

Proactiveness -> Competitive Aggressiveness	0.893	0.892	0.000	0.850	0.927
Proactiveness -> Environmental Dynamism	0.633	0.632	-0.001	0.530	0.731
Proactiveness -> Firm Performance	0.737	0.737	-0.001	0.660	0.799
Proactiveness -> Innovativeness	0.864	0.864	0.001	0.794	0.915
Risk Taking -> Autonomy	0.871	0.871	0.000	0.813	0.916
Risk Taking -> Competitive Aggressiveness	0.923	0.923	0.000	0.897	0.946
Risk Taking -> Environmental Dynamism	0.671	0.670	-0.001	0.573	0.760
Risk Taking -> Firm Performance	0.804	0.804	0.000	0.752	0.848
Risk Taking -> Innovativeness	0.846	0.846	0.000	0.793	0.889
Risk Taking -> Proactiveness	0.906	0.906	0.000	0.865	0.937

The HTMT results were analyse to assess discriminant validity of the research model. The table above shows that the confidence interval for HTMT inference test for both the lower and upper has the value of less than 1. This indicates that discriminant validity is achieved with this method.

By using both tests, the reliability and validity of the measurement model were established.

5.4 Hypotheses Testing

This research study uses the PLS-SEM method to assess the proposed research hypotheses. Table 25 has the original sample which is the beta sample, the t-statistics, p value and result of the hypothesis. The structural model of the study in figure 5 shows that there is a variance of 68.6% for entrepreneurial orientation construct with family firm performance. Based on table 25, the strongest direct effect path would be autonomy to family firm performance compared to the rest (ß= 0.279; t=3.550). Conversely, the lowest direct effect path would be proactiveness to family firm performance (ß =-0.158, t=2.020). The relationship between proactiveness and family firm performance has a p-value of p <0.05 at 0.043 which is has a low significance. This other statically significant paths (t > 1.96, p >0.05) are innovativeness to family firm performance (ß=0.225, t=3.505), competitive aggressiveness to family firm performance (ß=0.235, t= 3.173) risk taking to family firm performance (ß=0.255, t=2.982). This shows that all the five variables of entrepreneurial orientation are positively related to family firm performance. The strongest influence on family firm performance would be autonomy followed by risk taking and competitive aggressiveness. This shows that the hypothesis for the direct effect of all the variables are supported which are H1a, H1b, H1c, H1d and H1e.

PLS-SEM analysis was conducted to investigate the moderating effects of environmental dynamism and family firm performance and all the paths in the research model (Figure 5). The results of the PLS moderators was tabulated in Table 25. The results revealed that proactiveness and family firm performance is positively moderated by environmental dynamism (ß=-0.226, t=2.498) which shows that H2b is supported. On top of that, the relationship has the exact p-value at 0.013 which is within the range of p < 0.05. However, the result shows that the other variables do not have a significant path as it does not fulfill the cutoff t-value (t > 1.96) and p-value (p >0.05).The results that are not supported are innovativeness to family firm performance positively moderated by environmental dynamism (ß= 0.045, t=0.625), risk taking to family firm performance positively moderated by environmental dynamism (ß = 0.117, t=1.438), competitive aggressiveness to family firm performance positively moderated by environmental dynamism (ß =-0.054, t=0.623) and autonomy to family firm performance positively moderated by environmental dynamism (ß=0.026, t=0.293). This shows that only proactiveness has a relationship with family firm performance when it is moderated by environmental dynamism. Based on the table 25, for the moderating variable, the only hypothesis that is supported is H2b and the other hypotheses which are H2a, H2c, H2d and H2e is not supported.

In conclusion, the structural model supports six out of the ten hypotheses that was presented in the thesis which are H1a, H1b, H1c, H1d, H1e and H2b.

Table 25

Hypotheses Testing Table

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values	Results
Autonomy -> Firm Performance	0.279	0.279	0.079	3.550***	0.000	Yes
Autonomy*Environmental Dynamism -> Firm Performance	0.026	0.012	0.087	0.293	0.770	No
Competitive Aggressiveness -> Firm Performance	0.235	0.232	0.074	3.173**	0.002	Yes
Competitive Aggressiveness*Environmental Dynamism -> Firm Performance	0.054	0.055	0.087	0.623	0.533	No
Environmental Dynamism -> Firm Performance	0.064	0.070	0.051	1.254	0.210	No
Innovativeness -> Firm Performance	0.225	0.223	0.064	3.505***	0.000	Yes
Innovativeness*Environmental Dynamism -> Firm Performance	0.045	0.043	0.071	0.625	0.532	No
Proactiveness -> Firm Performance	-0.158	-0.154	0.078	2.020*	0.043	Yes
Proactiveness*Environmental Dynamism -> Firm Performance	-0.226	-0.210	0.09	2.498*	0.013	Yes
Risk Taking -> Firm Performance	0.255	0.253	0.085	2.982**	0.003	Yes
Risk Taking*Environmental Dynamism -> Firm Performance	0.117	0.115	0.081	1.438	0.150	No

