THE ROLE OF ENTREPRENEURIAL ORIENTATION AND STAKEHOLDER ORIENTATION ON FIRM PERFORMANCE: THE CASE OF THAI SMALL AND MEDIUM-SIZED ENTERPRISES IN STEEL FABRICATION INDUSTRY

Ekawee Vaitoonkiat

A Dissertation Submitted in Partial
Fulfillment of the Requirements for the Degree of
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ABSTRACT

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Author	Ekawee Vaitoonkiat
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Even though SMEs in emerging markets and developing economies (EMDEs) seem to play a major role in boosting the country's economy, researches show that SMEs also have some potential weaknesses such as lack of resources and market power to support expansion and overcome economic crisis. In order to overcome these weaknesses, the study focused on two managerial resources of competitiveness which can be developed internally by SMEs which are Entrepreneurial Orientation (EO) and Stakeholder Orientation (SO).

The positive relationship of EO and SO on firm performance was reported in previous studies; however the empirical researches of EO and SO on firm performance in South East Asian countries in particular are still limited. The objective of this study is to fill this gap by investigating the contribution of EO and SO on SME performance in Thailand. Furthermore, the study also empirically investigated the interaction effect between EO and SO on SMEs performance which has not been reported by the previous study.

Resource-Based View (RBV) and stakeholder theory were employed as major theoretical frameworks to explain the role of EO and SO on SME performance.

The data was collected through a questionnaire survey of 370 small and medium enterprises in Thailand. The data was analyzed using a Partial Least Square regression analysis. Results from the analysis confirmed a support that EO and two key components of SO contributed positively to SMEs performance. The analysis also found the effect of SO key components on the relationship between EO and SMEs performance which confirmed that the interaction effect of SO on the relationship

between EO and SMEs performance did exist.

Keywords: Entrepreneurial Orientation (EO), Stakeholder Orientation (SO), SMEs performance, Resource-Based View (RBV), stakeholder theory.

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Ekawee Vaitoonkiat

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TABLE OF CONTENTS

Page

LIST OF TABLES

Page

LIST OF FIGURES

Page

CHAPTER 1

INTRODUCTION

1.1 Background of the Study

According to World Bank (2017), the world economy in 2017 is projected to be another difficult year with a low projected growth of 2.7 percent due to stagnant global trade, subdued investment and heightened policy uncertainty. A recovery in emerging market and developing economies (EMDEs) is expected to drive the world economic growth. Among major EMDEs in South East Asia, Thailand has played significant role at the top four ranks with a nominal GDP total of 437.3 Billion US Dollars (Worldatlas, 2016). Thailand's past economy used to grow at relatively high annual rate of 7.5 percent during the year 1960 to 1996 following by 5.0 percent after the Asian economic crisis during 1999-2005; however, annual growth of Thailand has continued to drop to 3.5 percent during 2005-2015 and even expect to slower at 3.1 percent in 2016 and 2017 (World Bank, 2017).

Asian Development Bank, ADB (2015) suggested that EMDEs like Thailand requires a new growth model in which Small and Medium Enterprises (SMEs) play a key role in boosting national productivity and cope with global economic downturn. SMEs have been recognized as a major source of employment and a high efficiency resource allocation and distribution by mobilizing and utilizing local human and materials (Cunningham & Rowley, 2010). Many nations in developing countries have recognized the value of SMEs from the characteristics of dynamic, innovative and flexibility which enable them to survive in a difficult situation and play an important role in enhancing a country's economic growth (Arief, Thoyib, Sudiro, & Rohman, 2013; Jeswal, 2012).

In Thailand, previous study described the competitive strength of Thai SMEs in terms of innovation and proactive with emphasizing in a long term growth (Swierczek & Ha, 2003). Thai SMEs plays significant role with high contribution

percentage of 97.2% of total enterprises in the country, accounting for 2.76 million firms, creating 11.4 million jobs or 81% of the total workforce in 2013; moreover, Thai SMEs also continued to influence international trade with more than 26% of the country total export value in 2013 (ADB, 2015). Although Thai SMEs tend to have a reasonable growth from the past 10 years. However, the growing trend has been seen in trade and service sector and not in manufacturing sector (The office of SMEs Promotion, 2017). The declining of Thai SMEs manufacturing sector in recent years has affected employment rate and economic outputs. (Charoenrat, Harvie, & Amornkitvikai, 2013). Even SMEs in EMDEs seem to play a major role to boost the economy; however, researches show that SMEs has some potential weaknesses such as lack of market power and financial resources to support their expansion Damanpour (2010) and are likely to get affected from economic downturn than larger corporations (Bourletidis & Triantafyllopoulos, 2014; Charoensukmongkol, 2019a, 2019b). According to Bourletidis and Triantafyllopoulos (2014) SMEs in periods of prolonged economic crisis may face difficulties due to their lack of resource and capacity such as financial resource, technology, managerial and human capabilities to overcome the crisis. In order to overcome these weakness, SMEs tend to develop internal competitive strengths that enable them compete effectively with larger firms (Wiklund, Patzelt, & Shepherd, 2009). Maranto-Vargas and Rangel (2007) argued that SMEs' internal capabilities tend to be more important than financial resources in developing their competitive advantages which enable them to compete effectively in the high market competition. Previous studies suggested that small firms tend to be innovative and have a risk taking initiative, which could be a key factor that contributes their growth significantly (Terziovski, 2010; Wolff & Pett, 2006). Moreover, Aragón-Correa, Hurtado-Torres, Sharma, and García-Morales (2008) argued that SMEs tend to have high entrepreneurial orientation within their organization since the owners and/or managers are likely to communicate and dissipate their visions as well as reinforce opportunity-seeking and problem solving behaviors to their employees.

The study focuses on SMEs in steel fabrication industry which has been one of the key manufacturing sectors of Thai SMEs. Steel fabrication industry transforms steel raw materials by processing, assembling and building into parts, sub-assemblies

and finished products which are widely used in many applications and industries (Steel Fabrication Industry in Thailand, 2009). Besides in declining trend Thai SMEs in manufacturing sector, steel fabrication industry has still been playing active roles with steady performance due to the expansion of a construction sector, government infrastructure projects such EEC (Eastern Economic Corridor), airport or mass transportation and Thailand industrial 4.0 project aiming for expansion in machinery, automatic manufacturing and automotive sectors (Iron and Steel Institute of Thailand, 2018). Increasing trend of steel consumption in the country makes steel fabrication industry becomes one of attractive industries for both large enterprises and SMEs in (The office of SMEs Promotion, 2017).

However, according to the Iron and Steel Institute of Thailand (2018), effects from increasing trend of local steel price which estimated at 8.2% in 2017 and a strong competition from Vietnam have been major threats for Thai SMEs in steel fabrication industry. Vietnam was predicted to replace Thailand and become the Asian number one in steel industry in terms of production, consumption and export in the year 2020 (Thansettakij, 2016). This is expected to create more intense competition in steel fabrication market in Thailand since many steel products could be fabricated in Vietnam with more competitive price and finally imported to Thailand without import duty by Asian free trade agreement. Another major challenge faced by Thai SMEs in steel fabrication industry was the threat from importation of prefabrication steel products from China. According to Prachatchat.net (2017), the prefabrication steel products imported from China during January to August 2017 were unexpectedly high with more than 64,000 metric tons. The highly competitive price of prefabrication steel products from China has inevitably affected Thai SMEs in steel fabrication industry. The imported prefabrication steel products could cut off many local manufacturing activities in Thailand, making it’s hard for Thai SMEs in steel fabrication industry to expand and prosper (Prachatchat.net, 2017). Because of the aforementioned negatives factors that affected Thai SMEs in steel fabrication industry, it drives SMEs to realize the needs to search for new sources of competitiveness that allow them to deal with these challenges effectively.

The previous entrepreneurial researches suggested that a particular competency that allows SMEs to respond proactively and aggressively to a high

market competition and economic downturn is Entrepreneurial Orientation (EO) (G Thomas Lumpkin & Dess, 2001; Tang & Hull, 2012). EO refers to the strategy making processes that provide organizations with a basis for entrepreneurial decisions and actions (G Tom Lumpkin & Dess, 1996; Wiklund & Shepherd, 2003). EO activities observed in SMEs are such as launching innovative products and service that capture the market opportunity, driving organization toward goals proactively, making decisive decision on risky projects, competing and suppressing threats from competitors aggressively and empowering team or business unit to make quick decision in response to the competition (Arief et al., 2013; Arshad, Rasli, Arshad, & Zain, 2014; Brouthers, Nakos, & Dimitratos, 2015; Kraus, Rigtering, Hughes, & Hosman, 2012; Mahmood & Hanafi, 2013). There is a body of research provided empirical support about the benefits of EO on SMEs performance such as sales growth, employee growth and return on investment (Covin & Slevin, 1991; Krauss, Frese, Friedrich, & Unger, 2005; G Tom Lumpkin & Dess, 1996; Wiklund & Shepherd, 2005; Zahra & Covin, 1995).

Besides EO, another strategic managerial orientation that helps a firm building sustainable competitive advantage is Stakeholder Orientation (SO). Stakeholders are groups or individuals who are affected by or can affect the achievement of an organization's objectives (Freeman, 2010). According to Ferrell, Gonzalez-Padron, Hult, and Maignan (2010), SO is defined as the organizational culture and behaviors that induce organizational members to be continuously aware of and proactively act on a variety of stakeholder issues. There were studies supporting the benefit of organization from adopting SO which involved the entrepreneur or manager to develop relationships with the firm's stakeholders, making all stakeholders contribute their best interest to create value that firm committed (Ayuso, Ángel Rodríguez, García-Castro, & Ángel Ariño, 2011; Cennamo, Berrone, Cruz, & Gomez‐Mejia, 2012; Deshpande & Farley, 1999; Gonzalez-Padron, Hult, & Ferrell, 2016; Torugsa, O'Donohue, & Hecker, 2012; Yau et al., 2007; Zink, 2005). Moreover, the positive relationship between SO and firm performance measured in terms of financial returns is also empirically supported (Freeman, 2017; Greenley & Foxall, 1997; Harrison & Wicks, 2013; Lee & Susan, 2015).

Although previous studies have found positive contribution of EO and SO to firm performance, prior research tended to analyze the effect of EO and SO separately; there is no research that explores the role of EO and SO together as determinants of firm performance. Moreover, previous studies suggest that EO tends to have a positive influence on firm performance in a short-term perspective (less than five years) as it facilitates entrepreneurial firms to compete in a turbulent hypercompetitive environment where product and services cycles are characteristically short (Barringer & Bluedorn, 1999; Murimbika & Urban, 2014; Wiklund, 2006; Wiklund & Shepherd, 2011; Zellweger & Sieger, 2012) while SO seems to have a positive influence on firm performance in a long-term perspective (more than five years) in accordance with suggestions from extant researches that long-term success of the firm depends on the firm's ability to create value and satisfaction for a variety of stakeholders, such as customers, suppliers, investors, and employees (Berman, Wicks, Kotha, & Jones, 1999; Freeman & McVea, 2001; Miller & Le Breton-Miller, 2005; Phungsoonthorn & Charoensukmongkol, 2019; Post, Preston, & Sachs, 2002; Ruf, Muralidhar, Brown, Janney, & Paul, 2001). Since EO and SO tends to have influence on firm success in different time frame, having both strategic orientations implemented together could possibly lead to better strategic positioning for the firm which is not only aiming at success in a short term but also in a long term. Given that this is the area that has not been investigated in previous research, it is important for the study to explore the interaction between EO and SO to provide evidence to support this view.

1.2 Purpose of the Study

Our study aims to fill the above mentioned gap by investigating the contribution of EO and SO to SMEs performance in Thailand. Firstly, the main purpose of the study is to explore whether both EO and SO are the determinants of Thai SMEs performance. Secondly, the study will investigate whether firms that adopt both EO and SO will demonstrate better business performance than when just one strategic orientation is adopted. In particular, this research focuses on Thai SMEs in steel fabrication industry. Steel fabrication industry is selected because it has been

one of the major manufacturing industries of Thai SMEs that is significantly important for to the country in terms of employment and exports potential (Charoenrat et al., 2013). Moreover, the trend of steel consumption in five major countries in ASEAN including Thailand has been increasing with average annual growth of 5% since 2016 (World steel association, 2017), thereby making this industry become one of key representatives of manufacturing sector of Thai SMEs.

This study uses Resource-Based View (RBV) and stakeholder theory as a theoretical framework to explain the role of EO and SO on SMEs performance. According to RBV, a firm's competitive advantages are generated within a firm from its unique set of strategic resources including tangible and intangible assets which are valuable, rare, costly to imitate and difficult to substitute by competitors (J. Barney, 1991; Peteraf, 1993). Previous researches suggested that EO is a firm's intangible asset which is value, rare and difficult to imitate and substituted by competitors; therefore it is considered as a firm's strategic resource which possibly leads to sustainable competitive advantages for a firm (Kropp, 2006; Martin, 2009). On the other hand, stakeholder theory suggests the needs for firm's manager to put focus on firm's stakeholders, treating and managing their interests well, which help firm creates value in many aspects and finally leading to a better firm performance (Donaldson & Preston, 1995; Freeman, Harrison and Wicks, 2007; Harrison, Bosse & Phillips, 2010). SO is also regarded as a firm's strategic resource which helps firm to clarify the corporate mission, culture and development of the strategic planning that possibly lead to positive performance like sales growth, market share and new product launching success (Ferrell et al., 2010).

1.3 Significant of the Study

This study provides academic contribution and contribution for SMEs sector in practical way**.** For academic contribution, firstly, this study investigates the relationship between EO, SO and firm performance in context of SMEs in Thailand. Although the empirical studies of the effect of EO on firm performance have been extensively conducted in many contexts across the globe, the empirical investigation of SO on firm performance is still not widely conducted and mostly limited to firms in

developed economies such as in the US., U.K. and European countries (Patel, Manley, Hair, Ferrell, & Pieper, 2016; Perrini & Tencati, 2006; Yau et al., 2007). Therefore, the empirical investigation of the relationship between SO and firm performance in context of SMEs in developing economy such as Thailand can potentially fill this research gap. Secondly, even though the relationship between EO and firm performance as well as SO and firm performance have been studied in previous researches; however, to the best of our knowledge, the empirical study that investigate the interaction between EO and SO has not been conducted before. Moreover, given that EO tends to influence firm success in short term perspective while SO tends to influence firm success in long term perspective, the study of relationship between EO and SO could possibly leads to an important strategic management for SMEs since it explores into the area of firm's sustainable competitiveness which incorporates both short term and long term success.

For practical contribution, this research could offer SMEs suggestions to adopt a firm-level managerial strategic orientation such as EO and SO to their strategic plan. In recent global economic downturn that SMEs have become main focus of the country's economic driving force, it is necessary for SMEs to search and develop new competitive resources and capabilities that enable them to outperform the market and continue to succeed sustainably. The managerial strategic orientation which can be acquired and developed internally by SMEs like EO and SO could potentially become the strategic resources that enhance both short-term and long-term success for the firms. The results from this study could offer guidelines for SMEs whether they should invest, develop and maintain EO and SO within their organization.

CHAPTER 2

LITERATURE REVIEW

2.1 Entrepreneurial Orientation (EO)

In the early entrepreneurial research, Mintzberg (1973) explained that entrepreneurial firms were likely to take more risks and more proactive in searching for new business opportunities than other types of firm. According to Miller (1983, p. 771) "an entrepreneurial firm is one that engages in product-market innovation, undertakes somewhat risky ventures, and is first to come up with proactive innovations, beating competitors to the punch". Miller (1983) further argued that the emphasis of entrepreneur researches in the past just focused on individual entrepreneur for its new venture creation and innovation capabilities while his study shifted the focus from individual entrepreneur to a firm-level entrepreneurial activity due to the growth and complexity of organizations. Covin and Slevin (1991) proposed the conceptual model of entrepreneurial organization or a firm-level entrepreneur in which particular entrepreneurial behaviors are recurring and infiltrating into all levels of organization; moreover, adopting this firm-level behavior model of entrepreneurship has more advantages compares to individual trait entrepreneurship since a firm-level entrepreneurial behavior can be reliably, verifiably and objectively measured and managed.

Entrepreneurial orientation (EO) has emerged as a major concept comprising of various disciplines including entrepreneurship, organizational behavior, strategic management, marketing, and operations (Dess, Pinkham, & Yang, 2011). Lechner and Gudmundsson (2014) argued that there is no single agreed definition of EO. However EO is widely regarded as firm-level entrepreneurship focused on opportunity recognition and exploitation (Covin & Wales, 2012). Miller (1983) proposed the concept of firm level EO comprising of three independent dimensions including innovativeness, risk-taking and proactiveness. This study follows EO

definition suggested by Lumpkin and Dess's conceptualization in which EO is defined as the strategy-making processes, structures and behaviors of firms characterized by the exhibition of five entrepreneurial behavioral dimensions in pursuit of opportunity which are innovativeness, proactiveness, risk-taking, competitive aggressiveness and autonomy (G Thomas Lumpkin, Cogliser, & Schneider, 2009; G Tom Lumpkin & Dess, 1996; G Thomas Lumpkin & Dess, 2001). Even though the conceptualization of EO based on the above five independent dimensions is a distinct theoretical construct that do not need to covariate, each dimension may vary independently in a given context (Covin & Wales, 2012; G Tom Lumpkin & Dess, 1996). Each of EO dimensions is reviewed and summarized in details as below.

2.1.1 Autonomy

Autonomy refers to independent action taken by an individual or a team aimed at bringing forth a business idea or a vision and carrying it through the completion (G Tom Lumpkin & Dess, 1996). The character of entrepreneurial firm which has an autonomy can demonstrate by supporting individuals and/or teams to pursue business opportunity and make decision autonomously with less dependent to the supervisors (Rauch, Wiklund, Lumpkin, & Frese, 2009). Firms which intend to foster autonomy tend to engage in organization structure changes such as flattening hierarchies, delegating authority to business units, bending the rules and bypassing procedure and budgets (McDougall, Shane, & Oviatt, 1994; Pinchot, 1985).

2.1.2 Innovativeness

Innovativeness refers to a firm's tendency to engage in and support new ideas, novelty, experimentation, and creative processes that may result in new products, services, or technological processes (G Tom Lumpkin & Dess, 1996). Innovativeness of entrepreneurial firms can be demonstrated by several forms of innovative action from a simple willingness to try a new product/service or new advertising venue to a commitment to master the latest new products or technological advances (G Tom Lumpkin & Dess, 1996). The level of expenditures such as R&D costs as percentage of sales and/or the number of resources dedicated to R&D activities such a number of

engineers and scientists in R&D department can reflect firm's commitment to innovation activities (Charoensukmongkol, 2014; Hage, 1980; Miller, 1987, 1988). In the area of product-market innovation, one method for assessing firm's level of innovation that often used is to investigate the number of new product or service introductions and the frequency of changes in product lines or services (Covin & Slevin, 1989). Firms which intend to foster innovativeness tend to launch new products or services to the market periodically, change product lines or services dramatically, and have a long-term commitment to invest in new technology, R&D and continuous improvement (Chang, Lin, Chang, & Chen, 2007; Covin & Slevin, 1989). Innovative companies which developing and promoting new products, services and technologies, can generate high business performance and have been described as the engines of economic growth (S. L. Brown & Eisenhardt, 1995).

2.1.3 Risk-taking

Risk taking refers to taking bold actions by venturing into the unknown, borrowing heavily, and/or committing significant resources to ventures in uncertain environments (Rauch et al., 2009). According to Miller and Friesen (1978, p. 923) "the essential definition of risk taking is the degree to which managers are willing to make large and risky resource commitments i.e. those which have a reasonable chance of costly failures". The character of entrepreneurial firm which has a risk-taking can demonstrate by incurring the high leverage from borrowing and making large resource commitments in the interest of getting high returns from opportunities in the marketplace (G Tom Lumpkin & Dess, 1996). Firms which intend to foster risk-taking tend to invest in high risk projects with chances of very high return, adopts a bold, wide-ranging acts necessary to achieve the firm's objectives, invest in major projects through heavy borrowing and take calculated risks with new ideas (Chang et al., 2007; Covin & Slevin, 1989; Hughes & Morgan, 2007)

2.1.4 Proactiveness

Proactiveness refers to an opportunity-seeking, forward-looking perspective characterized by the introduction of new products and services ahead of the competition and acting in anticipation of future demand (Rauch et al., 2009).

Venkatraman (1989) suggested that proactiveness refers to processes aimed at anticipating and acting on future needs by seeking new opportunities. “The character of entrepreneurial firm which has a proactiveness can demonstrate by anticipating and pursuing new opportunities which may or may not be related to the current firm’s operation, introducing new products and brands ahead of competitors, strategically eliminating firm’s operations which are in the mature or declining stages of life cycle”(Venkatraman, 1989, p. 949). Firms who intend to foster proactiveness tend to initiate actions which competitors later on respond to, be the first one to introduce new products/ service or administrative techniques or operating technologies to the market, closely monitor technological trends and identify future needs of customers and be keen at identifying opportunities (Chang et al., 2007; Covin & Slevin, 1989). Proactive companies can create first-mover advantages, skim the market ahead of competitors, and target premium market segments (Zahra & Covin, 1995).

2.1.5 Competition Aggressiveness

Competition aggressiveness refers to a firm's efforts to outperform its industry rival in the market place, to achieve entry or improve position which characterized by a combative posture and to aggressively response to competitor’s actions (G Thomas Lumpkin & Dess, 2001). The character of entrepreneurial firm which has a competition aggressiveness can demonstrate by setting aggressive target of annual performance or market share and taking bold steps to achieve them by cutting prices and sacrificing profitability, lowering the price in response to competition, fast launching a new competitive product a head of competitors and spending aggressively in comparison to competitors on marketing, product service quality or manufacturing capacity (MacMillan & Day, 1987; Venkatraman, 1989). Firms who intend to foster competition aggressiveness tend to seek for a competitive “undo-the-competitors” position, possess very aggressive and intensely competitive strategy, adopt a price-cutting strategy to enhance a competitive position, imitate the business practices or techniques of successful competitors to enhance a competitive position and use of unconventional strategies to challenge competitors.(Chang et al., 2007; G Thomas Lumpkin & Dess, 2001)

2.2 Prior Research Findings about Contributions of EO

The previous researchers have found positive association between EO and firm performance in SMEs and many contexts across the globe. Since the five major characteristics of EO are the keys to enhance firm's competitiveness, in combination with opportunity seeking and exploiting behavior which are also the characteristic of an entrepreneurial firm, EO therefore tends to affect firm performance positively (Covin & Wales, 2012; G Tom Lumpkin & Dess, 1996). The summaries of EO found in research are reported in table 2.1.

