#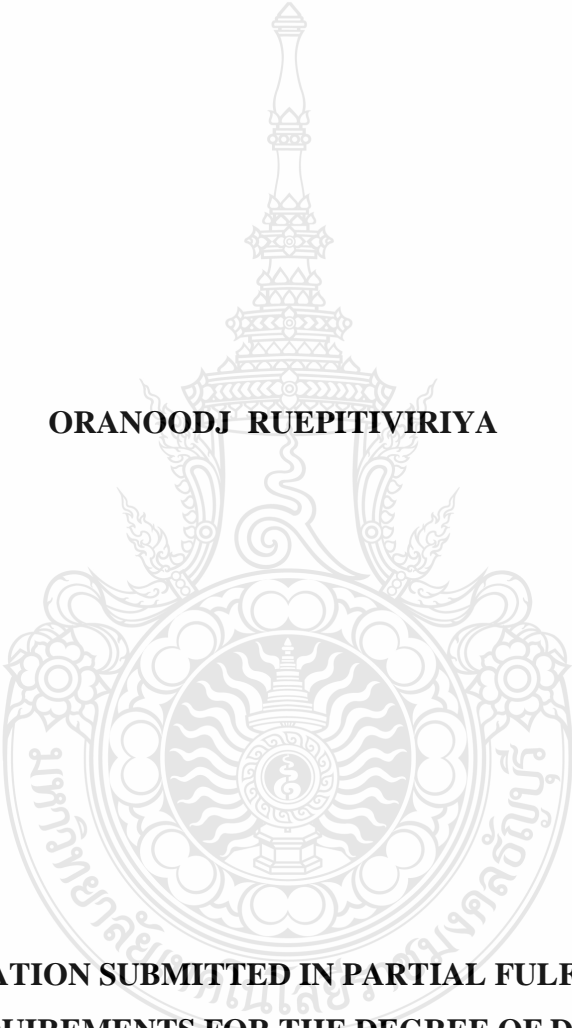 THE EFFECTS OF INTERNATIONAL ENTREPRENEURSHIP CHARACTERISTICS ON EXPORT PERFORMANCE OF SMALL AND MEDIUM ENTERPRISES IN THAILAND

ORANOODJ RUEPITIVIRIYA

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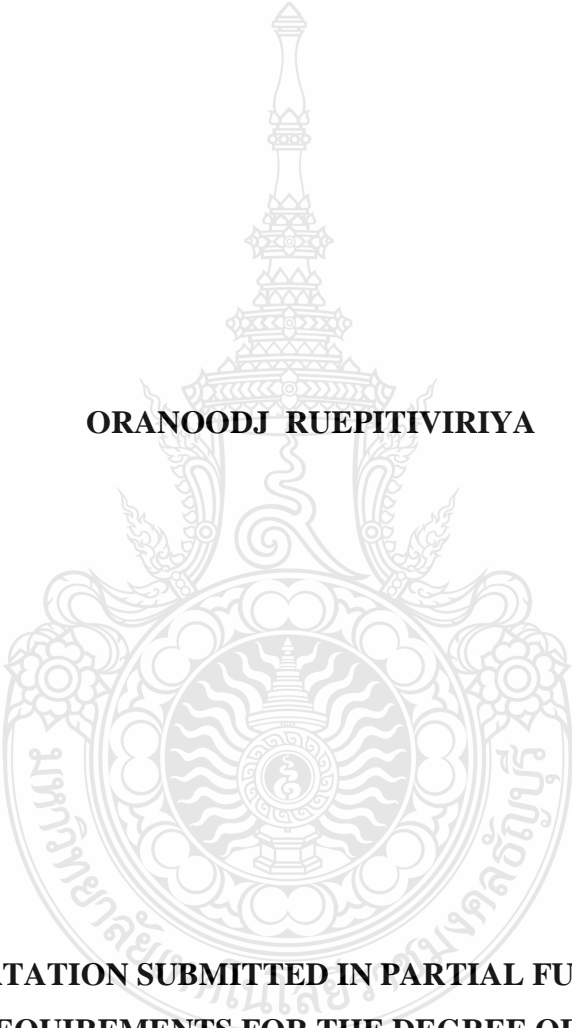## ORANOODJ RUEPITIVIRIYA

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Dissertation Title	The Effects of International Entrepreneurship Characteristics on Export Performance of Small and Medium Enterprises in Thailand
Name-Surname	Mrs. Oranoodj Ruepitiviriya
Program	Business Administration
Dissertation Advisor	Miss Duangporn Puttawong, Ph.D.
Dissertation Co-advisor	Associate Professor Khahan Na-Nan, Ph.D.
Academic Year	2018

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January 25, 2019

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ABSTRACT

The purpose of this research was to study the effects of international entrepreneurship characteristics on export performance of Small and Medium Enterprises (SMEs) in Thailand. This study was based on the literature review and related theories: international entrepreneurship and competitive advantage in order to describe the characteristics of international entrepreneurship in two aspects as entrepreneurial orientation and innovativeness. Therefore, this led to three research questions: 1) How do entrepreneurial orientation and innovativeness have causal relationship to export performance of Thai SMEs? 2) How do entrepreneurial orientation and innovativeness have causal relationship to export performance of Thai SMEs through reconfiguration capability? 3) How do entrepreneurial orientation and innovativeness have causal relationship to export performance of Thai SMEs increase with favorable competitive environment?

This dissertation was quantitative research. The population in this study were Small and Medium Enterprises who engaged in export business and registered with the Ministry of Commerce and the samples were 238 SMEs who were respondents to the questionnaire collected by mail and locations. The research instrument was questionnaire and the statistics used to analyze data was descriptive and structural Model Analysis.

The results of the research were as follows: research question 1 in model 1 entrepreneurial orientation ($\beta = 0.274$, $p<0.01$) and innovativeness ($\beta = 0.449$, $p<0.001$) had direct effect between the variance of the export performance. This was different from the results in model 2, model 3, model 4a and model 4b showed that

entrepreneurial orientation and innovativeness had no direct effect to export performance but had indirectly effect to export performance through reconfiguration capability, which was the mediating variable. The results from the research question 2 showed that in model 2 had indirect path that mediating by reconfiguration capability from entrepreneurial orientation to export performance ($\beta = 0.753$, p<0.01) and innovativeness to export performance ($\beta = 1.428$, p<0.001), in model 3 had indirect path that mediating by reconfiguration capability from entrepreneurial orientation to export performance ($\beta = 0.970$, p<0.001), and innovativeness to export performance ($\beta = 1.667$, p<0.001), in model 4a had indirect path that mediating by reconfiguration capability from entrepreneurial orientation to export performance ($\beta = 0.779$, p<0.001) and innovativeness to export performance ($\beta = 1.302$, p<0.001), and in model 4b had indirect path that mediating by reconfiguration capability from entrepreneurial orientation to export performance ($\beta = 0.727$, p<0.05), and innovativeness to export performance ($\beta = 1.420$, p<0.001). The results from the research question 3 in model 4a, and model 4b showed that entrepreneurial orientation ($\beta = 0.124$, p<0.05), and innovativeness ($\beta = 0.232$, p<0.01) had direct effect on export performance increase with favorable competitive environment as the moderator variable, respectively.

Keywords: international entrepreneurship characteristics, entrepreneurial orientation, innovativeness, reconfiguration capability, competitive environment, export performance

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CHAPTER 1
INTRODUCTION

1.1 Background and Statement of the Problem

For Thailand, after the economic crisis in 1997, it was found that the financial institutions and many of the larger businesses suffered from the business loss and bankruptcy. However, there was one business area which was able to escape such situations and helped recover the Thai economic is the small and medium enterprises (SMEs). In the present time, these SMEs are important and play an important role in the Thai economy as a source of large employment for the country (Lyon, Lumpkin, & Dess, 2000). In addition, the success of the SMEs means that many businesses can grow at the national level and can create satisfactory returns for the entrepreneurs. These are considered the most important reasons why SMEs businesses raise interest as well as gain support from the Government such as formation of SMEs centers.

For being successful SMEs, the entrepreneurs mu run the business with creating stability and quality of life for the people (Matthews, 2007; J. O. Okpara, 2009) as well as responding to the both of local and international competition and innovativeness, especially preparing to handle business in the international scene and participating in the liberalization under the international community ASEAN economic growth and community forums.

AEC established by a declaration Bangkok on August 10, 1967 with 10 countries: Brunei Darussalam, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Vietnam and Thailand. ASEAN Economic Community (AEC) is the key factor for enhancing the growth of business in Thailand to the internationalization with the objective of cooperation and integration of the region as well as the power of negotiation in international trading. Launching AEC would create the single market and production base which leads to the free trade area for many businesses like products, services, investments, capitals and skill labors. The free trade will be done continuously according to the agreement and negotiation which plans to be completed in 2015. AEC not only has the purpose of launching free trade, but also provides the guidelines for cooperation in improving the strength and growth of overall

ASEAN economics like competitive factor of ASEAN economics, equivalent economics development, and integration of ASEAN economics to global economics.

AEC is the new context of Thai SME business in the coming future which will extend the trading territory and investment of Thailand to ASEAN while the other 9 countries will expand their investment into Thailand. Then market competition and market factor of Thailand will totally change, meaning that it can be considered that AEC is a good factor supporting the growth of Thai businesses. In contrast, this is also a threat factor that brings Thai businesses down as well. Because of the pros and cons of these for business, Thai SMEs need to study, understand, adopt and apply the benefits of AEC wisely (Yuttasak Supason, Office of Small and Medium Enterprise Promotion (OSMEP).

Presently, each country, including Thailand, has developed its own economic plan with the concept of SMEs promotion according to the specific terms and conditions of each country; for example, business concept, manufacturing, trading, service and investment. No matter whether the size of the business running within the country or outside the country is a small or medium enterprise, these businesses would involve in communication or participation with foreign countries to become internationalization. Therefore, Thai SMEs must be ready to get involved with international business. Once Thailand becomes a part of AEC in 2015, country members will open their own trading sector, service sector, manufacturing sector and investment sector to other countries which leads to the movement of production materials, investment capital, labors, trading and investment support. With this, the government and private sectors (especially SMEs) are required to improve their management performance effectively. Moreover, being internationalization would require international business to step into the local market in the supply chain process while local businesses still remain to focus on their home country. Once the international business becomes a part of the supply chain, SMEs and concerned parties such as the government, private sector, education institutes, non-profit organization and other relevant associations need to tune their understanding and thoughts to the facts that internationalization is not only about exporting products to sell in other countries but also includes other functions like standard management strategy, innovation and technology, material sourcing for cheaper price or better quality from abroad,

marketing and export like international exhibition, international sales representatives or international sales office (http://www.thai-aec.com).

Table 1.1 Gross Domestic Product (GDP) Year 2013 – 2017 Categorized by Types of Enterprises

	2013	2014	2015	2016	2017
Gross Domestic Product : GDP At Year Prices in Economics Activities (Unit: Million)					
Country	12,915,162.00	13,230,301.00	13,747,007.00	14,533,475.00	15,452,882.00
Agriculture	1,462,625.00	1,335,153.00	1,236,237.00	1,236,038.00	1,337,284.00
Non-Agriculture	11,452,537.00	11,895,148.00	12,510,770.00	13,297,437.00	14,115,598.00
- Large Enterprises	5,557,401.00	5,772,970.00	5,991,616.00	6,304,808.00	6,647,993.00
-SMEs	5,129,152.00	5,319,388.00	5,678,957.00	6,115,402.00	6,551,718.00
- Small Enterprises	3,582,849.00	3,719,183.00	3,987,010.00	4,308,573.00	4,637,330.00
- Medium Enterprises	1,546,303.00	1,600,205.00	1,691,947.00	1,806,829.00	1,914,388.00
- Other	765,984.00	802,790.00	840,197.00	877,227.00	915,887.00

Reference: Office of National Economic and Social Development Board
Summarized: Office of Small & Medium Enterprises Promotion (OSMEP)
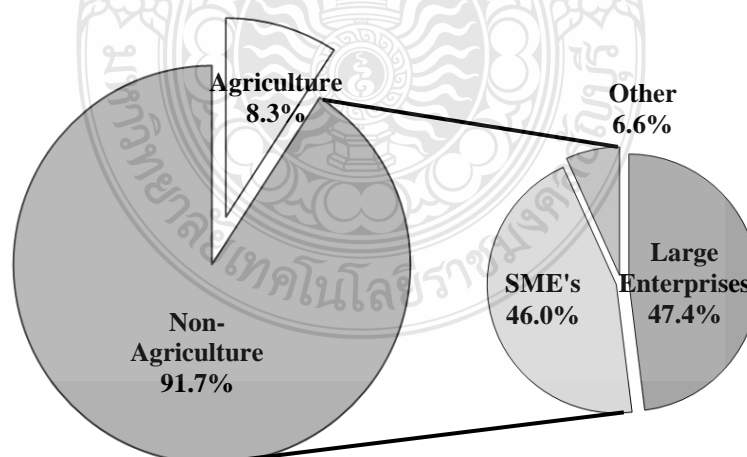
Figure 1.1 Gross Domestic Product (GDP) Structure in 2017

Reference: Office of National Economic and Social Development Board
Summarized: Office of Small & Medium Enterprises Promotion (OSMEP)

From Table 1.1 Gross Domestic Product (GDP) of Small and Medium Enterprises (SMEs) in 2017 had the value of THB 6,551,718.00 million which is equaled to 42.4% of total country GDP. The figure signified an expansion of 5.1% which surpassed the 4.9% rate of the previous year. The SME-generated portion made up some 42.4% of the overall GDP. With their GDP building performance, the SME's respective contributions in terms of enterprise size were: Small Enterprises (SE) contributed THB 4,637,330 million or 30.0% of GDP; Medium Enterprises (ME), THB 1,914,388 million or 12.4% of GDP. These figures represented increases of 5.6% and 3.9% over the previous year.

The importance of the business to the international market is very important in particular countries that have problems about lack of balance of payments due to the current activities in the country economy. They cannot rely on just the production potential within the country only, they need to add the international level activities such as doing more export, import, capital investment or other international business operations. That means they need to become a global or international force. The operation to drive SMEs business of the country to reach the international standards started seriously in 1920. The importance of SMEs to international raised after World War II in 1970 when most of business had developed themselves to global market which the term globalization was started (Gjellerup, 2000). Globalization means steps to perform the integration of markets in many countries around the world, which is different from being limited to only a few countries. Therefore, globalization is the circumstances which businesses will have to face the fierce competition in the world.

In the past, it was found that SMEs were often limited to the scope of doing business in their own local area only (H. J. Pleitner, 1997), but in the present, SMEs find their roles in running their businesses more in international level. Because of challenges to compete with the aggressiveness and respond much more quickly to the production cost as well as transportation and product quality, the businesses need to select someone who can help Thai SMEs maintain and enhance their competitiveness in the global market. In this case, the SMEs entrepreneurs are important persons because they have a role and responsibility to consider what directly affects the risks and uncertainties for the business and can achieve the goal such as profit and success

(Kuratko, 2009a). The performance of entrepreneurs is a key strategy of the business used to create the value to the business. They can comprehensively understand how to effectively use resources, especially focusing on the development of potential staff to think and look for new business opportunities that will have a significant impact on the SMEs business growth and the development of the country to the world (Szyliowicz & Galvin, 2010). Therefore, entrepreneurs in SMEs will have to respond to the market quickly (J. H. Pleitner, 2002) and have the necessary ability to step up to business to reach the SMEs internationalization.

Many study results of the small and medium enterprises in foreign countries found the similar conclusion on the linkage of SMEs businesses and entrepreneurs (Raymond & St-Pierre, 2003a). The key business success is emphasizing on entrepreneurship-driven performance which the entrepreneurs have the major role in extensively operating the organization (Welsh & White, 1981). In concept, gaining a competitive advantage for the enterprises can be created by introducing new things, process and management (Joseph A Schumpeter, 1942). However, the SMEs are still encountering the scarcity of resources that are necessary for enterprises management (Grimm, Lee, & Smith, 2006). According to that, the enterprises is required to make use of the proper strategy in order to best the option to find a way to create, develop and sustain the small and medium enterprise of Thailand. Furthermore, there should be a study that also involves the entrepreneurship factors influencing the business performance in order to guild the development and sustainability of the small and medium enterprises which finally can help develop Thai economy and society.

Table 1.2 The Value of the Export and Import the Year 2013 - 2017 Categorized by the Size

	2013	2014	2015	2016(1)	2017(2)	Proportion to GDP of SME (2017, %)	Growth (2)/(1) (%)
Export (Million Baht)							
SE	1,193,294.12	1,302,862.37	1,349,526.01	1,477,928.35	1,345,474.80	16.81	-8.96
ME	579,406.42	619,726.14	628,865.43	712,622.05	644,944.91	8.06	-9.50
LE	5,040,555.26	5,270,312.58	5,159,113.63	5,218,450.53	5,882,946.64	73.48	12.73
na.	96,288.11	118,187.91	88,217.73	141,703.14	132,898.82	1.66	-6.21
SMEs	1,772,700.54	1,922,588.51	1,978,391.44	2,190,550.40	1,990,419.71	24.86	-9.14
Total	6,909,543.90	7,311,089.00	7,225,722.80	7,550,704.07	8,006,265.18	100.00	6.03
Import (Million Baht)							
SE	1,604,977.54	1,520,883.44	1,616,089.58	1,643,970.58	1,743,109.16	22.97	6.03
ME	784,640.97	705,475.85	766,155.71	801,862.40	639,812.19	8.43	-20.21
LE	5,078,732.83	4,967,669.90	4,346,610.21	4,186,795.71	4,935,725.39	65.05	17.89
na.	189,281.75	209,875.61	177,222.91	255,558.01	268,471.68	3.54	5.05
SMEs	2,389,618.51	2,226,359.29	2,382,245.29	2,445,832.98	2,382,921.34	31.41	-2.57
Total	7,657,633.09	7,403,904.80	6,906,078.41	6,888,186.70	7,587,118.41	100.00	10.15
Balance of Trade (Million Baht)							
SMEs	-616,917.97	-303,770.79	-403,853.85	-255,282.58	-392,501.63		-53.75
Total	-748,089.19	-92,815.81	319,644.39	662,517.37	419,146.76		-36.73

Reference: Office of National Economic and Social Development Board
Summarized: Office of Small & Medium Enterprises Promotion (OSMEP)

Table 1.3 The Trend of the Export and Import and the Gowth rate of the SMES, 2013 - 2017

	2013	2014	2015	2016	2017
Total Export (Million Baht)	6,909,543.90	7,311,089.00	7,225,722.80	7,550,704.07	8,006,265.18
SMEs Export (Million Baht)	1,772,700.54	1,922,588.51	1,978,391.44	2,190,550.40	1,990,419.71
GDP at Year Prices (Million Baht)	12,915,162.00	13,230,301.00	13,747,007.00	14,533,475.00	15,452,882.00
GDP SMEs at Year Prices (Million Baht)	5,129,152.00	5,319,388.00	5,678,957.00	6,115,402.00	6,551,718.00
Export Proportion of SMEs Per Export Nation (%)	26%	26%	27%	29%	25%
Export Proportion of Nation Per GDP (%)	53%	55%	53%	52%	52%
Export Proportion of SMEs Per GDP of SMEs (%)	35%	36%	35%	36%	30%

Reference: Office of National Economic and Social Development Board
Summarized Office of Small & Medium Enterprises Promotion (OSMEP)

From Table 1.2, it shows the expansion of export and import in SMEs throughout the five years. The results revealed that the expansion is in the positive value in year from 2014 to 2016, except 2013 and 2017 there was the negative value, where trade contractions were 12.54% and 9.14% respectively. By contrast, SME import growths were positive for two years out of the five with the positive figures occurring in 2015 and 2016. The figure for 2017 reverted to negative at −2.57%.

When considering the proportion of the export value to GDP from Table 1.3, it reveals that the country's economy is mainly dependent on exports because the value of the export takes a great proportion of 52% of country GDP in 2017, while the export value of SMEs is as of 30%. For the export of SMEs in 2017, the proportion is of 25 % of total exports of the country only.

From the above, it is imperative that SMEs entrepreneurs or the persons being responsible for that have the knowledge and understanding of entering into the international market. Accordingly, this research work emphasizes on the SMEs exporting only and measures the outcomes of the export performance because the

export is the common method for being international, which has been used by Thailand and other countries to expand their business abroad (Kogut & Chang, 1996) and to reduce the restrictions on certain things such as the limitations in resources (Dalli, 1995), and to increase marketing knowledge and in a foreign country (Root, 1994). The research also explains that the export is the main business to grow and can create both competitive advantage and disadvantage. Thus, to find the answer about the factors, what the entrepreneurs are expected to influence the SMEs performance in entering into the internationalization, is necessary. The results from the research are especially useful for entrepreneurs of SMEs and can be used as information to make decisions and implement in the step up to the internationalization. Moreover, the government may use the various factors from the research as a guidance in planning to promote the sustainable development of the export capabilities of the Thai small and medium enterprises.

1.2 Purpose of the Study

To study "The Effects of International Entrepreneurship Characteristics on Export Performance of Small and Medium Enterprises (SMEs) in Thailand" according to the launch of ASEAN Economic Community (AEC), which would bring the advantage to trading and service entrepreneurs as well as prepare them for the change in commerce, the objectives of this research is portrayed as follows:

1.2.1 To analyze the causal relationship model of the effects of international entrepreneurship characteristics, including entrepreneurial orientation and innovativeness on the export performance of small and medium enterprises (SMEs) in Thailand.

1.2.2 To analyze the causal relationship model of the effects of international entrepreneurship characteristics, including entrepreneurial orientation and innovativeness, on export performance of small and medium enterprises (SMEs) in Thailand mediated by reconfiguration capability.

1.2.3 To analyze the causal relationship model of the effects of international entrepreneurship characteristics, including entrepreneurial orientation and innovativeness, on export performance of small and medium enterprises(SMEs) in Thailand moderated by the favorable competitive environment.

1.3 Research Questions and Hypotheses

Research of the "The Effects of International Entrepreneurship Characteristics on Export Performance of Small and Medium Enterprises (SMEs) in Thailand" is the study of the factors including, entrepreneurial orientation and innovativeness, that the influence of international entrepreneurship to export performance of small and medium enterprises (SMEs) in Thailand with the purpose to be the guided model for Thai SMEs entrepreneurs to develop and improve their SMEs performance in the international market. Then, this research would lead to the research questions as below:

1.3.1 How do entrepreneurial orientation and innovativeness have causal relationship to export performance of Thai SMEs?

1.3.2 How do entrepreneurial orientation and innovativeness have causal relationship to export performance of Thai SMEs through reconfiguration capability?

1.3.3 How do entrepreneurial orientation and innovativeness have causal relationship to export performance of Thai SMEs increase with favorable competitive environment?

From the conceptual framework, these following research hypotheses were set accordingly to respond to the research objectives and questions: The details are as follows:

H1: There is a positive relationship between entrepreneurial orientation and export performance of Thai SMEs.

H2: There is a positive relationship between innovativeness and export performance of Thai SMEs.

H3: Entrepreneurial orientation positively affects reconfiguration capability

H4: Innovativeness positively affects reconfiguration capability

H5: Reconfiguration capability have positive impact on export performance of Thai SMEs.

H6: The effect of the entrepreneurial orientation on export performance increase with favorable competitive environment.

H7: The effect of the innovativeness on export performance increase with favorable competitive environment.