1. t = 1.96, P < 0.05 *
2. t = 2.58 p<0.01**
3. t = 3.3 p < 0.001***

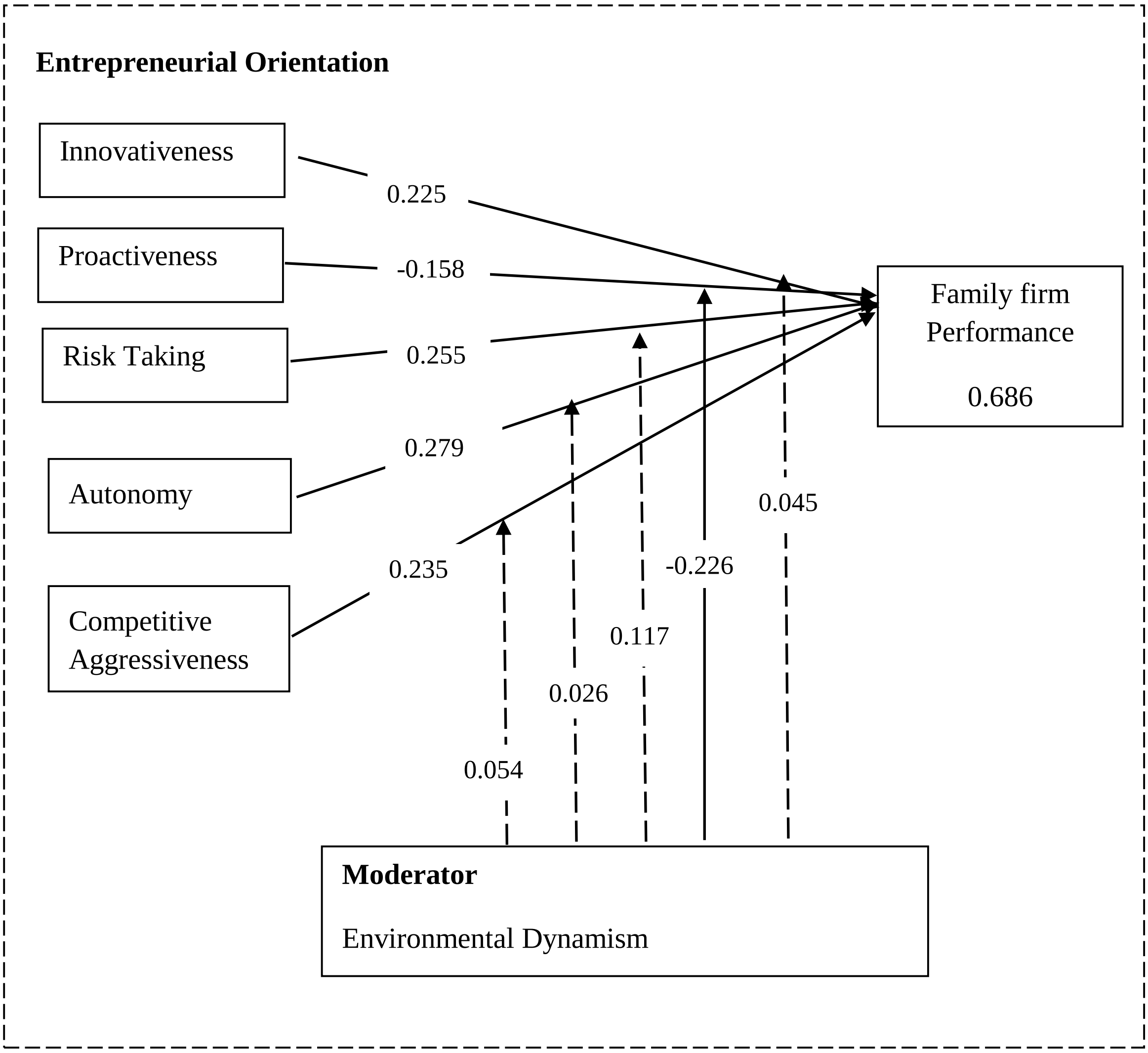


Figure 5: Result for Structural Model (Original Sample)

Table 26

Fit Summary

	Saturated Model	Estimated Model
SRMR	0.044	0.044

Standardized Root Mean Square Residual (SRMR) for saturated and estimated model are both at 0.044 as shown in table 26. Hair, Hult, Ringle and Sarstedt (2017) stated that a value less than 0.08 is considered a good fit.

5.5 Assessing Predictive Power

Table 27

Predictive relevance, Q^2

	SSO	SSE	Q^2 (=1-SSE/SSO)
Autonomy	2,100.00	2,100.00	
Competitive Aggressiveness	2,100.00	2,100.00	
Environmental Dynamism	2,100.00	2,100.00	
Firm Performance	3,850.00	1,882.50	0.511
Innovativeness	2,100.00	2,100.00	
Proactiveness	2,100.00	2,100.00	
Risk Taking	2,100.00	2,100.00	

The Stone Geisser's Q2 value is to assess the predictive relevance of the structural model as shown in table 27. According to Hair et al. (2014), Q^2 value is important to indicate the relevance of the structural model is relevant in explaining the endogenous variables. It can be classified into three levels which are small at 0.02, medium at 0.15 and large at 0.35 (Cohen, 2013). The table shows that Q^2 for family firm performance is more than 0.35 at 0.511 indicating that the integrated model is highly relevant in predicting the constructs.

Table 28

Effect sizes, f^2

	Firm Performance
Autonomy	0.056
Competitive Aggressiveness	0.032
Environmental Dynamism	0.007
Innovativeness	0.043
Proactiveness	0.016
Risk Taking	0.038

Table 28 shows the results of effect sizes, f^2 for the path. As mentioned by Hair et al. (2014) a path that has a high value f^2 would imply that the endogenous variable can be strongly explained by the exogenous variable. The test is measured by using a blindfolding method. It can be divided into three different levels similar predictive relevance where 0.02 is small, 0.15 indicated medium and 0.35 would be large. From the table above, environmental dynamism would have a small effect size. However, proactiveness and competitive aggressiveness would have a medium impact on family firm performance. Autonomy, innovativeness and risk taking would have a large effect size on family firm performance.

5.6 Conclusion

Chapter 5 has provided the summary of the data analyses using the SmartPLS and SPSS software. The next chapter will be on the discussion about the key findings, inferences of study, weakness of the studies as well as suggestions for future studies.

Chapter 6: Discussion and Conclusion

6.0 Chapter Initiation

Chapter six is made up of four parts; it would provide the insights on the research study findings, implication of the study, limitation of the research as well as the recommendations for studies on the topic in the future.

6.1 Summary of Statistical Analysis

A total of complete sets of 350 questionnaires were being processed and analysed using SmartPLS software.

6.1.1 Descriptive Analysis

6.1.1.1 Frequency Distribution

In this research study, most of the respondents were male which is about 75.1% whereas the remaining would be female respondents at 24.9%. In terms of ethnicity, majority of the respondents are Chinese (80.6%), married (80.6%), between the age of 41 and 50 years old (42.9%) and has an education at diploma level (24.3%). Besides that, the most respondents started the business between the age of 21 and 30 years old at 58.9%.

For the firm level, most of the family firms have 5 to 10 family members in it at 27.8%. The firm would most likely be family owned and managed at 68.2%.

The respondents of the questionnaire would be the business managers of the firm at 28.2%. The number of years the respondent has been in the firm would be 11 to 20 years at 34%. Most of the family firm has 5 to 30 employees at 39.4%. The family firms are mainly in the business activities industry at 20% and the second industry would be hotel and restaurants at 14.9%. Majority of the family firm would be around for 11 to 15 years at 37.1%. Family firms have a year sales turnover of RM 3, 000, 0001 to RM 15,000,000 at 28%.

6.1.1.2 Measurement Model Evaluation

The measurement model is reliable based on the test using both the Cronbach's coefficient alpha and composite reliability. The model has achieved reliability as the value exceeds the satisfactory range of 0.7 at 0.916 and 0.933 respectively. This shows that all the constructs in the study is proven to be reliable. In addition to that, the convergent validity has been proven as all the AVE of the constructs far exceeds the threshold of 0.50 at 0.70. In terms of discriminant validity, the HTMT result shows that the lower and upper inference test has a value of less than one, thus, the constructs are distinct from one another.

6.1.1.3 Hypotheses Testing

This research model has shown to be able to predict 68.6% of variance of the dependent variable. Out of all the 10 proposed hypotheses being tested, four hypotheses were not being supported. However, six of the hypotheses developed were supported, which are H1a, H1b, H1c, H1d, H1e and H2b.

6.2 Discussion on Major Findings

6.2.1 Discussion on innovativeness

Theory has suggested that there is a relationship between innovativeness and firm performance (Miller & Friesen, 1978). At the same time, it would positively influence small business performance (Wiklund & Shepherd, 2005). In this study, innovativeness (IN) has a positive relationship with the family firm performance (PER). Given that the results shown in Table 25, family firm performance (PER) was significantly affected by innovativeness (IN). Therefore H1a was supported.

Innovativeness has been one of the key determinants of a firm's performance (Naldi et al., 2007). In a study on manufacturing firms in Turkey, innovativeness has a significant effect on the firm performance (Zehir et al., 2015). By utilizing innovativeness, companies would have strategic innovation as they would innovate to have a new product (Rosenbusch, Brinckmann & Bausch, 2011). It would be in line with the customers' needs. Besides new products, the company would have innovative technology and administration. This would help the company to lower down their cost which would help them in the day to day activity.