Table 2.1 Research Outcomes Associated with EO

Author (year)	Research contexts	Findings
Mahmood and Hanafi (2013)	Women owner/managers of SMEs in Malaysia.	1) Entrepreneurial Orientation (EO) has a positive effect towards business performance of women-owned SMEs in Malaysia. 2) Partial mediation effect of competitive advantage was found on the relationship between EO and business performance. 3) The findings showed the importance competitive advantage in enhancing the relationship between EO and performance of women-owned SMEs in Malaysia.
Lechner and Gudmundsson (2014)	Small firms in Icelandic	1) The relationship of EO and small firm performance is mediated by firm's competitive strategy. 2) There are different impacts of individual EO dimensions on firm's competitive strategy. 3) Competitive strategy i.e.

Author (year)	Research contexts	Findings
		differentiation and cost leadership are positively related to firm performance.
Hongyun et al. (2014)	Entrepreneur firms in design industry in China	1) The five-dimensional EO scale (FDEOS) is reviewed and revised by this study as a second order reflective model in which EO can affect all five dimensions while each dimension, if not all, does not affect EO. 2) From behavioral perspective, the improved FDEOS developed by this study is found to be neutral with regard to industry context and type of organization.
Arshad et al. (2014)	Technology-based SMEs in Malaysia from both manufacturing and service sector.	1) Only four dimensions of EO, except autonomy, were positively related to business performance: innovativeness, proactiveness, risk-taking and competitive aggressiveness. 2) There was no correlation to business performance found on autonomy in the context of technology-based SMEs in Malaysia.
Zellweger and Sieger (2012)	Three long-live Swiss family firms: aging between 80 and 175 years old.	1) In contrast to the previous studies in the entrepreneurship field, a high level of the five EO dimensions was not a necessary conditioned for the firm's long-term success. 2) The five dimensions EO scales do not sufficiently capture the full extent of entrepreneurial behaviors in long-lived family firms.

Author (year)	Research contexts	Findings
Wiklund and Shepherd (2003)	Swedish small and medium-sized businesses	1) Knowledge-based resources (applicable to opportunities discovery and exploitation) are positively related to firm performance. 2) EO positively moderates the relationship between a bundle of knowledge-based resources (applicable to opportunities discovery and exploitation) and firm performance.
Brouthers et al. (2015)	SMEs companies in the United States and the United Kingdom	1) Both types of alliances (research alliance and marketing alliance) can be benefits to SME's performance depending on SME existing capabilities. 2) EO positively relates to SMEs performance in a specific foreign market as SMEs expanding abroad. 3) EO positively moderates the relationship between alliance participation and firm performance in context of international market expansion of SMEs.
Rigtering, Kraus, Eggers, and Jensen (2014)	SMEs in manufacturing and service industry from the four German-speaking countries which are Germany, Austria, Switzerland, and Liechtenstein.	1) Service firms have significant higher EO than manufacturing firms both at the overall level and for each of the three sub-categories. 2) Service firms appeared to be more innovative, risk-oriented and proactive than manufacturing firms. 3) Manufacturing firms have a stronger relationship between EO and growth than service

Author (year)	Research contexts	Findings
		firms, however this relationship is not significant, providing that EO as a second-order construct which is of equally importance within both industries.
Hakala (2013)	Computer software SMEs in Finland	1) The effects of EO on firm's profitability are fully mediated by learning oriented (LT) behaviors. 2) The effect of EO on firm's growth is direct and not mediated by LO. 3) LO does not have a positive relationship with firm's growth.
Filser and Eggers (2014)	SMEs in Rhine valley where three European countries i.e. Liechtenstein, Austria and Switzerland are geographically intersected.	1) The effect of individual three dimensions of EO (innovativeness, proactiveness and risk-taking) on firm performance is varied by individual dimension and by each country. 2) The optimal levels of each dimension of EO differ based on different country.
Su, Xie, and Wang (2015)	New ventures in manufacturing sector from many cities covering the eastern, western, and central areas of China.	1) There is a positive relationship between EO and new venture performance in China. 2) The moderating effect of political networking on the relationship between EO and new venture performance is negative, while the moderating effect of financial networking is inverse U-shaped, and the moderating effect of business networking is positive.

Author (year)	Research contexts	Findings
Kollmann and Stöckmann (2014)	Adolescent companies in ICT-related industry in Germany	1) EO positively effects firm performance. 2) Exploration and exploitation innovation are positively related to firm performance. 3) Exploration and exploitation innovation positively mediates the relationship between EO and firm performance. 4) The relationship between constituent dimensions of EO and firm performance are mediated by exploration and exploitation innovation but with different effect.
Adomako, Howard Quartey, and Narteh (2016)	SMEs in Ghana	1) Passion for work positively moderates the association between EO and firm performance. 2) The joint effect of EO and passion for work on firm performance is further moderated by environmental dynamism.
Kantur (2016)	Manufacturing firms in automotive and food industry in Turkey and Service firms in telecommunications and banking industry in Turkey	1) EO has a positive relationship with firm's financial and non-financial performance. 2) Strategic entrepreneurship, which is described as real entrepreneurial events and not just only behavioral approaches, fully mediates the relationship between EO and firm's financial performance as well as the relationship between EO and firm's non-financial performance.

Author (year)	Research contexts	Findings
Real, Roldán, and Leal (2014)	Spanish technological competent firms from industrial sectors in Andalusia, Spain.	1) Organization learning (OL) partially mediates the relationship between EO and perceived firm performance. 2) OL fully mediates the relationship between learning orientation (LO) and perceived firm performance. 3) The relationship between EO and OL is greater in large firms compared to SMEs. 4) The relationship between LO and OL is greater in SMEs compared to large firms.
Murimbika and Urban (2014)	The South African financial and business service firms	1) The strategic management practice composes of five attributes which are locus of planning, scanning intensity, planning flexibility, planning horizon, strategy and financial control attributes 2) All and each dimension of above strategic management practice has a positive relationship with a firm's EO in different degree.

2.3 Stakeholder

According to Freeman (2010), the term stakeholder had been pioneered and developed by Stanford Research Institute in the 1960's. Stakeholders are any groups or individuals who are affected by or can affect the achievement of an organization's objectives (Freeman, 2010). Stakeholder groups include primary and secondary stakeholders. Primary stakeholders are those who have formal, official and contractual relationship in which immediate influence or impact on firm's objectives (Freeman, 2010) such as shareholders, employee, customer, competitor and suppliers; on the other hand secondary stakeholders are those who do not have immediate impact or

influence on firm's objectives such as government agencies, communities and other more peripheral interest groups (Clarkson, 1995; Parmar et al., 2010). In order to achieve the organizational objectives, firms need to take into account the various stakeholders who affect the achievement of organization in different ways. Each stakeholder has a different set of expectations regarding the firm's objectives. Some stakeholders hold the authorize in controlling firm resources (Jawahar & McLaughlin, 2001) such as shareholders who have legal authority to vote for approving firm's capital expenditure or other financial related decisions while others deliver perceived performance to influence firm's success (Wood & Jones, 1995) such as employees and suppliers.

2.4 Stakeholder Theory

The role of stakeholders that can affect firm performance can be explained by stakeholder theory. According to Donaldson and Preston (1995), the stakeholder theory is intended to explain and guide the structure and operation of the firm which can be viewed as an organizational entity in which different participants accomplish multiple purposes that are not always completely congruent. Stakeholder theory can be presented in different ways and involved different methodologies, types of evidence, and criteria of appraisal. In particular, Donaldson and Preston (1995) proposed the three different aspects in approaching stakeholder theory which are (1) descriptive aspect of stakeholder theory, (2) instrumental aspects of stakeholder theory and (3) normative aspect of stakeholder theory. First, the descriptive aspect of stakeholder theory is used to explain the specific characteristics, behaviors or nature of the corporation which involve managers and stakeholders (Berman et al., 1999). It views the corporation as a constellation of cooperative and competitive interests, possessing intrinsic value and concerns how managers actually manage stakeholders (Berman et al., 1999; Donaldson & Preston, 1995). A descriptive aspect of stakeholder theory according to Brenner and Cochran (1991, p. 462) suggests that "the organization behavior can be predicted by the nature of its stakeholders, their values, their relative influence on decisions and the nature of the situation". Mitchell, Agle, and Wood (1997) proposed another descriptive aspect of stakeholder theory

arguing that stakeholders' salience is positively related to the cumulative number of stakeholder attributes of power and legitimacy to the firm; in other words, the stakeholders differs in their salience to the firm. An instrumental aspect of stakeholder theory is used to identify the connections between the practice of stakeholder management and the achievement of various corporate objectives such as profitability, stability and growth (Donaldson & Preston, 1995). In other words, the instrumental aspect of stakeholder theory links the stakeholder management by manager or entrepreneur to corporate performance with a fundamental assumption that the ultimate goal of corporate decisions is success in a market place and stakeholder strategic management is a means to that success (Jawahar & McLaughlin, 2001). A normative aspect of stakeholder theory involves the acceptance of the two major ideas including (1) stakeholders are individuals or groups with legitimate interests in procedural and/or substantive aspects of firm's activity (2) the interests of all stakeholders are of intrinsic value which means each group of stakeholders merits consideration for its own sake and not merely because of its ability to further the interests of some other groups (Donaldson & Preston, 1995). The normative aspect of theory concerns how managers should deal with the interest of all corporate stakeholders and how all corporate stakeholders should be treated on the basis of underlying moral and philosophical principles by managers. The implication is that moral principles should drive stakeholder relations (Berman et al., 1999; Jawahar & McLaughlin, 2001). Evan and Freeman (1993) advocated the normative aspect of stakeholder theory that managers should make decisions based on respecting stakeholders' well-being rather than treating them as means to a corporate end. Freeman (1994, 2010) viewed stakeholder theory similarly in terms of three different approaches to stakeholder theory which are (1) descriptive approach, which is applied to identify the firm's stakeholders and show how they interact (2) instrumental approach, which is applied to test the relationship between stakeholder management and firm's performance and (3) normative approach, which is applied to evaluate the way firm should be governed and the way managers should perform.

According to Donaldson and Preston (1995), the three aspects of stakeholder are different but also mutually supportive. While descriptive and instrumental aspect of stakeholder theory possess major attributes of stakeholder theory, the normative

aspect which underlying moral and ethics is considered as fundamental basis of stakeholder theory (Donaldson & Preston, 1995; Freeman, 2010). Our study focuses on descriptive and instrumental aspect of stakeholder theory; which involves the identification of firm's key stakeholders and the effect of each and all key stakeholders on firm performance.

Stakeholder theory suggests that the firm should comprehend and prepare for stakeholders interests to maximize its wealth and the collective benefits of all stakeholders (Donaldson & Preston, 1995; Freeman, 2010). According to Donaldson and Preston (1995), the stakeholder theory is considered managerial since it recommends attitudes, structures, and practices that constitute stakeholder management. Stakeholder management requires simultaneous attention to the legitimate interests of all appropriate stakeholders, this requirement holds for anyone managing or affecting firm's policies and it does not imply that all stakeholders should be equally involved in all processes and decisions (Donaldson & Preston, 1995).

The concept of stakeholder management had been further developed and emphasized that managers need to understand the concerns and interests of shareholders, employees, customers, suppliers, financiers and society in order to develop business strategies that stakeholders will support, and this support is necessary for long term success of the business (Freeman, 2010). Since there were many groups and individuals who had a stake in firm's success and the business environment were getting more turbulence with accelerated changes, the stakeholder management had become more crucial compare to many traditional approaches of strategic management which had ignored and/or marginalized some stakeholders and consistently traded-off the interests of other stakeholders against favored stakeholder group (Freeman, 2010). Finally the manager tasks are to ensure that the interests of key stakeholders must be integrated into the main purpose of the firm and stakeholder relationships must be managed in a coherent strategic fashion (Freeman & McVea, 2001).

The stakeholder management did not naively suggest that the managers can always turn all constraints and trade-offs into a win-win situations (Freeman & McVea, 2001). Due to limitation of firm's resources and diverse interests of

stakeholders, firm may not be able to address the interest of all stakeholders equally, making it is not possible for all stakeholders realize full benefit at all time, even having a strong stakeholder relationships and a good understanding (Clarkson, 1995; Freeman & McVea, 2001). Because most strategies can distribute both benefits and harms between different groups of stakeholders, win-win situations cannot always be guaranteed (Freeman & McVea, 2001). However it was important for managers or entrepreneurs to develop strategies that distribute harms and ensures the long-term support of all the stakeholders, over time all stakeholder interests need to be managed in the same direction (Freeman & McVea, 2001).

2.5 Stakeholder Orientation (SO)

According to Greenley and Foxall (1996, 1997), stakeholder orientation (SO) is defined as the firm's strategic orientation to the diverse interests of stakeholder groups. It represents how much the firm attends to the interest of all relevant stakeholders and attempts to address such interest. SO is central to the firm's strategic planning and is positively associated with firm's performance by previous empirical supports; failure to address the interests of all its relevant stakeholder groups may be detrimental to company performance (Greenley & Foxall, 1997; Hillman & Keim, 2001). SO was considered by previous studies as both unidimensional and multidimensional variable. Both conceptualizations of SO were found to have positive effect on firm performance. SO as a unidimensional variable was reported to have a positive association with firm performance by previous studies (Donaldson & Preston, 1995; Jones, 1995; Orlitzky, Schmidt, & Rynes, 2003). When SO is considered as multidimensional variable, the relationship between its key component which are the key stakeholder orientation i.e. customer orientation, competitor orientation, employees orientation, shareholders orientation and firm performance was also reported positively (Berman et al., 1999; Koirala & Charoensukmongkol, 2018; Patel et al., 2016). Moreover SO as a multiple stakeholder orientation was supported by researches for it helps adding both financial and non-financial value to the firm in long terms (Greenley, Hooley, & Rudd, 2005; Harrison & Wicks, 2013). Even though the studies showed positive relationship between key stakeholder orientation and firm

performance, the moderating effect of each key stakeholder orientation on these relationships were reported with varied results. For example, shareholder orientation negatively moderated the relationship between customer orientation and firm performance while employee orientation and competitor orientation moderated the same relationship positively (Luk, Yau, Chow, Tse, & Sin, 2005). According to Ferrell et al. (2010) and Greenley and Foxall (1997), the orientation to key stakeholders like customer, competitor, employee and shareholder helps to clarify the corporate mission, culture and development of strategic planning; therefore, it positively relates to firm performance such as sales growth, market share and new product success.

2.6 Components of the SO

Previous research showed that there are four groups of key stakeholders which are relevant for most corporations and positively related to firm performance, including customer, competitor, employees and shareholders (Greenley & Foxall, 1996, 1997, 1998; Greenley et al., 2005; Patel, 2012; Yau et al., 2007). The first two groups of stakeholder, customers and competitors, have been intensively studied as major components in the market orientation research (Narver & Slater, 1990). The latter two groups of stakeholder, which are employees and shareholders, have been increasingly recognized as the firm's primary stakeholders that crucially important to firm's survival and success (Kuvaas, 2008). Each component is described in details as follows:

2.6.1 Customer Orientation

Since customers are the primary source of a firm's revenue, it is important for a firm to be able to predict, understand, and possibly control customer needs and tastes (Tarsakoo & Charoensukmongkol, 2019; Yau et al., 2007). Customer orientation refers to a firm's focus on customer interests (Luk et al., 2005). According to Deshpandé, Farley, and Webster Jr (1993, p. 27), customer orientation is "the set of beliefs that puts the customer's interest first, while not excluding those of all other stakeholders such as owners, managers and employees, in order to develop a long-

term profitable enterprise". Ang and Buttle (2006) argues that a customer orientation is a process of putting customers at the heart of an organization, having the appropriate vision of customers and their needs, making the organization sees itself through the eyes of the customers. According to Narver and Slater (1990), a customer orientation requires a firm to understand a customer's entire value chain and not just only at present but also its evolvement over time according to internal and external or market dynamics. Moreover, a customer-oriented company tends to instill a positive attitude toward creating customer value to its employees and educate its employees to deliver superior customer value (Homburg & Pflesser, 2000; Pandey & Charoensukmongkol, 2019).

2.6.2 Competitor Orientation

Competitor orientation refers to a firm focuses on competitor interests (Luk et al., 2005). According to Freeman (2010), competitors are the stakeholders that exercise competitive threats to the firm. Competitor can actively compete for resources and force changes in pricing and strategy (Eibe Sørensen, 2009). On the other hand, competitors also provide benchmarks, drive for innovation and validation for customers (Greenley & Foxall, 1997; Yau et al., 2007). In particular, firms that emphasize competitor orientation tend to pay attention to its competitors' interests and actions in order to neutralize threats from their business strategies (Freeman, 2010). Moreover competitor oriented firms also outperform their competitors in order to retain customers and do not lose customers to its competitors (Greenley & Foxall, 1997, 1998; G Tom Lumpkin & Dess, 1996). Firms that focus on competitor orientation also understand the short-term strengths and weaknesses and long-term capabilities and strategies of current and potential competitors, as well as predict, monitor and counteract the actions and activities of their competitors (Narver & Slater, 1990). Nonetheless, they also adhere to the rule of fair competition and respect the competitors' legitimate rights (Luk et al., 2005).

2.6.3 Employee Orientation

Employee orientation refers to a degree how a firm addresses the interests of its employees and satisfies their employment needs (I. Lings, Greenley, & Broderick, 2000; Luk et al., 2005). According to Plakoyiannaki, Tzokas, Dimitratos, and Saren (2008), employee orientation describes a view of employees as partners in the effort of the firm to achieve organizational success in the marketplace. Hauser, Simester, and Wernerfelt (1996) argued that success in customer relationship requires a management focus on supporting the needs of employees, who in turn, accommodate the external customers. Moreover, the retention of key employees appears to be a prime issue for entrepreneurial firms under todays' increasingly competitive economy (Kemelgor & Meek, 2008). An employee-oriented firm tends to provide resources to promote various forms of employee benefits such as welfare, job security and reward system, which in turn, reduces employees' stress and enhances their satisfaction and commitment to the firm's goals (Charoensukmongkol & Suthatorn, 2018; Hooley et al., 2000; Janz & Prasarnphanich, 2003; I. N. Lings & Greenley, 2005; Phungsoonthorn & Charoensukmongkol, 2018). Moreover, research found that entrepreneurial firms that emphasized employee orientation created an employee's positive work environment, provided employees with freedom and flexibility, offered sufficient employee's involvement and growth opportunities, facilitated processes related to employee's compensation and benefits, and often communicated with and provided assistance to their employees (Kemelgor & Meek, 2008).

2.6.4 Shareholder Orientation

A shareholder orientation is defined as how the firm's management or manager is willing to take care of the interests of shareholders (Luk et al., 2005; Yau et al., 2007). Shareholder orientation relates to two types of firm's stakes which are (1) equity stake and (2) risk stake (Mitchell et al., 1997). In terms of equity stake, shareholders are the legitimate owners of a firm; they tend to influence the firm's managerial and firm's operation in a way that protect their interest and benefits (Mitchell et al., 1997). In terms of risk stake, shareholders are the investors who tend to look for either short or long term return, reflect their voices or concerns to the firm's management and simply choose to sell out their shares (Henriques & Sadorsky,

1999). Shareholder orientation has an influence on firm's management and operation in many ways which could also influence firm's profitability and its share price (Mitchell et al., 1997). Given this influence of shareholder, shareholder oriented firms tend to commit to shareholder's interest by maximizing shareholder's wealth through making profits and sharing it with shareholder (Samuels, Wilkes, & Brayshaw, 1990). Moreover, Firms with shareholder orientation tend to create shareholder value through shareholder value domain which comprising of shareholder engagement, shareholder satisfaction, shareholder retention and shareholder profitability (Bannister & Jesuthasan, 1997; Payne, Holt, & Frow, 2001; Slater & Olson, 1996).

2.7 Prior Research Findings about Contributions of SO

Empirical evidence about contributions of SO was reported in researches (Greenley & Foxall, 1997; Harrison & Wicks, 2013; Hillman & Keim, 2001; Lee & Susan, 2015). However, previous studies related to SO and firm performance were found predominantly in UK, USA and European countries (Luk et al., 2005). Allen, Carletti, and Marquez (2009) found that firms in German, France, Finland, UK and the U.S tended to have better share value when they adopt SO, regardless of they are shareholder oriented firms or they are stakeholder oriented firms. Some recent studies also found conducted in emerging markets such as China and Indonesia but still limited in number (Luk et al., 2005; Rais & Goedegebuure, 2009). Some example is the study of He, Zhang, Li, and Piesse (2011) which found that all aspects of SO is positively related to firm performance in Chinese firms located in big city in South China such as Shenzhen, Fuzhou and Xiamen city. Moreover, the study found that the interaction between customer orientation and competitor orientation were significantly determined better firm performance (He et al., 2011).

The summaries of SO found in research are reported in table 2.2.

Table 2.2 Research Outcomes Associated with SO

Authors	Research contexts	Findings
Jawahar and McLaughlin (2001)	The U.S. corporations	1) At any given organizational life cycle stage such as start-up, emerging growth, mature and declining, certain stakeholders are more important than others due to their higher potential to satisfy organization needs. 2) The firm's strategy to deal with each stakeholder depends on the relative importance of a particular stakeholder compares to other stakeholders.
Luk et al. (2005)	Service companies located in the three major commercial cities in China i.e. Beijing, Shanghai, and Guangzhou	1) Customer orientation, competitor orientation and employee orientation together help producing positive effects or synergy effects on firm performance. 2) Competitor orientation and employee orientation positively moderate the relationship between customer orientation and firm performance 3) Employee orientation positively moderates the relationship between competitor orientation and firm performance 4) Shareholder orientation negatively moderates the relationship between customer orientation and firm performance. 5) Shareholder orientation negatively moderates the relationship between and employee orientation and firm performance.