1.4 Theoretical Perspective

　　　　The concept of this research has developed from a literature review to find data and research related to the study on "The Effects of International Entrepreneurship Characteristics of Small and Medium Enterprises (SMEs) in Thailand" with the purpose of studying entrepreneurial orientation and innovativeness which are the internal factors that can be controlled, and reconfiguration capability and competitive environment which are the external factor. This is related to the business environment that is beyond the control of entrepreneurs. The variables that should be considered can include government policy, society, economics, technology development and industry competition. Therefore, the framework for this concept consist of five components as follows:

　　　　　　1.4.1 Entrepreneurial Orientation (EO)

　　　　　　1.4.2 Innovativeness (INNO)

　　　　　　1.4.3 Reconfiguration Capability (RC)

　　　　　　1.4.4 Competitive Environment (CE)

　　　　　　1.4.5 Export Performance (EP)

1.5 Research Framework

　　　　From the five-element framework, the researcher has developed the concept in the study of "The Effects of International Entrepreneurship Characteristics of Small and Medium Enterprises (SMEs) in Thailand" and show the relationship of the theoretical frameworks as follows:
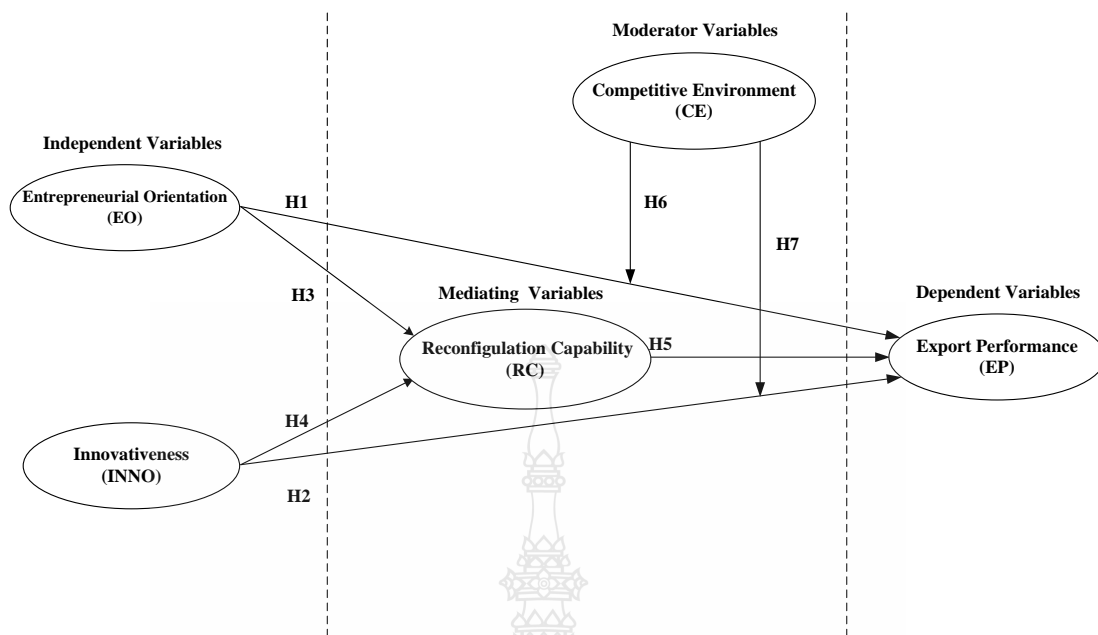
Figure 1.2 Theoretical Framework

1.6 Delimitations of the Study

This research is an empirical study of the effects of international entrepreneurship characteristics on export performance of small and medium enterprises (SMEs) in Thailand by focusing on effect of international entrepreneurship to the export performance for Thai SMEs in order to develop and promote them into exporting activities by giving guidelines for the entrepreneurs in adjusting and evaluating the direction and the trend of competitiveness of SMEs businesses under the liberalization of the ASEAN Economic Community (AEC). As aforementioned, the researcher displays the scope of the research as follows:

1.6.1. The Scope of content is limited to the study related to the general information of the small and medium enterprises (SMEs) in Thailand and the effects of international entrepreneurship on export performance of SMEs in Thailand including entrepreneurial orientation, innovativeness, reconfiguration capability and competitive environment.

1.6.2 The Scope of the population is limited to the Thai exporting SMEs registered with Department of International Trade Promotion, 2013-2016 and remained

at the end of 2016. The SMEs in terms of manufacturing sectors can classified into 10 groups as follows:

- Agricultural Products

- Minerals / Fuels

- Food

- Automotive / Auto Parts and Accessories

- Machinery / Equipment

- Chemicals / Plastic Raisin

- Cosmetics / Toiletries / Medical Supplies / Optical Goods

- Household Products

- Building Materials / Hardware Items

- Electronics / Electrical Products and Parts

1.6.3 The dependent variable in this research is export performance measured by the success in achieving the organization goal which split into financial and non-financial aspects. In this research, the researcher used the self-assessment because it was found by several studies that the measurement with self-assessment can result in content consistency, standard, reliability and accuracy (G. Dess & B. Robinson Jr, 1984; N. Venkatraman & Ramanujam, 1987; Yang, 2006). In addition, the self-assessment for subjective evaluation included the cross-sectioned data of the enterprises from different sectors of industry in the business (Kauranen, 1993). The export performance is detailed as follows:

- The financial measures can include sales measures, profit measures and growth measures.

- The non-financial measures can be perceived success, satisfaction and goals achievement.

1.7 Definition of the Terms

Small and Medium Enterprises (SMEs): It refers to the small and medium enterprises of Thailand that include production of goods and services, and trade and retail or other activities which had set by the stipulated in the announcement of the Ministry of Industry with the total number of employment and the value of fixed assets in 2002

International Entrepreneurship: It refers to the combination of innovation, proactive operation and the risk-taking behavior of cross-border operations and the purpose of creating value in the organization.

Entrepreneurial Orientation: Entrepreneurial orientation is an organizational structure that is closely linked to strategic management and strategic decision-making. The dimension associated with Entrepreneurial Orientation consists of risk-taking, innovativeness, proactiveness, human capital and institutions.

Innovativeness: Innovation is a necessary tool of entrepreneur as well as an important strategy in making a competitive advantage, market opportunity and success of business. This applies especially to small and medium-sized enterprises (SMEs), which is simple organizational structures and administrative system, can respond faster to customers' requirements and development trends.

Dynamic Capabilities: It refers to the ability, to recognize an opportunity and the threat occurred with the organization (Sensing). The ability to benefit from the opportunities emerging (Seizing) and the ability to create and update resources (reconfiguring).

Reconfiguration Capability: It refers to the organizational skill required to rebuild assets and learning in order for creativity consists of adaptive capabilities and innovative capabilities.

Competitive Environment: It refers to the diamond model analyzing the competitive environment in creating a competitive advantage and ability to respond to the internal and external environmental changes, especially, the production of goods and services that are necessary to highly satisfy the customers and other stakeholders.

Export Performance: Export performance is the result of business activities in the export of goods to foreign countries. It can measure both financial variables and non-financial variables.

1.8 Benefits of Research

Expected results of this research can include as follows. Firstly, the research can help create a perspective on the development of small and medium enterprises that focus on elements of international entrepreneurship factors in exporting SMEs operations through the perspective of the employed theories encompassing with resource based view (RBV), entrepreneurial orientation and innovativeness, and export performance.

Secondly, the results of this study can help governmental organizations such as the office promoting small and medium enterprises, the bank for the small and medium enterprises and the department of international trade to consider what factors the related organizations should promote or emphasize in order to develop the qualification of international entrepreneurship which finally can contribute to the success of the enterprises.

Thirdly, this result can contribute to the theory. The empirical findings from this study is useful to develop international entrepreneurship towards outcomes presenting elements of the factors which affect international entrepreneurship of small and medium enterprises. In addition, this is also useful for international business operators, who continue to export, to utilize the result from the study to help increase operational capability, gain increased performance and compete with foreign countries. As a result, it can promote the country benefits such as economic growth.

1.9 Organization of the Study

This study consisted of five chapters.

Chapter One: Introduction presents background and statement of the problem, propose of the study, research questions and hypotheses, theoretical perspective, research framework, definition of the terms and delimitations of the study.

Chapter Two: Review of Literature presents the study based on the reviewing of previous studies in related areas in order to lay a foundation for the study both theoretically and empirically. This chapter was designed to review each of the major theoretical concepts used in research works in the field of international entrepreneurship characteristic those were entrepreneurial orientation, innovativeness and as well as reconfiguration capability, competitive environment and the export performance. In addition, resource-based view theory, international entrepreneurship and competitive advantage were reviewed for relevance and application to the research questions , research hypotheses addressed in the study.

Chapter Three: Research Methodology presents the methodology relevant in the study. Topics of relevance were the research design, survey methodology, sampling plan, measurement properties of the selected scales, data analysis plan and quantitative measurement. Particular attention was given to the test for validity and reliability of the research constructs.

Chapter Four: Analysis of the Data presented in this chapter was the results findings. The data from empirical survey would be analyzed and presented. The hypothesis testing and summary of findings were reported to the extent that hypothesized relationships occurred.

Chapter Five: Summary and Conclusions presents the conclusions from the findings, both from a theoretical and practical perspective, including the discussions of the study, contributions, managerial implications, contributions, limitations, as well as recommendation for future research.

CHAPTER 2
REVIEW OF THE LITERATURE

The study of the "Effects of International Entrepreneurship Characteristics on Export Performance of Small and Medium Enterprises in Thailand" has a purpose to study general information and factors regarding international entrepreneurship affecting the export performance of small and medium enterprises in Thailand as well as to analyze the casual relationship and develop the causal relationship model of international entrepreneurship factors affecting the export achievement of small and medium enterprises in Thailand. Therefore, the researcher collected the information to achieve the objectives of the research and maximize the benefits of the study to both academic and practical aspects. The following theories, concepts and related researches were detailed as follows.

2.1 Small and Medium Enterprises in Thailand
2.1.1 Background of Small and Medium Enterprises

Based on evidence in the historical study of Wennekers (2006), it was found that the start-up of entrepreneurship began in the Middle Ages of European countries when entrepreneurs were not considered as organizational units. After the 17th century, the role of entrepreneurship became, however, more important due to the advancement of new technology discovery leading to the favorable economic and cultural environment including the increasing population (Landes, 1969). In the middle of the 19th century, the economy began to decline due to the agricultural revolution into the industrial revolution. Scientists invented a way to generate electricity and build steam engines. This has led to the emergence of large businesses as well as numerous innovations resulting in fewer entrepreneurial roles in innovation (Landes, 1969). Moreover, the revolutionary concepts of management in the early twentieth century viewed the entrepreneurs' mindset shifted toward management focusing on organization in the production to compete with the other competitions. As a result, this led to the critical decline in enterprises' entrepreneurship. Later, the global economic crisis occurred in the middle of 20th century that made various large enterprises collapse.

Nevertheless, there was one business area from various sectors that could survive from that collapsed event and is a great area that helps keep the economy positively grow, is a small and medium enterprises (SMEs).

For this reason, many countries have turned to the importance and promotion of small and medium enterprises. Since then, the United States has established the Small Business Administration (SBA) to take charge of promoting small enterprises in 1953. Japan established the Small and Medium Enterprise Agency in 1958 after the Second World War, which did not take long time to successfully promote these enterprises in the post war revitalization of the country. In 1996, South Korea established the Small and Medium Enterprise Administration (SMB) to handle specific cases for SMEs. For Thailand, the 1997 economic crisis had had a profound impact on business, especially, in small and medium enterprises covering manufacturing, trade, service and agriculture sectors. According to that, the Department of Industrial Promotion has recognized the important role of SMEs towards Thailand's economy and then proposed the establishment of a Small and Medium Enterprise Development Institute to be an instrument in reviving the national economy. The short-term goal of the institutes is to help salvage and increase the potential of SMEs, which is the base or grassroots of the Thai economy. Meanwhile, the long-term goal is to create new SMEs and enhance the competitiveness of existing active enterprises to ensure sustainable economic recovery. Therefore, the Cabinet adopted a resolution on April 5, 1999, approving the principles of establishment. The Small and Medium Enterprise Development Institute and the Ministry of Industry have issued an order No. 153/2542 dated April 23, 1999, to establish a small and medium enterprise development institute in order to transfer development mission from the governmental operation to the form of public organizations. The Small and Medium Enterprises Development Institute was established with the objectives as follows:

2.1.1.1 To support and coordinate the performance of educational institutions and specialized institutions participating in the network for the development of entrepreneurs and small and medium enterprises.

2.1.1.2 To transfer knowledge to entrepreneurs and service personnel in the medium-sized and small enterprises in various forms such as distance learning training, self-study from the media and others.

2.1.1.3 To provide services to small and medium enterprises and corporate advisory group on related business fields including business improvement, marketing, investment and joint ventures, business linkages as well as private partnerships, to support each other.

2.1.1.4 To research and study on both micro and macro levels, and gather useful information about the small and medium enterprise in order to provide the operators and service providers with reliable and up-to-date information. The institute also provides the curriculum improvement in terms of knowledge and development transfer, the service improvement as well as the financial supports in order to certify that the Thai SMEs would have the professional standards of business performance.

Subsequently, the Small and Medium Enterprises Promotion Act in 2000 was enacted to establish the Office of Small and Medium Enterprises Promotion. It is a national agency with broader macroeconomic budgets and responsibilities than the Small and Medium Enterprise Development Institute (Act, 2000). The Office of Small and Medium Enterprises Promotion has the purposes as follows:

1) To define the criteria for determining the type and size of small and medium enterprises to be in line with economic and social conditions.

2) To determine the type and size of small and medium enterprises that should be promoted and recommend the policies and plans for promoting small and medium enterprises.

3) To coordinate and implement action plan to promote small and medium enterprises, government agencies, state agencies, state enterprises or related private organizations.

4) To study and prepare a report on the situation of small and medium enterprises in the country.

5) To recommend the commission about improvement of this Act, including the implementation of a new law amendments, governing the promotion of small and medium enterprises.

6) To manage funds in accordance with policies and resolutions of the Board and the Executive Board.

2.1.2 Definition of Small and Medium Enterprises in Thailand

According to the Small and Medium Enterprise Promotion Act in 2000, "enterprise" means a group of people having activities related to production, wholesale and retail, and service. In announcement of the Minister in the Government Gazette, the "small and medium enterprises" refers to the enterprise that has been limited to the number of employees working in the organization and fixed assets or capital investment invested in the business.

The definition also defines the meaning of an enterprise covering three major groups: 1) production sector covering agricultural production, manufacturing and mining, 2) trading sector covering the wholesale and retail, and 3) service sector. In the meantime, the size of small and medium enterprises can be grouped into following four types. The details are portrayed as follows:

2.1.2.1 Services: The services business, which is small and medium, is popular in being invested and being a growing fastest business because it does not require a large amount of operational resources which they can lead to the difficulty in establishment. Also, the service business can create the added value from existing services or products. In addition, the service business is an important industry sector in globalization since it can benefit society such as giving the employment to the local people, raising the income for local community and so forth.

2.1.2.2 Retailing: The retailing business refers to the sale of products to the consumers. The small and medium retailing business is a popular business because the entrepreneurs can use limited operating resources to reach the desired consumer groups effectively.

2.1.2.3 Wholesaling: The wholesaling business refers to the business that purchases products from the manufacturers and sells to the retailing businesses which they will sell the products to the consumers. If any wholesaling business has the system that is organized effectively, it does not require the large quantities of investment and can be handled by only a few people. In addition, this kind of business is another one that is popular and has been operated in the small and medium scale.

2.1.2.4 Manufacturing: The manufacturing business refers to the business providing the production operation. Comparing to these three types of businesses, the manufacturing is a tough business, especially for small and medium scale, in the competition. However, the small and medium businesses still have opportunities in the manufacturing industry which it can provide the production of small-scaled products such as automobile components and others, for the use or assembly in the large industries. Or, they can provide the production of specialized products and special techniques as well.

For Thailand, the size of small and medium businesses varies according to the definition of each enterprise, using the asset and labor quantity criteria to scale the business, as shown in Table 2.1.

Table 2.1 Definition of the Identification of SMEs in Thailand of the ather Agencies

The Organization	Medium Businesses		Small Businesses	
	The Asset (Million Baht)	Employee (Persons)	The Asset (Million Baht)	Labor (Persons)
Small Industry Finance Corporation SIFC	no	no	Fixed assets do not exceed 50.	Not specified
Thai Credit Guarantee Corporation TCG	no	no	Fixed assets do not exceed 50.	Not specified
Department of Industry Promotion	Fixed assets, 20 - 100	50 - 200	Fixed assets do not exceed 20.	Do not exceed 50.
Federation of Thai Industries	Total assets of 20 - 100	50 - 200	Total assets do not exceed 20.	Do not exceed 50.
Industrial Finance Corporation of Thailand IFCT	Total assets of 100 - 500	Not specified	Total assets do not exceed 100.	Not Specified
Bank of Thailand	Fixed assets do not exceed the 500*	Not specified	Fixed assets do not exceed 50.	Not Specified
Stock Exchange of Thailand	The registered capital less than 40	Not specified	The registered capital less than 40	Not Specified

* Only for disaster recovery through the company
Source: Conference Document of "The APEC Conference on Entrepreneurship in the 21st Century." At Shangri-La Hotel, 30 - 31. July 1997. (Chawin, 1997)

The discussion has been made between the Ministry of Industry and the relevant authorities from both governmental and private sectors such as the Ministry of Finance, Ministry of Commerce, the Federation of Thai Industries, the Thai Chamber of Commerce, Industrial Finance Corporation of Thailand (IFCT), Small and Medium Enterprise Development Bank of Thailand (SMEs BANK), Thai Credit Guarantee Corporation (TCG), Export-Import Bank of Thailand (EXIM BANK), the Government Savings Bank, Bank for Agriculture and Agricultural Cooperatives and Bank of Thailand (BOT). The size of the definition of SMEs using advanced criteria value of fixed assets is shown in Table 2.2.

Table 2.2 Summary of the SMEs Definition

Type of Business	Medium scale enterprises	Small scale enterprises
1. Manufacturing	Fixed assets include the value for land more than 50 million baht, but not over 200 million baht.	Fixed assets include the value of land for not more than 50 million baht.
2. Services	Fixed assets include the value for land more than 50 million baht, but not over 200 million baht.	Fixed assets include the value of land for not more than 50 million baht.
3. Wholesaling	Fixed assets include the value for land more than 50 million baht, but not over 100 million baht	Fixed assets include the value of land for not more than 50 million baht.
4. Retailing	Fixed assets include the value of land for more than 30 million baht, but not over 60 million baht.	Fixed assets include the value of land for not more than 30 million baht.

Source : Office of Small and Medium Enterprise Promotion (OSMEP)

Apart from the breakdown of the criteria for SMEs, the other factors consisting of three parts: employment, fixed asset and registered capital, are used to clarify the size of the SMEs. However, under this criteria, the sales are not used because the difficult-to-clear sales are defined. In addition, there is a confusion of information. Herewith, the details with three criteria are shown in Table 2.3.

Table 2.3 Criteria to Divide the Size of the Business in Thailand

Type of Business	Small Scale Businesses			Medium Scale Businesses		
	Employment (Persons)	Fixed Assets (Million Baht)	The Registered Capital (Million Baht)	Employment (Persons)	Fixed Assets (Million Baht)	The Registered Capital (Million Baht)
Manufacturing	Do not exceed 50	Do not exceed 50	Do not exceed 25	Do not exceed 200	Do not exceed 200	Do not exceed 100
Services	Do not exceed 50	Do not exceed 50	Do not exceed 25	Do not exceed 200	Do not exceed 200	Do not exceed 100
Wholesaling	Do not exceed 25	Do not exceed 50	Do not exceed 25	Do not exceed 50	Do not exceed 100	Do not exceed 50
Retailing	Do not exceed 15	Do not exceed 30	Do not exceed 10	Do not exceed 30	Does not exceed 60	Do not exceed 30

Source : Office of Small and Medium Enterprise Promotion (OSMEP)

2.1.3 Problems and Limitations of Small and Medium Enterprises in Thailand

Nowadays, it is unanimously accepted that SMEs play an important role in the national economy, resulting in job creation and income distribution. SMEs contribute to the development of communities in different regions across the country, which promotes the spread of prosperity to the community and society.

Importantly, Thai SMEs are the highest value-added business units in the country, comparing to the large manufacturing industries with relatively high cost of production in terms of machinery and technology, production and raw materials imported from abroad at the same time, and huge number of labor. However, Thai SMEs also found the difficulty and obstacles because, in the past, Thailand did not seriously focus on developing the basic structure to upgrade the manufacturing industry. The Thai manufacturing sector has outdated technology. Therefore, the growth of Thai SMEs in the early stages relied on the cheap and self-reliant labor as the main part of mechanism among the competition, and the degree of competition of the market was not very high. Nevertheless, these problems are nowadays major obstacles to the growth of

SMEs in Thailand. The major obstacles, faced by Thai SMEs, can be categorized into the following areas:

2.1.3.1 Marketing problems:

The marketing problem is an important problem for SMEs in Thailand because entrepreneurs often look at the problem of how much the quality of the product. However, if the lack of a focus on place to sell products, the price to sell or the promotion to use, it can cause business problems for SMEs. There may be several reasons as follows:

1) Lack of marketing skills: The entrepreneurs lack marketing skills.

2) Lack of marketing personnel: Most SMEs still lack the knowledge and ability to access both domestic and international markets. Moreover, most SMEs are stuck in the domestic market only.

3) Lack of Thai SMEs' competitiveness: Thai SMEs have lower competitiveness than neighboring countries such as China, Vietnam, India and Indonesia. Therefore, it is not possible to draw customers. Especially, the businesses that lack their own identity. In addition, Thai SMEs cannot be a cheaper business provision because of higher costs of production.

4) Lack of work for self: Many businesses do the work for others, do not develop their own brand. This is due to the lack of marketing skills. They cannot create unique values for their products and cannot find their own market. They are always under the name of another business.

5) Lack of ability to reach large amount of income: SMEs continue to lack the accessibility to reach major customers from both governmental and private organizations such as auction, procurement and higher operating costs.

6) Lack of network or cooperation with others: While SMEs in many countries cooperate in the competition in terms of marketing and production which makes the business group of those countries stronger in the international arena, Thai SMEs do not cooperate and operate such that. There is no complete network linkage. It is a barrier to cooperation and assistance from the government and other agencies.

2.1.3.2 Production potential

In terms of the production potential, the Thai SMEs encountered the following points.

1) Lack of potential production: Sometimes, SMEs in Thailand can find markets that support the products, but they cannot produce the products to meet the market needs. There is the need to accelerate production and many times, but they cannot control the quality standards.

2) Lack of production potential assessment: Thai SMEs cannot assess their own production capacity. Sometimes, there are overloading works in their works. They cannot deliver the goods on time, resulting in lack of business credibility. It is a constraint for the SMEs that they cannot compete with the competitors in the market. In addition to the lack of assessment and expand its production capacity, this may be a problem in expanding the market into foreign countries.

3) High cost of production: The high cost of production due to the shortage of some raw materials and utilities can be one of many obstacles the Thai SMEs are encountering. This also includes labor costs that are higher than neighboring countries which make a less price competitiveness.

2.1.3.3 Technology problems

The problems related to the technology can be mentioned in the following points.

1) Lack of technology development: Thai SMEs lack of technological development in their own production; so that, they need to purchase technology from others, both from inside or outside country, which it is expensive. This can lead to the higher cost of production which it finally can create less competitiveness.

2) Limitation of capital: Most Thai SMEs are small scale and have limited capital. Thus, they cannot develop their own technology or provide modern technology that they can compete with the giant businesses which are the barriers to the adoption of high technology to produce new products.

2.1.3.4 Product development problems

The problems related to the product development is explained in the following points.