In terms of family firms, the management of the company would like to make the business sustainable that to keep abreast with the current market situation, they would rely on innovativeness. A family firm is a unique structure as one of the main goals is to carry on the company for years to come to be pass on to the next generation. They would think of ways to make and keep the company current. This can be seen in a study done that family firms with multigenerational ownership would place the importance in innovativeness. The management would want to pass on this legacy.

On the other hand, family firms would use their creative ability and technical skills to enhance their innovativeness. As they would know some of the people in the company they can place them in the right place to help to come up with innovative ways. Family firms would have a unique way of being innovative as they would have unique-family resources and capabilities which would help the firm use it as a leverage to improve their firm performance (Craig, Dibrell & Garrett, 2014). The company can use the resources wisely to make it more innovative.

6.2.2 Discussion on proactiveness

Proactiveness is used to foresee the future problems, needs and changes. This study hypothesised that proactiveness (PR) and family firm performance (PER) has a positive relationship. Based on the results shown in Table 25, there is a positive relationship for PR and PER. Therefore, H1b is supported. The result has the same impact as the previous studies that state a firm that is proactive is significantly associated with firm performance (Lumpkin & Dess, 2000; Wiklund & Shepherd, 2005; Naldi et al., 2007; Nordqvist et al., 2008; Short McKelvie, Ketchen & Chandler, 2009).

One of the reasons that the firm is proactive would be the attitude of the managers. Managers of the firm would be proactive in making the decisions especially when it is the owner of the firm. Most of the managers in the family firms are the family members themselves. They would make decisions that are proactive in increasing the financial performance of the company. Family firms would want to sustain the business that they are willing to take the proactive stance. Based on the research by Ward, McCreery & Anand (2007) on manufacturing firms, being proactive is part of the long term strategy for the firm.

A firm that is proactive would be looking for ways to increase the performance of the company instead of waiting around to see what the other competitors are doing. Firms that are proactive would be able to be the first in the industry that would increase the sales growth which is part of the firm performance. In a study of 279 Dutch companies, proactiveness has a positive impact on the sales and marketing performance (Rezaei & Ortt, 2018). This also be seen in a research done by Becherer and Maurer (1999) which focuses on the CEO's proactive behaviour and the effect on sales growth.

The family firm that is proactive would constantly be looking for multiple ways to increase their business which would lead to having diverse resources. When a firm has diverse resources it can survive in different types of economic environment that would help sustain the firm performance. As the firm wants to be the industry leader, it would be proactive by improving the products of the company but also understanding the customer wants. This can be seen in a study by Hughes and Morgan (2007) as the research shows that the only entrepreneurial orientation dimension that has significance with product and customer performance is proactiveness.

Another reason, the relationship between proactiveness and family firm performance is significant would be the structure of the firm and the environment. Family firms are aware of the different types of firms in the industry and network. They would be able to respond proactively by using proactive strategies towards the other firms that it would enhance their performance. According to Stam and Elfring (2008), firms that have network centrality are proactive to take action against the competitors to be the better firm in the market.

Proactiveness is the cornerstone of the entrepreneurial orientation construct. This research agrees with the other study done by Hughes and Morgan (2007) that states the significance of proactiveness and firm performance. An increase in the firm's proactiveness is described as the entrepreneurial structure of the firm (Fairoz, Hirobumi & Tanaka 2010). There are times that the entrepreneurial orientation is treated as a unidimensional structure and proactiveness would be used as one of the construct to measure it (e.g. Knight, 1997; Barringer & Bluedorn, 1999; Kreiser, et al., 2002; Zehir et al., 2015).

Firm age of the family firm would be the cause for the company to be more cautious in terms of being proactive. A firm would be proactive in different stages of its lifecycle. The family firm that is in the young stage would be more proactive to achieve more for the company.

A family firm has different types of business structure as the goal of the management of the business may differ from non-family business. The managers of the family firm may have a stewardship perspective in managing the business that they are willing to search for new business opportunities to increase the business performance (Corbetta & Salvato, 2004; Nordqvist et al., 2008). The commitment of building the business to last for the generations to come would make them not sit on their laurels but think further ahead.

6.2.3 Discussion on risk-taking

In this study, risk taking is taking into consideration as part of the entrepreneurial construct. It would be to take risk to improve the firm's performance. H1c hypothesised that risk taking (RT) and family firm performance (PER) has a positive relationship. This can be seen as the results in Table 25 shows that there is significance in the relationship.

There is significant relationship between risk taking and performance as the company is committed to do well in their performance. This happens as there are times that the company cannot be complacent in the way that they do things that being a risk taker it would help them be better in the industry that they are in. Risk taking not only helps in the firm's financial performance but it would help to grow the company as well (Peng, 2015).

Family firms are more often than not seen as unwilling to take risk (Hall, Sarstedt, Hopkins, & Kuppelwieser, 2001; Habbershon & Pistrui, 2002). They are more concern with preserving their wealth rather than taking risk. This may be due to the fact that they want to preserve what they have for the next generation. Our findings in this study would change the way family firms are looking at risk taking. Given the current situation, family firms understand the importance of taking risk to improve the firm performance. The family firm would not rely on one method to do their business which would include being a risk taker. Expectation of the family to perform well would encourage the family firm to take risk, hence the significance of risk taking and firm performance.

6.2.4 Discussion on autonomy

Autonomy can often be seen as an independent action of individuals in developing an idea or making a decision. It is one of the construct of entrepreneurial orientation, thus H1d, hypothesised that there is a positive relationship between autonomy and family firm performance. The result in Table 25 shows that there is indeed a relationship between both. This echoes the study done on 331 firms in Turkey where autonomy has a significant impact on the firm's performance (Zehir et al., 2015).

Our findings in autonomy have shown that family firm place an emphasis on autonomy and it is significant in their performance. Family firms have changed their management style from an authoritarian leadership style to being more autonomous in their dealings. The freedom to make decision is given to the younger generation within the company as they understand that the decisions made would not endanger the family firm.

By giving the autonomy to the workers in the firm, they would be more motivated in the way that they work as they feel that they are part of the company. The employees that are given the autonomy would be able to give ideas that are related to improve the innovation process of the firm (Andries & Czarnitzki, 2013). The employees would be able to contribute ideas on how to improve the innovation process as they would be the one that are closes to performing the task that they have first-hand experience. This would help them understand the process better and finding the better solution to improve it by being more innovative which would in turn enhance the firm performance. Hence, there is a positive relationship between autonomy and family firm performance.

6.2.5 Discussion on competitive aggressiveness

Competitive aggressiveness is part of the entrepreneurial orientation construct. It was hypothesised in H1e that competitive aggressiveness (CA) and family firm performance (PER) has a positive relationship. In Table 25, it is stated that there is a positive relationship between competitive aggressiveness and family firm performance. This shows that competitive aggressiveness is an important part of the entrepreneurial orientation construct when it in multidimensional format.