Authors	Research contexts	Findings
Flammer and Kacperczyk (2015)	The U.S Corporations	1) Firms who cater for their stakeholders promote more secure work environment, which in turn, inducing the innovative activities; due to it promotes more experimentation and more tolerance for failure. 2) Stakeholder orientation fosters innovation by increasing the satisfaction of various stakeholders within firm.
Allen et al. (2009)	German, France, Finland, UK and U.S. firms	1) This research developed a model of stakeholder capitalism in which both shareholder oriented firm and stakeholder oriented firm can be better off if adopting a concern for stakeholders. 2) Even though stakeholder orientation is not mandated by law, there are circumstances where firms try to embed concerns of stakeholder in their organizations since doing so can increase their share value. 3) Employee orientation increases firm efficiency and market value.
Berman et al. (1999)	The U.S. top 100 firms from the 1996 Fortune 500 list.	1) Two of five group of stakeholder orientation i.e. employees orientation and customer orientation positively affect firm financial performance. 2) The other three groups of stakeholder orientations i.e. community, diversity, and the natural environment do not significantly affect firm financial performance. 3) All five stakeholder orientations moderate the relationship between

Authors	Research contexts	Findings
		firm strategy and firm financial performance. 4) Firm strategy does not mediate the relationship between stakeholder orientations and firm financial performance, in other words, stakeholder orientations do not empirically drive firm strategy which in turn impacts firm financial performance.
Rais and Goedegebuure (2009)	Indonesia medium and large manufacturing firms from the district of Jakarta.	1) The instrumental proposition of stakeholder theory is valid; the stakeholder orientation is aimed to profit maximization. 2) The normative proposition of stakeholder theory is valid or there are stakeholders who expect the intrinsic values such as the communities and environmental related units. 3) The study concluded that the stakeholder orientation was proceeded based on the instrumental theory or a willingness to maximize profits, and not based on the normative theory or intrinsic value which stakeholder relationships were managed under moral and ethical considerations.
He et al. (2011)	Chinese firms located in Shenzhen, Fuzhou and Xiamen city in South China.	1) Stakeholder orientation as a whole is positively related to firm performance. 2) Customer orientation and competitor orientation positively interact between each other to enhance better firm performance. 3) Shareholder orientation negatively moderates the effectiveness of

Authors	Research contexts	Findings
		competitor orientation on firm performance.
Harrison and Wicks (2013)	The U.S. corporations	1) Stakeholders do not just look for economic value but also look for the value of utilities provided by the firm in order to fully engage in firm's activity. 2) The study proposed a stakeholder-based perspective on firm performance derived from the value a firm creates through its activities. 3) The perceived utility stakeholders receive from the firm are defined as four factors: 3.1) stakeholder utility associated with actual goods and services, 3.2) stakeholder utility associated with organizational justice 3.3) stakeholder utility from affiliation 3.4) stakeholder utility associated with perceived opportunity costs. 4) Since stakeholders rely on both the firm and other stakeholders to satisfy their interests, a firm that provide more utility to its stakeholders is better in gaining their supports.
Greenley et al. (2005)	Small, Medium and Large UK companies	1) The study proposed a multiple stakeholder orientation profile (MSOP) which is the simultaneous ordering of attitudes towards each set of primary stakeholder interests and allocated managerial behavior to serve these interests.

Authors	Research contexts	Findings
		2) Key primary stakeholders that included in MSOP are customer, employee, competitor and shareholder. 3) Four different types of MSOPs were defined, based on four key primary stakeholders i.e. competitors, customers, employees and shareholders. 4) Differences and similarities in marketing capabilities and strategy were found among marketing executives with a market MSOP and marketing executives with different emphases in their MSOPs.
Patel et al. (2016)	Firms from five European Union countries including France, Germany, Austria, Netherlands, and the U.K.	1) An overall stakeholder orientation for European firms is positively associated with overall firm financial and non-financial performance. 2) The proactive and responsive components for customer, competitor, employee, and shareholder orientations are confirmed to relate with overall stakeholder orientation. 3) A single theoretical stakeholder model is relevant for industries in multiple European countries such as France, Germany, Austria, Netherland, and the U.K.

2.8 Firm Performance

In previous studies about organization outcomes associated with EO and SO, firm performance was extensively used as an outcome variable (He et al., 2011; Patel et al., 2016; Rais & Goedegebuure, 2009). According to Yau et al. (2007), firm

performance included both financial and marketing performance. Financial performance measures from previous EO and SO studies are overall profit level, profit margin, return on asset, return on investment and return on equity; on the other hand, marketing performance measures are sales volume and market share (W. E. Baker & Sinkula, 2009; Deshpandé & Farley, 1998; Yau et al., 2007). To be consistent with previous studies, these types of performance are also used in our research as outcome associated with EO and SO. The theoretical and empirical supports for their linkage will be provided in the next section.

2.9 Resource-Based View (RBV)

This research uses a resource-based view perspective of firm proposed by J. Barney (1991) to explain how the firm's intangible assets such as EO and SO can be considered as the firm's strategic resources which provide sustained competitive advantages and lead to better firm performance. J. Barney (1991) defined firm resources as the tangible and intangible assets, capabilities, organizational processes and routines, management skills, information and knowledge controlled by a firm that enable it to conceive of and implement strategies which improve its efficiency and effectiveness (J. Barney, 1991; J. Barney, Wright, & Ketchen Jr, 2001; Ray, Barney, & Muhanna, 2004; Wernerfelt, 1984). According to J. B. Barney (1995), firm's resources and capabilities could be further classified into four categories such as (1) financial resources which including debt, equity and retained earnings (2) physical resources which includes machines, manufacturing facilities and buildings (3) human resources which including experience, knowledge, judgement and wisdom of individuals associated with a firm (4) organizational resources which including the history, relationships, trust, organizational culture, formal reporting structure and compensation policies. The question of interest for strategic management field is under what situations a firm's resource and capability can become a strategic resource which helps firm achieves high returns over longer periods of time or helps firm achieves higher efficient and effectiveness that leads to higher performance (J. Barney, 1991; Wernerfelt, 1984). Resource Based View (RBV) of the firm adopts two assumptions to explain why a particular firm's resource is considered a firm's

strategic resource that giving sustainable competitive advantage to the firm. First assumption, it assumes that firms within an industry are heterogeneous with respect to the strategic resources they control. Second assumption, it assumes that these strategic resources may not be perfectly mobile across firms and thus heterogeneity can be long lasting (Barney, 1991; Barney et al., 2001). Barney (1991) proposed that sustained competitive advantage of the firm derives from its possessing of strategic resources characterized by four key attributes including (1) valuable or the firm's resource must be valuable in the sense that it enhances effectiveness or efficiency of a firm or exploits opportunities and/or neutralizes threats in a firm's environment (2) rare or the firm's resource must be rare among a firm's current and potential rivalry (3) imperfectly imitable or the firm resource is not possible to be completely imitated by other competing firms and (4) not substitutable or the firm's resource cannot be substituted by others strategically equivalent resource of the competing firms . The concept of these four key attributes of strategic resource can be used to analyze whether a particular firm resource can be a strategic resource which contributes to the firm's sustained competitive advantage (Barney, 1991). Besides the four key attributes of a firm's strategic resource, Barney (1995) proposed the four questions of resources and capabilities that firm's managers should address which are (1) the question of value or do a firm's resources and capabilities add value by enabling a firm to exploit opportunities and/or neutralize threats in its environment (2) the question of rareness or how many competing firms already possess these resources and capabilities? (3) the question of imitability or do firms without a resource or capability encounter a cost disadvantage in acquiring it? and (4) the question of organization or is a firm organized to exploit the full competitive potential of its resources and capabilities? These four questions of resource and capability help firm's managers to evaluate if the resources and capabilities possessed by firm are strategic resources that lead to sustainable competitive advantage and greater firm's performance. It is suggested that firm's managers need to look inside the firm for valuable, rare, imperfectly inimitable resources and exploit these resources through the proper organization to create sustainable competitive advantage (J. B. Barney, 1995). A body of research adopted RBV perspective to explain firm's competitiveness and performance in various aspects. For example, in IT research field, Kearns and

Lederer (2003) proposed that firm's strategic IT alignment is considered a critical resources that lead to competitive advantage. Strategic IT alignment is a unique management process created by the firm which involves participation and knowledge sharing between CEO and CIO or IT top managers. Because strategic IT alignment is a complex organizational process that is difficult to developed, it can allow firms to outperform other competitors that lack this advantage (Barney, 1991; Wernerfelt, 1984). In SMEs research field, Darcy, Hill, McCabe, and McGovern (2014) proposed that human resource management (HRM) capabilities that firms have developed is considered a strategic resource that enhances firm's sustainable competitive advantage. In current global scale competition, even though other firm's resources can be easily replicated, human capital cannot. As this study focuses on EO and SO which are important SMEs intangible assets, our research will hypothesize EO and SO as SMEs' strategic resources that could have a positive relationship with SMEs performance. Moreover, the study will also hypothesize the relationship from the interaction between EO and SO.

2.10 Hypotheses Development

2.10.1 EO and Firm Performance

According to RBV proposed by J. Barney (1991), a firm's resources which are valuable, rare, imperfectly imitable and non-substitutable can become strategic resources, which help firm achieves higher efficiency and effectiveness that leads to sustainable competitive advantage and better firm performance. Extant researches suggested that EO was considered a firm's intangible asset which is developed by firm's internal resource base (Alvarez & Busenitz, 2001; Runyan, Huddleston, & Swinney, 2006; Tovstiga & Tulugurova, 2009; Wiklund & Shepherd, 2003; Zahra & Covin, 1995). Specifically, EO is considered to be a firm's strategic resource since it complies with four aforementioned criterions proposed by Barney (1991). Firstly, EO is valuable resource because it enhances firm performance. In particular, this role of EO was supported in literature showing that EO enabled a firm to actively explore and seize new market opportunity, proactively introduces innovative product and service offering to obtain first mover advantages, aggressively aims for superior target and

returns and outperforms rivalries, dedicates capital resource and empowers staffs to independently execute the plan (Kraus et al., 2012; Wiklund & Shepherd, 2005). Secondly, EO is rare because it requires specific entrepreneurial resources such as skill, knowledge, experience of the entrepreneurs and entrepreneur's networks to successfully develop it (Teece & Pisano, 1994; Wu, 2007). Moreover, EO is difficult to imitate and substitute because it takes time and for its development process (Godfrey & Gregersen, 1999; Mahmood & Hanafi, 2013). Research showed that a firm develops EO through its entrepreneurial process in which it gathers requisite resources from environment through entrepreneur's networks and utilizes an entrepreneur's knowledge and experience (Ferreira, Garrido Azevedo, & Fernández Ortiz, 2011). Since development process takes time and collective activities, it becomes uniquely fit for a particular firm and difficult for its rivalries to imitate or substitute (Godfrey & Gregersen, 1999; Mahmood & Hanafi, 2013). Given these contributions of EO that fit with the characteristics of critical resources, it tends to enhance a firm's efficiency and effectiveness which leads to better performance (J. Barney, 1991; Wiklund, 1999). Moreover, as already shown in the review of EO research in the above section, the contribution of EO and firm performance was supported in many studies (Brouthers et al., 2015; Filser & Eggers, 2014; Kantur, 2016; Kollmann & Stöckmann, 2014). Given these contributions of EO that fit with the characteristics of critical resources, it tends to enhance a firm's efficiency and effectiveness which leads to better performance.(Al-Swidi & Mahmood, 2011; Barringer & Bluedorn, 1999; Krauss et al., 2005; Lumpkin & Dess, 1996; Wiklund & Shepherd, 2005; Zahra & Covin, 1995). Based on the above arguments, this study proposed the below hypothesis:

Hypothesis 1: Entrepreneurial Orientation (EO) is positively related to SMEs performance.

2.10.2 SO and Firm Performance

Previous studies found all four groups of key stakeholder (customers, employees, competitors and shareholder) have a significant impact on firm performance (Allen et al., 2009; He et al., 2011). In particular, this is because SO

reflects organization strategic plan and behavior aiming to fulfill the demands of various stakeholder groups (Donaldson & Preston, 1995). It shows how much entrepreneur or manager attends to the interest of relevant stakeholders and attempts to address such interest (Freeman, 2010). Previous studies considered SO as a firm's intangible asset which developed by a firm internal resource base (Greenley et al., 2005; Hart & Sharma, 2004; Hillman & Keim, 2001; Yau et al., 2007). Moreover, SO complies with four criterions of a firm's strategic resource according to RBV proposed by Barney (1991). First, SO is valuable resource. It enhances firm performance because it enables a firm to focus and response to the needs of each relevant stakeholder so the gaps and conflicts among stakeholders and between stakeholder and firm's management are reduced (Greenley & Foxall, 1996, 1997). Moreover, it brings and aligns supportive collaboration from each relevant stakeholder within the organization to drive a firm toward its goals more effectively (Freeman & McVea, 2001). Second, SO is rare because managing stakeholder relationships requires dedicated valuable firm resources that firms need to invest such as managerial time and focus to stakeholder communications, financial and nonfinancial resources allocations to stakeholders' legitimate causes (Choi & Wang, 2009; Harrison, Bosse, & Phillips, 2010). Third, SO is difficult to imitate because research showed that it is generally developed over time and is often causally ambiguous (Zink & Steimle, 2000). Different firms are likely to develop different stakeholder management practices which are difficult for other firms to replicate (Ruf et al., 2001). Forth, SO is difficult to substitute because it takes a long time to build the trust which is fundamentally necessary for developing SO (Barney & Hansen, 1994); therefore the time dimension and important path-dependent attribute makes it difficult for the firm's rivalries to easily substitute or imitate (Hillman & Keim, 2001). Since SO is a strategic resource which could enhance a firm's efficiency and effectiveness, it can be expected that firms emphasizing SO are able to develop better relationship with key stakeholders, thereby allowing them to have better performance (J. Barney, 1991; Ferrell et al., 2010; Maignan, Gonzalez-Padron, Hult, & Ferrell, 2011; Yau et al., 2007).

Key components of SO and firm performance

In our research, we propose that each of the four key stakeholder groups can positively relate to better firm performance (Greenley & Foxall, 1996, 1997, 1998; Greenley et al., 2005; Patel, 2012; Yau et al., 2007). The contribution of each group of SO is presented as follows.

2.10.2.1 Customer Orientation

This research proposes that customer orientation can positively relate with favorable firm performance. In particular, customer-oriented firm puts the customers at the center of its operation, realizes the reason of customers being existence and delivers goods and services to meet their needs (Piercy, Harris, & Lane, 2002). As a result, customers are likely to patronize a product or service that is made for their needs, thereby helping firms increases sales growth and achieve better performance (Asikhia, 2010; Charoensukmongkol & Sasatanun, 2017; Piercy et al., 2002; Sasatanun & Charoensukmongkol, 2016). A good relation with customers can be a firm's valuable resource that may lead to performance advantages as the customers could increase their demand or pay premium prices for the firm's products and services (T. J. Brown & Dacin, 1997; Hillman & Keim, 2001; Ruf et al., 2001). Moreover, previous study further supported the importance of customer orientation, as it makes firms understand the market situation and able to develop suitable product and service strategies to meet customer needs which could translate into better firm performance (Liu, Luo, & Shi, 2003).

Based on the above arguments, we propose the below hypothesis:

Hypothesis 2: Customer orientation is positively related to SMEs performance.

2.10.2.2 Competitor Orientation

This research proposes that competitor orientation can positively relate with better firm performance. Because competitor can be threats to firm survival and success, a firm needs to pay attention to its competitors' interests and actions in order to neutralize threats from their business strategies (Freeman, 2010). According to Narver and Slater (1990), competitor orientation means a firm understands the short-term strengths and weaknesses and long-term capabilities and strategies of both current and potential competitors and then predict, monitor and response or counteract

their actions and activities (Dawes, 2000). Competitor oriented firms also focus on competitor's goal, strategies, activities, offerings, resources and capabilities as well as on the dissemination of the information gathered from this assessment to their organization (Olson, Slater, & Hult, 2005). The monitoring and comparison of competitors' actions can generate helpful insights for a firm to comprehend competitors' relative positioning within the marketplace, assess their strengths and weaknesses, formulate and construct an effective respond to competitors' strategies (Gao, Zhou, & Yim, 2007). All of these characteristics are crucial to enhance firm's performance (Yau et al., 2007). On the other hand, Deshpandé et al. (1993) argued that the exclusion of competitors' attention can lead to the neglect of the needs of customers and eventually can be detrimental to business performance.

Based on the above arguments, we propose the below hypothesis:

Hypothesis 3: Competitor orientation is positively related to SMEs performance.

2.10.2.3 Employee Orientation

This research proposes that employee orientation can lead to better firm performance. Employee orientation could enhance a better trust between a firm and its employees (Becker & Gerhart, 1996) which not only make employees work harder to enhance the firm's effectiveness (Dutton, Dukerich, & Harquail, 1994) but also lower labor costs due to less employee turnover (Berman et al., 1999; Kuvaas, 2008). Moreover, a good employee relation may help a firm prevent unnecessarily profits deterioration (McWilliams & Siegel, 2001). For example, skilled employees are likely to be a source of superior performance; however, such a performance superiority may not be last long if the skilled employees are easily lured away to competitors (McWilliams & Siegel, 2001). Since good relations with employees can create stronger employee's loyalty and commitment to a firm, it reduces employees' incentive to leave and thus reduce profit deterioration and leading to better firm performance (Guang & Charoensukmongkol, 2019; McWilliams & Siegel, 2001). Moreover, because employee oriented firms tend to promote a warm, supportive, and fair climate to their employee, in return the employee who perceived the firm's sincerity and benevolence are likely to reciprocate with greater commitment and more

willingness to act in the best interests of the firm which could lead to better firm performance (Plakoyiannaki et al., 2008; Ratasuk & Charoensukmongkol, 2019).

Based on the above arguments, we propose the below hypothesis:

Hypothesis 4: Employee orientation is positively related to SMEs performance.

2.10.2.4 Shareholder Orientation

This research proposes that shareholder orientation is positively related to better firm performance. As mentioned earlier, shareholder is related to a firm in terms of equity stake and risk stake (Mitchell et al., 1997). In terms of the equity stake, shareholders are a firm legitimate owners by the shares they own; they may choose to perform action that follow or against the firm's management's direction to protect their interest or benefits (Mitchell et al., 1997). When firm's management or manager focuses and takes action on shareholder's concern and expectation such as setting out internal procedures or regulations related to shareholder's power of authority and approval, it is likely to gain support from shareholder in the plan execution which leads to possible goal achievement and good firm performance (Hillman & Keim, 2001). In terms of risk stake, shareholders are investors who looking for either short and long term returns and their decision to sell or buy the firm's equity can affect share price, firm value and reputation (Yau et al., 2007). When firm's management takes good care of shareholders, shareholders are likely to support the organization, which in turn, benefits firm performance as a result. (Hillman & Keim, 2001; Mitchell et al., 1997). Moreover, because of the management of shareholder oriented firm tends to maximize shareholder's wealth by taking more emphasis on profit maximization, this can also make firm gain better performance for this initiation (Samuels et al., 1990).

Based on the above arguments, we propose the below hypotheses:

Hypothesis 5: Shareholder orientation is positively related to SMEs performance.

2.10.3 The Interaction between EO and SO

In addition to the contribution of EO and SO to firm performance, this study also investigates the interaction between EO and SO to test their combined effect on

firm performance. In particular, Lumpkin and Dess (1996), suggested that the role of organizational variables such as strategy making processes, organization cultures and top management team characteristics should be integrated in analysis in order to extend the present understanding of EO and firm performance. In other words, it suggested that the organizational variables such as organization cultures and strategy making process could possibly enhance or hinder the association between EO and firm performance. According to Greenley and Foxall (1996, 1997) SO is the central to the firm's strategic planning and process aiming for managing the diverse interests of stakeholder group. Moreover Ferrell et al. (2010, p. 93) proposed that "SO is the organizational culture and behaviors that induce organizational members to be continuously aware of and proactively act on a variety of stakeholder issues". Following the above conceptualization of SO, our study aims to investigate the effect of SO as the organization variable that moderates the relationship between EO and firm performance. The support for the interaction between EO and each aspect of SO will be mentioned as follows.

2.10.3.1 Interaction between Customer Orientation and EO

This study proposes that the positive relationship between EO and firm performance will be stronger for firms that emphasize more on customer orientation. Customer orientation plays supporting role for an entrepreneurial firm in better understanding customer's present and future needs which evolving overtime according to internal and external factor as well as market dynamics Narver and Slater (1990). This role of customer orientation is important to support the activities of EO which require firm to understand market trend and consumer demands (Baker & Sinkula, 2009). Moreover, the valuable information gain from customer orientation can help firms to predict market trend and to deal with market changes more effectively (Eggers, Kraus, Hughes, Laraway, & Snycerski, 2013). Therefore, entrepreneurial firm that can create good relationship with customers tend to gain more benefits because they can rely on valuable information obtained from customers to help them effectively adapt to changed situations and come up with innovative ideas and offering that lead to greater customer satisfaction and better firm performance (W. E. Baker & Sinkula, 2009; Eggers et al., 2013). Because of this contribution of customer orientation, this research predicts that customer orientation

may have to be emphasized in conjunction with EO to increase the ability of firms to achieve better performance. In other words, firms that demonstrate high EO and high customer orientation are more likely to show better performance than firms that demonstrate high EO but less customer orientation.

Therefore, the following hypothesis is presented.

Hypothesis 7: The relationship between EO and SMEs performance is positively moderated by customer orientation**.**

2.10.3.2 Interaction between Competitor Orientation and EO

This study proposes that the positive relationship between EO and firm performance will be stronger for firms that emphasize competitor orientation. Competitor orientation plays supporting role for an entrepreneurial firm in facilitating internal sharing of competitor information, understanding strengths and weakness as well as capabilities and strategies of both current and potential competitors (Narver & Slater, 1990). Competitor-oriented firm tend to focus on market knowledge accumulation in order to remain proactive and stay ahead of the competition (Im & Workman Jr, 2004). Moreover, the willingness to outperform competitors stimulates a firm to be innovative and proactive in order to launch new product and service offerings to the market ahead of competitors (Matsuno, Mentzer, & Özsomer, 2002). This role of competitor orientation is important to support the activities of EO which helping firms to be more innovative, proactive and effectively outperform its competitors (Dawes, 2000; Im & Workman Jr, 2004). Because of this contribution of competitor orientation, this research predicts that competitor orientation may have to be emphasized in conjunction with EO to increase the ability of firms to achieve better performance. Firms that demonstrate both high EO and high competitor orientation are more likely to exercise better performance than firms that demonstrate high EO but less competitor orientation.

Therefore, the following hypothesis is presented.