In fact, research and development (R&D) is very significant for the SMEs in Thailand because it can create the new products that can attract the customers' interest. However, most SMEs in Thailand do not invest in research and development (R&D) because it must invest a lot of financial budget into the business, which is the thing that Thai SMEs are severely scared of. Therefore, the entrepreneurs of Thai SMEs then decided to compete with the other competitors through the price only. Nevertheless, many entrepreneurs believed that being distinguished from other competitors required to have the research and development (R&D). In having innovation, the entrepreneurs do not have to own their own technology, but they can study the other competitor's technology and copy that technology by inserting something new to that technology. This is called "Copy and Development or C&D". In addition, being creative does not require only new technological innovation, but it can be something related to the design of new products and services. Previously, Thai SMEs did not emphasize on designing and packaging. However, the designing and packaging can respond to the needs of customers. Also, it is a major factor in the competitiveness of small businesses. Unfortunately, at present, there are few small businesses that can do this. Most of them still produce the similar products and services with competing based on the price only.

2.1.3.5 Human resources problems

In terms of human resource, there are several points which are portrayed as follows:

1) Lack of quality personnel: Most SMEs lack quality personnel with proper skills, especially engineering skill and good management skills.

2) Lack of skilled workers: Most of the workers working with SMEs are those without experiences and immediately started working with SMEs, so they do not have the expertise. However, when they have more expertise, they will leave for larger companies.

2.1.3.6 Problems and obstacles in applying for a loan from a financial institution.

In terms of loan from a financial institution, the entrepreneurs have encountered a lot of the following points.

1) Lack of effective money management: There is a lack of liquidity in working capital as well as the high interest of working capital because most come from the overdraft limit from a financial institution.

2) Lack of related document management: Thai SMEs are not generally approved for loans from financial institutions because of the credit crunch of financial institution. The loan institutes focus on transparent management documents, standard accounting system and collateral guarantee, but most Thai SMEs operated the business without documentation. As a result, they will mostly not be considered for a loan improvement from the financial institution.

2.1.4 Small and Medium Enterprise Development Approaches

There are two parts of supporting factors strengthening SMEs. In the first part, the policies and measure by the government and governmental agencies can be crucial factors positively affecting the SMEs. For policy by the government, there are currently two governmental plans, namely SME promotion plan 2012-2016, consisting of four main strategies: 1) supporting the positive business environment to facilitate the implementation business of Thai SMEs, 2) strengthening the competitiveness of Thai SMEs, 3) promoting Thai SMEs to grow in balance with the existing potential, and 4) strengthening the potentials of Thai SMEs to link with the international economy.

In the second part, it is related to the national development plan which is the "11th National Economic and Social Development Plan 2012-2015". This plan discusses the strength of society and the country's economy that can be adapted to the changing effects of the assistance from government agencies as well as the measures to promote management development, personnel and entrepreneurs, technology, market and export measures, and financial measures. There are major agencies such as the Department of Skill Development, Department of Industrial Promotion Institute of Small and Medium Enterprises, Development National Institute for Productivity and others.

Especially, the 2nd strategy of the SMEs Promotion Plan in No. 3, which aims to strengthen the competitiveness of Thai SMEs in the details of strategy No. 2.7, with the policy of creating and developing new entrepreneurial potential to be achieved by creating incentives and entrepreneurial mindset; enhancing the attitude and experience in conducting business for students; and strengthening the ability to produce products

and services that are highly differentiated and valued. This is also including the promotion of the registration of juristic persons; encouragement of social enterprises (SEs) and network promotion of social enterprises to exchange knowledge and to build a trader to stimulate and link producers to sell more goods and services, with the strategic direction of the implementation as follows:

2.1.4.1 motivating entrepreneurship,

2.1.4.2 increasing knowledge, capacity, skills, size and stage of business growth,

2.1.4.3 enhancing technology/innovation capabilities,

2.1.4.4 improving the quality of life of SMEs entrepreneurs,

2.1.4.5 creating business opportunities and educating about the marketing and,

2.1.4.6 raising consciousness and good governance for entrepreneurs.

2.2 International Entrepreneurship Characteristics

2.2.1 Internationalization

The evolution of the term "Internationalization" first began in the 1920s, just before World War II, which meant that economic activity expanded overseas through international economic progress and prosperity in the early 1970s, before the emergence of a new phenomenon called "Globalization" (Gjellerup, 2000). The term "Internationalization" is different from "globalization". The "Internationalization" often refers to international relations, people, cultures, business activities that play a role in international business. "Globalization" is often referred to as international marketing (Ruigrok, 2000), as well as human resources, economics, values, cultures, knowledge, goods, services and technologies. So, these two words are different, but they are interconnected. With this, it can be said that internationalization may happen along with business globalization. Globalization of business in the international market can be attributed to three possible causes (Acs, Morck, & Yeung, 2001; Gjellerup, 2000) as follows.

2.2.1.1 The relatively fast and low cost growth of technology to connect people, places and technology will be able to create more international economic opportunities.

2.2.1.2 The reduction of restrictions and restrictions on international trade can also assist to create more international chance.

2.2.1.3 Motivation for economic growth and economic structural change for free trade can be also significant for international opportunity.

Internationalization is what businesses use their core competencies or aptitudes or advantages developed in mother country whether it is a product, operational skills or others which they are like a major weapon in the competition. When the entrepreneurs want to expand operations to overseas markets, they will export the products into foreign markets. In fact, export can be both advantageous and disadvantageous in terms of the cost the entrepreneurs will encounter, for example the costs of production, storage and distribution. If the entrepreneurs can gain cheaper production cost, they will gain advantage of being profitable in the global market. In the meantime, if the entrepreneurs cannot gain the cheaper production, they will not gain profitability because their price will not be competitive in the global market. However, there are various study confirming that the universal strategy or internationalization strategy can be appropriate strategy to apply into the business when competitors are in foreign markets. Unfortunately, there is quite useless for the SMEs because SMEs have less skilled people who can produce that kind cheaper production.

However, recent studies attempt to emphasize the importance of understanding business behavior in international markets (Sousa, Martínez-López, & Coelho, 2008), particularly in terms of export development. The thing is needed to understand is about the business environment either at macro or microeconomic level. This leads to the country's successful economic and social development by helping the industry to develop and improve the efficiency of both production and business creation through a variety of markets. At present, it is found that the chances of export are very low, if the SMEs is focusing only in the domestic market, but the opportunity arises from the fact that the SMEs can find new customers and utilize the economies-of-scale concept in reducing production costs while producing more efficiency (J. O. Okpara, 2009). In this

sense, exports are an attractive way to enter the global market, especially for SMEs, as opposed to alternatives such as joint ventures, which are related to two or more parties sharing the resources (Dhanaraj & Beamish, 2003; Piercy, Kaleka, & Katsikeas, 1998). In addition, the exporting is not a way to lead to large risks, as well as allowing greater flexibility in adjustment each order value of exports of goods to foreign markets also (Lu & Beamish, 2001).

Many recent researches pointed out that internationalization of SMEs is often a priority in terms of exports, it is considered that the export is the main way to grow the business. Exporting is a way to get started in the international arena as it can respond to the expansion of the business, rather than any other methods (Kogut & Chang, 1996), the export method can reduce some limitations, such as resource constraints (Dalli, 1995) and overseas experience (Root, 1994), to make SMEs more international.

The export method is useful for the following points:

1. want to find new and larger markets than ever before to grow business,

2. want to expand the market by exporting products, finding co-investors or foreign sponsors, and

3. want to bring new knowledge and technology to create a competitive advantage.

Hollensen (2013) states that, prior to internationalization, it must be clear what strategies the SMEs need to know. This is in line with Albaum, Strandskov, and Duerr (1998), who say that the effects that may occur in international markets must be studied. The study found that there are two ways in which SMEs can make the international transition. The follows are the detail.

1. Business needs to have the ability to recognize internal and external factors which it can significantly affect the decision to export.

2. Entrepreneurs must be aware of what will be useful in seeking market opportunities, whether it is proactive. Recognition and interaction with different conditions will create opportunities for increased exports.

Under international research, most of the researches are focusing on the export study because it is the simplest and most common strategic method used by most businesses (Dhanaraj & Beamish, 2003). The internationalization of SMEs in

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developing countries often takes the form of finding opportunities in foreign markets to get new customers through the export process. (Ibeh & Young, 2001; Omar, 2009).

However, in this study, researcher defined internationalization as the achievement of export performance since in most cases. The internationalization of developing countries in the small and medium scale industry is often referred to as exportation. International business operations are less risky because they only ship overseas. Oman (1984) mentioned that the export can be divided into two different ways: direct and indirect export. Direct export refers to the fact that an entity is obliged to deliver its goods to the foreign market directly without any intermediary. Meanwhile, indirect exporting means that the company will assign another person to act on behalf of the export.

2.2.2 Entrepreneurship

The definition of startup entrepreneurs is known since the 18th century. An entrepreneur refers to a person who hires themselves to work in their own business. The entrepreneurs will purchase the products from one place at current prices and sell them to other place in the future at the different price. However, this kind of activities done by the entrepreneur is bearing the risk (Cantillon, 1730). Later in the 19th century, Say (1816) defined the entrepreneur as the collector who moved the resources to the point where production costs were lower, using all sorts of methods in production, including fund raising, wage determination, lease pricing, product pricing and self-determination. Fontaine (1999) and Mill (1848), who made the term "entrepreneur" widely used in the book "Principles of Political Economy", showing that entrepreneurial talents are shattered, unlike others in terms of risk taking and management competence (Cunningham & Lischeron, 1991). The meaning of this entrepreneur was less interested in the economic literature in the late 19th century, as economists believed in the Neo-Classic Economy theory. It is believed that every consumer has equal information, everyone can find the product or service they need and find it at a price that is not different or set equally and reasonably. So, in an economy, the entrepreneurs have no role to play in making a difference from the market. However, the economic mechanism is only achieved through a complete marketing mechanism.

In the 20th century, the meaning of entrepreneurship began to rise from Frank Knight, the definition of entrepreneurship, which is in the risk management concept, refers to the person who distinguishes risk out of uncertainty by defining risk. That is, it is possible to assess the impact using historical data and can insure against hedging. The uncertainty is the unacceptable events or happens and they can occur only once or infrequently (Fontaine, 1999). Austrian economist Joseph Schumpeter has a different view from Knight who does not care about risk, but focuses on innovation, by saying that entrepreneurs are the ones who offer something new. Innovator is not only an inventor, but also can change the "market" by bringing the existing resource mixed with existing resources into a new thing. Schumpeter presented this approach in five ways: 1) the introduction of new quality products; 2) the use of new production methods; 3) the opening up of new markets; 4) the search for new sources of raw materials or the search for new materials and 5) the establishment of a new venture (Joseph Alois Schumpeter, 1934).

At a later stage, the entrepreneurial view has shifted, with emphasis on profitability and creation of new enterprises, namely, the pursuit of new opportunities in the economy and management (R. Penrose, 1963). Full of "market" shortcomings through inward inputs and associated with activities required to re-establish or redevelop old enterprises. Boon or action on the part of the production is not yet known (Leibenstein, 1968). Entrepreneurs recognize and execute the market opportunities they encounter as profit takers (Kirzner, 1979) and entrepreneurs who create new enterprises (W. B. Gartner, 1988). The value of entrepreneurs is to support the new activities development within the company and continuing to secure business activity or market demand. Under the research, the meaning of entrepreneurship is not generally defined and entrepreneurs are able to apply the concept by creating a process that takes place in all sizes and types of organizations. Acs and Audretsch (2005) mentioned that business, even in large companies, must have innovative entrepreneurs (Collinson & Shaw, 2001; M. P. Miles & Darroch, 2006). Wickham (2001) argues that the entrepreneurial leadership, change and differentiation in each business will not be the same after the performance.

Entrepreneurship is a concept developed after the concept "entrepreneurs" but it is meaningful, closely related to the meaning of the term "entrepreneur" which generally refers to the use of these two terms alternately, depending on the context in which they are used. However, the term entrepreneur is often viewed in the sphere of individual character. It is not possible to understand how entrepreneurship is relevant and important to research enterprises, for example, Bygrave, Hofer, Amit, Shane did not view an entrepreneurship as just an entrepreneur only. Bygrave and Hofer (1991) additionally defined the entrepreneurial environment as being relevant to all functions and activities related to the acquisition of opportunity and the creation of an organization. Amit, Glosten, and Muller (1993) stated that entrepreneurship is the process of making a profit from the use of resources in new and unique ways under the uncertain or ambiguous environments. In meantime, Shane and Venkataraman (2000) saw that entrepreneurship is an event of convergence of two phenomenon. The first is to find or experience a business opportunity that can make a profit and the second is readiness to act. Therefore, the definition of entrepreneurial dimension in one's personal dimension is incomplete, raising doubts about the situation of entrepreneurs. Swedberg (2007), citing Joseph A Schumpeter (1911) who viewed entrepreneurship as a process of economic change resulting from the introduction of new resources that alter or destroy the creative balance of the market creative destruction. The entrepreneurial environment requires action or change from slides to dynamics.

In a narrower sense, entrepreneurialism is about exploiting innovation to create value that is not measurable in financial terms. The entrepreneurial process, including the different activities, is essential for the pursuit of business opportunities and the ability to set business concepts to acquire the resources needed for business. Seeking new business is another factor that has made the business success from the old business that formerly failed. Entrepreneurship is the result of entrepreneurship and can only happen if the entrepreneur is responsible for developing innovation and promoting customer service. It can be said that there are at least two important factors that are needed for successful implementation. The first factor is the entrepreneur who acts as a change leader or who seeks opportunities to change and drive the organization to create the value for new customers. The second factor is the entrepreneur's competition such

as designing new Innovations in the development and implementation of new ideas, including the release of new products, customer service procedures, or distribution to other markets.

Entrepreneurial concepts are fundamentally different, such as innovation, risk and proactive operation (Covin & Slevin, 1994; Cunningham & Lischeron, 1991; W. B. Gartner, 1990; Michael A Hitt & Reed, 2000). There are also ideas in scholar articles about creativity innovation and competitive entrepreneurship. They believe that organizations and companies may not be profitable and cannot be innovative until they are entrepreneurial. Innovation means finding solutions for the market or customer problems. Cooper (1998), which includes the development of new products or services, new technology and different operational processes within the organization. These can be used to cover production lines, design new packaging, communicate marketing or distribute products to consumers. Risk refers to concerns about resource management decisions for investment, new business ventures, proactive means of dealing with the operation of innovation in the marketplace (Collinson & Shaw, 2001). The operation of entrepreneurship also has a significant impact on the economy, growth and development of different countries. Around the world over the past decade (Szyliowicz & Galvin, 2010), it has been now found that the number of academic efforts that attempt to understand entrepreneurial status has increased to provide guidance for practitioners and followers. According to the theory, now the meaning of International Entrepreneurship Theory has a broader meaning and includes "the combination of innovation, and proactive and aggressive behavior that is looking for overseas and aims to create value in the organization" (Patricia Phillips McDougall & Oviatt, 2000).

Research on entrepreneurship is an important issue, that has been recognized as a matter of growth, in academic research (Gibb, 2000; Hisrich & Drnovsek, 2002). Additionally, McElwee and Atherton (2005) analyzed that publishing trends and patterns in entrepreneurship, by reviewing internationally published articles and journals, entrepreneurship and innovation, are increasing. Many academics have different scopes and there more than 50 existing journals that are relevant to entrepreneurship and disciplines. Concerned although many researchers study the implications of entrepreneurship and entrepreneurship, there are still many issues in

entrepreneurship and discussion. Howorth, Tempest, and Coupland (2005); Low (2001); Stevenson and Jarillo (1990) concluded that there may be three main types of entrepreneurs.

      1. Things to happen when the entrepreneur perform

      2. The reason why the entrepreneurs have to perform

      3. The approach for entrepreneur's performance

      However, it has also been found that understanding the process of entrepreneurship in the family business must take into account the best possible service, depending on the cultural elements, the nature of the industry, and the context of the organization under the responsibility of entrepreneurs (Morrison, 2006). Thus, the entrepreneur is entrepreneurial, who is part of the most important agent of change that is capable and willing to take the risk of making a decision (Anderson, 2000). Innovation leveraged the business opportunities in different market environments (OECD, 2000). Often, these opportunities can be realized in international markets and can create cross-country entrepreneurs.

      Globalization that has taken place around the world has resulted in a dramatic change in the business environment together with advances in technology such as communication, transportation, production, distribution and marketing and etc. The result is a diminishing barrier to international trade. Distant distances and time diminished to different countries focus on economic development and opening up free trade, broader international trade policy to promote and support business expansion, especially business and international trade. Those in the same region are grouped together to negotiate and cooperate in trade in various forms. Thailand and other countries in southeastern Asia is grouped together to facilitate trade under the ASEAN Economic Community or AEC. The ASEAN free trade offers a wider opportunity for businesses to enter the international market. But in the meantime, business risks due to competition are increasing. Countries must be prepared and adapt to the competitive conditions that may be faced by trade liberalization. Policies and tools in different formats are used to prepare and stimulate economic growth simultaneously. One mechanism, by which countries around the world have a consistent consensus, is that they are important and affect the creation of economic growth. These include creating

new businesses and promoting entrepreneurship. Because entrepreneurship is perceived as the cornerstone of economic growth in the era of free trade, governments in other countries are trying to expand their reach into the international market. Entrepreneurship has become an important economic policy in the period of free trade that governments encourage and support because it has the positive effects on the economy, such as creating innovation, creating a career, stimulating consumption as well as the rotation in the financial system of the country which is consistent with World Trade Organization policies that support entrepreneurship and establishment of new businesses. Therefore, it is seen as an important driver of economic growth and poverty reduction.

Thailand is one of the ASEAN countries that faces more and more intense competition. Adaptation of the business to the commercial environment and long-term competitiveness is essential to create growth and a way to survive the business. More businesses from ASEAN countries can recently compete in Thailand; meanwhile Trade opportunities of Thai entrepreneurs are highly increasing in ASEAN countries competition, resulting that Thai entrepreneurs must prepare and accelerate their own development to upgrade competency. The government attaches great importance to the promotion of exports and foreign direct investment. Because competition and trade-offs against global investment intensify and the ASEAN Economic Community (AEC) has a direct impact on Thailand, Thai entrepreneurs will have to adjust to the upcoming AEC changes such as the trend of trade barriers, non-tariff and rules within ASEAN. The ASEAN Community promotes greater investment and capital mobility (Chiamchittrong, 2010).

At present, the government has a policy to promote and support the development of the international market of SMEs to enter the international market of SMEs to broader international markets by Department of Export Promotion. It has set up a project to promote Thai entrepreneurs into an internationalization project by launching their businesses overseas, especially the ASEAN Economic Community (AEC) and encouraging SMEs to develop their products and services by using the knowledge, skills and Thai (Thainess) in production, participation in activities to enhance the experience and understanding of international trade accurately and

comprehensively for a competition in the global market. In addition, the Department of Export Promotion has organized training courses, seminar, and workshops on trade regulations, trends, markets, trade opportunities and investment. International marketing strategies has been put forwards to the entrepreneurs, manufacturers and exporters who are interested in both Bangkok and the provinces to increase the competitiveness of the Thai export business in the long run. More importantly, the promotion of the public sector has influenced the image of Thai products abroad.

2.2.3 International Entrepreneurship

According to a report by Zahra and George (2002), the first "international entrepreneurship" was defined by Morrow 1988. In his short essay in 1988, Morrow pointed out that advances in technology lowered the cultural barriers and increased perception of opened international markets. These are something that can be perceived by every company whether it is a small or new business. Later in 1989, McDougall conducted research to empirically examine comparisons between new domestic and foreign ventures to start academic studies to find ways of doing business internationally. Oviatt and McDougall (1994) modified the meaning of the defined by Stevenson and Jarillo (1990) states that entrepreneurship is "capacity building in value creation and participatory management and innovatively proactive operation ability to analyze the risks designed to run a overseas business operations which will be successful in the offshore market and be cautious of possible financial provision and other shortcomings". Patricia Phillips McDougall and Oviatt (2000) presented the implications of being an international entrepreneur by having the combination of innovation, proactive operation and risk-taking behavior of cross-border operations, and the purpose of creating value in the organization". This definition is another widely-accepted definition, after which they explore the insights of the people. These include areas such as discovery mutual agreement, evaluation and utilization of cross-border opportunities to find future markets for goods and services.

In terms of "International Entrepreneurship" Oviatt and McDougall (2005) is studying the behavior of cross-border operators which focuses on how to discover, analyze and take advantage of innovation opportunities to create new products or services. The agreement means proactive work to find opportunities for competitive

advantage. Evaluation will mean analysis, which will lead to the development of new experiences and knowledge. International entrepreneurship identify the behavior of individuals and company operators. This is the foundation of the international market (Mutigwe & Aghdasi, 2007). The advancement of cheap and easy technology in finding ways to access international resources and communication is what helps businesses to be successful. It is easier to enter the international market. Nowadays, entrepreneurship is rapidly advancing into the international arena, even though it has not been established, as in the case of new international ventures. Researchers and academicians argue that the most important thing for today's internationalization is the entrepreneur, who possesses only skills and information. They will seek opportunities in the marketplace and have the ability to build and create stable relationships with other companies, dealers, government customers, etc. Entrepreneurs are knowledgeable, experienced and targeted as well as risk discoverers. He is also able to use resources in an effective way to achieve competitive advantage. In international entrepreneurship, entrepreneurs are required to create opportunities for what they are looking for and must have international experience in order to take advantage of the opportunities they may see in the market and the ability to commit.

During the past few decades, a number of studies on entrepreneurial status have been conducted, but they have not yet established a theoretical framework for theorizing entrepreneurship (Swedberg, 2007). However, the study found that entrepreneurial concept was a key factor in creating competitive advantage for enterprises and creating good corporate performance. In the past, entrepreneurs were viewed as having a special character than others. It is believed that the success of an enterprise is more important to the entrepreneur than to other environmental conditions (Carter & Jones-Evans, 2000). Therefore, it is the beginning of research to find the individuality covering personal characteristics of successful entrepreneurs based on great man leadership theory or trait leadership theory as a guideline for creating or evaluating entrepreneurs. However, the results show that the general characteristics of entrepreneurs such as gender, age, work experience and others cannot be used to describe or find a link to the performance. So, later, the attention focused on the entrepreneurial behaviors which corresponds to an another academic group (Bygrave &

Hofer, 1991; Shane & Venkataraman, 2000). It does not focus on the definition of entrepreneurial characteristics, but rather on the entrepreneurial process or entrepreneurship, which is consistent with Schumpeter's view that entrepreneurs who act as innovator is the component of creating the organizational change by integrating the resources available to use in the business. In order to make the business survive in the competition of the industry (Joseph Alois Schumpeter, 1934) there is a study of entrepreneurship that analyzed the trend of education from the article on entrepreneurship published in the Journal of Entrepreneurship Research from 1981 to 2004 by Co-Citation Analysis by Bechard, Grégoire, Noel, and Dery (2006) presenting the key elements of being successfully entrepreneurial leaders. These leaderships consist of 7 areas as: identification and exploitation of opportunities, antecedents and consequences of innovation, entrepreneurship at firm - level, orientation/behaviors, dynamics surrounding new venture emergence and performance, individual characteristics of entrepreneurs, survival and growth, the practice of venture capitalists, and the contribution to firms and influence of social networks in entrepreneurship. From the diversity of these entrepreneurial studies, it is not yet possible to draw conclusions about the generally accepted entrepreneurial or theory of entrepreneurial (Swedberg, 2007), but it can lead to the creation of key components and characteristics of entrepreneurship such as the entrepreneurs that means more than just the entrepreneurs. Entrepreneurship refers to behavior or action, not just a feature. Entrepreneurship is a complex subject that must be explained by many theories. Many recent researches have presented theories that have been studied to explain entrepreneurship. This corresponds to the characteristics and meaning of the entrepreneurial environment, such as: leadership theory, resource-based view theory, cognitive theory and strategic management theory (Chiamchittrong, 2010). But in this research, researcher describes entrepreneurship through resource-based view with a theoretical basis. There is a sufficient variety of resources to gain competitive advantage, prevention of resource depletion, displacement or loss of organizational resources which will finally be a competitive advantage (J. Barney, 1991; Margaret A. Peteraf, 1993).