A firm that has competitive aggressiveness would use the valuable resources available for the firm's usage. Family firm that has been in the industry would have the available resources at its' dispense to use. Management capabilities of the firm would be able to recognise the resources to build a competitive advantage (Penrose, 1959). The family members who are part of the management team would use it for the competitive advantage of the firm. As the family members in the firm have grown up with the firm, they would have an understanding on how to use the resources.

Family firm has a long standing in the industry that they would keep up with the customers' wants and needs by being competitive aggressiveness. They would continue to build trust with the customers while being competitive. The firm will keep the customers in mind when they are thinking about expanding the business. Family firm will use competitive aggressiveness to outperform the other rivals by being more innovative. They understand that they would need to move with time that they would look at how to stay current in the industry.

Most of the family firm in the study is at the growing stage of the life cycle that the company they would be more competitive to get a bigger slice of the industry. A study done by Zellweger and Sieger (2010), states the older the family firm the more cautious they are about having competitive aggressiveness. The company would be more concern about the firm's reputation rather than the competing with the other firms in the industry. Family firm that is competitive has a negative reputation which would affect the performance of the company.

However, this research does not support the study done by Nordqvist et al. (2008) that multigenerational family business seldom rival with their business competitors by being aggressive. Family firms would more often than not build a niche market that they would not have to be aggressive with their competitors as they would be controlling the market that they are in. In the beginning they would be different from other firms that competitive aggressiveness would not be significant in contributing to the firm performance. The company would be focused into tapping their full potential that they have within the firm rather than going head on with their competitors.

6.2.6 Discussion on environmental dynamism and innovativeness

Theory has suggested that the relationship between entrepreneurial orientation and performance is moderated by environmental dynamism (Miller & Friesen, 1982; Covin & Selvin, 1989). This study has concluded that the relationship between innovativeness and family firm performance is not moderated by environmental dynamism. Results shown in Table 25, would show that innovativeness and family firm performance is not moderated by environmental dynamism. H2a is not supported.

The findings are in line with the study done by Wiklund and Shepherd (2005) that environmental dynamism has no significance in entrepreneurial orientation and firm performance. It enhances the study on Bulgarian firms by Davidkov and Yordanova (2017) where environmental dynamism does not moderate the relationship of entrepreneurial orientation and firm performance. Innovativeness is part of a firm's strategic planning. A firm that has flexibility in their strategic planning would be able to plan efficiently for firm performance without the moderation of environmental dynamism. The family firm would not innovate in an environment that is dynamic as the firm would be looking to low cost strategy to improve in the environment. This is not in line with being innovative as the company would need more resources to innovate in an environment that is not certain. A study done by Wijbenga and Witteloostuijn (2007) states that the company would choose to use low cost strategy in an environment that is dynamic. SMEs in Indonesia would not innovate in a dynamic environment as the company would not have enough resources to support the R & D investment (Pratono & Mahmood, 2015).

Firms would need a stable environment to be innovative. In a stable environment, the firm would prefer to have innovative products. It is a strategy used for short term that in the long run the other competitors would decide to sell the products at a lower price that would affect the firm's performance (Wijbenga & Witteloostuijn, 2007). A dynamic environment would not give the space and time for research and development that is needed to innovate products and services (Lieberman & Asaba, 2006). A stable environment is crucial for a firm to generate innovations for better performance in the company (Perez-Luno et al., 2014).

The leadership of the family firm has a different characteristic as most of it would have a transformational leadership style in the company especially the founder of the firm where they would integrate the culture of stewardship, family commitment and strategic flexibility (Eddleston, Kellermanns & Sarathy, 2008). Transformational leadership style of the management would engage the company to be innovative. A study done by Jansen, George, Van de Bosch, and Volberda (2008), would state that transformational leadership towards innovativeness would not be moderated by environmental dynamism. Thus, a family firm's performance and innovativeness would not be moderated by environmental dynamism.

Innovativeness and family firm performance is not moderated by environmental dynamism as the firm has the fear of failure when it innovates. The firm would not want to innovate in an environment that is not stable. This can be seen in the study done by the Tan and Litschert (1994) where the in an environment that is dynamic with a chance of failure, the firm would not want to take the step to innovate. A study done on Turkish SMEs states that the company would not want to innovate in a volatile environment as they foresee it to be a risky investment (Kurtulumus & Warner, 2015).

6.2.7 Discussion on environmental dynamism and proactiveness

In this study, it is hypothesized that the relationship between proactiveness and family firm performance is moderated by environmental dynamism. The results shown in Table 25 states that proactiveness and family firm performance is moderated by environmental dynamism. Therefore, H2b is supported.

Family firm that have higher level of proactiveness in an environment that is dynamic would increase the partnering options with other firms. The family would actively seek other firms to work together and have an alliance to improve their performance. As the firm is proactive they would have the skills in seeking better alliances. A head of family firm would have the passion in achieving their goal that they would be proactive in a dynamic environment. A study by Adomako et al. (2016), states that passion work is important in the relationship between EO and performance in an environment that is dynamic.

One of the reasons that family firm proactiveness and performance can be moderated by environmental dynamism would be strategic planning of the company. The firm would be more comprehensive in their scanning and analysis of the current environment. They can cope with the current situation that is happening as they would know how to take the necessary strategy in surviving in different environments. In a study by Priem, Rasheed and Kotulic (1995), the company that has the strategy would have a higher degree of rationality which would help in the performance of the company given the dynamic environment.

The leadership of the family firm is quite different as most of the management of the company would from the same family. Hence, the leadership style differs as they would have more at stake to sustain the business for the future generations to come. The behaviour of the leader to be proactive would lead the business to pursue new ventures when it is moderated by environmental dynamism. Ensley et al. (2006) did a study on new ventures in American firm and concluded that the transformational leadership of the company would lead to new ventures when moderated by environmental dynamism. Looking at the dynamic environment the leadership of the family firm would look to increase their performance by looking into new ventures to cope with it.

Environmental dynamism moderates the relationship of the family firm proactiveness and performance as the family firm have the resources and access to financial capital needed to improve the performance in a dynamic environment. The firm with high access to resources would be proactive in using the resources according to the environment. This would help in the performance of the company. They would not sit and wait for things to happen but be proactive in making it as they have the means to do it. This is in line with the study by Frank et al. (2010), where in a dynamic environment the firm would be proactive in their behaviour as they have the capital requirement for the opportunity.

The family firm would be proactive in a dynamic environment as they would take the step to innovate and take risk to suit the business environment and not be left behind. This is in line with at study done by Dess et al. (1997) that states the company would need to proactively monitor the environment to understand and innovate as well as take calculated risk towards the firm performance. The family firm has the flexibility to make the decision in certain environments as the hierarchy of the decision making process is low which allows the company to react quickly to the market situation (Rauch et al., 2009). The family firm in a dynamic environment would be more proactive in their endeavour in pursuing new business (Cruz & Nordvqist, 2012). At the same time being proactive would allow the firm to understand the current environment (Pratono & Mahmood, 2015) that the family firm is operating in.

6.2.8 Discussion on environmental dynamism and risk-taking

It is hypothesized that the relationship between risk taking and family firm performance is moderated by environmental dynamism. However, the results shown in Table 25, would show that risk taking and family firm performance is not moderated by environmental dynamism. This shows that H2c is not supported.