Hypothesis 8: The relationship between EO and SMEs performance is positively moderated by competitor orientation**.**

2.10.3.3 Interaction between Employee Orientation and EO

This study proposes that the positive relationship between EO and firm performance will be stronger for firms that emphasize employee orientation. Employee orientation plays supporting role for an entrepreneurial firm in promoting a warm, supportive, and fair climate to its employees (Hooley et al., 2000; Janz & Prasarnphanich, 2003). Employee-oriented firms tend to provide a healthy environment to their employees which reduces employees' stress and increase employees' satisfaction and commitment D. Baker, Greenberg, and Hemingway (2006); I. N. Lings and Greenley (2005). The satisfied employees are likely to have loyalty and act in the best interest of the firm, which could create higher productivity, superior customer value and proactivity behavior, all of which can facilitate EO activities that require contribution from employees (Gounaris, 2006; Hunter & Tietyen, 1997; Parker, 1998). According to Hackman and Oldham (1975), proactivity behavior such as problem prevention anticipation, self-directed learning and opportunity seeking could provide employees with a sense of task significant and autonomy which are crucial to support EO activities that require quick and innovative decision making. (Thomas, Whitman, & Viswesvaran, 2010). Moreover, the healthy climate of employee oriented firms tends to facilitate learning and knowledge sharing among employees, which in turn, enhances innovative activities required for new products and services development (Janz & Prasarnphanich, 2003; Zhang, 2010). This role of employee orientation is important to support the activities of EO which helping firms to be more proactive, autonomy and innovative (Gounaris, 2006; Hunter & Tietyen, 1997; Zhang, 2010). Because of this contribution of employee orientation, this research predicts that employee orientation may have to be emphasized in conjunction with EO to increase the ability of firms to achieve better performance. Firms that demonstrate both high EO and high employee orientation are more likely to exercise better performance than firms that demonstrate high EO but less employee orientation.

Therefore, the following hypothesis is presented.

Hypothesis 9: The relationship between EO and SMEs performance is positively moderated by employee orientation**.**

2.10.3.4 Interaction between Shareholder Orientation and EO

This study proposes that the positive relationship between EO and firm performance will be stronger for firms that emphasize shareholder orientation. Shareholder orientation plays supporting role for an entrepreneurial firm for having firm management or manager focuses and takes action on shareholder's concern and expectation (Hillman & Keim, 2001). This role of shareholder orientation is important to support the activities of EO which require firms to gain support from and avoid conflict with shareholder, which in turn, lead to better firm performance (Hillman & Keim, 2001). Shareholder support gained from shareholder orientation could facilitate firm's management to get approval for crucial capital budgeting such as investing in R&D, opening a new branch, replacing plant's equipment, etc. which could enhance firm's innovation or competitive positioning in the market (Rappaport, 1999). Furthermore, the aforementioned supports may not be approved when shareholder is not well managed (Rappaport, 1999). Because of this contribution of shareholder orientation, this research predicts that shareholder orientation may have to be emphasized in conjunction with EO to increase the ability of firms to achieve better performance. Firms that demonstrate both high EO and high shareholder orientation are more likely to exercise better performance than firms that demonstrate high EO but less shareholder orientation.

Therefore, the following hypothesis is presented.

Hypothesis 9: The relationship between EO and SMEs performance is positively moderated by Shareholder orientation**.**

All research hypotheses are summarized in Table 2.3. They are also presented in the form of conceptual model in Figure 2.1.

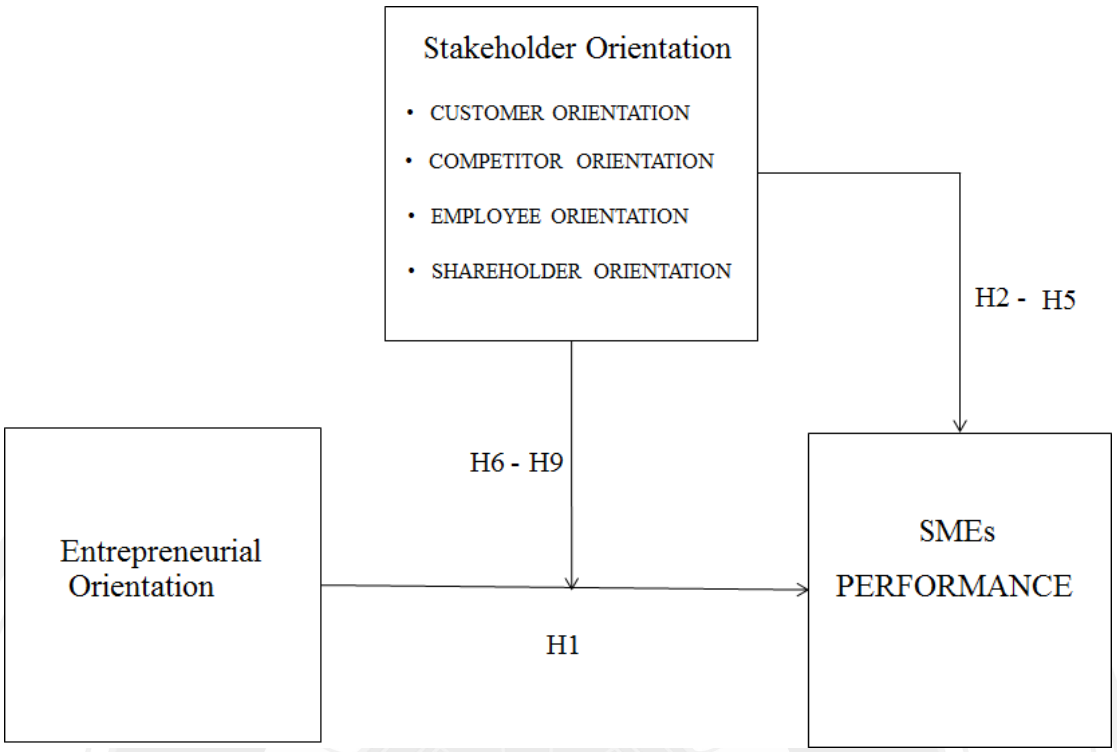

Figure 2.1 The Conceptual Model of this Study

Table 2.3 The Summary of Research Hypothesis

H1	Entrepreneurial Orientation is positively related to SMEs performance.
H2	Customer Orientation is positively related to SMEs performance.
H3	Competitor Orientation is positively related to SMEs performance.
H4	Employee Orientation is positively related to SMEs performance.
H5	Shareholder Orientation is positively related to SMEs performance.
H6	The relationship between EO and SMEs performance is positively moderated by Customer orientation.
H7	The relationship between EO and SMEs performance is positively moderated by Competitor orientation.
H8	The relationship between EO and SMEs performance is positively moderated by Employee orientation.
H9	The relationship between EO and SMEs performance is positively moderated by Shareholder orientation.

CHAPTER 3

METHODOLOGY

This chapter describes the methods employed to collect data and test the hypotheses that were proposed in the previous chapter. The research context, sample selection, data collection, questionnaire development, construct measurements, and estimation technique deployed to analyze the data will be discussed.

3.1 Research Context

This research focuses on Thai SMEs in steel fabrication industry. SMEs are selected due to significant contributions to the economics development of the country in many aspects such as GDP growth, productivity growth, innovation and job creation (ADB, 2015; Carree & Thurik, 2003; Harvie & Lee, 2002). The GDP of Thai SMEs in year 2016 was reported to be 6.06 billion baht, accounted for 42.2% of the country's GDP with 4.8% growth from previous year (The office of SMEs Promotion, 2017). The GDP of Thai SMEs in the year 2016 was contributed by major SMEs sectors i.e. service (40.6%), trade and maintenance (29.2%), manufacturing (23.4%) and construction (5.5%) respectively (The office of SMEs Promotion, 2017). In the past 10 years, the trend of GDP of Thai SMEs in service sector has been increasing, however the GDP trend and proportion of Thai SMEs in manufacturing sector has been declining (The office of SMEs Promotion, 2017). Since the contribution to the economy of Thai SMEs' manufacturing sector has traditionally been important in terms of business numbers, employment, output and exports Charoenrat et al. (2013), the declining of manufacturing sector could create determinant effects to the country's economic development, our study therefore put more attention on SMEs in manufacturing industry. In particular, our study focuses on SMEs in steel fabrication industry which is one of the major manufacturing sectors in Thai SMEs.

Steel fabrication industry is one of the major manufacturing industries in Thailand. According to World steel association (2017), steel consumption in five major countries in ASEAN combined i.e. Indonesia, Malaysia, Philippines, Thailand and Vietnam has been increasing in past several years. The ASEAN 5 combined steel consumption was 74.1 million metric tons in 2016, 77.7 million metric tons in 2017 and expected to be 83.0 million metric tons in 2018 reflecting annual growth rate from 2016 to 2017 and 2017 to 2018 of 4.8% and 6.8% respectively. The growing demand of steel makes steel fabrication industry becomes one of attractive industries for both large enterprises and SMEs of ASEAN and Thailand. Steel fabrication industry transforms steel raw materials by processing, assembling and building until they become parts and accessories, sub-assemblies and final products for using widely in many applications and industries (Steel Fabrication Industry in Thailand, 2009).

According to The Office of SMEs Promotion (2018), the registered number of Thai SMEs in steel fabrication industry in 2016 were 4,810 firms, accounted for 6.14 % of total Thai SMEs in manufacturing industry. Steel fabrication industry includes steel fabrication companies from different market segments such as structural steel for constructions, automotive parts and accessories, boiler and heat exchanger, pressure vessel, water tank, weapons and explosive, steel forging and rolling products, metal decoration, metal coating, precision milling and machining parts, machine and truck manufacturing, hand tools, spherical tank, can packaging, wires cables and spring, metal sanitary ware, kitchenware and household & office equipment, job shop, etc.

Steel fabrication industry has been playing active role in Thailand since 1987. During year 1987 to 1996 when annual growth of Thai GDP were more than 10% per annum, the government and private sectors' investment in infrastructure were accounted for 32.1% of the country's GDP in 1996 (Steel Fabrication Industry in Thailand, 2009). During those years, steel fabricators of large scale enterprises and SMEs had developed themselves to be competitive for both local and export market. Since economic crisis hit Thailand in year 1997 to 2004, many of steel fabricators from large scale firms and SMEs had shifted their focus to export markets due to lower domestic demand and inherited cost advantage for export from a large Thai baht depreciation after crisis, making export volume and value of steel products growth from 11,761 metric ton and 1,361 million baht in 1998 to 41,796 metric ton

and 3,723 million baht in 2004 (Steel Fabrication Industry in Thailand, 2009). From the year 2004 to 2015, steel fabrication industry has been performing along with country's GDP. However, the recent trend of steel fabrication industry in 2017 was predicted to be slightly 5% drop from 2016 (The Federation of Thai Industries, 2017). In year 2017, steel fabrication industry was projected to realize total slow growth considering particular situation in each sector such as construction sector gained growth from government infrastructure mega projects, machinery and machine parts sector realized moderated growth from export markets, automotive manufacturing sector was no growth by keeping the same volume and value as previous year 2016 due to demands decreased in export markets, canned food sector faced declined due to local raw material shortage, electrical appliances sector slightly increased from washing machine and refrigerator due to export market expansion while air compressor and air conditioner manufacturing sector had a slightly decline from domestic and export markets (The Federation of Thai Industries, 2017). The actual economic trend of steel fabrication industry moves along manufacturing industry making it a good presentative of manufacturing industry for our study.

3.2 Sample Selection

The study will use probability sampling method for sample selection. Probability sampling method is the acceptable way of achieving representativeness and is best known in which subjects are randomly selected (Cumming, 1990). In probability sampling method, each member of the population of interest has a known non-zero chance of inclusion (Cumming, 1990). By using probability sampling, the samples of SMEs in steel fabrication industry are randomly selected from the directory of Thai SMEs gathered from the Department of Business Development (DBD). The Department of Business Development (DBD) belongs to Ministry of Commerce of the Kingdom of Thailand. DBD's main duties are business registration and business development and promotion. DBD's vision is to become a state agency capable of delivering fully electronic-based services within 5 years and to steer SMEs sector forward based on knowledge and innovation. From DBD's database in 2018, there are number of 632,614 SMEs registered from all industries nationwide. From

this database, the SMEs from manufacturing sector are 78,300 firms in total and 4,810 firms are belonging to steel fabrication industry. The samples in this study include SMEs from various sectors of steel fabrication industry such as structural steel for building and construction, boiler and heat exchanger, water tank and pressure vessel, metal decoration, machining and machine tools, automotive parts and accessories, truck, kitchen ware, job shop, etc. By the below sample size calculation, the study proposes a total of 370 firms will be randomly selected from the list of steel fabrication directoty to be the samples of this study (Yamane, 1973)

According to Yamane (1973), a simplified formula to calculate sample sizes is described in below equation.

$$n = \frac{\mathrm{N}}{1 + N(e)^2}$$

Where n is the sample size of the study, N is the population size, and e is the level of precision. In this study, we follow a 95% confident level and ±5% precision from previous research(Israel, 1992). Finally, the sample size of the study can be calculated as follows:

$$n = \frac{4{,}810}{1 + 4{,}810(0.05)^2}$$

$$n = 370$$

3.3 Data Collection Procedure

The study chooses a self-administered questionnaire survey method for data collection. According to Bryman and Bell (2015), a questionnaire survey allows the study to collect a large number of respondents in a short period. The study aims to get response from an entrepreneur or top executive of the randomly selected SMEs since this group of respondent has in-depth knowledge and understanding in strategic positioning and direction of the company. The study also aimed for only one key respondent for each SMEs to complete the survey in order to minimize the potential error of systematic and random sources (Huber & Power, 1985). After contacting the

person identified in the source directory and searching for a targeted respondent; the questionnaire with covered letter and postage-paid business reply envelop will be sent directly to the respondent. The cover letter indicates the purpose of the research and guarantees that the data collected from the study will be treated as strictly confidence. The data collection is anonymous which the respondent will not be asked to indicate any information that reveal their own and their company's identity. According to Bryman and Bell (2015), the data collection with anonymous will encourage the respondents to respond truthfully to the questionnaires.

3.4 Questionnaire Development and Variable Measurement

The questionnaire items used to operationalize each construct in this study came from existing scales developed and used by previous studies. Using existing scales bring about several advantages. First, existing scales tend to have good validity and reliability because they were previously tested in research (Hyman, Lamb, & Bulmer, 2006). Second, the outcomes can be compared to other studies which adopted the same scales (Meadows, 2003). Third, adopting existing scales is time saving compared to developing new scales (Hyman et al., 2006). In order to ensure the validity of the content of the question items, the original English version questionnaire is translated into Thai, and then is back-translated to English by minimum two professional translators (Brislin, 1970). The measurements of each construct will be discussed as follows:

3.4.1 Entrepreneurial Orientation (EO)

The operationalization of EO in this research is based on the conceptualization of EO proposed by Lumpkin and Dess (1996) which used aggregate measure of EO is hypothesized to have a positive relationship with firm performance (G Thomas Lumpkin et al., 2009; Lumpkin & Dess, 1996; Lumpkin & Dess, 2001). The measurement of EO is adopted from H. Zhang et al. (2014)'s eighteen items self-reported scale. The scales consist of five entrepreneurial dimensions including innovativeness (4 items), proactiveness (4 items), risk taking (4 items), competitive aggressiveness (3 items) and autonomy (3 items). This measurement of EO has been

employed in past studies and the validity and reliability of the scales was confirmed satisfactorily (Boso, Cadogan, & Story, 2012; Chang et al., 2007; Hughes & Morgan, 2007; Zhang et al., 2014). These items are measured using a five-point Likert scales (1: strongly disagree; 5: strongly agree). Respondents will be asked to assess their firm regarding to what extent their firm engaged in these activities with below questionnaires.

Innovativeness

1) In my firm, very many new product lines or services has marketed

2) In my firm, changes in product or service lines have been mostly of being quite dramatic

3) My firm is creative in its methods of operation

4) My firm seeks out new ways to do things

Proactiveness

1) My firm typically initiating action which the competition then responds to

2) My firm is very often the first business to introduce new products/services, administrative techniques, operating technologies, etc.

3) My firm is close monitoring of technological trends and identifying future needs of customers

4) My firm excels at identifying opportunities

Risk-taking

1) My firm invests in high risk projects (with chances of very high return)

2) My firm adopts a bold, wide-ranging act necessary to achieve the firm's objectives

3) My firm commits a large portion of its resources in order to grow

4) In my firm, people in our business are encouraged to take calculated risks with new ideas

Competitive Aggressiveness

1) My firm typically seeks to a competitive “undo-the-competitors” posture

2) My firm is very aggressive and intensely competitive

3) My firm use of unconventional strategies to challenge competitors

Autonomy

1) My firm supports the efforts of individuals and/or teams that work autonomously

2) In my firm, the best results occur when individuals and/or teams decide for themselves what business opportunities to pursue

3) In my firm, employee initiatives and input play a major role in identifying and selecting the entrepreneurial opportunities

3.4.2 Stakeholder Orientation (SO)

The measurement of SO is adopted from Yau et al. (2007)’s eighteen items self-reported scale. The scales consist of four dimensions of stakeholder orientation including customer orientation (5 items), competitor orientation (4 items), employee orientation (4 items) and shareholder orientation (5 items). This measurement of SO has been employed in past studies and the validity and reliability of the scales was confirmed satisfactorily (Greenley et al., 2005; Patel, 2012; Yau et al., 2007). These items are measured using a five-point Likert scales (1: strongly disagree; 5: strongly agree). Respondents will be asked to assess their firm regarding to what extent their firm engaged in these activities with below questionnaires.

Customer Orientation

1) Competitive strategies are based on understanding customer needs

2) Customer satisfaction is systematically and frequently assessed

3) Our commitment of serving customer needs is closely monitored

4) Close attention is given to after sales service

5) Our objectives and strategies are driven by the creation of customer satisfaction

Competitor Orientation

1) Sales people share information about competitors

2) Top management regularly discuss competitors' strengths and weaknesses

3) We achieve repaid response to competitive actions

4) Customers are targeted when we have an opportunity for competitive advantage

Employee Orientation

1) We have regular staff appraisals in which we discuss employees' needs

2) We have regular staff meetings with employees

3) As a manager, I try to find out the true feelings of my staff about their jobs

4) We survey staff at least once each year to assess their attitudes to their work

Shareholder Orientation

1) Our objectives are driven by creating shareholder wealth

2) Senior managers have regular meetings with shareholders

3) We regularly compare our share value to that of our competitors

4) We regularly carry out public relations aimed at shareholders

5) Designated managers have responsibility for aiming to satisfy shareholders' interests

3.4.3 SMEs Performance

Extant researches showed that company performance is frequently measured by marketing and financial performances (Greenley & Foxall, 1997; Hooley et al., 2000; Sin et al., 2005). Marketing performance are such as market share and sales volume while financial performance are profit level, profit margin and return on investment (ROI) (Yau et al., 2007). The measurement of SMEs performance is adopted from

Yau et al. (2007)'s five items self-reported scale including financial performance (3 items), marketing performance (2 items). This measurement of SMEs performance is based on subjective approach which has been employed in past studies (Charoensukmongkol, 2015, 2016; Fu, Flood, & Morris, 2016; Singh, Darwish, & Potočnik, 2016; Vij & Bedi Harpreet, 2016); the validity and reliability of the scales was confirmed satisfactorily (Hooley et al., 2000; Yau et al., 2007). These items are measured using a five-point Likert scales ranging from 1: much worse than to 7: much better than major competitors (Yau et al., 2007). With the below scales, respondents will be asked to assess their firm regarding to what extent their firm engaged on the basis of comparison against major competitors.

Financial Performance

1) Overall profit level achieved
2) Profit margin achieved
3) Return on investment

Marketing Performance

1) Sales volume achieved
2) Market share achieved

3.4.4 Control Variables

According to Wiklund and Shepherd (2005), firms of different size and age could demonstrate different organizational characteristics that may influence performance. This research includes firm size and firm age as control variables. Firm size is measure by number of full time employees (Gupta, Dutta, & Chen, 2014; Semrau, Ambos, & Kraus, 2016). Firm age is measured by number of years that firm is in business (Ferreira et al., 2011). Other two control variables also include in this research which are industry experience of entrepreneur and environmental uncertainty. According to Cassar (2014), industry experience improves entrepreneurial forecast performance which could lead to better firm performance. Experienced entrepreneurs are less likely to be over-optimistic which could cause business failure or closeout (Ucbasaran, Westhead, Wright, & Flores, 2010).

Moreover, entrepreneurs with specific industry experiences are known to be able to raise and mobilize more resources from their supporters in pursuit of an opportunity than the ones with less experience (Kotha & George, 2012). Experience of an entrepreneur or top executive is measured by number of years they are in the industry (Kotha & George, 2012).

Lastly, this research considers environmental uncertainty as a control variable. According to Hrebiniak and Snow (1980), environmental uncertainty involves the level of predictability of capital and financial markets, government regulation and intervention, actions of suppliers, actions of competitors, and general conditions facing the organization. Environmental uncertainty requires a firm to be able to respond more quickly to unforeseen change in order to survive (Covin & Slevin, 1989). When a firm operates under environment uncertainty, the uncontrollable components from customer, supplier, market, technology and resource could affect the operation and strategic decision of a firm differently (Ghosh, Bhowmick, & Guin, 2014). For example, the environmental uncertainty such as fluctuation of raw material cost could affect the firm's operating profitability due to unexpected cost rising which lead to detrimental of firm performance. According to Duncan (1972) and Tosi Jr and Slocum Jr (1984), the environmental uncertainty construct is further differentiated according to the sources of uncertainty. There were reports from many researches that it was difficult to generalize the result of environment uncertainty from focusing on organization's point of view and the objective measures of environmental uncertainty were weak with low reliability (McCabe, 1990; Tosi, Aldag, & Storey, 1973). In this study, the measure of environment uncertainty was measured by subjective scale approach using three questions to measure the extent of environment uncertainty that firms perceived. The measure was obtained from the scale that was used in Homburg, Stierl, and Bornemann (2013). The questions were rated on a five-point likert scales ranging from 1: strongly agreed to 5: strongly disagreed.

1) The price of product or raw material are relatively fluctuated.

2) The market of your product is highly fluctuated and subject to rapid changing.

3) Technology in your industry is changed quickly.

3.5 Estimation Method

To test the hypotheses, Partial Least Squares (PLS) regression will be used as a statistical technique for data analysis. There are several reasons that make PLS appropriate for this study. Firstly, PLS requires a smaller sample size than other SEM techniques (Hair, Ringle, & Sarstedt, 2011). Secondly, PLS requires lesser statistical specifications than the covariance based strategy since it does not require data in normally distributed fashion (Hair et al., 2011). Thirdly, this technique allows to test multiple hypotheses simultaneously (Hair et al., 2011). With aforementioned reasons, PLS is an appropriate analysis technique for this study. Furthermore, WarpPLS will be used as a software to perform PLS regression.

CHAPTER 4

RESULT

4.1 Data

This chapter presents the characteristics of the data, including descriptive statistics and business background of the samples which are SMEs entrepreneurs in steel fabrication industry in Thailand. The details on how the data was prepared and analyzed are firstly discussed. Finally, the result of hypothesis testing is presented.