Therefore, the scope of the study was determined by studying the human resources factors. It is seen that entrepreneurship plays a very important role in getting

started into internationalization or international entrepreneurship. It is a person with sufficient skills and information to evaluate market opportunities with the ability to creatively and firmly establish relationships with other companies, suppliers, customers, government and media, and know the experience and purpose. In addition, it is the person who searches for risk and also has the ability to commit resources in an effective way to achieve a competitive advantage. From the literature review, most of the researches, found in Thailand and abroad, is aimed at studying the international entrepreneurial characteristics that influence the effectiveness of the SMEs business and provides the factors such as entrepreneurial orientation, market orientation, innovativeness, learning orientation, government regulation and others. However, there are few researches related to the international entrepreneurship of SMEs that influence the export performance. Therefore, the researcher is interested in this study in order to know what characteristics of international entrepreneurship can influence the export performance. In the study, there are two focused variables in terms of international entrepreneurship including entrepreneurial orientation and innovativeness.

2.2.3.1 Entrepreneurial Orientation

Entrepreneurship will be an important feature of high-performing companies. William R. Howell said "You cannot stay calm of your success." And, "You have to try to face the curve because a competitor may be scrambling for your success.", he added. Joseph Schumpeter views the entrepreneurship as a process of creative destruction because the original product or production method is destroyed and replaced it with new products or production methods. Thus, entrepreneurship is an important mechanism for change and helps companies adapt to the changes that come from other companies. Entrepreneur-driven companies recognize the risks associated with innovation and take proactive action to create opportunities instead of waiting to respond to opportunities created by other companies. The entrepreneurial opportunity is a state of being able to meet the needs within the marketplace. Entrepreneurial heart is to identify and take advantage of these opportunities. Entrepreneurs must be able to identify opportunities that others cannot recognize. Identifying these opportunities is subject to changing environments and certainly not in pursuit of opportunity (Matthew Hayman, 2002).

In terms of entrepreneurial orientation (Koop, De Reu, & Frese, 2000), former president of the International Society for Applied Psychology, The International Association of Applied Psychology(IAAP), conducted a study of the entrepreneurial personality and six types of entrepreneurial personality. The details are as follows:

1. Autonomy orientation means the ability and willingness that the entrepreneurs can find a way to create opportunities for them by being able to work on your own and being able to make decisions that are compulsive.

2. Innovativeness orientation means having ideas about new products, services or technological processes.

3. Risk taking orientation means being risk-averse in three ways: risking something the entrepreneurs do not know and they are courage to bring many of their assets and loan into the business.

4. Competitive aggressiveness refers to the need to compete, making it difficult, competitors to enter the same market. Entrepreneurs are committed to advanced efforts and carried out different activities that outperform competitors in the market.

5. Stability and learning orientation means that the operator is secured. Do not keep things wrong or be disappointed or frustrated with the mistakes but brought them to the learning.

6. Achievement orientation means that the entrepreneurs find the way to succeed their effort.

Focusing on entrepreneurial orientation is a critical factor for business success under conditions of changing business environment (Catherine L Wang, 2008). Uncertainty of future earnings and the pursuit of new business opportunities can be very effective and accessible (L. Zhou, Wu, & Luo, 2007). Entrepreneurship focuses on the willingness to innovate, searches for self-directed risk, directed and aggressive action, and intense competition with new market opportunities (G Tom Lumpkin & Gregory G Dess, 1996). In addition, entrepreneurial focus is a process of internal enhancement that affects innovation (G Tomas M Hult, 2004).

2.2.3.2 Innovativeness

The word innovation is derived from the Latin word "Innovare", meaning as "to innovate" by National Innovation Agency (NIA), 2007. For a long time, the definition or meaning of innovation as well as understanding is still different from the view and background of each academicians which still cannot be defined as acceptable common definition (Gopalakrishnan & Damanpour, 1997). For Thailand, the National Innovation Agency 2006 is the agency that promotes and publicizes innovation in the country. It defines innovation as "knowledge and creativity that is beneficial to the economy and society" (Aujirapongpan, Vadhanasindhu, Chandrachai, & Cooparat, 2010).

Table 2.4 List of Foreign Academics and Definitions of Innovation

Academics (year)	Definitions of innovation
Evan (1966)	Innovation is the process of developing new ideas.
Utterback (1971) (1994) (2004)	Innovation is the extension of an invention's reach and acceptance into the marketplace in terms of a new product or a new process that has been developed for the first time and brings economic benefits.
Drucker (1985) (1994)	Innovation is an important tool for entrepreneurs to create business competitiveness and wealth by using existing resources or by creating new ones. It is also a development of new knowledge.
Tushman and Nadler (1986)	Innovation is the creation of a product, service, or process that is new.
Damanpour (1987)	Innovation in terms of organizational innovation means new things are being developed in the organization and accepted in the organization.
Rogers (1995)	Innovation is the idea, practice, or something that is new to the person or entity that applies.

Table 2.4 List of Foreign Academics and Definitions of Innovation (Cont.)

Academics (year)	Definitions of innovation
Freeman and Soete (1997)	Innovation is a new product or a new process have improved for commercial use for the first time.
Beije (1998)	Innovation is something new in the business; whether it is production, distribution or it is a product or service.
Pérez-Bustamante (1999)	Innovation is the process of acquiring, operating, storing, and utilizing information in the field of knowledge creation. Research and development, commercial production, and business survival.
Smits (2002)	Innovation is the success of linking materials, devices and ideas into social and economic benefits.
Harkema (2003)	Innovation is the use of ideas or new behaviors in organization. Innovation can be either new products, new services or new technologies. This may be due to an acute or gradual change.
Lemon and Sahota (2004)	Innovation is the result of the use of knowledge and / or new technical knowledge in new markets leading to product development.
DTI (2004)	Innovation is the achievement of the exploitation of new ideas.
Schilling (2008)	Innovation is about bringing ideas to practice to get something or process new.

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Innovation is considered an important tool of entrepreneurship. It is an important strategy for gaining competitive advantage, marketing opportunities and success for business. It comes from the fact that entrepreneurs use change as an opportunity to make a difference in their business. It is generally understood that being an entrepreneur and innovation can be a leader (Peter F Drucker, 1994; Kanungo, Duda,

& Srinivas, 1999; F. Zhao, 2001). Entrepreneurship and innovation are discussed and studied for quite a long time, but the concept of innovation in economics is interesting and widely studied recently (Grupp & Maital, 2001). Sundbo (1998) summarizes theories of innovation theory by looking at innovation as an important tool for entrepreneurship for creating a competitive advantage, marketing opportunities and success for business. This can be achieved by the fact that entrepreneurs are taking the issue of change as an opportunity to make a difference in the business. The importance of innovation in entrepreneurship attempted to link the importance of innovation to entrepreneurship (Joseph Alois Schumpeter, 1934). An innovator is an innovation that will bring about economic growth only when the entrepreneur is an innovator. Therefore, the concepts of innovation from an entrepreneurial perspective, entrepreneurs are considered to play an important role in the innovation process. And, innovation has the role of being a successful entrepreneur, both of which have a positive relationship (F. Zhao, 2005). It also defines the characteristics of those who will be classified as entrepreneurs must be a person who can set up a new business by using new ideas and integrating what has existed to create innovation (Bygrave, 1994; Johnson, 2001). In addition, Dorf and Byers (2008); Hindle and Legge (1997), believe that entrepreneurship needs leadership and opportunities for innovation; meanwhile Peter F Drucker (1994) emphasized that entrepreneurs must have the ability to research, design and modify ideas and inventions them through the marketing process, and they can use innovation to build their business success.

For this reason, one of the most important aspects of entrepreneurial activity is innovation (Michael A. Hitt, Ireland, Camp, & Sexton, 2001). Successful entrepreneurs in international business must not only discover valuable innovations, but must also bring the innovation to success (Acs et al., 2001). This type of process is the goal of global business. Innovative work in innovation is something that is gaining in popularity today. Innovative organization is a recent stream of competition. Who achieved first will be in the forefront of success in the next age. However, which organizations do not care about innovation may be gradually growing. Therefore, all public and private organizations should pay attention to the importance of innovation in organization.

Classification of innovation can be divided into several categories according to the scoped characteristics, purpose of adoption, common classification and utilization in research and management. Most innovations are composed of three types (Bessant & Tidd, 2007; Gopalakrishnan & Damanpour, 1997; Grimm et al., 2006; Schilling, 2008). The target of innovation is divided into product innovation and process innovation. The degree of change divides innovation into two broad categories: radical innovation and incremental innovation. The area of impact is classified into two types: technological innovation and administrative innovation.

2.3 Resource – Based View Theory (RBV)

Based on the RBV theory, internationalization is new business development aims to rapidly develop dynamic capabilities, whether it is domestic, foreign or global business. RBV theory is a theory that discusses specific resources and capabilities. Capabilities of the organization, which was influenced by the concept of economists Chamberlin and Robinson in 1930. Chamberlin provides the key capabilities of a business enterprise that means technical knowledge, reputation, brand awareness, ability of the manager to build effective teamwork, and ability to create a patents brands and trademarks (John Fahy & Alan Smithee, 1999). RBV theory is developed under the strategic management theory which starts with the foundation of two theories including business strategy theory written by Andrews (1971) and Chandler (1962), and theory of growth of firm studied by E. T. Penrose (1959). Since the mid-1980s, the RBV theory has developed and gained more attention. Wernerfelt (1984) proposed the idea that internal resources are important in creating a competitive strategy, with emphasis on cost of production and the differentiation in goods and services. Subsequently, many investigators gave this attention and applied the theoretical RBV as a tool in the study including a competitive advantage (Grant, 1991), market capabilities (Hunt & Morgan, 1995), opportunities and organizational knowledge (Conner & Prahalad, 1996), strategic management (David J Teece, Pisano, & Shuen, 1997), marketing strategies (John Fahy & Alan Smithee, 1999), ability of enterprises to use the resources to find the opportunity and create a new entrepreneurs (Alvarez & Busenitz, 2001) and

entrepreneurship strategies (Ireland, Hitt, & Sirmon, 2003), which are very important factors to create a competitive advantage.

Resource refers to the tangible and intangible corporate assets, that a business possesses, which can be organizational culture, patent trustworthiness, talent management, skills management, process information and knowledge (J. Barney, 1991; 2001), and strength (Porter, 1981) which organizations can strategically develop and improve their organizations efficiently and effectively (Grant, 1991). The resources can be divided into six categories: human resources, physical resources, financial resources, technological resources, reputation and organizational resources. Additionally, these six categories are also consistent with the conceptual framework of (Carmeli & Tishler, 2004)) who mentioned that the resources refers to the managerial skills, human capital, and perceived organizational reputation.

Resource-based view (RBV) is used to define an organization's business policies and to look at efficient internal resource that can create a competitive advantage through looking at resources and capabilities. Resources can be divided into two categories: tangible resources and intangible resources. The first is about tangible resources, in general, referring to fixed assets and current asset such as land, buildings, factories, capital, machinery, finance, physical, personnel and technology, etc. The second is about the intangible asset, which it is an invisible asset. The intangible resources are not available, but the organization can own them through their action such as trust and loyalty, production experience, leadership in technology, reputation, cost, organization, patent, trademark, copyright and trade secret, etc. If the organization wants to create a sustainable competitive advantage, it should create primary resources heterogeneous including skills, abilities and stationary resources such as trademarks, work processes, knowledge or intellectual property, etc. Capabilities refers to the ordinary capabilities, an asset that is not visible. So, capabilities is the process of the Organization to bring information and knowledge controlled by the organization including information capabilities and creating relationships between customers, suppliers and variables associated with business performance, such as teamwork, organizational culture of trust between the management of the organization and related employees. The capabilities and methods, integrating assets, people and processes in the

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organization, are used by the organization to transform inputs into outputs by using existing resource capabilities to formulate strategies to improve the efficiency and effectiveness of the organization in order to create potential and competitive advantage (Weerawardena & Mort, 2012).

Resource-based view (RBV) is the idea related to the key characteristics of the resources that the organization possesses. As the basis for determining the results of operations which lead to a sustainable competitive advantage in the business. By considering cost advantage, price, and capacity to differentiate the products or services, the resources should include the VRIO features as follows:

1. Valuable resources integration and value-added within the organization value

2. Rareness, something that is difficult to find

3. Imitation, it should be not easily imitated

4. Organizations can build expertise in business operations or even control the impractical material. Be exclusively, it cannot be replaced or difficult to reconstruct organization.

Competitive competencies of the organization play an important role in running a business in the competitive conditions, both in domestic and international markets. The organization can utilize its maximized resources to benefit the organization and sustainability.

J. Barney (1991) stated that resources are the source of a sustainable competitive advantage that includes the unique attributes that the resource must bring to the organization. Value is one of organizational resources and it is scarce because it cannot be imitated and has high cost to be replaced.

Resource-based view (RBV) is a performance model of an organization that focuses on resources and capabilities. J.B. Barney and Hesterly (2006) classified the resources into financial resource, physical resource, human resource and organizational resources through human resource architecture (P. M. Wright, Dunford, & Snell, 2001).

This study describes international entrepreneurship through resource-based view with a theoretical basis. There is a sufficient variety of resources to gain competitive advantage. Protecting resources from dislocation or loss of corporate

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resources will be a competitive advantage (J. Barney, 1991; Margaret A. Peteraf, 1993), which can be used to describe entrepreneurship in terms of utilizing the resources to maximize the benefits to the organization to gain competitive advantage.

2.4 Dynamic Capabilities

Dynamic capabilities consist of two parts: (1) dynamic means the ability of the body to create new capabilities that correspond to the changing environment of the business to respond to new innovations in market entry; and (2) capabilities refers to important role in strategic management by integrating and reconfiguring both the internal and external skills of the organization to the changing needs of a rapidly changing environment (Teece et al, 1997).

RBV describes its success in creating a competitive advantage with four attributes (value, rareness, imitability and organization: VRIN), but RBV cannot create a sustainable competitive advantage, especially in a constantly-driven market (Eisenhardt & Martin, 2000). Organizations that can change their resources and capabilities will generate dynamic capabilities, especially in volatile markets. Teece et al, (1997) and Moustaghfir (2008) proposed that dynamics capabilities is a function of organizational capabilities (ordinary capabilities) to change and develop, leading to better performance than competitors in the long run. Therefore, the dynamic capabilities, focusing on processes in the organization, aim to create, develop and use new knowledge of organizational capabilities. The important element of dynamic capabilities is the organization that does not just use its capabilities to find the benefits from its resources, but also must compete with new capabilities to develop its organization (Teece et al, 1997).

Paarup Nielsen (2006) proposed that dynamic capabilities are a process of building a knowledge-based foundation. This is what flows into the organization at all times. And, the organization has a duty to collect knowledge in the store. When the organization aims to develop or create new products, the organization will benefit from the accumulated knowledge. Isabel Ma Prieto and Revilla (2006) emphasize that it is not just the company's ability to learn can gain the competitive advantages, but any company with high knowledge can have opportunity to gain as well. So, it can be said

that talent with high ability and knowledge is the key point to the company to gain competitive advantages.

In addition, Isabel M Prieto and Easterby-Smith (2006) emphasized that, in the long run, creating new organizational knowledge is based on both the utilization of existing knowledge and the search for new knowledge for the competition. Moustaghfir (2008) stated that organizational competencies depend on the knowledge assets that make the efficiency and effectiveness of the organization's knowledge process. Knowledge is a resource that supports talent. Nonaka, Toyama, and Nagata (2000) stated that knowledge assets are the organizational characteristics that are essential to create value for the organization.

Cavusgil, Seggie, and Talay (2007) introduced the elements of dynamic capabilities which include:

1. Organizational and strategic process: a new restructuring of resources will be created to respond to market changes. The restructuring can include processes, integration, reconfiguration, and increase and decrease of resources to fit market changes. However, Kogut and Zander (1992) mentioned that organizational and strategic process can include the combinative capacities that represent organizational processes that design and build knowledge resources and bring about new applications.

2. Learning: learning is consistent with that of Teece et al. (1997) who stated that learning is the repeating and testing whether the task can be created with better and faster results, unlike the RBV which emphasizes on static learning.

3. Path dependence: path dependence on the evolutionary path of the organization is what helps the organization to learn from the past, present and future of its dynamic capabilities and competitive advantage.

4. Asset position: asset position emphasizes that knowledge asset is difficult to trade (Cavusgil & Seggie & Talay, 2007) because it is a process of creating knowledge that cannot be imitated. The elements are as follows.1) experiential knowledge asset; 2) conceptual knowledge asset; 3) systematic knowledge asset; and 4) routine knowledge asset.

5. Replication and best practice: Teece et al. (1997) describes the importance of succession or transfer of ability from one generation to another based on competitive advantage.

Teece (2007) revealed that, in 1997, the dynamic capabilities is divided into 3 parts.

1. The ability, to recognize an opportunity and the threat occurred with the organization (Sensing), means the activities of organizations in monitoring and examining the environment that has changed in the industry which could lead to new opportunities in business, or new threats.

2. The ability to benefit from the opportunities emerging (Seizing) is when organizations are able to recognize that there are new opportunities emerging. The organization must be able to take advantage of that opportunity such as product development to meet the new market, investment in new technology solutions, design of new business models, and processes of the correct decision in order to enable enterprises to benefit from the new arising opportunities.

3. The ability to create and update resources (reconfiguring) such as work processes improvement, corporate restructuring, and service knowledge management can help organizations to retain the benefits of new opportunities that arise, and to avoid stick to what the organization had been operating, which may not benefit anymore to the organization when the external environment changed.

2.5 Reconfiguration Capability

For the context of small and medium enterprises, especially in the aspects of export of Thailand, the business opportunities are always emerging. However, the company will seek and take advantage of opportunities that arise and requires the ability to adapt itself (S. Chakravarthy, 1982) to create learning and absorbing external knowledge. Knowledge builds development. The venture has the potential to meet the new opportunities (Chatterji & Patro, 2014) and the creation of innovations that would bring up a business model (Wilden & Gudergan, 2015; K. Z. Zhou & Li, 2010). As aforementioned, it can be mentioned that the ability of dynamic capabilities is useful for the business and create the innovation which can help explain the context of SMEs in

Thailand. For further detail, the followings are the characteristics of dynamic capabilities.

2.5.1 Adaptive Capabilities

Business opportunities can happen at all time. The organizations then need to be prepared to respond to the arising opportunities. With that, the ability to adapt the organization to the new coming opportunities is very important in order to take advantage of them (Chakravarthy, 1982). The adaptive capabilities means the organizations are monitoring business opportunities and preparing the organization to take advantage of the opportunities in order to gain the competitive advantages. Staber and Sydow (2002) stated that the organization would improve its capabilities in the ways as follows:

1) Be able to learn, create and change quickly situations, where the work arrives at the point the work is the same, to the situation is new.

2) Be prepared to test new products or services.

3) Be able to seek, identify and utilize the market opportunities and technological opportunities that have evolved to improve innovative products or services based on new ideas (Staber & Sydow, 2002).

Various researches revealed that the ability the organization can adapt to the new opportunity exists which it is accounted as an important source can create a sustainable competitive advantage to the organization, such as developing new products/services or being successful in marketing. The adaptive capabilities is crucial and enables organizations to create a dynamic spatial abilities. However, the adaptive capabilities sends the results to the organization with innovation. By the research of Tuominen, Rajala, and Möller (2004), the study result divided the adaptation ability into 3 aspects: adaptive technology, adaptive marketing and organizational structure. According to a study of R. E. Miles, Snow, Meyer, and Coleman (1978), the study revealed that the management level group or supervisor will determine guidelines and decisions to adapt to suit the environment. From technological change and changes in the market of each industry, the study is consistent with research of Akgün, Keskin, Lynn, and Dogan (2012) showing that the ability to adapt to product innovation, which data was collected from 153 samples in Istanbul, Turkey, was divided into three parts:

the ability to adapt to technology, the ability to adapt to the market and the ability to adapt to the management. The three adaptabilities have a positive impact on the product innovation of the organization. Additionally, the adaptability can be also explained with the in-depth detail describing that the interaction of people in the organization can help create the management flexibility and availability of resources at the enterprise level. Nevertheless, this will help to improve adaptability.

2.5.1.1 Market Adaptive Capabilities

It involves learning and understanding the needs of customers, who are the target audience of the organization, and the behavior of competitors by monitoring and following up such changes in order to prepare the available resources and to respond quickly to customer changes and maintain customer satisfaction (Akgün et al., 2012).

2.5.1.2 Technology Adaptive Capabilities

It demonstrates the ability of organizations to monitor the evolution of technology related to their products and services. The ability to manage those technologies is very good. It enables the organization to produce high quality products, optimize production processes. It also reduces the risk associated with the cost of an organization's services or products due to technology used by the organization (Akgün et al., 2012; Tuominen et al., 2004).

2.5.1.3 Management System Adaptive Capabilities

The corporate management system encourages employees in the organization to change the way they work in order to enable organizations to respond to rapidly changing market conditions or industries (Akgün et al., 2012). Jantunen et al., 2012; Rindova & Kotha, 2001; Tuominen et al. (2004) demonstrate organizations that track changes occurred outside the organization, no matter in terms of customer needs, competitors and technology change, will adjust resources in the organization to respond to them. The organization continues to maintain its competitive advantage.

2.5.2 Innovative Capabilities

Innovation refers to the use of knowledge to create new products or services for its customers which they may have higher or lower quality than competitors (Afuah, 2003). Indeed, continuing to innovate requires good innovation management.

Innovation management can be viewed as a form of organizational competence. Innovative Capabilities refers to the ability to change ideas and knowledge into product creation, processes and systems that are useful to the organization (Lawson & Samson, 2001). Innovation is not just about creating new things. However, there must be a synergy between creating new things and organization's business management process. The results of innovative capabilities can help organizations to increase efficiency. Innovation is a combination of process and organization. It consists of seven main elements.

- Vision and strategy
- Harnessing the competence base
- Organizational intelligence
- Creativity and idea management
- Organizational structure & systems
- Culture and climate
- Management of technology

→ Innovation capability

Figure 2.1 Elements of Innovative Capabilities
Refer to: Lawson & Samson, 2001

The adaptive capabilities based on the elements in the literature, according to Lawson & Samson (2001).

1) Vision and Strategy

Strategies and innovations are critical to the effectiveness of innovative capabilities. The strategy determines the components of the organization's resource, products or services, processes and systems. For organizations dealing with an uncertain external environment, they must decide which business type to be focused on and which industries to be competed. In fact, innovation must be successful, and the organization must be clear about its vision and business direction in executing the business. Employees in the organization need to understand the vision and strategy, which is a very important step in moving to an innovative organization. Most innovative organizations try to develop themselves to be outstanding. Employees in those organizations have a clear goal, a challenge in which to innovate. Find new ways to

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create better products, services and processes to achieve the goals of the vision that has been laid to create outstanding quality products to the market.

2) Harnessing the Competence Base

It refers to the ability of organization to manage resources appropriately and efficiently. This kind of ability is critical to be successful innovation. Herewith, there are several key variables: resource management, variety of funding, channels, innovation champions, and E-business.

3) Resource Management

Effective resource management helps create more innovative initiatives and may encourage innovation. Success in developing new products requires the coordination of knowledge and resources in a variety of areas. Successful organizations in managing innovation will accumulate experience, learn and continually improve operations.