The findings of the relationship between risk taking and family firm performance is not moderated by environmental dynamism is similar to the study done by Hameed and Ali (2011). Family firms would not be taking risk in an environment that is dynamic as environment is one of the factors for risk aversion in family firm (Gómez-Mejía, Haynes, Núnez-Nickel, Jacobson, & Moyano-Fuentes, 2007). The manager would use risk taking in a stable environment. Besides that, Malaysia is considered a developing country that it may be one of the reasons that the family firm would not want to take the risk in an environment that is dynamic. This happens as the company would not have the proper information to make a decision that would involve taking risk in an environment that is not stable due to improper bookkeeping or credit markets that are imperfect. Thus, they would not want to take on more risky projects that would jeopardise the whole company in the future (Boermans & Willebrands, 2012).

In a dynamic environment, family business would not take risk but rather use the waiting strategy for their firm. One of the reasons would be that the firm feels that the environment is not stable that it is not worth take this type of risk as they may lose the whole business. The firm would wait to see how the environment fair before taking any risk. In the study done on micro-enterprises in Bulgaria, firms would not want to take risk in expanding the business in a transitional business environment as they would prefer to waiting strategy in the dynamic environment (Alexandrova, 2004).

Most of the family firms would not take the risk of venturing into new business when the environment is not stable. However, they would be looking into taking a defensive strategy instead of risk taking. As the family firm has a lot at stake in terms of not only performance but other objectives in regards to the family management, the firm would be wise in making the decision during a dynamic environment. They would be thinking of maintaining the business and make sure it survives for future generation. This would be the same approach that micro-enterprises in Bulgaria take when the firm is in dynamic environment (Alexandrova, 2004).

Growth of the firm is part of the firm performance. In family firm, when they want to expand the company they would choose an environment that is stable to take the risk as they understand the environment (Casillas et al., 2010, 2011). Family firm would be adverse to risk when the environment is dynamic as they are uncertain how it would affect the firm.

The founder of the firm plays an important part in the family business. When the firm is in a dynamic environment, it would not want to take risk but hold the founder's vision which is to maintain the business rather than take risk (Salvato, Chirico & Sharma, 2010). The founders’ vision may be to keep the business afloat and strive in the dynamic environment that it would not take risk but rather keep the current stand in their business strategy.

6.2.9 Discussion on environmental dynamism and autonomy

The hypothesis of H2d, the relationship between autonomy and family firm performance is moderated by environmental dynamism is not supported in the study based on the results. In Table 25, autonomy and family firm performance has a score of ß= 0.054, p>0. Thus, the hypothesis is not supported.

Autonomy and family firm performance have a significant relationship but it is not moderated by the environmental dynamism. This happens as in a dynamic environment, directive leadership would not be used in the situation. In a stressful situation, the decisions need to be made quickly that autonomy would not be used (Hmieleski & Ensley, 2007). Autonomy is about empowering the staff that in an environment that is dynamic, the management would need to make decisions their own decisions. The management would be more careful to have good performance in the different environment. Family firm would be concern about preserving the business that they would want to control the certain decisions during a dynamic environment.

Family firm is complex compared to non-family business as they would have to think of both the performance of the company and the relationship of the staff in the company as they would be the family members (Tagiuri & Davis, 1992). In a dynamic environment there would be family members that are in the management team that they would not make the staff make autonomous decision on their own but control the power given to them. This would help the family members in the firm maintain family harmony as they would know what is going on in terms of decision making for the future of the firm. The management would make the decision together that would be beneficial to both the firm and the family.

Management that has family members would want stay true to the legacy of the founder of the firm. When the firm is in a dynamic environment the management would want to make their own decisions. The management would make decisions that would maintain the ideology of the founder rather than perform as they have a psychological barrier in making radical and drastic changes (Kaye, 1996). As the firm has been around for some time that they may make their decision to hold on based on past experience that after the troubled economy the firm will perform. Thus, they would not have autonomy in a dynamic environment.

Most family firms are made up of family members which makes it part of their human capital (Danes, Stafford, Haynes & Amarapurkar, 2009). Firms would sometimes face an environment that is dynamic that they would need to have the right strategy to be able to overcome the barriers that they face. The firm would give autonomy to their staff as they would want to make decisions on their own. Commitment and cooperation of the non-family members are different that if the empowerment is given to all the staff to make decisions it would not be in accordance to the objective of the family members in the firm.

Besides that, family firms in Malaysia are considered to be in their early lifecycle that when in a dynamic environment the autonomy of the making decision would not be given but made by the management. The family firm would want to control the decisions and make the right ones so that the firm can be sustained. A firm in its' later lifecycle would have formal procedure to run the firm that when in a dynamic environment the managers would be given the autonomy to be flexible (Hatum & Pettigrew, 2004).

6.2.10 Discussion on environmental dynamism and competitive aggressiveness

For the H2e hypotheses, theory has suggested that the relationship between competitive aggressiveness and family firm performance is moderated by environmental dynamism as it is part of the entrepreneurial orientation construct (Lumpkin & Dess, 1996). The findings in this study stated that there is no significance in the relationship between competitive aggressiveness and family firm performance being moderated by environmental dynamism. As can be seen in Table 25, where the score would be $ß= 0.026$, $p>0.05$.

In family firms, the competitive aggressiveness would not be moderated by environmental dynamism as there are contradictory ideas on it. There are studies that shows competitive aggressiveness would be low in a less dynamic environment and the opposite in a dynamic environment (Schilke, 2014). The company would want to be aggressive in an environment that is stable. One of the reasons would be the size of the family firms (Alexandrova, 2004). Most of the family firms fall into the micro and small category in the SMEs structure that they are not affected by environmental dynamism compared to bigger firms. The smaller firms would be affected more by customer's preferences and market rather than environment.

Family firms have different objectives either than just the performance of the firm. They would want to sustain the family firm to keep it intact for the future generations. One way of maintaining the legacy of the firm would be institutional integrity. The firm would not want to pursue competitive aggressiveness in a dynamic environment when they would want to preserve the integrity of the firm. Family firm would want to sustain the firm by looking at different strategies to achieve high performance in a dynamic environment (Gioia, Schultz & Corley, 2000).

In a dynamic environment, family firms would not take the competitive aggressiveness stance as the firm would have to take into the consideration the family interest and performance. Most of the time, the family firm would want to maintain the family interest and values in the firm besides the performance. Hence, in an environment that is not stable family firms to maintain status quo (Kepner, 1991; Gersick et al., 1997) and would not want to be competitive aggressive as they have other interest.

A firm would be more proactive in searching for new business opportunities rather than be competitive aggressiveness as the other firms in the industry are facing the same situation (Alexandrova, 2004). Family firms would be reluctant to be competitive in a dynamic environment as they feel that it would be expensive and would cause conflict among the family members in the firm (Vago, 2004). They would use the tried and true way of handling things rather than be aggressive against their competitors. As family firms have a set way of doing business they would not be flexible to change in an environment that is dynamic as they have an emotional attachment to the firm (Miller, Steier, & Le Breton-Miller, 2003).