A total of 1,000 questionnaires were distributed to the randomly selected SMEs in steel fabrication industry throughout Thailand. The questionnaires were sent by post with recipient registered for researcher's tracking purpose. One week after the questionnaire was sent out, the followed up telephone call was made to the recipient's office to make sure that the questionnaire was received. The postage prepaid envelop was included in a package for facilitating the return of the filled questionnaire by SMEs' entrepreneur to the researcher. There were 390 questionnaires returned to researcher and 20 questionnaires were removed due to missing and uncompleted information. Finally, there were 370 questionnaires remained in use for data analysis, which yielded 37 percent response rate. The data collection process was completed in three months between beginnings of August to mid of October 2018.

4.2 Demographic Characteristics of SMEs' Entrepreneur

The SMEs's entrepreneur's age is ranged between 28 to 71 years old, with a mean value of 48.00. The minimum age of the SME's entrepreneur was 28 and the maximum was 71. SME entrepreneurs' age from the collected data are reported in Table 4.1

Table 4.1 Ages of SMEs Entrepreneurs

	Min	**Max**	**Mean**	**Standard Deviation**
Age	28	71	48.00	8.819

The majority of SME's entrepreneurs are male, with the number of 308, accounted for 83.3 percent of the total number of respondents. The rest of respondents are female, with the number of 62, accounted for 16.7 percent.

SMEs entrepreneur's level of education ranges from below bachelor degree to doctoral degree. There are 49 respondents or 13.2 percent in the below bachelor degree level, 212 respondents or 57.3 percent in the bachelor's degree level, 99 respondents or 26.8 percent in the master's degree level and 10 respondents or 2.7 percent in the doctoral degree level. The demographic characteristics of the SMEs entrepreneurs are reported in table 4.2

Table 4.2 Demographics Characteristics of SMEs Entrepreneurs

Variables	**Categories**	**Frequency**	**Percentage**
Gender	Male	308	83.3 %
	Female	62	16.7 %
Education	<Bachelor's Degree	49	13.2%
	Bachelor's Degree	212	57.3 %
	Master's Degree	99	26.8 %
	Doctoral's Degree	10	2.7 %

The number of year of SMEs establishment is ranged between 1 to 57 years, with a mean value of 21.219 and standard deviation of 10.871. Numbers of year of SMEs establishment from the collected data are reported in Table 4.3.

Table 4.3 Number of Years of SMEs Establishment

	Min	**Max**	**Mean**	**Standard Deviation**
Number of year	1	57	21.219	10.871

Size of SMEs in terms of number of employee is ranged from 5 to 200 employees with mean value of 66.768 and standard deviation of 60.817. Sizes of SMEs in terms of number of employee are reported in table 4.4.

Table 4.4 Size of SMEs Measured by Number of Employee

	Min	**Max**	**Mean**	**Standard Deviation**
Size of SMEs	1	200	66.768	60.817

4.3 International Business Characteristics of SMEs' in Steel Fabrication Industry

The international business characteristics of SMEs including whether they had joint-venture with foreign company and engage in export business are reported as follows. The SMEs which do not have a joint-venture, which reported under "No" category, are 357 firms. On the other hand, SMEs which have a joint-venture with foreign company are 13 firms and accounted for 3.5%.

There are 249 SMEs which do not have export activity, accounted for 67.3%. On the other hand, there are 121 SMEs engage in export business, accounted for 32.7%. The joint venture and export characteristics of SMEs are reported in table 4.5.

Table 4.5 Join Venture and Export Characteristics of SMEs in Steel Fabrication Industry.

Variables	Categories	Frequency	Percentage
Joint-venture	No	357	96.5 %
	Yes	13	3.5 %
Export	No	249	67.3%
	Yes	121	32.7 %

4.4 The Objective Measures of Firm Performance of SMEs in Steel Fabrication Industry

Besides the measurement of subjective data of SMEs performance, the study has also measured the objective data of SMEs performance. The objective data was measured in a rank data which including forecast annual revenue, forecast annual sales growth and forecast profit growth. Forecast annual revenue of SMEs in steel fabrication industry range from below 50 million Thai baht to more than 200 million Thai baht. There are 117 SMEs or 32.0 percent with below 50 million Thai bath forecast annual revenue, 78 SMEs or 21.0 percent with the range between 50 to 100 million Thai baht, 52 SMEs or 14.0 percent with the range between 101 to 150 million Thai baht, 35 SMEs or 9.0 percent with the range of 151 to 200 million Thai bath and 88 SMEs or 24 percent for more than 200 million Thai bath forecast annual revenue. The SME's forecast annual revenue is reported in table 4.6.

Table 4.6 SMEs' Forecast Annual Revenue.

Variables	Categories	Frequency	Percentage
SMEs'forecast annual revenue	< 50 million baht	117	32.0%
	50-100million baht	78	21.0 %
	101-150million baht	52	14.0 %
	151-200million baht	35	9.0%
	>200 million baht	88	24.0%

SME's forecast sales growth ranges from 0 percent and below to more than 10 percent. There are 78 respondents or 21.0 percent with annual forecast sales growth of 0 percent and below, 138 respondents or 37 percent with 1-3 percent sales growth, 60 respondents or 16.0 percent with 4-6 percent sales growth, 19 respondents or 5.0 percent with 7-9 percent sales growth and 75 respondent or 20.0 percent with annual sales growth of more than 10 percent. The SME's forecast sales growth are reported in table 4.7.

Table 4.7 SMEs' Forecast Sales Growth

Variables	Categories	Frequency	Percentage
SMEs'forecast sales growth	< 0 percent	78	21.0%
	1-3 percent	138	37.0 %
	4-6 percent	60	16.0 %
	7-9 percent	19	5.0 %
	>10%	75	20.0%

SME's forecast net profit growth range from 0 percent and below to more than 10 percent. There are 42 respondents or 12.7 percent with 0 percent or lower forecast net profit growth, 192 respondents or 58.2 percent with 1-3 percent net profit growth,

88 respondents or 26.7 percent with 4-6 percent net profit growth, 8 respondents or 2.4 percent with 7-9 percent net profit growth and 10 respondent or 2 percent with more than 10 percent net profit growth. The SME's forecast net profit growth are reported in table 4.8.

Table 4.8 SME's Forecast Net Profit Growth

Variables	Categories	Frequency	Percentage
SMEs'forcasted net profit growth	< 0 percent	105	28.0%
	1-3 percent	138	37.0 %
	4-6 percent	53	14.0 %
	7-9 percent	25	7.4 %
	>10%	49	13.0%

4.5 Normal Distribution

The normal distribution test of data was performed to check whether the data are normally distributed. For testing the normality of the data, the two tests, which are Jarque-Bera test of normality (Normal-JB) and Robust Jarque-Bera test of normality (Normal RJB) are employed in this study (Jarque & Bera, 1980). The results of variables of this study showed that the three main variables which are competitor orientation (COMO), shareholder orientation (SO) and SMEs performance (PERF) demonstrated non-normally distributed data. Moreover, most of control variables which are 1) size of SMEs, 2) age of SMEs and 3) experience of entrepreneur also demonstrate non-normally distributed data. A body of research shows that the Partial Least Square (PLS) provides a robustness result when the data are highly non-normal (Hair, Sarstedt, Ringle, & Mena, 2012). These evidence suggested that the Partial Least Square (PLS) is an appropriated statistical estimation for this study (Garson, 2016).The results of normalization of the data are presented in Table 4.9.

Table 4.9 The Normalization of the Data

	EO	CO	COMO	EMPO	SHAO	PERF	ENV	SIZE	AGE	EXP
Normal-JB	Yes	Yes	No	Yes	No	No	Yes	No	No	No
Normal-RJB	Yes	Yes	No	Yes	No	No	Yes	No	No	Yes

Note: EO = Entrepreneurial Orientation, CO= Customer Orientation, COMO = Competitor Orientation, EMPO = Employee Orientation, SHAO = Shareholder Orientation, , PERF = SMEs Performance, ENV = Environmetal Uncertainty, SIZE = Number of SMEs' employee, AGE = Years of SMEs establishment, EXP = Industrial experience of an entrepreneur

4.6 Model Assessment

The study has performed a set of data analyses to ensure that the collected data has reached an acceptance level of validity and reliability. Two types of validity test have been conducted, which are convergent and discriminant validity. The two types of reliability test which are Cronbach's alpha coefficient (α) and composite reliability have also been performed.

4.6.1 Validity Test

The validity test will evaluate how well the constructs are measured (Hair et al., 2012). The validity test was conducted to ensure that the scales employed in this study will measure what they are supposed to measure (Chin, 1998; Sreejesh, Mohapatra, & Anusree, 2014). Two types of validity test were conducted by this study, which are convergent validity and discriminant validity.

4.6.1.1 Convergent Validity Test

Convergent validity is the extent of correlation among different measures that intended to measure the same concept (Sreejesh et al., 2014). According to Sekaran (2003), the level of validity will be high when the questions used to measure the same variable are highly correlated. The study used factor loadings and cross-loadings to test convergent validity. Chin (1998) suggested that the value of item in each construct should be over 0.7. However, Hair et al. (2012) suggested that the minimum value of 0.5 is adequate for the validity of construct The

result of factor loadings and cross loadings showed that all items in each construct have a value over a minimum requirement of 0.5. The results of factor loading and cross-loadings of all variables are presented in table 4.10.

Table 4.10 The Combined Factor Loadings and Cross-Loadings of all Variables

	EO	**CO**	**COMO**	**EMPO**	**SHAO**	**PERF**	**ENV**
INV1	**(0.530)**	- 0.357	0.023	- 0.001	0.097	0.086	0.066
INV2	**(0.544)**	- 0.263	0.187	- 0.116	- 0.028	0.075	0.011
INV3	**(0.724)**	0.025	- 0.096	0.062	0.038	0.130	0.054
INV4	**(0.687)**	- 0.059	0.031	0.057	- 0.174	0.028	- 0.044
PRO1	**(0.758)**	- 0.204	0.000	- 0.030	0.041	0.107	0.019
PRO2	**(0.735)**	- 0.274	0.048	- 0.183	0.036	0.156	- 0.025
PRO3	**(0.697)**	- 0.042	0.063	- 0.125	- 0.013	0.016	0.099
PRO4	**(0.772)**	- 0.116	- 0.149	- 0.165	0.089	0.029	- 0.030
RISK1	**(0.631)**	- 0.319	0.144	0.294	0.095	0.028	- 0.076
RISK2	**(0.742)**	- 0.093	- 0.010	0.211	0.054	- 0.121	- 0.089
RISK3	**(0.729)**	0.050	- 0.038	- 0.019	- 0.073	- 0.050	- 0.062
RISK4	**(0.763)**	0.095	- 0.085	0.108	0.158	- 0.115	0.092
AGS1	**(0.719)**	0.251	0.181	- 0.208	- 0.153	0.012	0.124
AGS2	**(0.786)**	0.301	0.070	- 0.155	- 0.239	- 0.069	0.150
AGS3	**(0.782)**	0.100	0.102	- 0.223	0.009	0.022	0.107
AUTO1	**(0.565)**	0.172	- 0.011	0.276	- 0.012	- 0.054	- 0.161
AUTO2	**(0.569)**	0.421	- 0.268	0.242	- 0.032	- 0.166	- 0.215
AUTO3	**(0.574)**	0.278	- 0.222	0.160	0.151	- 0.141	- 0.139
CUSO1	0.003	**(0.772)**	0.106	0.017	0.064	0.049	- 0.271
CUSO2	0.039	**(0.805)**	- 0.084	- 0.254	0.155	0.028	0.196
CUSO3	- 0.055	**(0.827)**	0.041	- 0.025	0.141	- 0.042	0.117
CUSO4	0.199	**(0.759)**	- 0.225	- 0.005	- 0.148	- 0.065	0.065
CUSO5	- 0.182	**(0.762)**	0.160	0.282	- 0.234	0.030	- 0.125
COMPO1	0.071	- 0.076	**(0.820)**	- 0.077	0.048	0.028	0.148
COMPO2	- 0.161	0.017	**(0.851)**	- 0.008	0.066	- 0.006	0.047
COMPO3	0.000	- 0.081	**(0.824)**	0.022	- 0.056	- 0.016	- 0.045
COMPO4	0.105	0.152	**(0.750)**	0.069	- 0.065	- 0.006	- 0.166
EMPO1	0.018	0.036	0.231	**(0.802)**	- 0.043	- 0.080	0.083
EMPO2	0.026	0.145	- 0.202	**(0.815)**	0.020	0.099	0.042
EMPO3	0.009	- 0.142	- 0.047	**(0.757)**	0.007	0.018	- 0.104
EMPO4	- 0.054	- 0.051	0.019	**(0.782)**	0.016	- 0.038	- 0.028
SHAREO1	- 0.076	0.245	- 0.054	0.063	**(0.794)**	0.010	- 0.037
SHAREO2	0.022	- 0.081	0.061	- 0.016	**(0.886)**	0.005	- 0.062

	EO	CO	COMO	EMPO	SHAO	PERF	ENV
SHAREO3	0.051	- 0.041	0.095	- 0.094	**(0.915)**	- 0.016	0.010
SHAREO4	- 0.073	- 0.002	- 0.162	0.125	**(0.908)**	0.014	0.065
SHAREO5	0.068	- 0.094	0.055	- 0.070	**(0.890)**	- 0.012	0.017
PER1	0.064	0.091	- 0.009	- 0.066	- 0.122	**(0.893)**	0.006
PER2	0.116	0.025	0.098	0.005	- 0.184	**(0.897)**	- 0.009
PER3	- 0.010	- 0.054	- 0.027	- 0.146	0.135	**(0.920)**	- 0.021
PER4	0.045	0.006	- 0.004	- 0.184	0.138	**(0.904)**	- 0.037
PER5	- 0.188	- 0.031	0.022	0.158	0.113	**(0.859)**	0.037
PER6	- 0.035	- 0.036	- 0.079	0.249	- 0.082	**(0.885)**	0.027
INDA1	- 0.164	- 0.019	0.144	- 0.025	0.004	0.001	**(0.899)**
INDA2	0.034	0.048	- 0.146	0.072	0.012	- 0.070	**(0.905)**
INDA3	0.159	- 0.036	0.005	- 0.058	- 0.020	0.086	**(0.733)**

Note: EO = Entrepreneurial Orientation, CO= Customer Orientation, COMO = Competitor Orientation, EMPO = Employee Orientation, SHAO = Shareholder Orientation, PERF = SMEs Performance and ENV = Environmetal Uncertainty

4.6.1.2 Discriminant Validity

Discriminant validity demonstrates the lack of correlation among the constructs which are supposed to be different (Sreejesh et al., 2014). According to Sekaran (2003), the level of discrimination validity will be high when the questions used to measure different variables are not correlated. This study performed discriminant validity test by comparing the square root of average variance extracted (AVE) of one construct which is supposed to be higher than the correlation between that construct and other constructs (Garson, 2016). The result showed that the square root of AVE of each construct is higher than its correlation with others. Therefore, the measurements used in this study are considered to have discriminant validity. The result are reported in table 14.11

Table 4.11 Variable Correlations and Square Root of Average Variance Extracted

	EO	CO	COMO	EMPO	SHAO	PERF	ENV	SIZE	AGE	EXP
EO	**(0.689)**	0.546**	0.640**	0.554**	0.434**	0.463**	0.298**	0.147*	-0.101	-0.014
CO	0.546**	**(0.785)**	0.662**	0.565**	0.420**	0.452**	0.248**	0.163*	-0.029	-0.055
COMO	0.640**	0.662**	**(0.812)**	0.595**	0.530**	0.459**	0.343**	0.078	-0.058	-0.060
EMPO	0.554**	0.565**	0.595**	**(0.789)**	0.409**	0.354**	0.174**	0.103*	-0.079	-0.093
SHAO	0.434**	0.420**	0.530**	0.409**	**(0.880)**	0.280**	0.235**	-0.018	-0.024	-0.189**
PERF	0.463**	0.452**	0.459**	0.354**	0.280**	**(0.893)**	0.095	-0.082	-0.081	-0.113*
ENV	0.298**	0.248**	0.342**	0.174**	0.235**	0.095	**(0.849)**	-0.115*	-0.152**	-0.100*
SIZE	0.147*	0.163*	0.078	0.103*	-0.018	-0.082	-0.115	**(1.000)**	0.306**	0.309**
AGE	-0.101	-0.029	-0.058	-0.079	-0.024	-0.081	-0.052	0.306**	**(1.000)**	0.431**
EXP	-0.014	-0.055	-0.060	-0.093	-0.189**	-0.113*	-0.100	0.309**	0.431**	**(1.000)**

Notes: EO = Entrepreneurial Orientation, CO= Customer Orientation, COMO = Competitor Orientation, EMPO = Employee Orientation, SHAO = Shareholder Orientation, PERF = SMEs Performance, SIZE = Number of SMEs' employee, AGE = Years of SMEs establishment, EXP = Industrial experience of an entrepreneur and ENV = Environmental Uncertainty.

* p-value < 0.05, ** p-value < 0.01

Square root of AVE is presented in parentheses.

4.6.2 Reliability Test

According to Nunnally (1978), the reliability test needs to perform to ensure that the scales are consistent or they are able to produce the same result when measuring the same thing more than one time. Two types of reliability test were employed in this study are Cronbach's alpha coefficient and composite reliability.

4.6.2.1 Cronbach's Alpha Coefficient

Cronbach's alpha coefficient is used to measure the internal consistency of scales and the reliability of the construct (Hair et al., 2012). Fornell and Larcker (1981) suggested that the minimum value should be over the acceptable range of 0.70. The results of this study showed that the values of Cronbach's alpha coefficient are higher than 0.7. Therefore, the measures in this study have a good reliability. The values of Cronbach's alpha coefficient are reported in table 4.12.

4.6.2.2 Composite Reliability

According to Kock (2017), composite reliability measures the reliability by including indicator loadings in the calculation. J. F. Hair, M. Sarstedt, C. M. Ringle, and J. A. Mena (2012) suggested that a value of composite reliability has to be more than 0.70 in order to confirm the reliability of variables' internal consistency.

The results showed that all composite reliability are above 0.8. This means that the measures in this study have a good level of reliability. The results of composite reliability are presented in table 4.12.

Table 4.12 Cronbach's Alpha Coefficient and Composite Reliability of all Latent Variables

	EO	**CO**	**COMO**	**EMPO**	**SHAO**	**PERF**	**ENV**
Cronbach's alpha (α)	0.933	0.844	0.827	0.798	0.926	0.949	0.803
Composite reliability	0.941	0.889	0.886	0.869	0.945	0.959	0.885

Note: EO = Entrepreneurial Orientation,CO = Customer Orientation, COMO = Competitor Orientation, EMPO = Employee Orientation, SHAO = Shareholder Orientation, , PERF = SMEs Performance, ENV = Environmental Uncertainty.

4.6.3 Multicollinearity

Multicollinearity problem occurs when two or more independent variables are highly inter-correlated (Garson, 2016). The respondents could perceive that the scales of two variables tend to measure the same thing (Kock & Lynn, 2012). In case of two or more independent variables are highly inter-correlated, the result of the model can be misleading due to collinearity (Kock & Lynn, 2012). The full collinearity variance inflation factor (VIF) is used as the threshold in which the problem will exist if the value of full VIF is higher than 3.3 (Kock, 2017; Kock & Lynn, 2012). The full VIF was conducted by this study with the results that all VIF values of all variables are lower than 3.3. Thus, multicollinearity is not a serious problem in this model. The values are shown in table 4.13. This measurement can investigate the collinearity that might make misleading results (Kock & Lynn, 2012).

Table 4.13 Full VIF of all Variables

	EO	CO	COMO	EMPO	SHAO	PERF	ENV
Full VIFs	2.255	2.185	2.745	1.857	1.543	1.549	1.270

Note: CO= Customer Orientation, COMO = Competitor Orientation, EMPO = Employee Orientation, SHAO = Shareholder Orientation, EO = Entrepreneurial Orientation, PERF = SMEs Performance, ENV = Environmental Uncertainty.

4.7 Hypotheses Test

This study has proposed nine hypotheses which are presented earlier in Table 3 in chapter 3. The results of PLS regression analysis are reported in this section. The decision to support or reject the hypotheses is based on following statistical measurements. First, the path analysis reflects the direction and strength of relationships between variables. Beta coefficient (β) is used to illustrate the path coefficient in PLS analysis (Walpole, Meyers, & Myers, 2002). Positive beta coefficient reflects positive relationship between the two variables. On the other hand, negative beta coefficient reflects negative relationship between the two variables. The beta coefficients in this study were estimated through the bootstrapping resampling technique. According to Henseler, Ringle, and Sinkovics (2009) bootstrapping is a procedure that is used in PLS path modeling to deliver confidence intervals for all

parameter estimates, building the basis for statistical inference. It is a technique that will randomly draw on existing data to create larger data, or subsamples, to represent a population. This study employed bootstrapping technique with 100 no. of resamples which is recommended by Efron, Rogosa, and & Tibshirani (2004). Second, the p-value determines the null hypothesis if it will be accepted or rejected (Kline, 2004). When the p-value is lower than 0.05, the null hypothesis will be rejected, and the alternative hypothesis will be accepted providing the relevant hypothesis is statistically significant. On the other hand, when the p-value is more than 0.05, the null hypothesis cannot be rejected, thus the relavant hypothesis will not be statistically significant (Rice, 1989).

The result of PLS regression are reported in table 4.14. The researcher uses hierarchical regression analysis to test the hypotheses (Cohen, Cohen, West, & Aiken, 1983). The purpose of using this method of regression analysis is to gain a full understanding on how Entrepreneurial Orientation and Stakeholder Orientation may affect SMEs performance independently and jointly. Moreover, the interactive effect between Entrepreneurial Orientation and each aspect of Stakeholder Orientation can be clearly presented by hierarchical regression method. The results were separated into four models which SMEs performance was included as an common dependent variable for all models. Furthermore, each model also incorporates four control variables in the analysis, including environment uncertainty, firm's size, firm's age, and experience of entrepreneur. The details of each model are described as follows. Model 1 includes only Entrepreneurial Orientation and the set of control variables to predict SMEs performance. Model 2 includes the four aspects of Stakeholder Orientation (including Customer Orientation, Competitor Orientation, Employee Orientation and Shareholder Orientation) and the set of control variables to predict SMEs performance. Model 3 includes Entrepreneurial Orientation together with the four aspects of Stakeholder Orientation and the set of control variables to predict SMEs performance. Model 4 is the same with model 3 but also includes the interaction of Entrepreneurial Orientation and each of the four aspects of Stakeholder Orientation to test the moderating effects proposed in the hypotheses.