4) Variety of Funding Channels

Innovative organizations use various financial channels to encourage risk taking or entrepreneurship by asking for funding from the department or the R&D organization. So, it can be said that the funding can encourage innovation to continue in the organization. However, the problem regarding to the funding channel is about the job displacement of specialists in each field decreased.

5) Innovation Champions

The success of innovation comes from the process of innovation where there should be the support for each member in the organization, such as technology experts, project experts, business professionals and so forth. This would help coordinate and encourage innovation in the organization (Bessant & Tidd, 2007).

6) E-business

The use of information technology has been recently used to support the business process innovation. In the past, the only way to use information technology is to do things in the traditional ways such as going to meet each other or calling to make an appointment. But nowadays, the organizations are now able to use these technologies to modify their traditional activities to spread the innovation from one area to the other area. In online format, the business can be operated in anywhere. Also, the employees

need not be included in the same place. This is very useful for organizations since it can make them to possibly gather knowledge regarding products/services development from all around the world. Consequently, it can help develop new products to market faster.

7) Organizational Intelligence

Organization intelligence is the ability to manage information to benefit the organization by understanding the organizational environment (Glynn, 1996). The main components can include organization learning about customers and competitors. The details are described here as follows.

7.1 Learning about Customers

Organizations should encourage employees to monitor their needs or problems of customers. Many organizations focus on customer needs and create innovative new products or services to help solve problems for customers. This creates great value for the customers.

7.2 Learning about Competitors

The process of creating, learning and applying the benefits associated with the products and strategies of business regarding competitors is very important. The organizations that have information about competitors, such as competitors' weaknesses, business limitation or direction of product/service, can use such knowledge to gain the advantage for the business. Therefore, learning about competitors is also important element of organizational intelligence.

8) Creativity and Idea Management

Creativity requires a different way of thinking. In organization, creativity may come from small idea of employees who are willing improve their jobs. The effect of creativity may change the business strategy or even a new business model. Organizations must continually promote creativity in all levels of work. In fact, the creativity can be either untested or tested; but, it has to be driven by the way to apply new knowledge or corporate vision.

9) Organizational Structure & Systems

Good organizational structure and systems stimulate innovation in the organization. Successful innovation requires an appropriate business structure (Burgelman, Christensen, & Wheelwright, 2004). The components are as follows.

9.1 Organizational Structure

High performance organizations drive and motivate employees in different departments within the organization, such as production, marketing, sales, and other to collaboratively innovate their work without obstacles and blocks. This could profoundly benefit the organization. Therefore, the more organizations that create these kinds of cooperation, the more innovative the organization can be.

9.2 Reward Systems

Rewarding individuals or teams is a highly motivating way to empower employees to rethink their thinking and to be the key to success in innovation-related activities. (Saleh & Wang, 1993) finds that organizations with high innovation potential have good rewarding systems that encourage employees to create new ideas and innovations. In contrast, the organizations that have low innovation potential have do not pay attention to such systems. Indeed, awards can be made in several forms, such as public announcement, financial bonuses and others. Individual awards will encourage new ideas and radical innovations. Rewarding with the team, it promotes the increased cooperation in innovation and incremental innovation. However, the rewarding system may not lead to a completely new innovation to new markets or change the composition of business competition (Lawson & Samson, 2001).

9.3 Stretch Goal for Innovation

Targeting the innovation challenge to employees is what drives the emergence of innovation.

10) Culture and Climate

Working environment and culture in the organization are important factors that affect the success of innovation. The following elements are related to the culture and climate of organization:

10.1 Tolerance of Ambiguity

Risk taking is one of the behaviors of an innovation organization (Saleh & Wang, 1993), but that does not mean that organizations have to risk everything. Anything that is not needed and can reduce the risk of management and control operations is a good thing. However, when the organization is already

vulnerable and the results are not as expected, it is accepted and considered as an opportunity to learn and develop.

10.2 Empowered Employee

Empathy and empowerment of employees is considered to be one of the best ways to create a culture of innovation in the organization. The organization employs a talented and expertise in various fields to work, which they may have an idea or vision that is different. The authority or promotion given to the group could result in new approaches to create innovation in organizations.

10.3 Expect Creative Time

Innovators need time to think creatively. Giving time to employees at the time of work for thinking or innovating is important.

10.4 Communication

Communication within the organization is very important. Research institutes and networks that are involved in the business revealed that the time is essential to create learning and innovation. Communication contributes to sharing knowledge, experiences, ideas, differences and w solutions, which are part of innovation. Innovative organizations seek to facilitate the exchange of knowledge among professionals, collaboration of different agencies, which it helps to learn and develop new things.

11) Management of Technology

Technology management is very important for today's organizations. Technology is playing a role in business. This is what makes a business work better and reduce costs in activities. It is also an important part of helping organizations to innovate successfully. Most innovation organizations implement technology strategies, strategic innovation and business strategy in the same direction. This will create a powerful mechanism to create a competitive advantage for the organizations.

2.6 Competitive Advantage

The sustainability of the competitive advantage of the business is related to the ability of the company to protect the resources, that is, the source of their competitiveness (Amit and Schoemaker (1993); J. Barney (1991); David J Teece et al.

(1997)). From the view of the RBV theory, the competitive advantage can be obtained in 2 different ways: 1) in the event that the company is using the resources that are rare and difficult to mimic and can be customized to the organization more effectively than the competition with an economic cost of the products and services in the same manner under the recognition of the value of the products for the cost of the customer paying. This strategy will be supported as the leader in the low-cost. And, 2) another way to do this is to provide a competitive advantage with the increase of awareness of the benefits to the customer if a valuable resource for the rare and difficult to mimic can be customized to the organization and used to create the difference in the service provided for the same price. It will be the awareness of the benefits that may be higher giving the company a competitive advantage. This strategy will be supported as the leader with a difference (Margaret A Peteraf & Barney, 2003).

From the study of Harms (2009), the nature of the enterprise is a feature of the business focusing on the change of a product or service. That will be able to create the quick business growth for them. This business may be using a "strategy focuses" on the product or target market as well as the process to create the value of the organization in order to increase performance and support business growth. Harms offers the nature of the fastest growing business for 7 reasons:

1. Market coverage is to use the strategy and ability to respond to the market in overview or to respond to the market or some of the specific market segment.

2. Internationalization is the ability of the organization in the international market.

3. Entrepreneur's management is the ability to use the strategy and seek new business opportunities of the entrepreneurs.

4. Pricing as part of a product, which is one of market strategy function, will be needed to determine the prices of goods in the different levels and different from our competitors so that the customer is willing to pay for the purchase of the product

5. Innovation is to create innovative options and offer to the market innovation which the competition is not able to replicate or there is no other products to replace.

6. Cooperation is the ability to collaborate and create a partnership between business and other industry to share the risk together, the use of technology to market

and enhancement of organization's knowledge and skills will lead to the business potential.

7. Human resources management consists of the management participating into equity, including the compensation or incentives to employees, and challenge towards the work environment which means the open of the opportunity for employees to change the tasks in order to learn the work flexibility and challenge under various environments.

From the research work of Harm, even if there is a study on the variable nature of the fast growing in the 7 reasons, the study found that some of the plant is not yet able to be applied to the variable because the environment of the property is different and is constantly changing affecting the time period as well as location of the plant (Sanyawiwat, 2003). Today enterprises need to create a competitive advantage because of the competition in the today's world. In addition, the enterprises need to create a model to manage and present a competitive advantage in the environment. The long-term success is the ability to create the achievement and maintain the competitive advantage. In the understanding of the source of the competitive advantage in terms of plant, it is important for the study of the concepts and theories that are relevant to create a competitive advantage. However, there is no ideas or any theory of the present in the workplace and achieve sustained success.

From the ideas and theories that are relevant to creating a competitive advantage, it is shown that the enterprises, that have the competitive advantage, need to have the good performance of management that responds to the changes of business environment including production, goods and services to meet customers and stakeholders so that the competitors will not be able to follow the same way. This is consistent with Professor Porter (1985) mentioned that the strategic planning can help determine the position of the competition.

The theory of competitive advantage by Professor Porter (1990) has the important information about the industry that will help the industry successful. There are 3 reasons as follows: 1) competitive strategy, 2) competitive advantage and 3) national competitive advantage. The details are as follows.

2.6.1 Competitive Strategy

The competitive strategy, as perceived by Professor Michael E. Porter who presents a strategy can be divided into three following points.

2.6.1.1 The cost leadership strategy means that the advantage of industry will be created when the organization can have a low cost of production or services including the new product designs. In addition, the low cost can also refers to the faster delivery comparing to the competitors. Lastly, the network with the purchaser can also yield the low cost of production.

2.6.1.2 The differentiation strategy refers to create value for the products in the high quality. This could also include the after-sales service which this different from the competitors. In align with the differentiation strategy, it can positively influence the competitive advantage over the competitors.

2.6.1.3 The focus strategy focuses on a niche market or specific industry in order to use the specific strategy to overcome the competitor in the market. However, the focus strategy is normally used in small or not-to-large organization. In fact, the niche market is very difficult find; but if any organization can find the niche markets, it will become a market leader.

2.6.2 Competitive advantage

The competitive advantage function based on the concept of Professor Michael E. Porter that is for the industry can include the structure of the industry and the position of the business. The five force model can be representing the dimension related to the competitive advantage. Here is the five-force model.

Porter (1980)' five-force model can contain as follows.

1. The threat to new entrepreneurs

2. The threat of substitutes

3. The bargaining power of supplier

4. The bargaining power of customer

5. Rivalry among existing competitors

These dimensions consider the nature and extent of competition, such as the potential for generating industry profits. This will help management to determine the

right strategy and to protect themselves as well as respond to competitors within the industry.

The 5 factors are important. This is the definition of the industry' competitive advantage that will be used to create an industry's long-term success.

2.6.2.1 The threat of new entrants to the market: New competitors in the industry will be a competitive barrier to the old business because of the increase in competencies that will dominate the market. New competitors will require businesses to use more resources like advertising budgets and research. In the past, it may not be necessary that the executives must find a solution from the new entrant. However, the recent study revealed that the new entrant can create threat to the entrepreneurs. Herewith, the major obstacles are:

1) Economies of scale - a decrease in cost due to mass production.

2) Product differentiation - physical differences and perceptual differences that will make a product unique or valuable in the eyes of the consumer.

3) Capital requirements - the amount of investment required to enter the industry. This consists of factories and tools as well as working capital.

4) Switching costs - the cost caused by the buyer that changes from one vendor to another. This includes the cost side, psychology and budget.

5) Access to distribution channels - costs for developing ways to distribute products or services to consumers.

6) Cost disadvantage - it is the cost of the production of new comers that must encounter when entering to the market. New arrivals cannot save on production size.

7) Government policy - the government issued laws and regulations such as concession, raw material control, standard of environmental protection, safety standards for consumers and others. This can be accounted as the barrier to entry into the market as well.

2.6.2.2 The bargaining power of the firm's suppliers: the suppliers also can create the threats for the organization as well since it control the bargaining power towards the cost of supplies. If there is few suppliers, the result will not be to the organization who is purchasing the raw material from the supplier. However, this will

be turn to contrary point when there are more number of suppliers; this will be positive resulting to the organization who is purchasing the raw material. Therefore, to gain the competitive advantage including other points such as low cost, quality, sufficient supply and network, the organization should consider the market where there is alternative suppliers. The followings show the considerable point to gain competitive advantage from supplier side.

1) A few suppliers,

2) Greater concentration than the buyer industry,

3) Non-availability of substitute products,

4) Relative lack of importance of buyer to the supplier group,

5) Importance of the supplier's product or service to the buyer

6) High differentiation by the supplier

7) High switching costs for the buyer

8) Credible threat of forward integration by suppliers,

9) Forward integration involves expansion and the movement of inputs in terms of production process and distribution.

2.6.2.3 The bargaining power of buyers: The buyers of industrial products will generate power to negotiate the price or demand for products and services with greater quality comparing to the original price. Buyers will have the bargaining power to buy in the following cases.

1) Greater concentration than the supplier group,

2) Large volume purchases,

3) Undifferentiated or standard products or service of the suppliers,

4) Credible threat of backward integration by buyers,

5) Be the primary buyer of the manufacturer or distributor,

6) Accurate information about the cost structure of the supplier, and

7) The supplier's product which it can lead to only marginal savings for the buyer.

2.6.2.4 The threat of substitute product: It is the ability to find products replacement. This will cause price constraints on the product. When the price of an existing product is higher than the substitute product, the customer will change or

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convert to replace products. Businesses that have a barrier to substitute products must try to make a difference in the competition. One option to point out to the buyer is about the cost that the increase in the purchase price of a competitor's product. In addition, businesses must strive to develop and improve the product to make a difference, including lowering prices for sensitive buyers. Consequently, the price is not the cause the buyers to change to buy the product or use the service from another brand.

2.6.2.5 The intensity of rivalry among competitors: Many industries in the liberal economy have always encountered the severe competition, either price competition, product differentiation or product innovation. Therefore, the management must keep in mind that businesses and competitions cannot be separated. Also, the intense competition can result the following consequences:

1) Numerous or equally balanced competitors,

2) Slow industry growth,

3) High fixed or storage cost,

4) Lack of differentiation or switching costs,

5) Manufacturing capacity,

6) Competitors with diverse strategies, origins and personalities,

7) High strategic level used due to customer acceptance

8) High exit barriers for economic, strategic or emotional reasons

2.6.3 Competitive advantage of nations

A Competitive advantage for the country producers is based on the concept of Professor Michael E. Porter's (1990). The competitive advantage for the country will affect the competitiveness of the industry in the country level. This has been set in the frame of a Porter's diamond model which is a model that can be used to analyze to determine if the competitiveness of a country is more than another country. The model has 4 important components that can be adjusted to study the competitive advantage of industry. Therefore, the diamond model of the factors that have the association with each other will show the effect of a competitive advantage in the country level as follows:
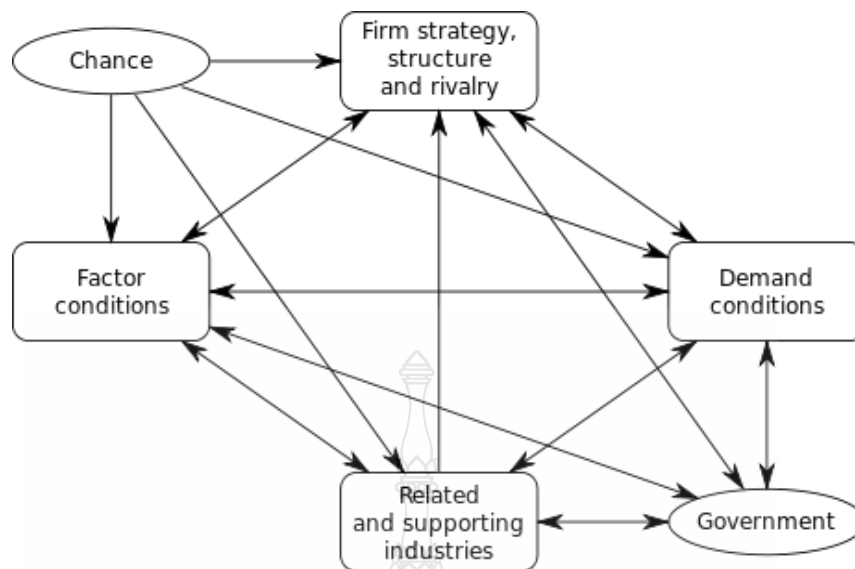
Figure 2.2 Diamond Dynamics Model: Michael E. Porter

2.6.3.1 The production factor (factor condition) is the ability of the country to change the basic resources of natural resources and other resources to the competitive advantage of industry by means of production which include entrepreneurial management (EM), cooperation, human resources management, location of the enterprises, type of enterprises, enterprises duration, experience of entrepreneurs in foreign markets and etc.

2.6.3.2 The demand or market factor (demand conditions) refers to the market side. The numbers of consumers and level of consumers' need in the country towards the industries are a very important part of the business that will create a competitive advantage if the entrepreneurs in the country can focus on the foreign market and its conditions and nature. In the study of demand condition, there are 4 elements consisting of market coverage, internationalization, first mover, and product quality and standard.

2.6.3.3 Related and supporting industries: This refers to the quality or strength of the supporting industry or industry related to the business. The business can become the leader in the global industry if there are a strong supporters. Industries with high quality can bring in good raw materials, equipment and machinery to create new innovations and associated industry to make an added value in a production. Align with

this, it will cause the advantage compared to the competition in the market. This includes a network of business advantage in terms of raw materials sources and delivery competence.

2.6.3.4 Firm's strategy, structure and rivalry: It is a strategy and direction in doing the business entrepreneurs in the industry because they are the most important factors. The firm's strategy, structure and rivalry can result in positive or negative competitiveness if there is good or worse management of related resources including market condition, cultural dimension and others. In addition, there are also other factors, especially the business strategy, which can push the organization to gain competitive advantage. The business strategies can include cost leadership, differentiation and focus. The more the organization can respond the customers, the more the product can be success, helping the development of the model and quality of products and service, and reducing costs and improving business performance.

2.6.3.5 Chance or opportunities: The opportunity provided by government and business environment; such as key technology, market opportunity, population, culture, government policy, products and service standard, and others, can affect the four main elements of the model. The opportunity can determine the competitive potential, influencing the utilization of the certainty or uncertainty to promote the countries' competitiveness.

2.6.3.6 Government is the key factor: Governments in all level of the nation can develop or constrain the development of the national industry. Even though the state sector is not the element that can directly create a competitive advantage, the policy rules and the official processes, defined by the state sector, can have a significant impact on the 4 elements of the model which finally affect the industry's competitiveness. For instance, the antitrust laws may affect competition in the country where the liberal market is promoted. The rules may cause the terms in domestic demand or investments of the state changes. In the study, to change the conditions of the means of production as well as the use of the state sector can encourage or supporting and related industries. Therefore, the entrepreneurs are required to follow the policies of the government sector and must be aware of the influence of these which may result in a positive or a negative of the national competitive advantage.

2.7 Export Performance

Organization performance is the accomplishment of organization. Stuart-Kotze (2006) defined the organization performance as the right action at right time according to the behavior. Ramsey (2008) stated that organization performance defined as an achievement of set goal which occurred by the capability or resources to create the output. This is correspondent to Singer and Edmondson (2008) who declared the organization performance as goal achievement which consisted of various indicators and some indicators might be important for only some organization. The key performance indicator of business is a heart of strategy which the management level would apply it as a tool for strategic decision. This also matched with Natarjan Venkatraman and Ramanujam (1986) implied that performance evaluation is important which it can define the key factors of strategic management and organization effectiveness.

Corporate performance evaluation is a prudent approach. Especially, the performance associated with the operation of the operator of small and medium enterprise (Murphy, Trailer, & Hill, 1996). This is because the performance of the enterprise is the key builder. One of the most studies related to the corporate performance is organizational management. It is accounted as an important indicator of success and survival in business operations. Commercial enterprise operational performance is recognized as having a critical role in the organization's performance evaluation and is a key determinant of organizational survival (Devinney, Richard, Yip, & Johnson, 2005). Enterprises are complex and multi-dimensional. There are several ways to evaluate a business, depending on the purpose of the application. In practice, the performance of an enterprise often evaluates or measures the ability of an enterprise to offer its products or services to the target market (Carton, Hofer, & Meeks, 1998). Enterprise empirical appraisals can generally be measured in three groups. The first group is the measure of growth: income, number of employees, market share, others. The second group is the profitability measure: return on investment and others. The third group is the survival measure: number of years the enterprise operates and the financial ratios, others (Pasanen, 2003). In the beginning, it may be concluded that

performance evaluation should be measured to cover operations such as annual sales, gross margins, operating cash flow and net profit (Whiting, 1986).

Performance evaluations of small and medium enterprises cannot be expressed in one dimension (Murphy et al., 1996), due to their complex structure, but it should be evaluated in several dimensions to meet their needs: for those who have a stake in the organization and for the purpose of evaluating their performance (Devinney et al., 2005). In addition, because only one type of performance cannot provide reliable and determination of performance; therefore, there should be a study on causal relationship between the independent factors that drive the reliable performance dimensions. N. Venkatraman and Ramanujam (1987) stated that performance evaluation requires a multidimensional measure and includes both financial and other metrics (R. Kaplan & P. Norton, 1991). Specifically, financial measurement such as profitability is a good assessment of the performance of a large enterprise. It is a measure of demand for accurate revenue and cost data for big and small enterprise. However, there are many costs that are not straightforwardly and clearly recorded, for example costs of family labor. The use of existing assets, for example, makes it difficult to calculate the cost of a small enterprise. Thus, the existing assets measurements is inappropriate for measuring the business performance because the data may be incomplete and represent the enterprise's size measurement as medium or small incorrectly. Therefore, the appropriate performance measures towards small and medium enterprises can be both financial and non-financial performance. The method can be used to evaluate both objective and subjective. Objective is the use of data recorded from the accounting system. Although there are strict rules, recorder error and recording method, it can also be diverted for administrative reasons. The key weakness is the exact recording structure. If it is desired to measure things that are not designed, the organization must supply or modify the recording or processing. In addition, the historical accounting data does not reflect future performance. For subjective measurements, access to information from direct inquiries from those who know accounting rules can be done at all levels in the organization (Devinney, et al., 2005). Subjective is accurate and sufficient to replace information derived from objective measurement. Empirical studies have shown that the use of information obtained from management agents is not biased until it is

inconsistent with the subjective data collected from primary and secondary sources. However, the data from primary sources is more reliable than data from the secondary sources for measuring sales growth. Research showed that data derived from subjective measurements can be used to substitute data derived from objective measurement, but it cannot declare which one is better (N. Venkatraman & Ramanujam, 1987). The small organization's objectivity is uncertain, due to the ambiguity of what to measure and ability to access the actual accounting data. There are studies that use subjective information to measure return on assets and sales growth instead of objective information by collecting information from the management team of the organization. From the study, it was found that subjective data could be used as a substitute for objectively reliable data in terms of data collection and empirical results. Objective methods can be used to collect data from accounting and management records and an independent way of measuring performance, which can be collected from an entrepreneurial perspective or from those who work in the organization (Campbell, 1977). Several studies have shown that performance-based metrics can yield results, consistent with highly reliable and highly accurate objective performance metrics (N. Venkatraman & Ramanujam, 1987; Yang, 2006). For example, the self-assessment method by comparison with the past performance in the topic of sales growth that compared to competitors. The value of the market increases relatively to the competitors and return on assets and return on investment (Yang, 2006). The use of self-assessment has obvious advantages. It can be applied to cross-sectioned enterprises from different sectors or industries, based on different sizes of investments and business combinations (Kauranen, 1993). For small and medium enterprises on the goals and objectives, the study recommended not depending on financial aspect alone. The researcher recommended the use of both subjective and Objective measurement to measure the performance of small enterprises (G Tom Lumpkin & Gregory G Dess, 1996).

2.8 Concept, Theories and Related Research on Relationship Variables

2.8.1 Entrepreneurial Orientation and Export Performance

Covin and Slevin (1991) created model of the relationship between entrepreneurial and organizational performance. They found that entrepreneurial focus was positively correlated with performance and entrepreneurship. The most positive to the performance of K. D. Miller and Bromiley (1990) found that Entrepreneurial Orientation (EO) had an impact on overall business performance including return on shareholders' equity and assets, and sales, etc. According to Zahra (1991), there is a positive correlation between entrepreneurial orientation and profitability and business growth. From the research work of Wiklund (1999), the result confirmed that there is positive relationship between entrepreneurs orientation and business performance. In the previous study, there were also reports of significant positive relationship between entrepreneurial orientation and business performance (Al-Swidi & Mahmood, 2011; Zahra & Covin, 1995). The result also matches the study of Krauss, Frese, Friedrich, and Unger (2005) who found that entrepreneurial orientation is a valuable indicator of business, and entrepreneurial orientation is a critical component for organizational success and sustainability (Kuhn, Sassmannshausen, & Zolin, 2010; Rauch, Wiklund, Lumpkin, & Frese, 2009). While some researchers indicate that, in order to enter the market in order to deliver high performance, the company should increase the strength of entrepreneurial orientation (Covin & Slevin, 1991; Zahra, 1993).