6.3 Implication of study

The objective of the study was to examine the effect/influence of the entrepreneurial orientation on performance in the family firm. The contributions of the study are being discussed below.

6.3.1Theoretical Implications

There have been studies done on entrepreneurial orientation and firms in the Western economies but this study focuses on the family firms in Malaysia. Within the entrepreneurial orientation literature, it is positively related to performance as a one-dimensional construct. In this study, entrepreneurial orientation is looked at a multidimensional construct where each of the components would be investigated individually. The findings of this study state that all the components have a significant and positive relationship with family firm performance. However, not all the components have the same weightage as each other. This contributes to the understanding of the different construct in the Malaysian family firm setting. This echoes the research done on 79 independent hotels in Spain stated that the different constructs in terms of innovativeness, proactiveness, autonomy and risk taking has different weight to the entrepreneurial orientation construct (Cossıo-Silva et al., 2014). This is not the same as the Malaysian family firms as the country is an emerging market. On top of that, the industry of the business covered by Malaysian family firm is wider as it includes other industries not only the tourism industry as can be seen in the profile of the family firms.To fully understand the whole construct of entrepreneurial orientation each component would need to be analyzed separately. Based on the Malaysia context, the entrepreneurial orientation contributes to the family firm performance as it looks into the factors individually.

This study would enhance the family theory as the study understands how the entrepreneurial orientation would affect the performance of a family firm. The research shows that in terms of the different factors, the entrepreneurial construct does affect the family firm performance in a positive manner but in various degrees. Autonomy is significant component in the entrepreneurial construct when contributing to the family firm performance. Family firm would be autonomous in the way that they handle new projects and may include workers into the strategic direction of the company. As family firms has a slightly different make compared to non-family firms as the workers would be from the same family as the owner that they are given the responsibility to make strategic decisions for the benefit of the firm. Procativeness has the lowest significance among the other entrepreneurial orientation dimension in the construct. Family firms would use the other types of construct to make the firm entrepreneurial. Being a family firm the company would be a more cautious of how to change certain things that proactiveness has the lowest significance to performance. Thus, it deepens the understanding of entrepreneurial orientation construct in the family firm theory.

Not all the entrepreneurial orientation construct and family firm performance is moderated by environmental dynamism. This would contribute to the theoretical implication as in previous studies environmental dynamism plays a part in moderating the relationship. However, family firm chosen is from the SME sector that the size of the firm may not be highly affected by the environment in terms of their entrepreneurial endeavour. The only construct that is significant with the family firm performance when moderated by environmental dynamism would be proactiveness. This differs from a study done in 104 SMEs in Russia where environmental dynamism positively moderates the innovative factor of entrepreneurial orientation and firm performance (Shirokova, Bogatyreva, Beliaeva, & Puffer, 2015). In another study on 253 IT firms in Spain, it concluded that when entrepreneurial orientation is taken as a one dimensional is moderated by environmental dynamism (Ruiz-Ortega et al., 2013). This clearly shows that when the entrepreneurial orientation construct is multi-dimensional, the significance of environmental dynamism as a moderator would have a different impact on

Malaysian family firms. In the dynamic environment, the family firm would not strive to be entrepreneurial but would aim to make the company sustainable. The goal of the family firm is not only to perform in the market place but to survive where they would be proactive for the business. It contributes to the family theory as through this research there is an understanding that in a dynamic environment, the family business would only have proactiveness.

Based on the RBV view, this research would contribute that it can use for the entrepreneurial orientation literature as well as family firm theory. The family firm would use existing resources in their entrepreneurial endeavour to increase the performance of the firm. As competitive aggressiveness contributes to the family firm performance in the positive manner, the company would use the allocation of the resources wisely. They value that their resources are unique and different from the other companies that they would chase to be first in the industry. On top of that, the company would be able to be more proactive in using their resources when they are in a dynamic environment. This would help the family firm to achieve better performance. Another way of contributing to the RBV view, the company would use the human resources in the firm in the best way possible. The workers are given the responsibility to help make strategic decisions in the company.

In this study, the entrepreneurial orientation can be seen as a multidimensional construct rather than a one dimensional. The different construct have different significance towards family firm performance. The research focuses on all the five different factors of entrepreneurial orientation which are innovativeness, proactiveness, risk taking, competitive aggressiveness and autonomy.

6.3.2 Managerial Implications

In the Malaysian economy, the managers would understand that in a dynamic environment that entrepreneurial orientation would not affect the family firm performance to a certain extent. In the dynamic environment the family firm would use innovativeness from entrepreneurial orientation to sustain the company rather than concentrating on using all the five components in the entrepreneurial orientation structure.

This study contributes to the managerial implication by understanding that autonomy is an important part of the entrepreneurial orientation in family firm performance. As autonomy is important, the company can give empowerment to the workers to make their own decisions. The firm would give responsibility to their workers that the company would need to give training so that they can make insightful decisions.

Risk taking is the second most significant construct towards the contribution of the family firm performance. By understanding this, the managers are willing to take more risk when planning strategically for the company. They would be open to new ideas that have not been used before as this would help them look beyond for the betterment of the firm's performance. The managers are part of the family firm that they will comprehend the risk that the company is taking and would know the capability of the return (Arzubiga et al., 2018). Managers would encourage not only the company to be more risk taking but the workers as well so that the whole business would be in sync towards the same vision.

Competitive aggressiveness is significant in family firm performance. Managers would understand that the firm would need to be in tune with the competitors. Once they understand their competitors they would be able to come up with strategies that would help the company towards achieving better performance. Family firms have resources that would make them more aggressive as they have been in the market. Besides that, being a family firm they would also have the human resources within the family to strategize the company by allocating the right people in the job (Yoon, 2018) to achieve better heights which non-family firms do not have.

Innovativeness is a significant construct towards the performance of a family firm. The managers can focus on being innovative by focusing on the research and development areas in the company to improve the family firm performance. Family firms tend to use the old methods of doing things that the managers in the family firm can look to new ideas or products to help the company strive in the market place. Not only to be more innovative in their products but to improve on the innovative process to help the company. The manager of the company can be innovative on daily activities (Guzman et al., 2016) by thinking of the customers personal needs and aligning them with the family firm objective.

Managers would understand the importance of being proactive even though it has the lowest significance compared to the other entrepreneurial orientation construct. Family firm would want to protect their legacy that they would be proactive in doing so. Through this study, the managers would understand that the proactiveness is moderated by environmental dynamism that the best way to be entrepreneurial would be in a dynamic environment for a family firm. Managers can focus on being more resilient to the different environment by being the first in the industry. The family firm can do the proactiveness step by step and include it as part of their everyday activity by looking at the current market situation.

The managers need not adopt all the different constructs that are in the EO dimension. They would understand that each of it would have a different impact on the financial performance of the firm and would choose one that would fit the family firm at that particular time. They have a guide in coming up with a competitive strategy for their company.

6.3.3 Government and Policymakers

Family firms can also be classified under SMEs. SMEs are one of the contributing factors towards the economy of the country. The study helps to enhance the understanding that entrepreneurial orientation contributes towards the performance of the family firm that the government can focus helping the family firms be more entrepreneurial. One way would be to include more training that would focus on the family firms that are under the SME programme. Through this research, family firm would differ slightly than the normal SMEs that the government would need to have a training that is specially geared towards family firms.