Table 4.14 PLS Regression Estimation of SMEs Performance

Independent Variables	**Dependent variable: SMEs performance**			
	Model 1	**Model 2**	**Model 3**	**Model 4**
Main effects				
Entrepreneurial Orientation (H1)	0.515***		0.300***	0.276***
Customer Orientation (H2)		0.281***	0.245***	0.260***
Competitor Orientation (H3)		0.285***	0.187**	0.202***
Employee Orientation (H4)		0.057	-0.008	0.002
Shareholder Orientation (H5)		0.002	-0.032	-0.051
Moderating effects				
Customer Orientation x Entrepreneurial Orientation (H6)				0.177**
Competitor Orientation x Entrepreneurial Orientation (H7)				-0.096
Employee Orientation x Entrepreneurial Orientation (H8)				-0.040
Shareholder Orientation x Entrepreneurial Orientation (H9)				-0.105*
Control variables				
Environmental Uncertainty	-0.082	-0.105	-0.137**	-0.146**
Number of SMEs'employee	-0.156**	-0.158***	-0.190***	-0.192***
Years of SMEs establishment	0.052	0.008	0.045	0.031
Industrial experience of entrepreneur	-0.088	-0.039	-0.064	-0.069
R-square	**0.249**	**0.285**	**0.330**	**0.354**

Notes: 1. CO= Customer Orientation, COMO = Competitor Orientation, EMPO = Employee Orientation, SHAO = Shareholder Orientation, EO = Entrepreneurial Orientation, ENV = Environmental Uncertainty, SIZE = Number of SMEs' employee AGE = Number of years of SMEs establishment, EXP = Industrial experience of an entrepreneur

2. *** p-value < 0.001, ** p-value < 0.01, * p-value <0.05

Hypothesis 1 proposed that Entrepreneurial Orientation is positively related to SMEs performance. The result showed a positive sign of the beta ($\beta = 0.276$; $p<0.001$) with the p-value less than 0.001. This result confirmed that there was a positive and significant relationship between Entrepreneurial Orientation and SMEs performance. The finding suggests that firms that had high Entrepreneurial Orientation tended to produce better performance. Therefore, hypothesis 1 is supported.

Hypothesis 2 proposed that Customer Orientation is positively related to SMEs performance. The result showed a positive sign of the beta ($\beta = 0.260$; $p<0.001$) with the p-value less than 0.001. This result confirmed that there was a positive and significant relationship between Customer Orientation and SMEs performance. The finding suggests that firms that had high Customer Orientation tended to produce better performance. Therefore, hypothesis 2 is supported.

Hypothesis 3 proposed that Competitor Orientation is positively related to SMEs performance. The result showed a positive sign of the beta ($\beta = 0.202$; $p<0.001$) with the p-value is less than 0.001. This result confirmed that there was a positive and significant relationship between Competitor Orientation and SMEs performance. The finding suggests that firms that had high Competitor Orientation tended to produce better performance. Therefore, hypothesis 3 is supported.

Hypothesis 4 proposed that Employee Orientation is positively related to SMEs performance. The result showing a positive sign of the beta ($\beta = 0.002$; $p = 0.487$), which suggested that firms that had high Employee Orientation tended to produce better performance. However with the p-value of 0.487 which is more than 0.05, this suggested that the relationship is not statistically significant. Therefore, hypothesis 4 is not supported.

Hypothesis 5 proposed that Shareholder Orientation is positively related to SMEs performance. The result showing a negative sign of the beta ($\beta=-0.051$, $p = 0.211$) which suggested that firms that had high Shareholder Orientation tended to produce lower performance. However with the p-value of 0.211 which is more than 0.05, this suggested that the relationship is not statistically significant. Therefore, hypothesis 5 is not supported.

The hypotheses 6-9 that involve the moderating effect were tested by hierarchical regression analysis (Cohen et al., 1983). The interaction terms between Entrepreneurial Orientation and each component of Stakeholder Orientation were created and put in the model estimation. The results are reported in Model 4 of the Table 4.14.

Hypothesis 6 proposed that the relationship between Entrepreneurial Orientation and SMEs performance is positively moderated by Customer Orientation. The result showed that the interaction term of Entrepreneurial Orientation and Customer Orientation had a positive beta ($\beta = 0.177$; $p = 0.008$). With the p-value of 0.008, this confirmed that the Customer Orientation significantly moderated the positive relationship between Entrepreneurial Orientation and firm performance. The positive moderation suggests that the effect of Entrepreneurial Orientation on performance was stronger for firms that emphasized more Customer Orientation than firms that emphasized less Customer Orientation. Therefore, hypothesis 6 is supported.

Hypothesis 7 proposed that the relationship between Entrepreneurial Orientation and SMEs performance is positively moderated by Competitor Orientation. The result showed that the interaction term of Entrepreneurial Orientation and Competitor Orientation had a negative beta ($\beta = -0.096$; $p = 0.083$). The negative moderation suggests that the effect of Entrepreneurial Orientation on performance was weaker for firms that emphasized more Competitor Orientation than firms that emphasized less Competitor Orientation. However, with the p-value of 0.083, which is more than 0.05, this suggested that the relationship was not statistically significant. Therefore, hypothesis 7 is not supported.

Hypothesis 8 proposed that the relationship between Entrepreneurial Orientation and SMEs performance is positively moderated by Employee Orientation. The result showed that the interaction term of Entrepreneurial Orientation and Employee Orientation had a negative beta ($\beta = -0.040$; $p = 0.271$). The negative moderation suggests that the effect of Entrepreneurial Orientation on performance was weaker for firms that emphasized more Employee Orientation than firms that emphasized less Employee Orientation. However, with the p-value of 0.271, which is

more than 0.05, this suggested that the relationship was not statistically significant. Therefore, hypothesis 8 is not supported.

Hypothesis 9 proposed that the relationship between Entrepreneurial Orientation and SMEs performance is positively moderated by Shareholder Orientation**.** The result showed that the interaction term of Entrepreneurial Orientation and Shareholder Orientation had a negative beta ($\beta = -0.105$; $p = 0.027$). With p-value of 0.027, this confirmed that the relationship between Entrepreneurial Orientation and firm performance was negatively and significantly moderated by Shareholder Orientation. The negative moderation suggests that the effect of Entrepreneurial Orientation on performance was weaker for firms that emphasized more Shareholder Orientation than firms that emphasized less Shareholder Orientation. Therefore, hypothesis 9 is not supported.

The graphs that illustrate the moderating effect of Entrepreneurial Orientation and each aspect of Stakeholder Orientation are presented in Figure 4.1, Figure 4.2, Figure 4.3 and Figure 4.4

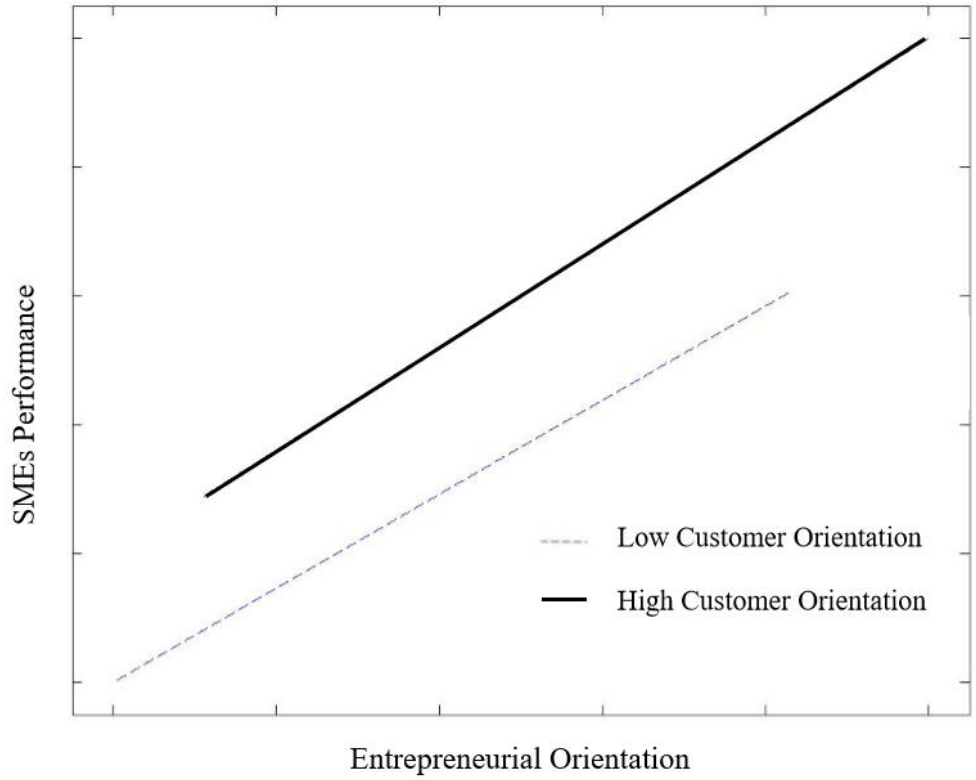

Figure 4.1 The Moderating Effect of Customer Orientation on the Relationship between Entrepreneurial Orientation and SMEs Performance

Figure 4.1 presents the moderating effect of Entrepreneurial Orientation and Customer Orientation on SMEs performance. The positive slope of the regression line that represents the relationship between Entrepreneurial Orientation and SMEs performance is steeper for SMEs that emphasized more Customer Orientation than SMEs that emphasized less Customer Orientation. This suggests that the effect of EO on firm performance is stronger for SMEs that emphasized more Customer Orientation than SMEs that emphasized less Customer Orientation.

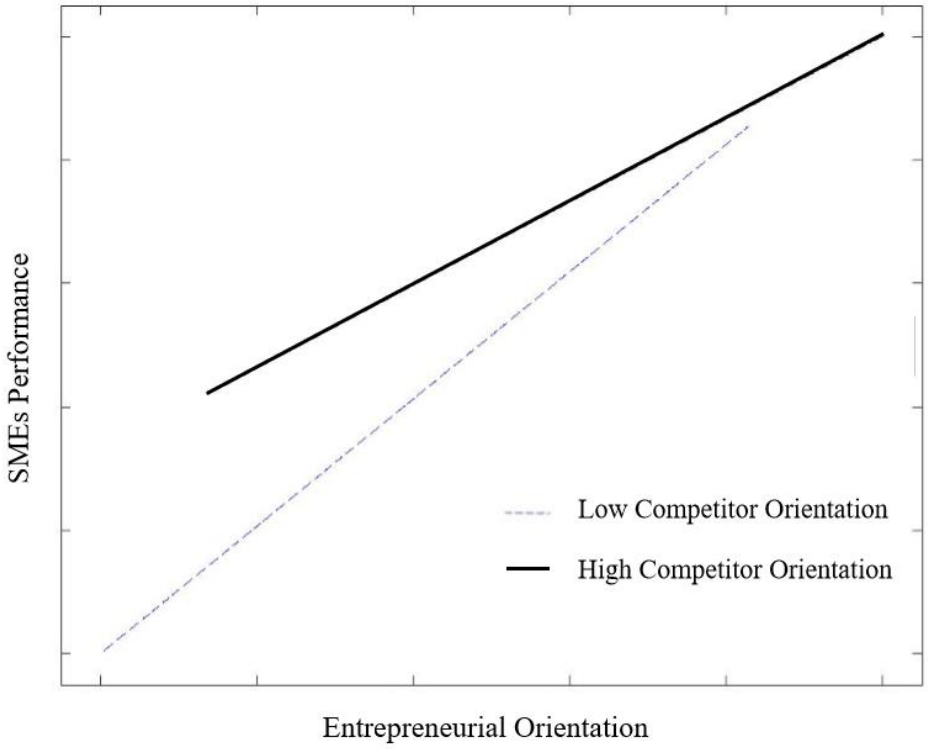

Figure 4.2 The Moderating Effect of Competitor Orientation on the Relationship between Entrepreneurial Orientation and SMEs Performance

Figure 4.2 presents the moderating effect of Entrepreneurial Orientation and Competitor Orientation on SMEs performance. The positive slope of the regression line that represents the relationship between Entrepreneurial Orientation and SMEs performance is flatter for SMEs that emphasized more Competitor Orientation than SMEs that emphasized less Competitor Orientation. This suggests that the effect of Entrepreneurial Orientation on firm performance is weaker for SMEs that emphasized more Competitor Orientation than SMEs that emphasized less Competitor Orientation. However, this difference was not statistically supported in model estimation.

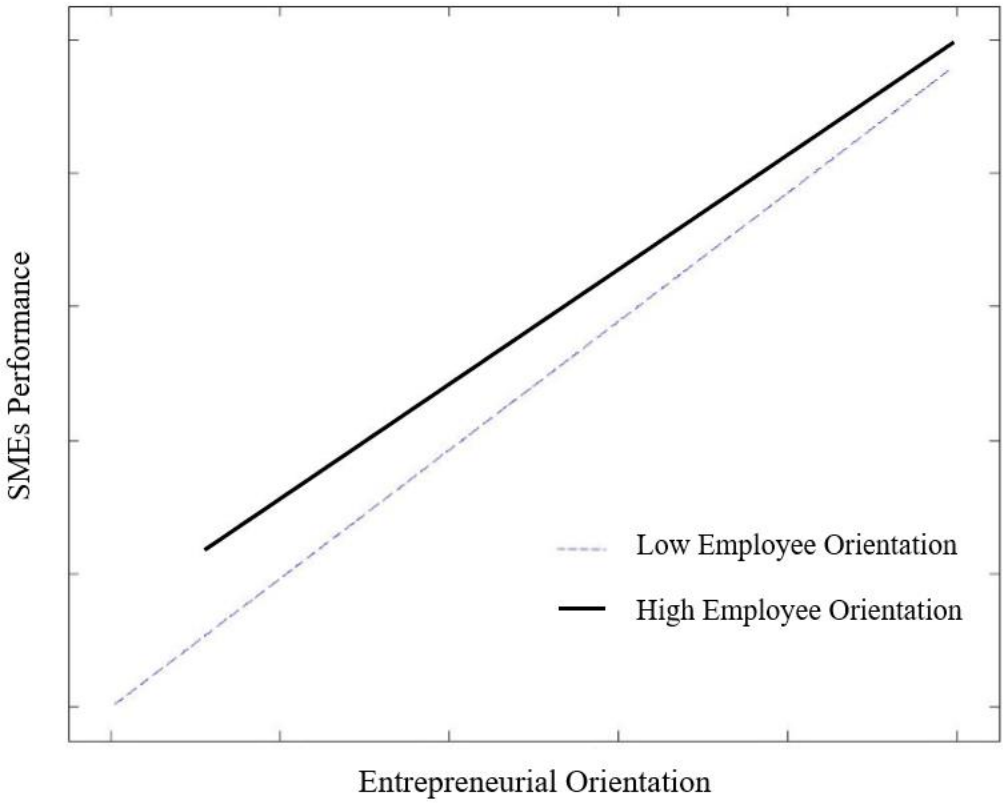

Figure 4.3 The Moderating Effect of Employee Orientation on the Relationship between Entrepreneurial Orientation and SMEs performance

Figure 4.3 presents the moderating effect of Entrepreneurial Orientation and Employee Orientation on SMEs performance. The positive slope of the regression line that represents the relationship between Entrepreneurial Orientation and SMEs performance is flatter for SMEs that emphasized more Employee Orientation than SMEs that emphasized less Employee Orientation. This suggests that the effect of Entrepreneurial Orientation on firm performance is weaker for SMEs that emphasized more Employee Orientation than SMEs that emphasized less Employee Orientation. However, this difference was not statistically supported in model estimation.

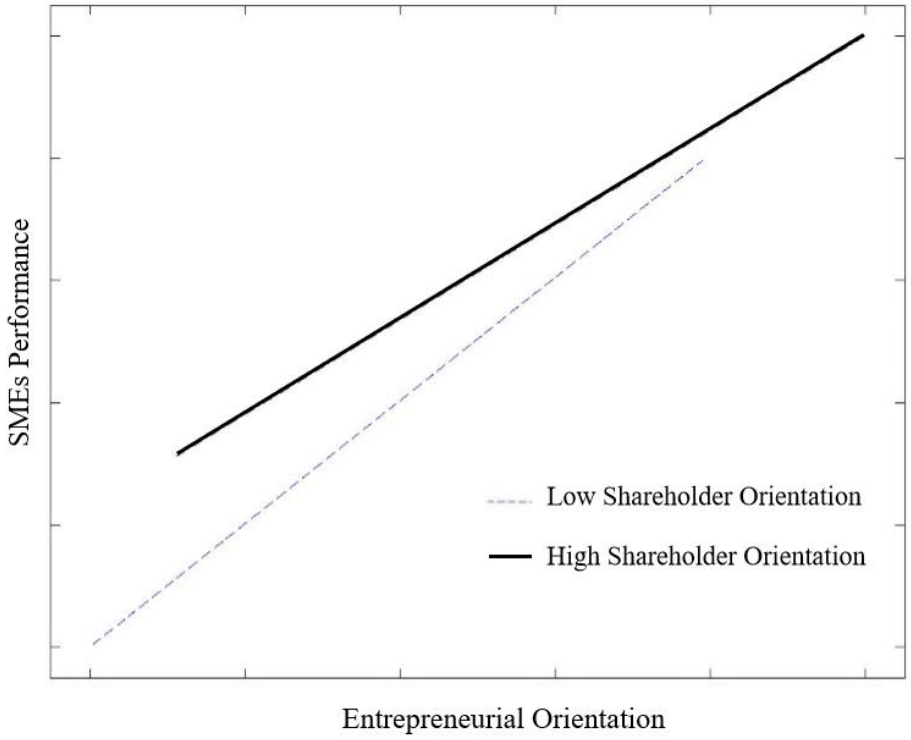

Figure 4.4 The Moderating Effect of Shareholder Orientation on the Relationship between Entrepreneurial Orientation and SMEs performance

Figure 4.4 presents the moderating effect of Entrepreneurial Orientation and Shareholder Orientation on SMEs performance. The positive slope of the regression line that represents the relationship between Entrepreneurial Orientation and SMEs performance is flatter for SMEs that emphasized more Shareholder Orientation than SMEs that emphasized less Shareholder Orientation. This suggests that the effect of Entrepreneurial Orientation on firm performance is weaker for SMEs that emphasized more Shareholder Orientation than SMEs that emphasized less Shareholder Orientation.

In addition to the main hypotheses proposed, the relationships between control variables and SMEs performance are reported as follows. For the first control variable which is the age of SMEs measured by the number of years of SMEs establishment, the result showed a positive sign of the beta ($\beta = 0.031$; $p = 0.275$). This result suggested that firms that had been in business longer tended to produce better

performance. However, with the p-value of 0.275 which is more than 0.05, the finding is not statistically significant. Therefore, this finding is not statistically supported.

Regarding the second control variable which is the size of SMEs measured by number of employees, the result showed a negative sign of the beta (β = -0.192; $p<0.001$). This result suggested that firms with larger size tended to produce lower performance. With the p-value less than 0.001, the finding is statistically significant. Therefore, this finding is statistically supported.

Regarding the third control variable which is the experience of entrepreneur in steel fabrication industry, the result showed a negative sign of beta (β = -0.069; p = 0.084). This result suggested that firms in which the entrepreneur had longer experience tended to produce lower performance. However, with the p-value of 0.084 which is more than 0.05, the finding is not statistically significant. Therefore, this finding is not statistically supported.

Regarding the fourth control variable which is an environment uncertainty, the result showed a negative sign of the beta (β = -0.146; p = 0.002). This result suggested that higher environment uncertainty tended to decrease firm performance or firms which operating in a higher uncertain environment tended to exhibit lower performance. With the p-value of 0.002 which is less than 0.05, the finding is statistically significant. Therefore, this finding is statistically supported.

4.8 R-squared

R-squared is the percentage of the response variable variation that is explained by a linear model (Chatterjee & Hadi, 2015). It is a statistical measure of how close the data are to the fitted regression line. It is also known as the coefficient of determination, or the coefficient of multiple determination for multiple regression (Chatterjee & Hadi, 2015). The R-square of the model 1 is 0.249 which means all variables included in the model which are Entrepreneurial Orientation and the set of control variables can explain firm performance of 24.9%. The R-square of the model 2 is 0.285 which means all variables included in the model which are the four aspects of Stakeholder Orientation and the set of control variables can explain firm performance of 28.5%. The R-square of the model 3 is 0.330 which means all

variables included in the model which are Entrepreneurial Orientation, the four aspects of Stakeholder Orientation and the set of control variables can explain firm performance of 33%.The R-square of model 4 which included interaction effects is 0.354 which is the highest among four models. It means all variables included in the model i.e. Entrepreneurial Orientation, the four aspects of Stakeholder Orientation, the four interaction terms of Entrepreneurial Orientation and Stakeholder Orientation and the set of control variables can explain firm performance of 35.4%. Since the R-square value of model 4 which involves the moderating effect is the highest among all previous models, this suggested that interaction terms between Entrepreneurial Orientation and Stakeholder Orientation helped to improve the explanatory power of the model as compared to others. Therefore, the study used model 4 as a main model for the reports. The R-square of model 4 suggested that all independent variables in the model can explain firm performance by 35.4 percent. There are 64.6 percent remaining that might be explained by other variables that are not included in this model.

The result from the PLS analysis are shown in figure 4.5.