For Thailand, the research on export performance of small and medium enterprises in Thailand selected by researcher of 224 SMEs from the export business focusing on entrepreneurship containing with innovative capabilities revealed that proactive and risky ventures directly affect export achievement (Pitakannop, 2015).

Therefore, business-focused research can gather evidence that explains the relationship between entrepreneurial focus and results or performance (Barringer & Bluedorn, 1999; Covin & Slevin, 1989; D. Miller, 1983; Wiklund, 1999; Wiklund & Shepherd, 2003; Zahra, 1991; Zahra & Covin, 1995).

All international activities are related to entrepreneurship as they represent a combination of risk and innovation, which are the necessary characteristics to create value in global market (Javalgi, Todd, & Granot, 2011). Entrepreneurial behavior offers

firms the ability of driving the market, it enables firms to seize new opportunities in the markets (Hughes & Morgan, 2007). Scholars indicated that entrepreneurial orientation is especially helpful for achieving success in foreign markets (Luo & Tung, 2007; Yamakawa, Peng, & Deeds, 2008). Studies have shown that entrepreneurial orientation is crucial for superior performance, especially for firms which came from emerging markets (M. Wright, Filatotchev, Liu, & Lu, 2011).

Research in the field of entrepreneurial orientation has focused on two different analysis levels: the individual level and firm level which managers uses the methods and decision making styles to act entrepreneurship in the markets (Blesa, Monferrer, Nauwelaerts, & Ripollés, 2008). It is believed that the firm level is the better predictor of EO effectiveness (Yeoh, 2000). Also, there has been a debate about the definition of the EO construct at firm level (Lyon et al., 2000). EO has been described as an antecedent to growth and performance differences in firms, in both domestic and foreign markets (Kuivalainen, Sundqvist, & Servais, 2007). The concept of EO is related with the new market opportunities and defines new operational guidelines (G Tomas M Hult & Ketchen Jr, 2001).

This reflects the philosophy of the firm of how to conduct business and be align with its environment (Murray, Gao, & Kotabe, 2011). The companies that focus on entrepreneurship will monitor the internal environment to find new opportunities and strengthen their competitive positions (Keh, Nguyen, & Ng, 2007). EO is one of the popular research topics in the field of international business to determine the link between EO and performance which was proved by numerous studies (D. Y. Lee & Tsang, 2001; Wiklund & Shepherd, 2003). Keh et al. (2007) provided evidence that EO had both direct and indirect effects, through information utilization as a partial mediator, on firm performance (Keh et al., 2007).

Knight (2001) stated that EO appears to drive key strategic initiatives intended to enhance organizational performance. In addition, EO is an important driver of several parameters such as internationalization preparation, technology acquisition and strategic competence that resulted in international operation. (Lisboa, Skarmeas, & Lages, 2011) indicated that positive relationship exist between EO with product development to exploration. In addition, the ability to seek benefits and building relationship with

foreign markets. The relationship between the ability to intimidate the foreign markets and the ability to discover, develop products with EO resulted in new product differentiation that brings market effectiveness.

EO is often conceptualized as a latent construct comprising with three dimensions: innovativeness, proactiveness and risk taking (Javalgi et al., 2011; Lisboa et al., 2011; Pérez-Luño, Wiklund, & Cabrera, 2011; Y. Zhao, Li, Lee, & Bo Chen, 2011). Researchers have used these dimensions in the international context to examine the performance of SMEs (Patricia P McDougall, Oviatt, & Shrader, 2003; Todd & Javalgi, 2007). Some researchers have suggested that the dimensions of EO should be viewed separately, but related to components, rather than a combination of the one single together (Naldi et al., 2007).

Therefore, it is proposed that:

H1: There is a positive relationship between entrepreneurial orientation and export performance of Thai SMEs.

2.8.2 Innovativeness and Export Performance

Sher and Yang (2005) found that innovation potential is most relevant to performance when assessed by asset yield, strength, and potential for human resources in research and development, which means innovation has been found that it affects the company's performance. Companies with multi-step value creation have different potential for innovation. Low and medium R&D results in a moderate level of organizational performance. Leadership development is another human resource development that will increase the performance of the organization. Guan and Ma (2003) found that export growth was correlated with innovation potential. Learning side research and development, marketing, enterprise management, human resources and strategy, a business-efficient, process-innovation can accelerate business operations more fluidly and successfully.

Porter (1990) said a country to be competitive in foreign markets needs to have the analytical basis for understanding the competition, especially in the "industry". Regarding the impact of innovation on exports at the national level, there must be environmental business competition analysis. However, innovation is a driving force in the development process of the company and can penetrate foreign markets. There are

many factors that affect international trade and innovation. This statement matches with study from Vernon (1966) and Krugman (1979) saying that, in the process of entering the international market, the innovation is the driving force for the company.

Innovation is an important component of the company's strategic strengths. The company has various investments in new products and manufacturing processes in order to penetrate new markets and be more competitive. As a product of Vernon (1966) has been introduced by the company to meet the needs of the country and exported to countries of similar and hence different companies; thus, it can reduce the risk and cost in the market from the national boundaries.

After Krugman (1979) developed a model of international trade, the trade pattern defined by the continuous process of transferring innovation and technology which Grossman and Helpman (1991) predicted in the form of innovation and growth of the global economy, the export-driven innovation will increase the company's investment. This is to promote the issue of homogeneity between innovation and export.

There is research that supports the idea that innovation has a positive effect on the company's exports. Studies conducted by Hirsch and Bijaoui (1985) have tested the impact of R&D intensity on the company's export performance in Israel and found a positive impact on innovation to export. In addition, the research has shown that the number of R&D employees is positively correlated with the growth of exports.

Kumar and Siddharthan (1994) discovered interesting results, in which the relationship between the size of the company and the performance of exports showed a U-shaped pattern, which enables companies to export more products when it starts to grow. But after the beginning of growth, it affects the export. It can mean that large companies act as major retailers in the generally protected domestic market, which makes them less likely to export than other companies. In their study, it measures innovation in the form of R&D intensity.

Wakelin (1998), in his study, used examples of companies in the United Kingdom to analyze the role of innovation in determining export behavior. Wakelin's research suggests that innovative and uncooperative companies behave differently in terms of export probabilities and export levels, indicating the ability to innovate change the behavior of the company. Small innovative companies are less likely to enter the

export market than non-innovative ones. Nevertheless, the large innovative companies are more likely to export, and even more innovative, the more likely they are to enter the export market. Smaller innovation companies are more likely to be in the domestic market because of High cost of entering the international market for small companies. Another indirect result of the study is the significant leaks resulting from significant increases in probability for first-time exporters, but not to increase the liking for exports.

Sterlacchini (1999), in his study, used innovative inputs other than R&D, such as the ratio of engineering costs, design and production experiments to the sale of innovative content of capital stock and the cost of equity innovative capital to sell.

Therefore, it is proposed that:

H2: There is a positive relationship between innovativeness and export performance of Thai SMEs.

2.8.3 Entrepreneurial Orientation and Reconfiguration Capability

In a rapidly changing environment, managers must find strategies for responding to environmental changes, including management (Zahra, Sapienza, & Davidsson, 2006). In addition, D. Miller (1983), Covin and Slevin (1991) and (G. T. Lumpkin & Gregory G. Dess, 1996) explained that Entrepreneurial Orientation (EO) should pay attention to the environment including consideration to improve the organization's processes containing with risk taking orientation, proactiveness orientation and human capital.

In general, EO can create new markets and result in competitive advantage (D. Miller, 1983; Prahalad & Hamel, 1990). Ireland et al. (2003) pointed out that in a changing environment, managers must be able to use resources to create new markets and respond to customer needs. Wiklund (1999) explained how EO affects organizational culture by learning process and advanced capabilities. Similar to Jantunen, Puumalainen, Saarenketo, and Kyläheiko (2005), EO has a positive impact on dynamic capabilities and entrepreneurs should pay attention to the details and support their organizations. Jiao, Wei, and Cui (2010) found that EO has a positive effect on other dynamic capabilities; therefore, the most important for executives dealing with

entrepreneurial thinking and dynamic capabilities is creativity, self-confidence, expertise, experience, tolerance and adaptability to dynamic change.

Risk taking orientation being taken into account for the action, even if it is not known and courage in new venture is one reason to push people to success (Gilmore, 1971). However, the results of some studies show that risky venting has a negative impact on the relationship between risk aversion and business growth (Chell, Haworth, & Brearley, 1991). Risk taking can help predict the success. Low levels of risk tolerance do not lead to new ideas, while high levels of risk tolerance lead to failure. Therefore, moderate level of risk tolerance is the best way to achieve success (Begley & Boyd, 1987). In addition, the risk dimension is related to the willingness to take responsibility for resources that may fail. It seems that the results are unpredictable and do not know the risks (Keh, Der Foo, & Lim, 2002; D. Miller & Friesen, 1982; Wiklund & Shepherd, 2005).

Proactiveness orientation means being a superior competitor. It is a combination of proactive and aggressive service to serve the needs of the future. It also means searching for opportunities to offer new services and products and anticipate future needs (Covin & Slevin, 1989; G. T. Lumpkin & Gregory G. Dess, 1996; D. Miller, 1983). Creating a competitive advantage is the first step. Before the race, it is important for organizations to be the first to control the situation and to make the best of it (G. T. Lumpkin & Gregory G. Dess, 1996; Wiklund & Shepherd, 2005). Therefore, the implementation of proactiveness dimension refers to the attitude of action for the future needs and requirements of the market.

Human capital, as perceived by Schultz (1993), is the ability of many in the human that is innate or originated from the accumulation of learning originality, loyalty, effort, commitment to success. It is a valuable indicator of competence that will increase when investment is right (Warech & Tracey, 2004). Subsequently, the study of human capital in a new sense has broad implications in the management and development of human resources. The human capital of (Gratton & Ghoshal, 2003) provides the definition of human capital. It consists of three components: intellectual capital, social capital and emotional capital. Firstly, the intellectual capital consists of knowledge and ability to learn specialized skills, experience, and deep knowledge in the person (Tacit

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knowledge). Secondly, social capital consists of a network of relationships. This will help create opportunities for value creation such as trust. Thirdly, emotional capital includes attributes such as self-perception, self-awareness, integrity and resilience. Human capital is an important factor affecting competitiveness and growth of sustainable business. In particular, investing in human capital and training is inevitable. For every business, the development of individuals in the organization through the concept of human capital development is a competitive advantage and is immune to the effects of external factors (Crook, Todd, Combs, Woehr, & Ketchen Jr, 2011). Investing in human capital development will lead to enhanced core competencies that focus on enriching the human capital sustainability.

Therefore, it is proposed that:

H3: Entrepreneurial orientation positively affect reconfiguration capability.

2.8.4 Innovativeness and Reconfiguration Capability

Innovation is one dimension of dynamic capabilities and it is the ability to initiate experiments, research and development as well as the product and service, management in organization (Covin & Slevin, 1989; G. T. Lumpkin & Gregory G. Dess, 1996). Based on the study of innovation of dynamic capabilities, innovation can be involved in the development of new organizations, new product development and distribution model of the product, new event development concepts, and concept management. This is a great result for the company's operations (B. Miner, R. Smith, & S. Bracker, 1989; Lumpkin & Dess, 2001). Creativity and innovation is the dimensional response of trends that supports new ideas and processes with new technologies. (Lumpkin & Dess, 1996; Wiklund & Shepherd, 2005)

According to a study by Frese, Krauss, and Friedrich (2000) about the entrepreneurship in education in Zimbabwe and by Frese et al. (2000) about households in Zambia, the results revealed that successful entrepreneurs starts from the initiation and practice of their own ideas, unlike most people who have good ideas but do not do anything.

In addition, research by Lambing and Kuehl (2003) discovered that new ideas are the starting point of action and the key to be successful entrepreneurship. Also, Rauch and Frese (2000) found positives between personality building and

entrepreneurial success. In addition, the meta-analysis found that business owners are more creative than others, so innovation is important for organizations to use new technologies instead of traditional ones.

From literary review from Hurley and Hult (1998), they added that innovation is the direction of an organization's innovation. Also, G. Tomas M. Hult, Snow, and Kandemir (2003) added that the innovation is ability to innovate the innovation which it can be a dimension that describes the corporate atmosphere or corporate culture. In addition, L. and K. (2004) said that organizational innovation capabilities mean the organization's overall ability to introduce new products to the market or open new markets. Through a combination of strategy, innovation and process, Matsuo said that innovation is the trend of organizations that support innovation. Innovative ability is the attitude, or the habit of developing or accepting innovation. The study of Nybakk, Crespell, Hansen, and Lunnan (2009) indicated that innovation ability refers to the inclination to create and or apply new products, processes and systems which is consistent with the definition of Knowles, Hansen, and Shook (2008). According to the literature review, academics have given the definition of innovative ability in many ways depending on the purpose of each study. Therefore, it can be said that there is no real conclusion in the sense of innovation ability (Nystrom, Ramamurthy, & Wilson, 2002).

In this context, innovative capabilities refers to the ability to change ideas and knowledge into product creation. Processes and systems are useful to organizations and stakeholders (Peng, 2008). Innovative capabilities are measured in several dimensions, such as innovation strategies, behavior of people in the organization, work process, new products and markets which are sought or measured in the form of vision and strategy that support the innovation, capabilities and resources, effective management of information in the organization, creative management organization and structure, working atmosphere, organizational culture and technology management (Peng, 2008). From a different literature review in the industry, innovation has been found to enhance the efficiency of the organization (Kreiser, Marino, & Weaver, 2002; S. M. Lee & Peterson, 2000; G. T. Lumpkin & Gregory G. Dess, 1996). The more innovative an organization is, the more dynamic it will be (Nybakk et al., 2009).

To study organizational innovation capabilities, Avlonitis, Kouremenos, and Tzokas (1994) J., Athanassios, and Nicos (1994) identified innovative capabilities in four areas: product innovativeness, process innovativeness, behavioral innovativeness, and strategic innovativeness. The study of Lyon et al. Lyon et al. (2000) identified innovative capabilities in two areas: product innovativeness and process innovativeness. North and Smallbone (2000) mentioned that education innovative is divided into 4 areas: product innovativeness, market innovativeness, process innovativeness and behavioral innovativeness. The study of Catherine L. Wang and Ahmed (2004) identified the innovative capabilities in five areas: product innovativeness, market innovativeness, process innovativeness, behavioral innovativeness and strategic innovativeness.

It can be said that definition and education of innovation vary in many views. The innovation in terms of products, processes, marketing, behavior, corporate strategy including the factors of innovation depend mainly on the purpose of the utilization.

Innovation has direct influence on dynamic capabilities. This innovation is the result of the creativity of the employees in the organization and must always be targeted at the customer and bring value to the organization. Innovation is based on knowledge, skills and experience of the person. So, it can be said that human beings are an irreplaceable element in the process of innovation (Molina-Morales, Martínez-Fernández, & Torlo, 2011). Innovative people will help organizations to benefit from competition as distinct from their competitors. This may be a competitive advantage over a short period of time. It will be a long-term basis to create a competitive advantage. These capabilities can be individual or organizational competence (Lynch, Walsh, & Harrington, 2010). This finding is consistent with Jiao et al. (2010) who conducted a study of dynamic environments, innovation and dynamic capabilities in China. The linkage between dynamic capabilities and innovativeness is based on the concept of Schumpeterian (David J Teece et al., 1997). The interrelationships of both abilities include the core role of learning and strategic focus. The main features comprise with the role of management and the nature of the development.
Therefore, it is proposed that:

H4: Innovativeness   positively affect reconfiguration capability

2.8.5 Reconfiguration Capability and Export Performance

Dynamic capabilities are the process of the organization and the strategy that managers change the value of their resources to the value of the strategy (Eisenhardt & Martin, 2000) with new strategic incentives. Dynamic capabilities enhance the competitive advantage (Taylor & Helfat, 2009; Zahra et al., 2006) and improve overall efficiency of the company (David J Teece et al., 1997; Wu, 2006; Zollo & Winter, 2002; Zott, 2003).

The dynamic view of capabilities is especially important in the international market (e.g., Griffith and Harvey (2001); Prange and Verdier (2011); David J. Teece (2007)). Success depends on the organization's ability to constantly renew and reconfigure its resources and adjusts them to international constraints. It is, therefore, important for organizations to gather their internal resources to meet their needs (Camuffo & Volpato, 1996). Dynamic capabilities are reflected in the company's ability to adapt in terms of strategic flexibility, resource and alignment between company assets, organizational forms and changing strategic needs (Rindova & Kotha, 2001).

As a sequence, superior dynamic capabilities enables firms to respond more easily to opportunities in the marketplace (Eisenhardt & Martin, 2000; David J Teece et al., 1997). This has helped to improve the efficiency of the export market (e.g., (Lisboa et al., 2011; Piercy et al., 1998).

Dynamic capabilities in the relationship between enterprise resources and export performance are evidenced in the dynamic capabilities documentation that enables companies to create, develop and protect resources that help them achieve superior long-term performance (Ambrosini, Bowman, & Collier, 2009). Wu (2006) confirmed the importance of dynamic capabilities in transforming resources into organizational performance. The researcher expect this effect to occur in the international market.

Therefore, it is proposed that:

H5: Reconfiguration capability have positive impact on export performance of Thai SMEs.

2.8.6 Entrepreneurial Orientation with Competitive Environment

Entrepreneurial focus is an important resource and represents the ability of a business to deliver sustainable competitive advantage and superior performance over other businesses. Resource-based theory, which explains that competitive advantage, can only arise from the use of scarce assets, intangible assets and business of limited assets. Bontis, Bart, Tovstiga, and Tulugurova (2009) argued that internal resource development is a factor of competitive advantage in small and medium businesses. From other literature studies, relevance also confirms that businesses with competitive advantage and good performance are largely influenced by entrepreneurial behavior of the business (Wiklund & Shepherd, 2003; Zahra & Covin, 1995).

EO is considered a strategically important resource and reflects the vision of the business (Murray et al., 2011). From the perspective of RBV theory, EO is a valuable and necessary resource, but it is not enough to create value for the company (J. Barney, 1991). Businesses need to take the right strategic action to take advantage of the EO (Murray et al., 2011). Thus, EO has to be developed to maximize the organization's capabilities to succeed (Lisboa et al., 2011).

EO can also refer to the strategic management process that business decision makers can use to set goals to achieve organizational objectives, to maintain a vision and to create competitive advantage (Frese & de Kruif, 2000; G. T. Lumpkin & Gregory G. Dess, 1996; Wiklund & Shepherd, 2003). Some researchers also found, that companies that developed EO and deployed, had better performance than those without EO (G. Tomas M. Hult et al., 2003; Ireland et al., 2003; Rauch & Frese, 2000; Wiklund & Shepherd, 2003).

Therefore, it is proposed that:

H6: The effect of the entrepreneurial orientation on export performance increase with favorable competitive environment.

2.8.7 Innovativeness with Competitive Environment

Competitive advantage is a concept applied from the comparative advantage in economics. The theory of comparative advantage is related to the cost factor or quality difference in each country that results in a competitive advantage (Porter, 1990). Comparative advantage is only part of the theory of competitive advantage. Portor

concludes that the comparative advantage of a business will be varied. In information services sectors, Buckley and Ghauri (1993) would however mentioned that a business had relationship with another business. So nowadays, businesses are generally trying to find a sustainable advantage and business successful, which means recognizing customer value for goods or services that businesses can respond to that by using different strategies and maintaining value standards that the customer needs. The application of competitive advantage theory is a matter for entrepreneurs to prioritize the important factors in order to maximize competitive advantage and survive in a competitive environment. Han, Kim, and Srivastava (1998), mentioned that businesses, therefore, needs to optimize risk management and innovative learning to improve performance all the time (Bartlett & Ghoshal, 1992). How business organizations gain competitive advantage can be assessed by the effectiveness of innovation, management efficiency, risk management and quality of product (Duncan & Moriarty, 1998). At present, most researches focus on innovation and productive effectiveness in increasing competency because innovation reflects the advantage of differentiated products to meet the needs of new products to customers. So, it is evident that innovation is very important to the business, with the clear result that any business with innovation will have a competitive advantage over its competitors in the end. Innovative ability is a corporate strategy and is a competitive focus with corporate innovation. Innovation is like a tool the organization uses to gain competitive advantage (G. Tomas M. Hult et al., 2003). In addition, organizations need to be innovative at all times, because innovation is important. This enables the organization to gain competitive advantage through higher performance (Henard & Szymanski, 2001). Thus, innovation means to create new products or services so that entrepreneurs can have more work processes and be able to change their innovations into market opportunities or sustainable competitive advantage.

Therefore, it is proposed that:

H7: The effect of innovativeness on export performance increase with favorable competitive environment.

2.9 Hypothesis Structure Model

Research Model
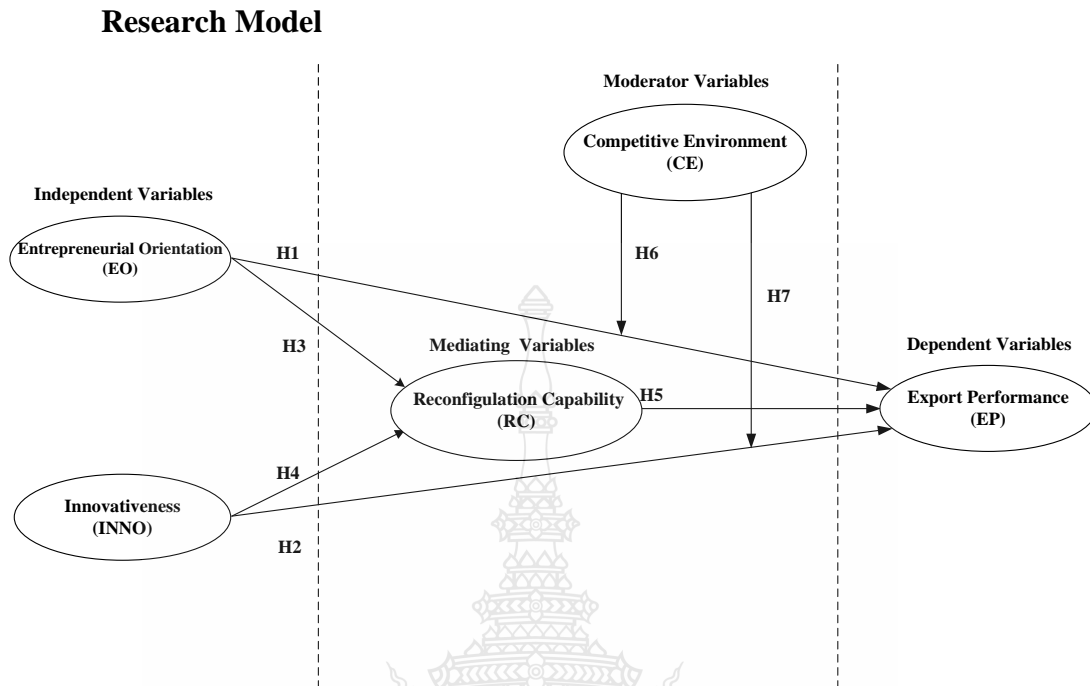
Figure 2.3 Research Hypotheses

From the concerned concepts, theories and researches together with other variable factors, these following assumptions are set according to research objectives. The details of the research hypotheses are written as follows:

H1: There is a positive relationship between entrepreneurial orientation and export performance of Thai SMEs.