By understanding how entrepreneurial orientation would affect the family firm performance. The government can place an emphasis on the family firm SMEs to be more entrepreneurial in the way that the business is handled. This is also in line with the government policy that focuses on the entrepreneurship. The government can concentrate specifically on family firm performance by helping them to be more entrepreneurial by offering financial help to the family.

The government can provide a specific platform for family business to encourage it to be more entrepreneurial. Most of the companies are under the SMEs that if they would like to increase the company by being entrepreneurial would be offering professional help to the company and matching them with the right people to grow the business towards greater heights.

6.3.4 Social Implication

This research shows that the family firm would benefit in terms of financial performance when they are entrepreneurial. A family firm that is prospering would not only benefit the country directly but will have a social implication where they are situated. The firm that is doing well would be able to create more jobs. People with jobs would be able to contribute to the country's economy as well. When there are more job opportunities, the people would have money for their daily life that the social illnesses would be less.

6.3.5 Methodological Implication

The methodological implication of the research would be from the view point of the analysis software which is PLS-SEM. It has contributed to the family business research as it uses PLS-SEM to analyse the data. There is no discrepancy when using the software to analyse it based on the Malaysian context and can be used on the small sample size. On top of that it contributes to the moderator function that is in the analysis system.

6.4 Limitations

There are some limitations to the research. The first being it would be more in depth study on the subject. The study was only done by the quantitative method using the cross sectional way of analysing the family firm performance.

The study only focused on the family business in the SMEs sector in Malaysia that it may not represent all the family firms in the country. It is only a fraction of the family firms in the country as some of the firm do not fall under the category of SMEs.

Thirdly, the moderator did not moderate the relationship of most of the entrepreneurial orientation components and family firm performance that it would be better to include a control variable such as size and age. In addition, the environmental dynamism as a moderator would not be a good fit as a moderator in the Malaysian family firm context.

Fourthly, the study did not consider other variables like the internal factors of the family firm that may affect the entrepreneurial orientation of the family firm and its performance.

6.5 Future Research

There are some recommendations for the future research based on the findings of the research.

Due to the quantitative approach of the research, it would be good to include the qualitative approach into the research to have a clearer understanding on the relationship of entrepreneurial orientation and family firm performance. It would give a greater insight into the theoretical and managerial practice on the use of entrepreneurial orientation (Wales, 2015).

Secondly, the future researches can focus on the longitudinal study of the research on entrepreneurial orientation on the performance in family firm. Family firms have a long history compared to other firms that it would be good to see if being entrepreneurial orientation would contribute to the performance in the long term as well. By doing this, the effects of entrepreneurial orientation dimensions and its effects on the firm performance over a long time would provide further insights and reliability of it.

The family firm would be in different industries. It would be interesting to see if the family firms that are in the different industries would behave differently in their entrepreneurial stance to survive in the market place or do they depend on the industry.

This research focuses on the Malaysian context of family firm SMEs that it would be interesting to study the other countries within the Asia Pacific area. The research would be carried out to see if in the other Asian countries the entrepreneurial orientation construct would affect the family firm performance the same way it did in Malaysia.

The research did not have any control variables that it would be interesting to see if the outcome of the result would be the same when there is a control in the size of the firm and age. This is to see if there is a difference on the result when the size of the family firm is bigger or if the family firm is older it would affect the entrepreneurial construct of the firm differently. For example, younger Czech Republic micro enterprises are more innovative, proactive and are risk takers compared to older microenterprises (Civelek et al., 2016). This shows that age can be used as a control factor to evaluate the significance of entrepreneurial orientation and performance of family firm. In terms of firm size, a study done on 339 Swedish firms by Deb and Wiklund (2016) states that it does matter in the entrepreneurial orientation construct where larger firms are more entrepreneurial.

6.6 Conclusion

This research paper focuses on entrepreneurial orientation in family firm performance. The entrepreneurial orientation construct takes on a multi-dimensional approach rather than a one-dimensional approach. As the five dimensions are treated independently, present findings that each of the dimensions (innovativeness, proactiveness, risk taking, competitive aggressiveness and autonomy) affects family firm performance with each having a different degree of importance. However, when the moderating factor of environmental dynamism is added into the relationship of all the factors of entrepreneurial orientation only proactiveness has a significant relationship with family firm performance. The findings of the study contributed to the future studies on family firm and entrepreneurial orientation.

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UTAR
UNIVERSITI TUNKU ABDUL RAHMAN

Dear Participant:

I am a postgraduate student at Universiti Tunku Abdul Rahman. For my thesis, I am examining the family business in Malaysia. I am inviting you to participate in this research study by completing the attached surveys.

The following questionnaire will require approximately 10 minutes to complete. There is no compensation for responding nor is there any known risk. In order to ensure that all information will remain confidential, please *do not* include your name. Copies of the project will be provided to Universiti Tunku Abdul Rahman. If you choose to participate in this project, please answer all questions as honestly as possible and return the completed questionnaires promptly. Participation is strictly voluntary and you may refuse to participate at any time.

Thank you for taking the time to assist me in my educational endeavours. The data collected will provide useful information regarding research on family business in Malaysia.

Questionnaire

Section A: Firm Information

1. How many family members in the business (this includes extended family)?
   ☐1 1 -4 ☐2 5-10 ☐3 11-14 ☐4 15-20
   ☐5 more than 20

2. What type of business ownership?
   ☐1 Family owned and family managed ☐2 Family owned not family managed
   ☐3 Family managed but not family owned

3. Your position in the company :
   ☐1 Business Owner ☐2 Business manager
   ☐3 Company Founder
   ☐4 Other(please specify):__________

4. Number of years in this company:
   ☐1 2 years or less ☐2 3-5 years ☐3 6-10 years ☐4 11-20 years
   ☐5 21 years or more

5. Number of full time employees:
   ☐1 Fewer than 5 ☐2 5-30 ☐3 31-75
   ☐4 76-200 ☐5 more than 200

6. What is your company's industry?
   ☐1 Manufacturing ☐8 Hotels and Restaurants
   ☐2 Primary Agriculture ☐9 Professional and ICT services
   ☐3 Construction ☐10 Business Activities
   ☐4 Mining and Quarrying ☐11 Private Education and Health
   ☐5 Entertainment ☐12 Financial Intermediation
   ☐6 Manufacturing-related services(research and development(R&D), warehouse etc..)
   ☐7 Other (please specify):____________________

7. How old is the company?
   ☐1 Less than 5 ☐2 6-10 years ☐3 11-15 years
   ☐4 16-20 years ☐5 more than 20 years

8. How much is your sales turnover rate yearly?
   ☐1 less than RM 300,000 ☐2 RM 300,001- RM 3,000,000
   ☐3 RM 3,000,001-RM 15,000,000 ☐4 RM 15,000,001- RM20,000,000
   ☐5 RM 20,000,001-RM50,000,000 ☐6 more than RM 50,000,000

Section B: Entrepreneurial Orientation

How would you describe the entreprenuerial orientation of your organization? Please circle the number in each scale that best describes the actual entrepreneurial orientation in your organization.