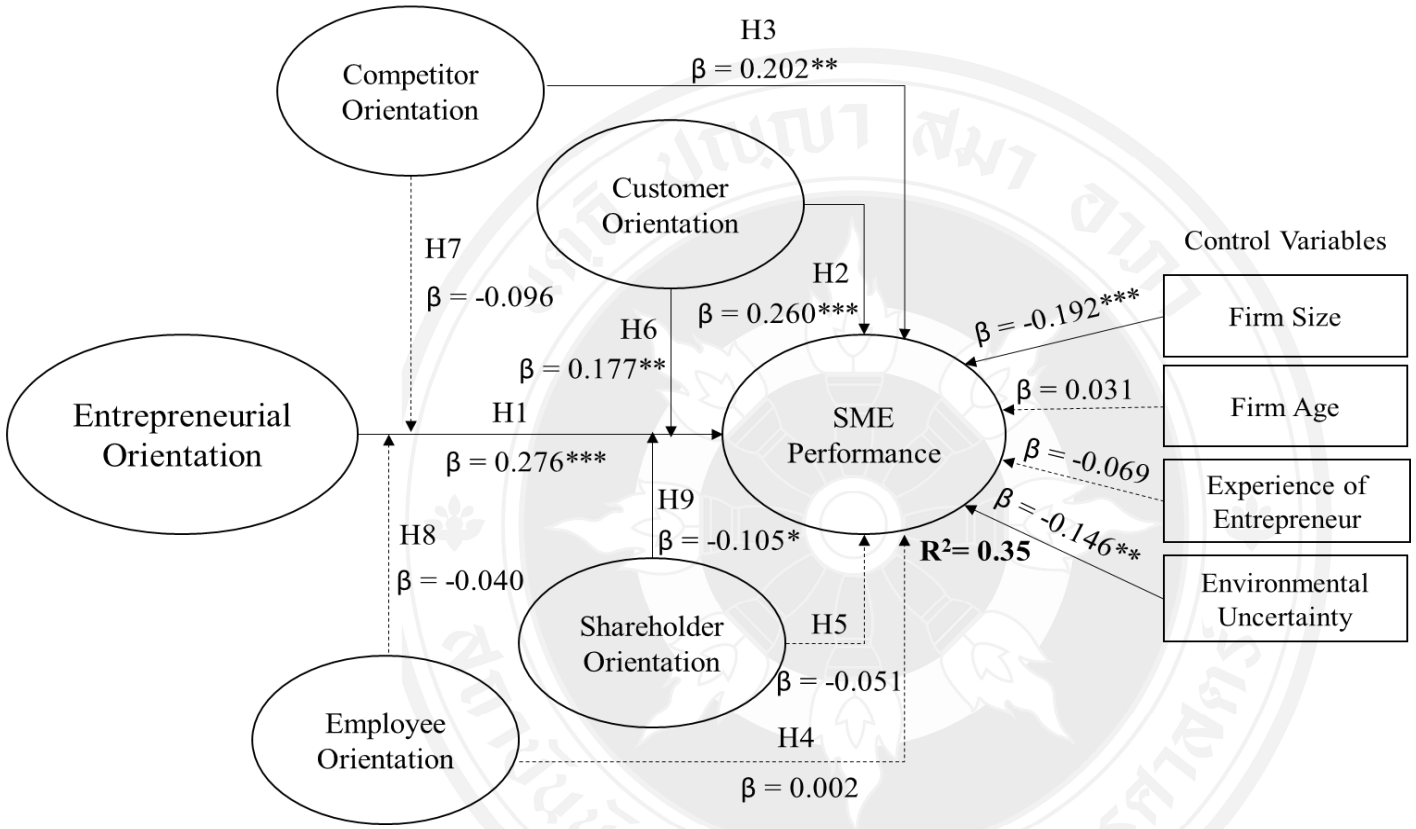

Figure 4.5 The Results Presented in a Conceptual Model

Notes: *** p-value < 0.001, ** p-value < 0.01, * p-value <0.05

Solid lines are significant path, dashed lines are non-significant path

4.9 Model Fit Indices

WrapPLS 6.0 provides ten model fit indices to measure the quality of PLS-SEM model (Kock, 2017). This includes (1) Average path coefficient (APC), (2) Average R-squared (ARS), (3) Average adjusted R-squared (AAS), (4) Average block VIF (AVIF), (5) Average full collinearity VIF (AFVIF), (6) Tenenhaus GoF (GoF), (7) Sympson's paradox ratio (SPR), (8) R-squared contribution ratio (RSCR), (9) Statistical suppression ratio (SSR) and (10) Nonlinear bivariate causality direction ration (NLBCDR).

4.9.1 Average Path Coefficient (APC)

The average path coefficient (APC) refers to how strong the paths are in the overall model. It is recommended that the p-value should equal to or below 0.05. The result from PLS analysis revealed that APC of model 1,2,3,4 has a value of 0.179, 0.117, 0.134 and 0.127 respectively with all p-value lower than 0.001. Thus, APC is statistically significant for all models.

4.9.2 Average R-squared (ARS)

The average R-squared (ARS) refers to the overall explanatory power of the model. It is suggested that the p-value should be equal to or below 0.05. The result reveals that the ARS value of model 1,2,3,4 are 0.249, 0.285, 0.330 and 0.354 respectively with all p-value below 0.001. Thus, ARS is statistically significant for all models.

4.9.3 Average Adjusted R-squared (AARS)

Average adjusted r-squared (AARS) is slightly different from the average R-squared (ARS). The Average adjusted r-squared corrects spurious increases in R-squared coefficients due to predictors that add no explanatory value in each latent variable block. It is recommended that the p-value should equal to or below 0.05. The result from the test shows that AARS of model 1,2,3,4 are 0.239, 0.270, 0.314 and 0.331 respectively with all p-value less than 0.001. Therefore, AARS is statistically significant for all models.

4.9.4 Average Variance Inflation Factor (AVIF)

The average variance inflation factor (AVIF) is an indicator which measures model's vertical or classic collinearity. WarpPLS 6.0 suggests that an acceptable value of AVIF is equal to or less than 5 and the ideal value is equal to or less than 3.3. The result reveals that the AVIF index of model 1, 2, 3, 4 are 1.225, 1.583, 1.680 and 1.801 respectively, which means the collinearity in all models are ideally acceptable.

4.9.5 Average Full Variance Inflation Factor (AFVIF)

The average full variance inflation factor (AFVIF) measures both vertical and lateral collinearity, or multicollinearity, of the model. WarpPLS 6.0 suggests that an acceptable value of AFVIF is equal to or less than 5 and ideal value is equal to or less than 3.3. The result indicates that AFVIF value of models 1,2,3,4 are 1.698, 1.698, 1.698 and 1.817 respectively. Thus, the multicollinearity in all models is ideally acceptable.

4.9.6 Tenenhaus GoF (GoF index)

GoF index or Tenenhaus GoF is a measurement of model's explanatory power. GoF index defined the square root of the product between what they refer to as the average commonality index and the ARS. GoF index is equal to or greater than 0.1 means small explanatory power, GoF index is equal or greater than 0.25 means medium explanatory power and GoF index is equal or greater than 0.36 means large explanatory power. The result indicates that the GoF index of models 1, 2, 3, 4 are 0.437, 0.468, 0.503 and 0.475 respectively. Thus, the result of all models has a large explanatory power.

4.9.7 Simpson's Paradox Ratio (SPR)

The Simpson's paradox ratio (SPR) is an indicator which indicates a possibility to have a Simpson's paradox in the model (Wagner, 1982). An acceptable value of SPR is 0.7 or 70 percent of paths in the model are free from Simpson's paradox. The result indicates that SPR value of model 1 and model 3 are 0.600 and 0.556 respectively which is below the acceptable value 0.7. On the other hand, SPR value of model 2 and model 4 are 0.750 and 0.769 respectively which is above the

acceptable value. It means 75.0 and 76.90 percent of paths of model 2 and 4 do not have a Simpson's paradox issue. Thus, SPR index in model 1 and 3 are unacceptable while the SPR index in model 2 and 4 are acceptable.

4.9.8 R-squared Contribution Ratio (RSCR)

The R-squared contribution ratio (RSCR) measures a negative r-squared which comes from a Simpson's paradox issue (Pearl, 2009). An acceptable value of RSCR is equal to or above 0.9 or over 90 percent of r-squared in the model and has a positive sign. The result from PLS analysis reveals that the RSCR index of model 1,2,3,4 are 0.956, 0.966, 0.927 and 0.926 respectively, which means that 95.6, 96.6, 92.7 and 92.6 percent of paths of r-squared in model 1, 2, 3 and 4 have a positive sign. Therefore, the RSCR indexes of all models are acceptable.

4.9.9 Statistical Suppression Ratio (SSR)

The statistical suppression ratio (SSR) is another index that measures a causality problem in the model (Spirtes, Glymour, Scheines, & & Causation, 1993). The SSR indicates that the hypothesized path in the model is not reasonable or should be reversed. The ideal SSR index is 1 which means there is no SSR issue in the model. The acceptable value is 0.7 which means over 70 percent of paths are not associated with SSR issue. The result of model 1,2,3,4 are 0.800, 0.875, 0.778 and 0.769 respectively, which means over 80.0, 87.50, 77.80 and 76.90 percent of paths in the model 1,2,3 and 4 are free from SSR. Thus, all models are acceptable.

4.9.10 Nonlinear Bivariate Causality Direction Ratio (NLBCDR)

The nonlinear bivariate causality direction ratio (NLBCDR) measures the correctness of direction of causality in a non-linear relationship. Acceptable values of NLBCDR is equal to or greater than 0.7 which means 70 percent of path-related instances have weak or no suggestion to reverse hypothesized direction. The result shows that NLBCDR index of model 1,2,3 and 4 are 0.700, 0.813, 0.833 and 0.731 respectively which means all models are acceptable for the non-linear of the direction of causality.

In conclusion, results from ten model fit indices of model 2 and model 4 are all in acceptable range or above, and these results confirm that the study used a suitable technique for the data and these two models are reliable (Browne & Cudeck, 1993). All model fit indices of model 1,2,3 and model 4 are shown in table 12 below.

Table 4.15 Model Fit Indices

Model fit indices	Model 1		Model 2		Model 3		Model 4	
	Coefficient	**Result**	**Coefficient**	**Result**	**Coefficient**	**Result**	**Coefficient**	**Result**
Average path coefficient (APC)	0.179***	Significant	0.117***	Significant	0.134***	Significant	0.127***	Significant
Average R-squared (ARS)	0.249***	Significant	0.285***	Significant	0.330***	Significant	0.354***	Significant
Average adjusted R-squared (AARS)	0.239***	Significant	0.270***	Significant	0.314***	Significant	0.331***	Significant
Average block VIF (AVIF)	1.225	Ideally	1.583	Ideally	1.680	Ideally	1.801	Ideally
Average full collinearity VIF (AFVIF)	1.698	Ideally	1.698	Ideally	1.698	Ideally	1.817	Ideally
Tenenhaus GoF (GoF)	0.437	Large	0.468	Large	0.503	Large	0.475	Large
Simpson's paradox ratio (SPR)	0.600	Unacceptable	0.750	Acceptable	0.556	Unacceptable	0.769	Acceptable
R-squared contribution ratio (RSCR)	0.956	Acceptable	0.966	Acceptable	0.927	Acceptable	0.926	Acceptable
Statistical suppression ratio (SSR)	0.800	Acceptable	0.875	Acceptable	0.778	Acceptable	0.769	Acceptable
Nonlinear bivariate causality direction ratio (NLBCDR)	0.700	Acceptable	0.813	Acceptable	0.833	Acceptable	0.731	Acceptable

Overall, the results of all models estimations i.e. the Beta coefficient (β) and p-value of all main independent and control variables are consistent in terms of the sign of the relationship and the level of the statistical significant. However, when considered the quality of model fit indices, the model 4 which combined the main effects and the moderating effects in the analysis seems to be the model that have the best quality of model specification. Moreover, model 4 showed the greatest R square value which reflects highest degree of explanatory power as compared to other models.

CHAPTER 5

DISCUSSION

5.1 Overall Findings

In this section, the results from nine hypotheses testing are summarized. The study also discusses the findings and their contributions related to existing researches. The results from PLS analysis are showed in table 5.1.

Table 5.1 Summary of Hypotheses Testing Result

	Hypotheses	**Result**
H1	Entrepreneurial Orientation is positively related to SMEs performance.	Supported
H2	Customer Orientation is positively related to SMEs performance.	Supported
H3	Competitor Orientation is positively related to SMEs performance.	Supported
H4	Employee Orientation is positively related to SMEs performance.	Not supported
H5	Shareholder Orientation is positively related to SMEs. performance.	Not supported
H6	The relationship between EO and SMEs performance is positively moderated by Customer Orientation.	Supported
H7	The relationship between EO and SMEs performance is positively moderated by Competitor Orientation.	Not Supported
H8	The relationship between EO and SMEs performance is positively moderated by Employee Orientation.	Not Supported

	Hypotheses	Result
H9	The relationship between EO and SMEs performance is positively moderated by Shareholder Orientation.	Not supported

Four hypotheses out of nine were supported. The results provide the evidences that firm's strategic resources which are Entrepreneurial Orientation and two aspects of Stakeholder Orientation including Customer Orientation and Competitor Orientation are significantly associated with performance of SMEs in steel fabrication industry.

With respect to the positive relationship between Entrepreneurial Orientation and SMEs performance, this finding suggests that SMEs that exhibited high Entrepreneurial Orientation tend to show higher firm performance than those that have lower Entrepreneurial Orientation. The finding is in line with the previous studies which suggested that Entrepreneurial Orientation is a firm's strategic resource that leads to better firm performance in several contexts (Arshad et al., 2014; Brouthers et al., 2015; Filser & Eggers, 2014; Hakala, 2013; Kollmann & Stöckmann, 2014; Real et al., 2014; Rigtering et al., 2014; Tovstiga & Tulugurova, 2009; Wiklund, 1999). The result is consistent with Mahmood and Hanafi (2013) which found that Entrepreneurial Orientation has a positive effect towards business performance of women-owned SMEs in Malaysia. It also supports the study of Su et al. (2015) which showed that there is a positive relationship between Entrepreneurial Orientation and firm performance of new venture in manufacturing sector in China. Moreover, the result is also align with Kantur (2016) which suggested that Entrepreneurial Orientation has a positive relationship with firm's financial and non-financial performance in manufacturing firms in automotive and food industry and in service firms in telecommunications and banking industry in Turkey.

In regard to Stakeholder Orientation, the results of the study show that only two aspects of Stakeholder Orientation including Customer Orientation and Competitor Orientation are positively and significantly associated with SMEs performance. Regarding the result about the positive association between Customer Orientation and firm performance, it can be interpreted that SMEs in steel fabrication industry that emphasized on Customer Orientation tend to demonstrate higher firm

performance than others in this industry that emphasized less on Customer Orientation. The finding is in line with extant studies which suggested that good relationship with customers can lead SMEs to better performance since satisfied customers could either increase their business or pay premium price for the firm's products and services (Ruf et al., 2001). This finding supported the argument of Piercy et al. (2002), who suggested that satisfied customers are likely to patronize product or service from the firms who understand their needs and deliver that particular product and service for them, this helps firms increase sales and achieve better performance. More specifically, this finding also supported the study of Berman et al. (1999) who suggested that Customer Orientation positively effected financial performance of the U.S. top 100 firms from the Fortune 500 in 1996.

Regarding the result about the positive association between Competitor Orientation and firm performance, it can be interpreted that SMEs in steel fabrication industry that emphasized on Competitor Orientation tend to demonstrate higher firm performance than others in this industry that emphasized less on Competitor Orientation. The finding is in line with extant studies which suggested that comparing and monitoring competitors' actions can generate insights which enable a firm to formulate a strategy to better perform competitors which leads to better firm performance (Gao et al., 2007; Yau et al., 2007). The finding supported the study of Deshpandé et al. (1993) who suggested that the exclusion of competitors' attention can lead to the neglect of the customers'needs in which eventually can be detrimental to business performance. The finding also supported the argument from Yu, Wang, and Brouthers (2015) that firms need to indentify their competiors both domestic and abroad in order to establish and maintain their competitive advantage, which lead to improve firm performance.

In regard to Employee Orientation, the result from this research did not significantly support its positive contribution to firm performance. The finding of this study contradicts with prior researches which showed that employess are significantly important for firm performance (Allen et al., 2009; Berman et al., 1999; Luk et al., 2005). Some reasons for this unsupported contribution of employee orientation may be explained by the work characteristic of manufacturing firms in steel fabrication industry in Thailand. The focus on employees related issues such as employee

welfare, employee engagement and career development by SMEs in steel fabrication industry in particular, may not produce postitve effect on firm performance compare to larger firms (Kroon, Van De Voorde, & Timmers, 2013; Smallbone, Deakins, Battisti, & Kitching, 2012) and the firms in other industries (Datta, Guthrie, & Wright, 2005). From a typical nature of steel fabrication works which demands a high work regulation and a strict work schedule from workers in order to produce steel works that meet deadline, providing a standard welfare to employee could be an effective way to keep firm performance up high. Since productivity and quality of steel works are the key issues for most companies in steel fabrication industry, employee engagement may not be the top priority for management to implement. On the other hand, understanding and favoring employee's demands by adjusting some current regulations could lead to more relaxed work regulation and lacking of urgency which could give detrimental effect to firm performance.

In regard to Shareholder Orientation, the result from this research did not significantly support its positive contribution to firm performance. The finding shows that Shareholder Orientation negatively effects SMEs performance in steel fabrication industry, however, this relationship is not statistically significant. The finding of this study contradicts with prior researches which showed that Shareholder Orientation is significantly important for firm performance (He et al., 2011; Patel et al., 2016). While the importance of Shareholder Orientation was emphasized in prior research (Allen et al., 2009; Flammer & Kacperczyk, 2015; Patel et al., 2016), there are still some extant researches argued that Shareholder Orientation negatively effects SMEs firm performance. For example, Shleifer and Vishny (1986) proposed that shareholder structure and concentration are important factors that could give a negative effect on firm performance. For example, in case of large shareholder group, there is a possibility that large shareholders use their control rights to achieve private benefits which can cause a negative effect on firm performance (Shleifer & Vishny, 1986). Furthermore, Leech and Leahy (1991) found a negative and significant relationship between the shareholder concentration and the firm's value and profitability. Stockhammer (2005) argued that an increase in shareholder power will lead to a decline in aggregate investment expenditure and lower output growth of the organization. Moreover, an increase in shareholder power could possibly be at the

expenses of other stakeholders in the organization (Stockhammer, 2005). This evidence could provide some possible explanation why Shareholder Orientation did not significantly explain positive firm performance in this study.

After analyzing the main effect of Entrepreneurial Orientation and the aspects of Stakeholder Orientation on SMEs performance, the study continued to analyze whether SMEs in steel fabrication industry that adopt both Entrepreneurial Orientation and each of the four aspects of Stakeholder Orientation will demonstrate better performance than when just one strategic orientation is adopted. The result of interaction effect between Entrepreneurial Orientation and each aspect of Stakeholder Orientation in relation to firm performance are discussed as follows.

In regard to the hypothesis about the moderating effect of Customer Orientation on the relationship between Entrepreneurial Orientation and SMEs performance, the study proposes that the positive relationship between Entrepreneurial Orientation and firm performance will be stronger for firms that emphasize more on Customer Orientation. In other words, firms that demonstrate high Entrepreneurial Orientation and high Customer Orientation are more likely to have better performance than firms that demonstrate high Entrepreneurial Orientation but lower Customer Orientation. The result of the study shows that the relationship between Entrepreneurial Orientation and SMEs performance is positively and significantly moderated by Customer Orientation. Based on this, SMEs with a strong initiative for Customer Orientation in conjunction with Entrepreneurial Orientation tend to show better performance than SMEs that did not focus on Customer Orientation in conjunction with Entrepreneurial Orientation. This result is consistent with prior research which support the importance of Customer Orientation, which should be incorporated with the entrepreneurial oriented characteristics of firms, in order to enhance the capability of SMEs to produce better performance (Baker & Sinkula, 2009). In particular, the finding is in line with the study of Eggers et al. (2013) which suggested that Customer Orientation helps the firms that focused on entrepreneurial behavior access to customer's valuable information which help them adapt to the customer's changing behavior effectively as well as to come up with new offering that lead to greater customer satisfaction and better firm performance (Baker & Sinkula, 2009; Eggers et al., 2013).

In regard to the hypothesis about the moderating effect of Competitor Orientation on the relationship between Entrepreneurial Orientation and SMEs performance, the study proposes that the positive relationship between Entrepreneurial Orientation and firm performance will be stronger for firms that emphasize more on Competitor Orientation. In other words, firms that demonstrate high Entrepreneurial Orientation and high Competitor Orientation are more likely to have better performance than firms that demonstrate high Entrepreneurial Orientation but lower Competitor Orientation. The result from the study contradicts our prediction. It shows that entrepreneurial oriented SMEs in steel fabrication that put more emphasize on Competitor Orientation are likely to produce lower performance than firms that put less emphasize on Competitor Orientation, however this relationship is not statistically supported. Nevertheless, there could be some possible explanation for the unsupported result regarding the moderating effect of Competitor Orientation. According to Lumpkin and Dess (2001), entrepreneurial firms that emphasize on competitive aggressiveness may not produce better performance since the benefit of competitive aggressiveness to the entrepreneurial firms is contingent to another two major factors which are 1) stage of industry development of the firm and 2) type of environment which the firm operates. According to G Thomas Lumpkin and Dess (2001) competitive aggressiveness can support firm performance of an entrepreneurial firm better when the entrepreneurial firm is in 1) its maturity stage of industry development and 2) operates in a hostile environment which competition is intense and resources are constrained. The samples of SMEs in steel fabrication industry that collected by this study were mostly from early stages of industry development and mostly not from maturity stage. Moreover, the environment that entrepreneurial firms operate in this study is characterized by uncertainly rather than hostility in nature. Therefore, this could be some possible explanation why the benefit of emphasizing Competitor Orientation in conjunction with Entrepreneurial Orientation may not matter much in helping firms gain highly significant performance.

In regard to the interaction between Employee Orientation and Entrepreneurial Orientation, the study proposes that the positive relationship between Entrepreneurial Orientation and firm performance will be stronger for SMEs that put more emphasize

on Employee Orientation. In other words, entrepreneurial firms that demonstrate high Employee Orientation in conjunction with Entrepreneurial Orientation tend to produce better performance than firms that do not emphasize on Employee Orientation. The result from the study contradicts our prediction. The result of study shows that entrepreneurial SMEs that put more emphasize on Employee Orientation together with strong Entrepreneurial Orientation are likely to produce lower performance than those that put less emphasize on Employee Orientation, however this relationship is not statistically supported. Still, there could be some possible explanation for this unsupported result. The focus on employees related issues such as employee welfare and employee engagement of entrepreneurial SMEs in steel fabrication industry in particular may not produce positive effect on firm performance compare to the focusing on basic employee income and incentive based on the amount of steel works produced. This is due to the typical demand of steel fabrication works which need employees to strict on working procedure and a tight working schedule which could limit concerns and activities related to employees by both managers and employees themselves. Moreover, in Thai culture, which is classified by Hofstede (2011) as high power distance culture, a gap between executive team and managers as well as manager and supervisors or staffs is commonly accepted in a society as much as in a firm. In general, employee prefers to work by routine, follow guidelines and do not actively participate in company's managerial issues which mostly related to entrepreneurial activities. For these reasons, focusing on Employee Orientation in conjunction with Entrepreneurial Orientation may not support firms to gain much better performance.