H2: There is a positive relationship between innovativeness and export performance of Thai SMEs.

H3: Entrepreneurial orientation positively affects reconfiguration capability.

H4: Innovativeness positively affects reconfiguration capability.

H5: Reconfiguration capability has positive impact on export performance of Thai SMEs.

H6: The entrepreneurial orientation has an effect on export performance increase with favorable competitive environment.

H7: The innovativeness has positive effect on export performance increase with favorable competitive environment.

CHAPTER 3
RESEARCH METHODOLOGY

Introduction

This chapter presented the research methodology used to prove the conceptual framework and test the hypotheses derived from Chapter 2. The first part described the research design.The second part described the method of research studies including population and sampling and data collection method. Also, this part described the characteristics of the population of small and medium enterprises within the scope of study including the criteria for determining the selected sample to represent the population. The third part described the tools used in the study and the statistical methods used to analyze the data. The results of the research were presented in part 4 as details of the variables used in the research are provided in the research framework and the creation of measurement or questionnaires for data collection.

3.1 Research Design

The research model used to study the "Effects of International Entrepreneurship Characteristics on Export Performance of Small and Medium Enterprises in Thailand" was quantitative analysis approach because this research problem can be traced to the concepts of the literature review and the related theories. Finally, it was possible to determine the components of the characteristics of the international entrepreneurship and to create a framework for the study of the causal relationship with the premise of the theory and the results of the past research. Factors, constituents or constructs were derived from research results or theoretical references. It could be developed as a question, with definitions, and operational definitions that correspond to reference theory. These questions can be understood by the respondents and inquired from the target sample group.

Survey data was collected from the sample of small and medium enterprises acquired by random sampling from the target population. The method of data collection was done by using questionnaires as the primary data. Although there were disadvantages in terms of high transaction costs by using this sampling method for the

survey, there were advantages that the study could cover the target population widely, be productive and get accurate information (Kerlinger, 1986). This research was non-experimental design because it was a study of the incurrence of phenomena, factors, features, characteristics of international entrepreneurship on export performance. The research was based on cross-sectional survey research to collect data from sample enterprises. The cross-sectional data to be surveyed was enterprise information, factors related to the composition of the international entrepreneurship characteristics on export performance, including information on the operations and related data in the past year. Herewith, the small and medium enterprises were selected from the export sector, which is important for the national economic growth of the country. Since in 2016, the export value of SMEs was accounted for 53.0% of GDP of the country and accounted for 29.0% of total exports, which exporting SMEs is considered as an important part for contributing work, income stability and better life quality for the people as well as increased trade competitiveness with other countries, especially in ASEAN.

Based on the research framework presented in Chapter 2, the analytical unit of the research was the small and medium enterprise which was engaged in the export business and continues to operate as a group that needs to be identified what are the international characteristics associated with the export performance by small and medium enterprises, persons who can provide information on variables like education, which consists of a variable that was the variable export performance of small and medium enterprises. Independent variable group consists of 2 variables, namely entrepreneurial orientation and innovativeness.

3.2 Unit of Analysis

3.2.1 Population and Sample Group

In 2016, Thailand had exporting small and medium enterprises as of 25,340, or equal to 3.98% of the number of small and medium enterprises in the country (Registered with Office of Small and Medium Enterprises Promotion, 2016). However, there were about 18,000 small and medium enterprises which are members of the Department of International Trade Promotion (DITP), Ministry of Commerce. The researcher will only provide information to enterprises that have already registered as a

juristic person to be the population of the sample for the purpose of conducting this research because it is an enterprise group with a certain establishment to contact. Based on the findings, the databases of such enterprises with continuous operations can be tracked in the operation of enterprises, which are registered with Department of International Trade. There are 454 members including all members of the industry. Another suitable feature of this database is that the study focuses on an entrepreneurial enterprise for a reasonable period of time, with credible performance data considering the credibility of the details of the DITP member database with the business type, establishment year, investment amount and number of employees.

Random sampling: The samples were selected from a number of members. There are 454 members referred by the Department of International Trade Promotion in 2016, distributed by 10 different industry groups as:

3.2.1.1 Agricultural Products

3.2.1.2 Minerals / Fuels

3.2.1.3 Food

3.2.1.4 Automotive / Auto Parts and Accessories

3.2.1.5 Machinery / Equipment

3.2.1.6 Chemicals / Plastic Raisin

3.2.1.7 Cosmetics / Toiletries / Medical Supplies / Optical Goods

3.2.1.8 Household Products

3.2.1.9 Building Materials / Hardware Items

3.2.1.10 Electronics / Electrical Products and Parts

3.2.2 Data Collection

The criteria for sampling are members with a registered capital of no more than 100 million baht or an employment of up to 30, 50 and 200 persons for retail, wholesale and service or production, according to the Ministry of Industry's announcement on the number of employment and fixed asset value in 2016. In addition, samples must be registered and opened for at least 1 year. There are 454 small and medium enterprises operating in export business. The sampling principle is a selective combination of purposive sampling for the industry with probability sampling for members in each industry. In accordance with the criteria for the classification of

enterprises, the researcher selected only qualified enterprises who can provide information on the operation and information about the characteristics of international entrepreneurship because of the need to study the correlation of the variables studied by the enterprises correctly. This study is controlled at the organizational level. It is defined as the operators, the owners of the business who are the exporters, the partners who are an exporter, and the senior executives who are responsible for export or being authorized to represent the operators representing one of analysis unit. (W. Gartner, Shaver, Gatewood, & Katz, 1994)

The questionnaire was used in a variety of ways, such as how to make an appointment and send a questionnaire to the samples. The data collection is done though face-to-face inquiry or sends the questionnaire to the target audience by mail, with a reply envelope, then respond to the sample which form of data collection is used by the facilitator of the data provider is important.

Table 3.1 Characteristics of the Returned Questionnaire

Group	Sample (N)		Return		Response Rate (%)
	Bangkok metropolitan area	locations in the province	Bangkok metropolitan area	locations in the province	
Agricultural Products	43	60	30	58	85.44
Minerals / Fuels	14	2	7	1	50.00
Food	30	34	23	19	65.63
Automotive / Auto Parts and Accessories	26	17	13	11	55.81
Machinery / Equipment	11	13	9	10	79.17
Chemicals / Plastic Raisin	33	9	19	6	59.52
Cosmetics / Toiletries / Medical Supplies / Optical Goods	18	6	14	6	83.33
Household Products	11	4	10	4	93.33
Building Materials / Hardware Items	9	5	6	3	64.29
Electronics / Electrical Products and Parts	15	11	7	4	42.31
Other	66	17	23	7	36.14
Total	276	178	240	55	

3.3 Indicators and Measurement Variables

3.3.1 Export Performance as Dependent Variables

The research described the measurement of performance of all the above mentioned small and medium enterprises. The researcher divided the measurement into two areas: objective and subjective measurement, which is similar to financial and non-financial aspects. By studying the variables in this research, the export performance is as follows.

3.3.1.1 Financial measure includes sales, market share, and profit growth.

3.3.1.2 Non-Financial measure includes perceived success, satisfaction and goal achievement.

Table 3.2 Summary of Literature Review to the Export Performance

Variable	Finding	Source
Export Performance	Export performance is the result of business activities in the export of goods to foreign countries. It can measure both financial variables and non-financial variables.	Zou and Stan (1998) Baldauf, Cravens, and Wagner (2000) Leonidou, Katsikeas, and Samiee (2002) Navarro, Losada, Ruzo, and Díez (2010) Pitakannop (2015)
Finance	Finance is the measure of the organization's performance that aims to assess asset efficiency. Generally, it consists of sales growth, market share and net profit.	Zou and Stan (1998) Enz, Canina, and Walsh (2001) R. S. Kaplan and Norton (2004) Pitakannop (2015)
Non-Finance	Non-finance is a measure of the company's performance in terms of perceived success, satisfaction and goal achievement.	Zou and Stan (1998) Pitakannop (2015)

3.3.2 Entrepreneurial Orientation as Independent Variables

Based on literature review in this study, researcher focused on entrepreneurial orientation which divided into 3 aspects as:

1. Risk Taking Orientation

2. Proactiveness Orientation

3. Human capital

3.3.2.1 Risk Taking Orientation

Risk-taking is defined as "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" (G. T. Lumpkin & Gregory G. Dess, 1996). Zahra and Covin (1995) define risk taking as the company's willingness "to engage in business ventures or strategies in which the outcome may be highly uncertain." Natarajan Venkatraman (1989) operationalizes risk taking as the degree to which managers adopt a conservative strategy of following paths that result in expected certain returns. In financial terms, risk refers to the probability of a financial loss or negative outcome (G. T. Lumpkin & Gregory G. Dess, 1996). According to G. T. Lumpkin and Gregory G. Dess (1996), risk-taking behavior in entrepreneurial firms involves taking on debt or using resources for potential high returns. D. Miller (1983) clarifies that risk-taking is not only a firm that is highly leveraged financially, but also engages in product-market or technological innovation, the risk taking is the willingness of the entrepreneur to bring most of the resources that the organization has to run high-cost failure projects in the hopes of high returns (D. Miller & Friesen, 1982), as well as opportunistic exchanges with the market.

Rational decision-making is something that entrepreneurs dare to take. Generally, executives do not like to do risky things for profit or dare to make changes to their product or service. The organization is abrupt, but will have the courage to take a proactive approach to maximize the opportunities for existing business opportunities. It can be divided into 3 types:

1) Daring to risk something unknown

2) Daring to use a lot of assets for business start-ups and

3) Daring to borrow a lot of money that risk bold. It must involve avoiding to face uncertainty.

3.3.2.2 Proactiveness Orientation

According to D. Miller and Friesen (1978), proactiveness is the indication that companies have a way to respond to different environments, like introducing new products, technology, management techniques, or general response. The proactive implementation is a future perspective. Natarajan Venkatraman (1989) explains that proactive action is akin to focusing on strategic corporate orientation, as

described by R. E. Miles et al. (1978). R. E. Miles et al. (1978), mentioned that it is like finding new products and marketing opportunities, and trying to maintain reputation as an innovator. Similarly, Natarajan Venkatraman (1989) describes the aggressive operation of entrepreneurs, this is like proactive behavior. This is a continuation of the relationship with continued participation in emerging industries in order to find market opportunities and test potential responses to changing environmental trends.

Proactiveness is the demonstration of the creation of new opportunities for organizations by proactively engaging in organizations that need to be monitored, as well as identifying trends in existing customer needs by anticipating the need to change or anticipating the expected problems and obstacles from the investment. Not only proactive work needs to focus on change, but also to focus on the work within the organization to achieve a competitive advantage. Therefore, strategic executives must pay attention and always seek information to consider the possibility of business expansion and developing their own operations. Indeed, proactive actions will create competitive advantage. This will make the business become a leader in the new market and become a unique organization as well as be able to use new techniques and technologies. Becoming the "business leaders" or "first mover" is very crucial; it has many advantages, for example, high profitability because there are no competitors in the market, customers can also remember the brand, and create a good image in the eyes of the customers. This will result in a higher market share. Proactive is a goal-oriented work. Proactive communication requires information or experience gained from the past and present. The conceptual framework focusing on future events, mission-critical operations, value and quality helps the organization to identify crises and opportunities to prevent problems that may arise in the future. Therefore, it can prepare various matters to support in advance to help reduce the damage in a timely manner, to take advantage of opportunities or any situation and to develop the organizational culture where the employees can gain working habit.

Proactiveness factors include two factors.

1) A presentation of the new products or the technology creates a competitive advantage by the factors that are the result of a strong push in the

organization such as the mission of the organization that focuses on leadership in the product or market.

2) The attempt to discover the products and services continuously as well as seeking the resource or the new sources of raw materials creates the benefits to the organization in the form of such low-cost raw materials or agreement between the owners of the raw materials etc.

3.3.2.3 Human Capital

Human capital or knowledge, expertise, which consists of educational level and experience in business and management experience. It is very important to start a business (Rose, Kumar, & Yen, 2006). In addition to physical capital resources, human capital also refers to the resources that are the equipment for the organization. In the study conducted with entrepreneurs in the United States, the level of education was correlated with the start of business (Marshall & Oliver, 2005). Business size in the mold industry, steel industry and plastics industry in Thailand as well as management experience have relationship with business success (Srijantaranon, 2001).

Table 3.3 Summary of Literature Review to the Entrepreneurial Orientation

Variable	Finding	Source
Entrepreneurial Orientation	Entrepreneurial orientation is an organizational structure that is closely linked to strategic management and strategic decision-making. Herewith, dimension associated with entrepreneurial orientation consists of risk-taking, innovativeness proactiveness human capital and institutions.	Covin and Slevin (1991) Mthanti and Ojah (2017) Mthanti and Ojah (2018)
Risk Taking Orientation	Risk taking is one of important dimensions of entrepreneurial orientation. It is believed that there will be advantages performing well and surviving business. The owners/managers of firms which has an international vision, favorable perception and attitudes toward exports, are willing to take risk and have the capacity to engage positively in export activities which finally leads a company to export success.	Naldi, Nordqvist, Sjöberg, and Wiklund (2007) J. Okpara (2009)

Table 3.3 Summary of Literature Review to the Entrepreneurial Orientation (Cont.)

Variable	Finding	Source
Proactiveness Orientation	Proactiveness is the opportunity-seeking and forward-looking perspective that involves introducing new products/services and acting in anticipation of future demand. This can include a firm's ability to enter the export market. There are a wide variety of activities including identifying opportunities and market trends, assessing the strengths and weaknesses of opportunities, and forming capable teams to exploit them.	Kropp and Zolin (2005) Okpara (2009)
Human capital	The human capital, which contains the education level, experience in the business and experience in administration, was extremely important to start the business operations. The human capital affects social capital, and that experience and cognitive ability influence personal relations and complicity. Organizational performance is strongly influenced by human capital through the cognitive ability of the manager.	Rose et al. (2006) J., Eduardo, and Jorge (2014)

3.3.3 Innovativeness as Independent Variables

Classification of innovation can be divided into several categories according to the scope characteristics and the purpose of adoption, common classification, which are used in research and management. Most innovation is composed of three types (Bessant & Tidd, 2007; Gopalakrishnan & Damanpour, 1997; Grimm et al., 2006; Schilling, 2008). The target of innovation is divided into product innovation and process innovation. The degree of change divides innovation into two broad categories: radical innovation and incremental innovation. The aspect of impact identified two types of innovation: technological innovation and administrative innovation.

Although the classification of innovation is multi-dimensional, the process of innovation can also be considered in many ways. If the innovation is classified by the main factors of innovation which are the technology and market demand (Capon, Farley, Lehmann, & Hulbert, 1992; Ettlie & Reza, 1992; Virasa, 2005), the researcher divided into innovation into three categories as follows:

1. Technological innovation

2. Product innovation

3. Process innovation

3.3.3.1 Technological innovation

Technological innovation can make the better performance in the service business. Cohen and Levinthal (1990) refer to Orfila Sintes, Crespí Cladera, and Martínez Ros (2005) mentioned that it also enables the businesses to adjust their organization to changing conditions, changing marketing environment, and to evolve into a competitive edge. The study done by W. L. Miller (2001); Orfila Sintes et al. (2005) cited in Gunday, Ulusoy, Kilic, and Alpkan (2011) mentioned that the it can increase sales. Lin and Chen (2007) cited in Gunday et al. (2011) revealed that the technological innovation will be used to create new products, new services or new processes to present to the market, which the study corresponds to Landau (1991) referred in Orfila Sintes et al. (2005). In conclusion, the technological innovation can improve the service performance.

3.3.3.2 Product innovation

Product innovation reflects the ability of a business to create and use new ideas in developing new products or services. To bring about economic benefits to the business (Fritz, 1989) needs to consider the consistent development of new products or services into the market at the right time to enter the market. Henard and Szymanski (2001) also gave the idea of "competitive advantage" (Catherine L. Wang & Ahmed, 2004). In addition, Henard and Szymanski (2001) commented that product innovation capabilities should also be considered in terms of novelty, uniqueness and prototype. Originality can be considered both from the perspective of the consumer and of the operator, such as the perspective of the consumer. Also, the product innovator may consider innovative features including the risks of use and effects on consumer behavior in the view of the operator. To apply the product innovation to the market, the product itself needs to be determined by the level of technology and marketing strategies as well (Atuahene-Gima, 1995; Danneels & Kleinschmidtb, 2001).

3.3.3.3 Process innovation

Process innovation is organizational development efforts or organizational management processes that are effectively and successfully being implemented in innovation (Olsen & Connolly, 1998; Orfila Sintes et al., 2005; Sirilli & Evangelista, 1998). The process innovation can increase sales (Axel and Robert (2000) cited in Gunday et al. (2011)). The process innovation is the application of new concepts, methods or processes that results in the production process and the overall performance covering effectively and significantly higher productivity, such as the use of computers in the design of new manufacturing processes, etc. Process innovation is a change or transformation in the organization whether it is a tool of manufacturing processes distribution or organizational management style. The goal is to lead to product innovation to consumers or users efficiently and effectively to the organization (Capon et al., 1992; Ettlie & Reza, 1992; Gopalakrishnan & Damanpour, 1997). Although product innovation is more visible, the process innovation is also very important. In order to make the organization or business a competitive advantage in business (Schilling, 2008), most process innovations focus on quality control and productivity improvement in progress.

Table 3.4 Summary of Literature Review to the Innovativeness

Variable	Finding	Source
Innovativeness	Innovation potential is currently considered to be a key prerequisite for a firm's competitiveness and performance. This applies especially to small and medium enterprises (SMEs). The simple organizational structures and administrative systems can respond faster to customers' requirements and development trends. A growing number of studies stresses the existing relationship between the innovation potential of an enterprise and market success.	Baden-Fuller (1995) BARKER III and Duhaime (1997) Christensen and Raynor (2003) Audretsch (2003) Andergassen, Nardini, and Ricottilli (2009) Zeng, Xie, and Tam (2010)

Table 3.4 Summary of Literature Review to the Innovativeness (Cont.)

Variable	Finding	Source
Technological innovation	Technological innovation will be used to create new products, new services or new processes to deliver to the market. The innovative technology can improve the performance in the service. The effects of non-technological innovation differ depending on the phase of the innovation process and organizational innovation which influences technological innovation persistence.	Landau (1991) Cited Orfila Sintes et al. (2005) Caroline and Thuc (2010) Christian, Caroline, and Uyen (2015)
Product innovation	Product innovation can be considered from the both view of consumers and entrepreneurs. For example from the consumer's view, the consumer might be considering the innovative features, new appearance, uniqueness and product originality. Product innovation occurs from the consistency in the development of new products or services to the market at the right time to enter the market and to gain a competitive advantage against competitors.	Atuahene-Gima (1995); Danneels and Kleinschmidt (2001) Henard and Szymanski (2001) Wang and Ahmed (2004)
Process innovation	Process innovations is also very important to the organization or business to obtain the competitive advantage from the competition. This represents the introduction of new or significantly improved production and/or delivery methods.	Schilling (2008) Zizlavsky (2014)

3.3.4 Reconfiguration Capability as Mediating Variables

Based on David J. Teece (2007), the reconfiguration capability is detailed by dividing the dynamic capabilities into 3 parts: 1) the ability to recognize an opportunity and threat occurred within the organization (Sensing), 2) the ability to benefit from emerging opportunities (Seizing) and 3) the ability to create and update a resource (reconfiguring).

For the context of exporting small and medium enterprises in Thailand, it has set the dynamic ability to be able to run a strong business and increase the competitiveness. This will lead to sustainable business growth. According to the 2nd SME Promotion Plan (2007-2011), there are 6 issues as follows:

Issue 1: Creating and developing entrepreneurs: This is a strategy that focuses on creating an environment and encourage new qualified entrepreneurs to properly use the knowledge base, virtue, skill and technology to run a business for sustainable growth. This means the survival and growth of the business and the empowerment of the original entrepreneur to gain appropriate growth of the business, create value and focus, and meet the needs of mid-market and more niche markets.

Issue 2: Increasing productivity and innovation capacity of SMEs with the strategic focus on adding value: The difference and competitiveness of the industrial products as well as the development of the production structure from the contractor to the designer can create competitive advantage by promoting business partnerships and networking, enterprise networks (clusters), technological support optimization and productivity preparing for free trade and trade measures, and the upgrading of quality, standards and ability to differentiate. However, the products must be in the line with market demand.

Issue 3: Enhancing and reducing the impact on the trade sector: This is the strategy that focuses on enhancing the efficiency of business operations in the line with the trend of modern consumer behavior and minimizing the impact of competition with large modern trade enterprises. The target groups of the strategy include wholesale SMEs, and retail SMEs.

Issue 4: Promoting service sector in value creation and value adding: This is a focused strategy to support the use of Thai cultural knowledge, wisdom and technology, especially information technology in order to create value as well as link between SMEs and service sector with large businesses.

Issue 5: Promotion of regional and local SMEs: It is a strategy that focuses on promoting to create a network and link SMEs business in the region and develop production capacity and business management by using cultural technology and Thai wisdom to create value and improve product quality and service. The local and regional enterprises in line with market demand and play a role in creating wealth and foundation of the economy.

Issue 6: The development of business conductive factors: This is a strategy that focuses on the development of the facility environment and the infrastructure that

facilitates the business of SMEs to increase the productivity of SMEs, and strengthens the intellectual infrastructure to increase competitiveness. It also supports adaptation to knowledge-based enterprises by using skill that has the ability to adapt to high dynamics.

These six issues will be consistent with reconfiguration capability, which it is the expansion of a mutual learning frame of mind, motivating components of the firm to combine their wisdom and expert professionalism through team work. Reconfiguration capabilities is the organizational skill required to rebuild assets and learning in order for creativity to take place (Jantunen, Ellonen, & Johansson, 2012). Reconfiguration of current assets and capabilities through recent models of consolidation is enough for further complication than combination, as it includes the positioning of familiarized resources to create new worth, improving the mixtures inside and between firms (Lockett, Thompson, & Morgenstern, 2009; David J. Teece, 2007). Reconfiguration is divided into 2 parts as follows:

3.3.4.1 Adaptive Capabilities: It is important to bring the product or service into the market quickly to respond to the opportunity (Chatterji & Patro, 2014; Drnevich & Kriauciunas, 2011). Including the management of existing resources to respond to the opportunity quickly (S. Chakravarthy, 1982), the entrepreneurs also need to manage their resources in a timely manner (K. Z. Zhou & Li, 2010).

3.3.4.2 Innovative Capabilities: It refers to the ability to change ideas and knowledge into product creation, processes and systems and to benefit enterprise and stakeholders (Lawson & Samson, 2001). Innovative capabilities can be described in many dimensions such as the strategies promoting innovation, organization behavior, work process commitment, and pursuit of new markets as well as organization's vision and strategies that support innovation, capacity and resources for creative management, organization and structure, working atmosphere, and organizational culture (Zhou & Li, 2010)

In this research, measurement of reconfiguration capability, the researchers used the McKinsey 7s Framework to measure organizational capabilities. Manage (2007) said elements such as skills, staff, structure and systems can be used to respond quickly to changes in the environment. These changes will result in competitive survival

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and will be used to create a sustainable competitive advantage in the long run. This implies certainty in the implementation of successful strategies.

McKinsey 7S Framework is framework of critical thinking and planning for strategic planning in an organization by coordinating all seven elements in a consistent manner. Each variable is important for successful corporate management. The measurement of success according to McKinsey 7s Framework is a basic conceptual framework used to analyze the environment within an organization. The efficiency of a business organization is derived from the relationship of seven factors. The 7s elements are distinct and can be divided into 2 types as follows.

Hard element are easier to define or identify and management can directly influence them: these are strategic statements, organization charts and reporting lines and formal processes and IT systems.