Innovativeness								
In general, the top managers of my firm favor....								
A strong emphasis on the marketing of tried and true products	1	2	3	4	5	6	7	A strong emphasis on R & D technological leadership, and or services innovations
Using the same ways for the business	1	2	3	4	5	6	7	Trying out new ideas for the business
Doing the same process for the business	1	2	3	4	5	6	7	Seeking out new process for the business
Methods that has been used in the business operation	1	2	3	4	5	6	7	New and creative ways in the methods of business operation
How many new lines of products/services has your firm marketed in the last 5 years (or since its establishment)?								
No new lines of products/services	1	2	3	4	5	6	7	Many new lines of products/ services
Changes in product/ service lines have been mostly a minor nature	1	2	3	4	5	6	7	Changes in product/ service lines have usually been quite dramatic

Proactiveness								
In general, the top managers of my firm								
Do not seek new opportunities that may or may not be related to the present	1	2	3	4	5	6	7	Seek new opportunities that may or may not be related to the present
Is seldom on the lookout for business that can be acquired	1	2	3	4	5	6	7	Is constantly on the lookout for business that can be acquired
Has a strong tendency to "follow the leader" in introducing novel products or ideas	1	2	3	4	5	6	7	Has a strong tendency to be ahead of other competitors in introducing novel ideas or products

Does not believe in an idea, if there is an obstacle that prevents them from implementing it	1	2	3	4	5	6	7	Believes in an idea, no obstacle will prevent them from implementing it
In dealing with its competitors, my firm..								
Typically responds to actions which competitors initiate in the industry	1	2	3	4	5	6	7	Typically initiates actions which competitors then respond to in the industry
Is seldom the first organization to introduce new products/services, administrative techniques, operating technologies etc.	1	2	3	4	5	6	7	Is often the first organization to introduce new products/services, administrative techniques, operating technologies, etc.

Risk-Taking								
In general, the top managers of my firm...								
Have a strong proclivity for low risk projects with normal and certain rates of returns	1	2	3	4	5	6	7	Have a strong proclivity for high risk projects with chances of very high returns
Are not open to new ideas that have not been used	1	2	3	4	5	6	7	Are open to new ideas that have not been used
Is not open to selling in new markets if there is a high risk								Is open to selling in new markets with a high risk
Owing to the nature of the environment, explores it with a cautious behaviour to achieve the firm's objectives	1	2	3	4	5	6	7	Owing to the nature of the environment, bold, wide-ranging acts are necessary to achieve the firm's objectives

Seldom encourage workers to take calculated risks with new ideas	1	2	3	4	5	6	7	Encourage workers to take calculated risks with new ideas
When confronted with decision-making situations involving uncertainty, my firm...								
Does not typically adopt a bold, aggressive posture in order to maximize the probability of exploiting potential opportunities	1	2	3	4	5	6	7	Typically adopts a bold, aggressive posture in order to maximize the probability of exploiting potential opportunities
Competitive Aggressiveness								
In general, the top managers of my firm...								
Makes no special effort to take business from the competition	1	2	3	4	5	6	7	Is very aggressive and intensely competitive
Do not set ambitious market-share goals and taking steps to achieve them	1	2	3	4	5	6	7	Set ambitious market-share goals and taking steps to achieve them
Spend less compared to competitors	1	2	3	4	5	6	7	Spend aggressively compared to competitors
In dealing with its competitors, my firm....								
Typically seeks to avoid competitive clashes, preferring a "live-and-let-live" posture	1	2	3	4	5	6	7	Typically adopts a very competitive "undo-the competitors" posture
Has a low allocation of resources to improve market positions compared to competitors	1	2	3	4	5	6	7	Has high allocation of resources for improving market positions faster than competitors
Has low investments to improve market share and competitive position	1	2	3	4	5	6	7	Has high investments to improve market share and competitive position

Autonomy								
In general, my firm...								
Has low number of corporate venture conducted by R&D department that	1	2	3	4	5	6	7	Has high number of corporate venture conducted by R&D department that is

is not part of the company strategy								not part of the company strategy
Has low effort that employees initiate to the top management to help the firm's strategic direction	1	2	3	4	5	6	7	Has high effort that employees initiate to the top management to help the firm's strategic direction
Workers need to have proper procedures when implementing innovation	1	2	3	4	5	6	7	Involves workers in implementing innovation even by ignoring procedures
Does not promote risk taking based on new ideas and promising breakthrough	1	2	3	4	5	6	7	Promotes risk taking based on new ideas and promising breakthrough
Seldom provide freedom in using own judgment	1	2	3	4	5	6	7	Provides freedom in using own judgment
Does not give the responsibility to the workers on how the job is done	1	2	3	4	5	6	7	Gives the responsibility to the workers on how the job is done

Section C: Environmental Factor

Environmental Dynamism

How would you characterize the external environment within which your organization operate? Please circle the number in each scale that best describes the actual conditions in your organization's principal industry (1 being the least to 7 being the best)

Environmental Dynamism							
The actions of competitors(local and foreign) in our major markets were changing rapidly	1	2	3	4	5	6	7
Technology changes in our industry were rapid and unpredictable	1	2	3	4	5	6	7
The market competitive conditions were highly unpredictable	1	2	3	4	5	6	7
Customers' product preferences changed quite rapidly	1	2	3	4	5	6	7
Changes in customers' needs were quite unpredictable	1	2	3	4	5	6	7
The business cater to the same customer base that we have in the past	1	2	3	4	5	6	7

Section D: Business Performance

Based on the last 3 years (or since its establishment), how would you rate your company's business performance

	Much lower....					Much higher...
Profitability	1	2	3	4	5	6	7
Sales growth rate	1	2	3	4	5	6	7
Earnings Growth	1	2	3	4	5	6	7
Net profit	1	2	3	4	5	6	7
Market Share	1	2	3	4	5	6	7
Return on Investment (ROI)	1	2	3	4	5	6	7
Overall performance/success	1	2	3	4	5	6	7

Section E: Personal Background Information
Please tick each of the followings accordingly:

1. Your current age: ☐ 20 or under ☐ 21-30 ☐ 31-40
   ☐ 41-50 ☐ 51-60
   ☐ 61 or above

2. Your gender ☐ Male ☐ Female

3. Your marital status: ☐ Married ☐ Single

4. Race: ☐ Malay ☐ Chinese ☐ Indian
   ☐ Others (please specify)______________________

5. Do you have children: ☐ Yes ☐ No

   If yes, how many children do you have?
   ☐ 0-2 ☐ 3-4 ☐ 5-6 ☐ more than 6

   What are the ages of your children? (Please state the number of children in each box)
   4 years or less ☐ child/children
   5-13 years ☐ child/children
   13-18 years ☐ child/children
   19 and over ☐ child/children

6. Your age when you started this business: ☐ 20 or under ☐ 21-30
   ☐ 31-40 ☐41-50
   ☐ 51-60 ☐ 61 or above

7. Educational Level: ☐ High School ☐ Certificate
   ☐ Diploma ☐ Bachelor Degree
   ☐ Post-graduate

End of questionnaire
Thank you