In regard to the interaction between Shareholder Orientation and Entrepreneurial Orientation, the study proposes that the positive relationship between Entrepreneurial Orientation and firm performance will be stronger for SMEs that put more emphasize on Shareholder Orientation. In other words, entrepreneurial firms that demonstrate high Shareholder Orientation in conjunction with Entrepreneurial Orientation tend to produce better performance than firms that did not emphasize on Shareholder Orientation. The result from the study is contradictory to the prediction. It shows that the relationship between Entrepreneurial Orientation and SMEs performance is negatively moderated by Shareholder Orientation. In other words,

entrepreneurial oriented firms that put more focus on Shareholder Orientation together with Entrepreneurial Orientation are likely to produce lower performance than those who put less focus on Shareholder Orientation. Moreover, this negative moderation of Shareholder Orientation is statistically supported. Some possible explanation for this result might be explained by the agency theory in regard to the conflict of interest between shareholder and management. According to agency theory, separation of ownership and control creates conflicts and triggers agency problems that could decrease firm performance (Fama & Jensen, 1983; Jensen & Meckling, 1976). According to Ramdani and Van Witteloostuijn (2012), the agency problems are created from two main reasons including 1) the owner as a principal and the manager as an agent may well pursue different goals 2) there is asymmetric information between the owner and the manager in managing the company and it is costly for the owner to monitor and verify what the manager has been doing. Moreover, previous empirical studies in corporate governance research have confirmed that separation of ownership and control decrease firm performance (Andres, 2008; Sheu & Yang, 2005). The conflict of interest between shareholders and corporate management could involve the dividend payout against capital investment and the investment in R&D. La Porta, Lopez - de - Silanes, Shleifer, and Vishny (2000) argued that dividends are the result of effective pressure by shareholders to force corporate management to release cash out to shareholder. Consistent with this study, Gugler (2003) found that low investment firms or no R&D spending firms had much larger dividend payout ratios than high investment firms. This is also consistent with Fama and French (2001), who found that firms with good investment plans payout substantially less dividend or likely to payout nothing than other competing firms. According to Gugler (2003), dividends significantly negatively influence capital investment of the firms. Regarding SMEs in steel fabrication industry, the conflict of interest between shareholders and corporate management regarding capital investment could possibly impede firm performance. For example, when the corporate management agreed to invest in the new equipment and technology in order to improve manufacturing operation, the required investment could be disapproved, reduced or replaced by outsourcing or sub-contracting upon decision of shareholders who may reject capital investment but reserve cash for dividend payout. In this case, following shareholders'

demands could create difficulty in implementing new projects which could impede entrepreneurial SMEs from better performance. This could be some possible explanation why firms that focused on both Entrepreneurial Orientation and Shareholder Orientation tended to showed significantly lower performance than firms that paid less attention to Shareholder Orientation.”

CHAPTER 6

CONCLUSION

6.1 Summary

Among the recent global and regional economic downturn, SMEs regardless of their strength and weakness, are expected to play an important role in driving the country's economy upward. In Thailand, SMEs in manufacturing industry, such as steel fabrication industry in particular, has been playing significant roles in terms of revenue and number of employment (Charoenrat et al., 2013). Due to the growing consumption of steel in Thailand and upward trends from steel works made for oversea markets, steel fabrication industry becomes one of the attractive industries for SMEs in the country. Despite growing demands, steel fabrication industry has recently been affected by cost increased from local steel price and strong competition from oversea including Vietnam and China. Therefore, Thai SMEs in steel fabrication industry need to build competitive advantages that possibly enhance sustainable success. To address the issues faced by SMEs in steel fabrication industry, this study chose to investigate whether the firm's strategic orientations including Entrepreneurial Orientation and Stakeholder Orientation are critical to support performance of SMEs in this sector.

The findings from this study confirmed that Entrepreneurial Orientation and two aspects of Stakeholder Orientation including Customer Orientation and Competitor Orientation positively contributed to SMEs performance. The findings of this study also confirmed that the interaction between Entrepreneurial Orientation and two aspects of Stakeholder Orientation in conjunction with SMEs performance did exist. The result showed that the relationship between Entrepreneurial Orientation and SMEs performance was positively moderated by Customer Orientation. In other words, SMEs that demonstrate high Entrepreneurial Orientation and high Customer Orientation are more likely to have better performance than SMEs that demonstrate

high Entrepreneurial Orientation but do not emphasize on Customer Orientation. Moreover, the result also showed that the relationship between Entrepreneurial Orientation and SMEs performance was negatively moderated by Shareholder Orientation. In other words, SMEs that demonstrate high Entrepreneurial Orientation and high Shareholder Orientation are likely to have less performance than SMEs that demonstrate high Entrepreneurial Orientation but do not emphasize much on Shareholder Orientation.

From the theoretical perspective, this research provided additional support to both Resources Based View (RBV) of firm and stakeholder theory. From the perspective of RBV of the firm, this study confirmed that EO was considered as the strategic resource of SMEs in steel fabrication industry in Thailand which allowed them to realize better performance (Tovstiga & Tulugurova, 2009; Wiklund & Shepherd, 2003). EO could possibly make SMEs in steel fabrication aware of the overall operational improvement through innovation which eventually raising higher work efficiently and better quality that led to better firm performance. Moreover, EO might possibly enhance proactiveness in the organization which helped SMEs in this industry actively put themselves to the new market segment and built higher operational effectiveness that also led to better firm performance. This research also confirmed that two aspects of Stakeholder Orientation including Customer Orientation and Competitor Orientation were considered as a critical resource of SMEs in steel fabrication sector in Thailand which allowed them to gain better performance (Asikhia, 2010; Liu et al., 2003). In particular, strategic resource development from Customer Orientation could potentially guide SMEs to build stronger relationship with their customers and eventually achieved satisfaction, trust and loyalty from the customers. Similarly, strategic resource developed from Competitor Orientation could facilitate SMEs in steel fabrication industry to effectively monitor and analyze their competitors and eventually formulate a plan to reduce threats from competitors' action.

In addition to the theoretical explanation from the RBV perspective, the result of this study that support the interacting effect between EO and some aspects of Stakeholder Orientation suggested that the effectiveness of firm's strategic resources such as EO and two aspects of SO from RBV perspective could be explained further

by stakeholder theory which suggested firms to take into consideration the role of stakeholder groups which could exert influence on the effectiveness of firms' strategy (Donaldson & Preston, 1995; Freeman, 2010). The relationship between EO and firm performance of SMEs in steel fabrication industry is contingent to some aspects of SO which can even more increase or hamper firm performance. Thus, the integrated view of RBV and stakeholder theory could provide more complete view of the interplay between EO and SO that can influence the effect of each other on firm performance.

6.2 Academic Contribution

The study provided the two major academic contributions. First, the study investigated and confirmed positive relationship between Entrepreneurial Orientation and firm performance as well as Stakeholder Orientation and firm performance in context of SMEs in steel fabrication industry in Thailand. Even though the empirical studies of the effect of Entrepreneurial Orientation on firm performance have been conducted previously in many countries across different industries, the empirical study of this subject in Thailand and in SMEs in steel fabrication industry is still limited. Moreover, to the best of our knowledge, the empirical study of the effect of Stakeholder Orientation on firm performance in Thailand and SMEs in particular has still not been conducted before. Therefore, this study has fulfilled this current research gap. In particular, SMEs in steel fabrication industry in Thailand is a suitable choice for the study related to stakeholder orientation due to its manufacturing nature that requires intensive and continuous investment in fixed assests such as lands, plants and equipment for business expansion more than some other industries. This intensive investment involves top decision making from corporate management and shareholder which is suitable for this empirical study which is related to Stakeholder Orientation and firm performance. Second, since the empirical study that investigate the interaction between Entrepreneurial Orientation and Stakeholder Orientation has not been conducted before, this empirical study has fulfilled this research gap by confirming that the interaction effect between Stakeholder Orientation and Entrepreneurial Orientation in regard to firm performance did exist. According to the suggestion of G Tom Lumpkin and Dess (1996), in order to extend the understanding

in field of Entrepreneurial Orientation research, new organizational variables should be searched to see whether they can enhance or hinder the association between Entrepreneurial Orientation and firm performance. This study has contributed to this research inquiry as the academic contribution. This allowed firms to understand the effect of Stakeholder Orientation which can either enhance or hinder the strength of relationship between Entrepreneurial Orientation and firm performance depending on what aspect of Stakeholder Orientation to be implemented.

6.3 Practical Implication

The main findings from this research also provided a recommendation for the management of SMEs, particularly for those in the steel fabrication industry, regarding some aspect of firm's competency required for them to be competitive in the market. Given the role of EO that was found as a characteristic of firms that was positively related with their performance, it might be important for the management of SMEs to focus on EO development to help them respond effectively to market competition and gain satisfactory outcomes. Since five dimensions of EO including innovativeness, proactiveness, risk-taking, competitive aggressiveness, and autonomy collectively permeated the decision-making styles and practices of firms' members Dess and Lumpkin (2005), Thai SMEs in steel fabrication industry can implement EO by checking firstly how the five EO dimensions did inherit within their organization. Each EO dimensions is recommended to be assessed by the study as follows. Innovativeness can be checked to see if a firm has a track record and willingness to create new product and service or new process through experimentation and creative processes. Proactiveness can be checked to see if a firm has an characteristic of forward-looking perspective to seize opportunities in prediction of future demand. Risk-taking can be checked to see if a firm makes decisions and takes action with minimum knowledge of probable outcomes. Autonomy can be checked to see if individual or team takes independent action aimed at bringing forth a business concept or vision and works it out until completion. Competitor aggressiveness can be checked to see if a firm has an intense effort to outperform competitors and takes

aggressive response to improve position or overcomes threats from market competition (Covin & Slevin, 1991; Lumpkin & Dess, 1996).

After assessment, SMEs' management can follow below guidelines provided by the study in case an EO dimension is still lack or not properly instilled in the organization. Innovativeness can be encouraged by focusing on innovation in three major areas within the organization including operational technology, product-market and administrative. Moreover, the investment in R&D should be kept continuously even during the time of economic difficulty. Proactiveness can be enhanced by establishing a cross functional team to continuously monitor trends and identify future needs of customers and/or anticipate future demand conditions. Moreover, the cross functional team also aims to further introduce new products and technologies ahead of the competition and continuously seek out new product service offerings. Risk taking can be encouraged by the management to foster a proper level of risk-taking in three areas including business, financial and personal. Moreover, the management should search and assess the related risk factors in steel fabrication business in order to minimize uncertainty. Autonomy can be encouraged by developing independent work units to enhance creative thinking. The management also needs to ensure sufficient coordination to minimize inefficiency and efforts duplication. Competitor aggressiveness can be enhanced by selectively combating in the area that threaten firm's survival or competitive position. Moreover, closing monitoring and analyzing key competitors' actions and strategy should be performed and reported regularly in managerial meeting (Dess & Lumpkin, 2005).

After EO implementation, it is crucial to realize that just having EO may not be sufficient for SMEs in steel fabrication industry to gain superior performance; they must also focus on other strategic orientations that might enhance the contribution of EO. In particular, SMEs must put an emphasis on the interest of some stakeholder groups that significantly influence EO activities. The result regarding the moderating effect of customer orientation suggested that firms must put a strong emphasis on the interests of customers who seem to be the stakeholder group that strongly determines business success. Focusing on the interests of customers is essential for firms that implement EO activities to satisfy demands and expectations of customers which tend to be more dynamic in the present time. Given that customer-oriented focus allows

firms to gain more understanding about the present and future trend of customer demands, entrepreneurial SMEs that focus on customer orientation to guide EO activities can be at the advantageous position to implement the strategies and gain more market share and better profit from customer loyalty. Thai SMEs in steel fabrication industry can implement customer orientation by first checking how customer orientation inherited within their organization. The customer orientation assessment begins to check if the firm has clear idea about customers and their needs. Secondly, the commitment of serving customer needs has to be closely monitored by the firm. Thirdly, the firm's objectives have to be driven by the creation of customer satisfaction. Lastly, customer satisfaction has to be systematically and frequently assessed. After assessment, SMEs' management can follow below guidelines provided by the study in case of customer orientation is still lack or not properly instilled in the organization. Customer orientation can be further enhanced within the organization by creating specific customer care objectives which may communicate both customer and management aspiration. Furthermore, feedback systems that enable the organization to reach its customer and vice-versa should also be implemented (Asikhia, 2010).

The jointly implementation of EO and customer orientation is expected to effect firm performance even better from the result of this study. On the other hand, one particular stakeholder group that may limit the ability of SMEs to plan and implement EO activities to gain competitive performance effectively is shareholder. This could possibly happen due to the conflict of interest between shareholders and the firm's management regarding the emphasis on the strategic activities related to EO. In this circumstance, it is crucial for the firm's management to align the interest of shareholders and make them realize about the necessity of EO and gain support from them. It is suggested that the management of SMEs in steel fabrication industry hold a meeting with shareholders more frequently for example in quarterly basis. The meeting is expected to discuss the pros and cons of entrepreneurial activities and new investment projects proposed by the management in order to gain better understandings among shareholders.

6.4 Limitations

There some limitations of this research that needs to be acknowledged. First, the study only used the sample of firms from one industry; therefore, the results may not be generalized to firms in other industries. Second, this research used cross-sectional data and correlational to obtain the results. Using this method may not make the findings to be interpreted in terms of causality. Thirdly, the results this research used self-report data collection particularly for firm performance. Although using subjectively measure of performance was widely accepted in research, the measure could have some possibility of subjective bias. Lastly, there could be other control variables that might influence firm performance but were not included in the analysis.

6.5 Future Research

This research also provided some suggestion for future research. Given a lack of study that explored the role of SO components as moderating conditions that influence the effect of EO on performance outcome, it is important for future studies to be conducted in different context to confirm this moderating role of SO components. In particular, the results that did not significantly support the moderating effect of some SO components which are competitor orientation and employee orientation may be clarified by future research that use the sample of firms in highly competitive and highly innovative industries (such as those in high-tech industries) which could be more relevant for competitor orientation and employee orientation to moderate the effect of EO on firm performance. Moreover, it could be possible that different type of firm ownership may influence the moderating effect of shareholder orientation on the link between EO and firm performance differently. Thus, future research that test the moderating effect of shareholder orientation by comparing firms with different ownership types may be required to gain more understand about its effect.

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APPENDIX

Appendix
Questionnaire

ข้อมูลผู้บริหารและธุรกิจ	
เพศ	☐ ชาย ☐ หญิง
อายุ	ปี
การศึกษาสูงสุด	☐ ต่ำกว่าปริญญาตรี ☐ ปริญญาตรี ☐ ปริญญาโท ☐ ปริญญาเอก
จำนวนพนักงานประจำ	คน
ธุรกิจท่านก่อตั้งมากี่ปี	ปี
ผู้บริหารมีประสบการณ์ในธุรกิจกี่ปี	ปี
การร่วมทุนของต่างชาติ	☐ ไม่มี ☐ มีชาวต่างชาติร่วมหุ้น_____%
การส่งออก	☐ ไม่ส่งออก ☐ มีการส่งออกคิดเป็น_____% ของยอดขายในประเทศ

กรุณาระบุว่าบริษัทของท่านมีลักษณะดังต่อไปนี้อยู่ในระดับใด	น้อยที่สุด	น้อย	ปานกลาง	มาก	มากที่สุด
กลยุทธ์เชิงแข่งขันของบริษัทฯมีพื้นฐานอยู่บนการเข้าใจความต้องการของลูกค้า					
ความพึงพอใจของลูกค้าได้รับการประเมินอย่างเป็นระบบและสม่ำเสมอ					
บริษัทฯติดตามตรวจสอบเกี่ยวกับความพึงพอใจของลูกค้าอย่างใกล้ชิด					
บริษัทฯให้ความสนใจอย่างใกล้ชิดในเรื่องการบริการหลังการขาย					
เป้าหมายและกลยุทธ์ของบริษัทฯเน้นการสร้างความพึงพอใจแก่ลูกค้า					
ฝ่ายขายของบริษัทฯแชร์และอัพเดทข้อมูลเกี่ยวกับคู่แข่งอยู่เสมอ					

กรุณาระบุว่าบริษัทของท่านมีลักษณะดังต่อไปนี้อยู่ในระดับใด	น้อยที่สุด	น้อย	ปานกลาง	มาก	มากที่สุด
ผู้บริหารระดับสูงของบริษัทฯปรึกษากันในด้านจุดแข็งและจุดอ่อนของคู่แข่งเสมอ					
บริษัทฯมีการตอบสนองที่รวดเร็วเกี่ยวกับสภาพการแข่งขันในตลาด					
บริษัทฯสร้างความได้เปรียบเชิงแข่งขันโดยมีลูกค้าเป็นจุดมุ่งหมายหลัก					
บริษัทฯมีการสอบถามถึงความต้องการของพนักงานระหว่างการประเมินผลงาน					
บริษัทฯมีการนัดพบปะพูดคุยกับพนักงานอยู่เสมอ					
ผู้บริหารบริษัทฯให้ความสำคัญกับความรู้สึกของพนักงานที่มีต่องาน					
บริษัทฯมีการสำรวจทัศนคติต่อการทำงานของพนักงานอย่างน้อยปีละหนึ่งครั้ง					
บริษัทฯมีวัตถุประสงค์หลักในการสร้างความมั่งคั่งให้กับผู้ถือหุ้น					
ผู้จัดการอาวุโสของบริษัทฯมีการประชุมกับผู้ถือหุ้นเสมอๆ					
บริษัทฯให้ความสำคัญกับมูลค่าหุ้นของบริษัทฯอยู่เสมอ					
บริษัทฯมีการสื่อสารกับผู้ถือหุ้นหรือผู้ลงทุนอยู่เสมอๆ					
บริษัทฯมีผู้รับผิดชอบดูแลความพึงพอใจของผู้ถือหุ้น					

กรุณาระบุว่าบริษัทของท่านมีลักษณะดังต่อไปนี้อยู่ในระดับใด	น้อยที่สุด	น้อย	ปานกลาง	มาก	มากที่สุด
บริษัทฯของเราคิดค้นสินค้าและบริการใหม่ๆออกสู่ตลาดเป็นจำนวนมาก					
บริษัทฯเน้นสร้างการเปลี่ยนแปลงของสินค้าและบริการที่รวดเร็ว					

กรุณาระบุว่าบริษัทของท่านมีลักษณะดังต่อไปนี้อยู่ในระดับใด	น้อยที่สุด	น้อย	ปานกลาง	มาก	มากที่สุด
บริษัทฯของเรามีความคิดสร้างสรรค์ในการปฏิบัติการ					
บริษัทฯของเราเสาะแสวงหาแนวทางและวิธีการใหม่ๆในการทำงาน					
บริษัทฯของเรามักเป็นผู้ริเริ่มในแผนงานหรือการปฏิบัติงานต่างๆก่อนคู่แข่ง					
บริษัทฯของเรามักเป็นผู้ริเริ่มในการนำเสนอสินค้าและบริการตลอดจนการบริหารจัดการหรือการปฏิบัติการแนวใหม่ก่อนผู้อื่นในอุตสาหกรรม					
บริษัทฯของเราติดตามแนวโน้มด้านเทคโนโลยีอย่างใกล้ชิดและสามารถระบุถึงความต้องการของลูกค้าในอนาคตได้					
บริษัทฯของเราโดดเด่นในการแสวงหาโอกาสใหม่ๆทางธุรกิจ					
บริษัทฯของเรากล้าลงทุนในโครงการที่มีความเสี่ยง(และให้ผลตอบแทน)สูง					
บริษัทฯของเรากล้าตัดสินใจลงมือทำด้วยวิธีการและรูปแบบต่างๆเพื่อให้บรรลุวัตถุประสงค์ของบริษัทฯ					
บริษัทฯของเรากล้าทุ่มทรัพยากรส่วนใหญ่ เพื่อความเติบโตของบริษัทฯ					
ผู้บริหารและพนักงานได้รับการสนันสนุนให้กล้าตัดสินใจประยุกต์แนวคิดและวิธีใหม่ๆในการทำงาน ภายใต้ความเสี่ยงที่มีการประเมินผลลัพธ์ได้					
บริษัทฯของเราชอบเสาะแสวงหายุทธวิธีในการพิชิตคู่แข่ง					
บริษัทฯของเรามีความดุดันและความสามารถเชิงแข่งขันอยู่ในระดับสูง					
บริษัทฯของเราใช้กลยุทธที่ซับซ้อนในการแข่งขันกับคู่แข่งทางธุรกิจ					

กรุณาระบุว่าบริษัทของท่านมีลักษณะดังต่อไปนี้อยู่ในระดับใด	น้อยที่สุด	น้อย	ปานกลาง	มาก	มากที่สุด
บริษัทฯของเราสนับสนุนให้พนักงานสามารถตัดสินใจด้วยตนเองภายใต้ขอบเขตที่บริษัทฯได้วางไว้					
ผลงานของบริษัทฯส่วนหนึ่งเกิดขึ้นได้เพราะเราให้พนักงานได้มีส่วนในการตัดสินใจในการแสวงหาโอกาสทางธุรกิจ					
บริษัทฯสนับสนุนให้พนักงานมีบทบาทในการแสวงหาโอกาสทางธุรกิจ					

ในช่วงปีนี้คุณพอใจกับผลประกอบการธุรกิจคุณอยู่ในระดับใด	ไม่พอใจมาก	ไม่พอใจ	เฉยๆ	พอใจมาก	พอใจมากที่สุด
ยอดขายโดยรวม					
การเติบโตของยอดขายโดยรวม					
ผลกำไรโดยรวม					
การเติบโตของผลกำไรโดยรวม					
ผลตอบแทนจากการลงทุน					
ความพึงพอใจกับผลประกอบการโดยรวม					

ประมาณการยอดขายในปีนี้	☐ น้อยกว่า 50 ล้านบาท ☐ 50-100 ล้านบาท ☐ 101-150 ล้านบาท ☐151-200 ล้านบาท ☐ มากกว่า 200 ล้านบาท
ประมาณการยอดขายที่เติบโตจากปีก่อน	☐ 0% หรือต่ำกว่า ☐ 1-3% ☐ 4-6% ☐ 7-9% ☐ มากกว่า 10%
ประมาณการกำไรสุทธิที่เติบโตจากปีก่อน	☐ 0% หรือต่ำกว่า ☐ 1-3% ☐ 4-6% ☐ 7-9% ☐ มากกว่า 10%

อุตสาหกรรมในธุรกิจของท่านมีลักษณะในภาพรวมต่อไปนี้อยู่ในระดับใด	น้อยที่สุด	น้อย	ปานกลาง	มาก	มากที่สุด
ราคาของสินค้าหรือวัตถุดิบค่อนข้างผันผวน					
ตลาดของผลิตภัณฑ์ท่านมีความผันผวนและเปลี่ยนแปลงสูง					
เทคโนโลยีในอุตสาหกรรมท่านมีการเปลี่ยนแปลงรวดเร็ว					

BIOGRAPHY

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