Soft Elements, on the other hand, can be more difficult to describe, and are less tangible and more influenced by culture. However, these soft elements are as important as the hard elements for the organization is going to be successful. This will affect each culture and work skills.

Hard Elements	Soft Elements
• Structure	• Style
• Strategy	• Skill
• System	• Staff
	• Shared Values

That is, McKinsey 7S Framework will demonstrate the link between the different "S" factors. The details of each S are as follows.

1. Structure: Structured is set by process or the function of the work by recruiting people to work together in different areas to achieve their goals. Good organization management will help to streamline the work, reduce redundancy or contradictions in functions, allowing staff to know the scope of work responsibilities. It is easy to contact liaison, management can make the decision to manage it accurately and quickly.

2. Strategy: Strategic management is a process that will provide managers with the answer for the key questions such as "where the organization is located at the moment?", "What is the purpose of the organization?", "What should our mission be?", and "who is our service?". The strategic management is very important to help organizations to define and develop competitive advantage. Also, that is the way that individuals within the organization knows how to use and try to go in which direction to succeed.

3. System: To implement the strategy to achieve the goals set out in addition to proper structure and good strategy. The management system and main operation system will be important to drive the organization to achieve its goals.

4. Style: Management behaviors of the executives are one of the most important elements of an organizational environment. It is found that the leadership plays an important role in the success or failure of the organization. Successful leaders must be able to set up the organization's cultural structure by inking excellence and ethical behavior.

5. Skill: Skill in the performance of the human resource in the organization can be divided into two main areas: professional skills meaning a skill to make personnel perform their duties and responsibilities, such as financial skills and personal skills based on further education or training. Aptitude and special talents may be able to make a person stand out better than others, resulting in better results and progress in the job faster. The organization, therefore, must parallel focus on human resources with both skills.

6. Staff: Human resources are an important factor in the organization's operations. The success of the organization partly depends on human resource management (HRM). According to the analysis of resources requirement, human is the defining process and the selection and placement of personnel which is in line with the organizational strategy developed to make human resources work in the direction that organization defines until reach the objectives of the organization.

7. Shared Values: Values and norms is shared by members of the organization that become the foundation of the administrative system and how the practice of

personnel and management within the organization, or so-called corporate culture. The foundation of corporate culture is value beliefs that build a philosophical foundation for the direction of the organization. In general, beliefs will reflect the personality and goals of the founder or senior executive. Later, those beliefs will set the norm as a daily occurrence within the organization. When values and beliefs being recognized throughout the organization and its personnel can strengthen the culture.

3.3.5 Competitive Environment as Moderator Variables

From the concepts and theories involved in creating a competitive advantage, it is clear that competitive enterprises need to be able to manage their operations in a manner that they respond to changing conditions. The environment in which products and services are made available to customers and stakeholders is satisfied. At the same time, competitors are not able to carry out the same strategy in line with the idea of Professor Michael E. Porter (1985), who emphasizes strategic planning to position the competition under the existing industrial environment.

In this study, Diamond Model Framework is used as a conceptual model or moderator to relation between entrepreneurial orientation and innovativeness with export performance. This situation, itself, is the one of the main contributions of this paper to the literature. Although there are some studies in the literature analyzing the relationship between entrepreneurial orientation and innovativeness with export performance (i.e. Baldauf et al. (2000)), there is no study treating the diamond model framework as a moderator between this relationship. From the study of theory related to the characteristics of establishments, the researchers compiled the variables in the dynamic diamond model by Professor Michael E. Porter, which was divided into 6 areas, as follows:

3.3.5.1 Factors in operation include: management of entrepreneurs entrepreneurial management (EM), cooperation, human resource management, location of establishment, type of establishment, age of establishment and experienced entrepreneurs in foreign markets.

3.3.5.2 Market factors include: market coverage, internationalization, first mover, product quality and standards.

3.3.5.3 Relevant industry and support include: having a business network, the advantage of raw material, the advantage of delivering goods.

3.3.5.4 Organizational structure and competitive strategies include: product mix, cost advantage, differentiation, and customer's responsiveness.

3.3.5.5 Governments include sources of funding, laws, regulations, and rules.

3.3.5.6 Opportunities include economic, social, cultural, demographic, environmental, and technological

3.4 Research Instrumentation

The researcher presented the research methodology used in the study as quantitative research and used questionnaire as a research tool to explore the variables in research and information related to the study of the "Effects of International Entrepreneurship Characteristics on Export Performance of Small and Medium Enterprises in Thailand" with the details are as follows:

3.4.1 Questionnaire

A tool used to collect quantitative data on the "Effects of International Entrepreneurship Characteristics on Export Performance of Small and Medium Enterprises in Thailand" with respect of entrepreneurial orientation, innovativeness, reconfiguration capability, competitive environment and export performances was questionnaires. The researcher created them based on the data collected from the related theoretical and theoretical considerations that was related to the study of the "Effects of International Entrepreneurship Characteristics on Export Performance of Small and Medium Enterprises in Thailand". Nevertheless, the steps to create the questionnaires were divided into 5 steps as follows:

3.4.1.1 Studied the concepts, theories and researches related to the effects of international entrepreneurship characteristics on export performance of small and medium enterprises in Thailand to serve as a framework for creating questionnaires for use in this research.

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3.4.1.2 Summarized the result from the first step by using the content analysis to summarize variables then used the basic information to create a questionnaires consisting of 4 parts as follows:

Part 1: Personal data and business data of the respondents include gender, age, educational level, status in the business, experience abroad, business type, number of employee, registered capital, business operation duration, export value and country of the exported market.

Part 2: Questionnaire measuring the variables of entrepreneurial orientation and innovativeness. The instrument is 7 rating scales: 1 = the least, 2 = less, 3 = rather less, 4 = neutral, 5 = rather much, 6 = much and 7 = the most.

Part 3: Questionnaire measuring the variables of reconfiguration capability. The instrument is 7 rating scales: 1 = the least, 2 = less, 3 = rather less, 4 = neutral, 5 = rather much, 6 = much and 7 = the most.

Part 4: Questionnaire measuring the variables of competitive environment. The instrument is 7 rating scales: 1 = the least, 2 = less, 3 = rather less, 4 = neutral, 5 = rather much, 6 = much and 7 = the most.

Part 5: Questionnaire measuring the variables of export performance divided into two areas: financial measurement and non-financial measurement. The instrument is 7 rating scales: 1 = decreased over 30%, 2 = decreased during 10-30%, 3= decreased less, 10% 4 = Not change, 5 = increased less 10%, 6 = increased during 10-30% and 7 = increased over 30%. For the non-financial measure, the instrument is 7 rating scales: 1 = the least, 2 = less, 3 = rather less, 4 = neutral, 5 = rather much, 6 = much and 7 = the most.

3.4.1.3 Used the questionnaire generated from the second step to find out the consistency and accuracy by using index of item-objective congruence (IOC) to determine the appropriateness of the questionnaire in both Thai and English language and complete content referring to the purpose of the research. The score of IOC was analyzed to determine the quality of the questions as of follows:

+1 means that the questionnaire is exactly measurable

0 means that the question is not exactly measurable

-1 means that the question is not measurable

After receiving the questionnaires evaluated by the experts and faculty members, the questionnaire with a question-matching index of 0.50 or above was considered to be suitable for the use as an indicators of the variables.

3.4.1.4 Edited and adjusted the questionnaires, based the score of IOC, from the expert recommendations. After that, the researcher tried out the edited questionnaires from 30 respondents from non-sample businesses such as small and medium enterprises with owners and executives.

3.4.1.5 Analyzed the data from the try-out experiment to determine the questionnaire reliability by measuring internal consistency with Cronbach Alpha Coefficient (α: coefficient). This method is reliable and has been used for evaluating instruments such as scale rating. Added by Kline (2011), this method is a quality check of the research tools, questions, and overall quality. The quality of each question is based on the Corrected-Item for Total Correlation, which should not be less than 0.30 for the overall quality of the tool. Based on the Cronbach Alpha Coefficient, the reliability of the questionnaire was not less than 0.70.

3.4.2 Define scoring

Defining scoring values in the questionnaire part No. 2-5 on entrepreneurial orientation, innovativeness, reconfiguration capability, competitive environment and export performances in both the finance and non-financial, is based on 7 rating scales as follows: The respondents were asked to consider and choose one of 7 levels which reflect the most agreed opinion. The rating scales can be as follows: 1 = the least, 2 = less, 3 = rather less, 4 = neutral, 5 = rather much, 6 = much and 7 = the most. From 1-7 points, the meaning of each score is shown in Table 3.5.

Table 3.5 Value of Questionnaire

Level of Attitude	Score
The Most agreement	7
Much agreement	6
Rather much agreement	5
Neutral agreement	4
Rather less agreement	3
Less agreement	2
The Least agreement	1

For analysis and interpretation of scores, the researcher defined the level of opinion on such factors calculated the range as follows (Fisher, 1953).

Range = (maximum value - minimum value) / number of layers

They can be classified into 7 opinions as follows:

The mean between 0.00 and 1.00 was the least agreement.

The mean between 1.01 and 2.00 was less agreement.

The mean between 2.01 and 3.00 was rather less agreement.

The mean between 3.01 and 4.00 was neutral agreement.

The mean between 4.01 and 5.00 was rather much agreement.

The mean between 5.01 and 6.00 was much agreement.

The mean between 6.01 and 7.00 was the most agreement.

3.4.3 Data Coding and Entry

The variables in this study had been encoded as to simplify the data processing and interpretation process. The abbreviation used for variables as shown in Table 3.6.

Table 3.6 Abbreviation of Constructs and Observed Variables

Construct	Observed variable	Type of variable
Entrepreneurial Orientation(EO)	Risk Taking Orientation (EO_Risk) Proactiveness Orientation (EO_Pro) Human capital (EO_Human)	Independent Variable
Innovativeness (INNO)	Technological innovation (INNO_Tech) Product innovation (INNO_Prod) Process innovation (INNO_Proc)	Independent Variables
Reconfiguration Capability(RC)	Innovative Capabilities1 (RC_Inc1) Innovative Capabilities2 (RC_Inc2) Innovative Capabilities3 (RC_Inc3) Adaptive Capabilities1 (RC_Adc1) Adaptive Capabilities2 (RC_Adc2) Adaptive Capabilities3 (RC_Adc3) Adaptive Capabilities4 (RC_Adc4)	Mediating Variables
Competitive Environment (CE)	Factor Conditions (CE_Fact) Demand Conditions (CE_Demand) Related and Supporting Industries (CE_Relate) Firm Strategy, Structure and Rivalry (CE_Firm) Government Conditions (CE_Gov) Chance Conditions (CE_Chan)	Moderator Variables
Export Performance(EP)	Finance (EP_Fin) Non-Finance (EP_NFin)	Dependent Variables

3.4.4 Testing on the Reponses Bias

After the data collection process was completed, the questionnaire was checked for accuracy and then the data was changed using the code and recorded in the computer and programmed by the researcher. The respondents' data from the sample was inserted to the data analysis from statistical packages program. To describe the sample characteristics and variables used in the research by using statistical packages, there will be a step-by-step process as detailed below:

The preliminary data analysis

3.4.4.1 In order to examine the appropriateness of data for further hypothesis testing, basic terms of statistics, the preliminary data analysis including the

test of distribution characteristics of observed variables, Skewness not exceeding 3.00 (absolute value) and kurtosis not exceeding 7.00 (absolute value) was conducted (J. Curran, G. West, & F. Finch, 1996; Kline, 2011) by using statistics software.

Basically, the normality testing of each variable is normal and sufficient to test several variables (J. F. J. Hair, Black, Babin, Anderson, & Tatham, 2006). Normality testing of variables means that each variable has the characteristics of normal distribution. Validity of the normal distribution from the data of all 21 observed variables of Entrepreneurial Orientation (EO) is measured by three observable variables: risk taking orientation (EO_Risk), proactiveness (EO_Pro) and human capital (EO_Human). In terms of Innovativeness (INNO), the model measured by three observable variables including technological innovation (INNO_Tech), product innovation (INNO_Prod), process innovation (INNO_Proc). In aspects of the reconfiguration capability(RC), the are seven variables including innovative capabilities1 (RC_Incl), innovative capabilities2 (RC_Inc2), innovative capabilities3 (RC_Inc3), adaptive capabilities1 (RC_Adc1), adaptive capabilities2 (RC_Adc2), adaptive capabilities3 (RC_Adc3), and adaptive capabilities4 (RC_Adc4). In terms of competitive environment (CE), the model was measured by six observation variables covering factor conditions (CE_Fact), demand conditions (CE_Demand), industry related and supporting industries (CE_Relate), firm strategy, structure and rivalry (CE_Firm), government conditions (CE_Gov) and chance conditions (CE_Chan). In terms of export performance variables (EP), the model measured two observable variables, Financial Export (EP_Fin) and Non-Financial Export (EP_NFin). As observed, these data are not distributed, some variables are skewness and some variables are kurtosis. Therefore, the data was transformed with the method that is similar to the normality distribution (J. F. J. Hair et al., 2006), by using the structural equation model program. The results of this study showed the distribution testing as the normality variable of observation was shown in Table 3.7

Table 3.7 To determine the Normal Distribution of Data.

Variables	Skewness	Kurtosis	Normal Distribution
EO_Risk	0.411	-0.121	✓
EO_Pro	0.625	0.204	✓
EO_Human	-0.189	0.005	✓
INNO_Tech	-0.116	-0.106	✓
INNO_Prod	-0.531	0.503	✓
INNO_Proc	-0.318	0.241	✓
RC_Incl	0.147	0.166	✓
RC_Inc2	0.351	0.178	✓
RC_Inc3	-0.145	0.227	✓
RC_Adcl	-0.126	0.248	✓
RC_Adc2	-0.271	0.642	✓
RC_Adc3	-0.056	0.387	✓
RC_Adc4	-0.402	1.078	✓
CE_Fact	0.215	0.025	✓
CE_Deman	-0.162	0.560	✓
CE_Relate	-0.180	0.240	✓
CE_Firm	-0.457	1.024	✓
CE_Gov	0.523	0.374	✓
CE_Chan	0.419	-0.232	✓
EP_Fin	0.150	-0.214	✓
EP_NFin	0.220	0.500	✓

3.4.4.2 The assessment of the reliability of the variables used in the model was done through the analysis of Cronbach's alpha. Cronbach's alpha is mean to measure internal consistency and to analyze whether how closely a set of items used in the model correlated with each other (Cronbach, 1951). The theoretical value of the alpha ranges from zero to one, of which the higher value indicates better survey quality meaning that the data is more reliable. It is suggested that Cronbach's alpha coefficient should be of 0.7 or higher; as a result, it is considered acceptable (Carman, 2000). The results of Cronbach's alpha coefficient analysis were shown in Table 3.8.

Table 3.8 Results of Cronbach's Alpha Coefficient Analysis

Construct	Item	Cronbach's Alpha Coefficient	$\overline{X}$	SD
EO	EO_Risk	.947	3.3796	1.1223
	EO_Pro	.946	4.6345	1.0588
	EO_Human	.943	5.0588	.9621
INNO	INNO_Tech	.944	5.4916	.9621
	INNO_Prod	.943	5.3459	.9524
	INNO_Proc	.943	5.3592	.9150
RC	RC_Inc1	.942	5.2878	.8507
	RC_Inc2	.942	5.1061	.9051
	RC_Inc3	.942	5.4384	.8637
	RC_Adcl	.942	5.4552	.8237
	RC_Adc2	.942	5.4034	.8024
	RC_Adc3	.943	5.5644	.7754
	RC_Adc4	.942	5.4902	.8417
CE	CE_Fact	.945	5.4517	.8053
	CE_Deman	.943	5.2227	.8768
	CE_Relate	.945	5.4286	.9193
	CE_Firm	.942	5.2409	.8468
	CE_Gov	.943	4.5840	.9167
	CE_Chan	.946	4.9412	1.1237
EP	EP_Fin	.944	4.7815	1.0739
	EP_NFin	.943	5.0602	.8675

The Cronbach's alpha coefficient results for all the items used in the model ranged from 0.942 - 0.947, the mean values ranged from 3.3796 - 5.5644, and the standard deviation ranged from 0.8024 - 1.1237.

Entrepreneurial orientation construct consisted of three items which the overall Cronbach's alpha coefficient was 0.944, mean values ranged from 3.3796 - 5.0588, and standard deviation ranged from 0.9621 - 1.1223, this explained the reliability of this construct and acceptance of the measurement of entrepreneurial orientation in the model.

Innovativeness construct consisted of three items which the overall Cronbach's alpha coefficient was 0.942, mean values ranged from 5.3459 - 5.4916, and standard deviation ranged from 0.9150 - 0.9621, this explained the reliability of this construct and acceptance of the measurement of innovativeness in the model.

Reconfiguration capability construct consisted of seven items which the overall Cronbach's alpha coefficient was 0.941, mean values ranged from 5.1061 - 5.5644, and standard deviation ranged from 0.7754 - 0.9051, this explained the reliability of this construct and acceptance of the measurement of reconfiguration capability in the model.

Competitive environment construct consisted of six items which the overall Cronbach's alpha coefficient was 0.942, mean values ranged from 4.5840 - 5.4517, and standard deviation ranged from 0.8053 - 1.1237, this explained the reliability of this construct and acceptance of the measurement of competitive environment in the model.

Export performance construct consisted of two items which the overall Cronbach's alpha coefficient was 0.943, mean values ranged from 4.7815 - 5.0602, and standard deviation ranged from 0.8675 - 1.0739, this explained the reliability of this construct and acceptance of the measurement of export performance in the model.

The total reliability statistics was 0.927 for 21 items. The Cronbach's alpha coefficients were well above 0.7, indicated reliability and acceptance of the mode for the further analysis.

3.4.4.3 Multicollinearity Testing

The testing of multi-collinearity is an analysis for the non-relationship between variables. The tolerance must be more than 0.1 and the value of variance inflation factor (VIF) must be lower than 10 (J. F. Hair, Anderson, Babin, & Black, 2010). The analyzed tolerance values ranged from 0.332 - 0.605 and VIF values ranged from 1.653 - 3.011, indicating that there were no multi-collinearity among variables. The analyzed values as shown in Table 3.9.

Table 3.9 Multicollinearity Testing Results

Construct	Items	Collinearity Statistics	
		Tolerance	**VIF**
EO	EO_Risk	.542	1.847
	EO_Pro	.403	2.479
	EO_Human	.450	2.221
INNO	INNO_Tech	.401	2.493
	INNO_Prod	.356	2.806
	INNO_Tech	.332	3.011
RC	RC_Incl	.340	2.873
	RC_Inc2	.349	1.737
	RC_Inc3	.346	2.152
	RC_Adcl	.365	2.011
	RC_Adc2	.370	2.859
	RC_Adc3	.354	1.895
	RC_Adc4	.348	1.653
CE	CE_Fact	.576	2.938
	CE-Deman	.465	2.862
	CE_Relate	.497	2.888
	CE_Firm	.350	2.739
	CE_Gov	.528	2.699
	CE_Chan	.605	2.828
EP	EP_Fin	.488	2.051
	EP_NFin	.398	2.515

3.4.5 Validation and Evaluation of Model Performance

Verification and evaluation of model performance based on validity and reliability (Ngudgratoke & Reckase, 2010)

3.4.5.1 Reliability means the consistency of the measurement or the accuracy of the measurement without the measurement error. The reliability of the variables is determined by the analysis of square multiple. Correlation is the variance of variables described by latent variables. The value is equal to the communality in the analysis of survey elements. Reliability can also be determined by the construct reliability (CR) and average variance extract (AVE) (Hair et al., 2010).

- Average variance extracted (AVE), where the criterion for the extracted variance is good, should have value as of 0.50. This score indicate that the

data does not exceed the measurement error value, which it can cause the variation in observed variables rather than latent variables.

- Construct reliability (CR) indicates the level of latent variables in the model, with a good CR level of 0.70 or higher. If the CR value is between 0.60 and 0.70, the construct will be acceptable.

The construct validity is the evaluation of the degree of which the test is actually measuring the theoretical construct. It claims and attempts to measure. The construct validity is divided into 2 subcategories; convergent validity testing and discriminant validity testing.

The convergent validity is the test whether the constructs, which are expected to be related, are, in fact, related to the others. The discriminant validity is the test whether constructs, that should have not related, is, in fact, not related to the others.

Convergent validity assessed the extent that the indicators could represent the construct; in the other word, convergent validity examines the degree to which the measurement is similar to other measurements. In this study, convergent validity has been evaluated through factor loadings. The factor loading of all items should be exceeding 0.60.

Confirmatory factor analysis (CFA) is used to evaluate relationship between variables with the priority in evaluating the relationship pattern of the variables in the model. CFA is an evaluation whether the set of variables are good representatives for the construct (J. F. Hair et al., 2010). The assessment indicators include *p*-value (Chi-square Probability Level), CMIN/df (Relative Chi-square), GFI (Goodness of Fit Index), AGFI (Adjusted Goodness of Fit), RMSEA (Root Mean Square Error of Approximation), and NFI (Normed Fit Index). The *p*-value should be significantly associated with each loading. The CMIN/df value should be less than 3.0. The values of GFI, CFI, and NFI should be higher than 0.90 and AGFI should be higher than 0.80 (Hu & Bentler, 1999), the RMSEA should be lower than 0.08. If the aforementioned criteria are met, the CFA would be considered as data-fit model.

Convergent validity can be evaluated with an average variance extracted (AVE). The model would be acceptable if the AVE is higher than 0.5 (Fornell & Larcker, 1981; J. F. Hair et al., 2010). AVE is calculated based on the calculation formula as follows:

$$AVE = \frac{\sum_{i=0}^{n} Li^2}{n} > 0.5$$

The evaluation of convergent validity is done through CFA. The observed variable can be considered a good representative of the construct if the factor loading value is higher than 0.60. Furthermore, all average variance extracted (AVE) of all variables should be higher than 0.5, and the composite reliability (CR) of all variables should be higher than 0.60.

Table 3.10 Factor loading, R^2, Composite Reliability, Average Variance Extracted of Independent Variable (Entrepreneurial Orientation: EO)

Variables	Factor loading	R^2	Composite Reliability	AVE
EO			0.891	0.824
EO_Risk	0.534	0.29		
EO_Pro	1.167	1.36		

EO construct had factor loading values ranged from 0.534 to 1.167, Although the factor loading of EO_Risk will be lower than 0.60, it is located in the criteria that it is enough. The R^2 values ranged from 0.29 to 1.36 which are within the acceptable range. Composite reliability at 0.891 indicated the acceptability of construct reliability. The acceptable AVE value must be higher 0.5 (Fornell & Larcker, 1981), the AVE from the model was 0.824, also indicating the acceptability of the construct reliability.

Table 3.11 Factor loading, R^2, Composite Reliability, Average Variance Extracted of Independent Variable (Innovativeness: INNO)

Variables	Factor loading	R^2	Composite Reliability	AVE
INNO			0.833	0.626
NNO_Tech	0.727	0.53		
INNO_Prod	0.814	0.66		
INNO_Proc	0.828	0.69		

INNO construct had factor loading values ranged from 0.727 to 0.828, which were all higher than 0.60. The R^2 values ranged from 0.53 to 0.69 which are within the acceptable range. Composite reliability at 0.833 indicated the acceptability of construct reliability. The acceptable AVE value must be higher 0.50 (Fornell & Larcker, 1981), the AVE from the model was 0.626, also indicating the acceptability of the construct reliability.

Table 3.12 Factor loading, R^2, Composite Reliability, Average Variance Extracted of Independent Variable (Reconfiguration Capability: RC)

Variables	Factor loading	R^2	Composite Reliability	AVE
RC			0.898	0.557
RC_Incl	0.745	0.56		
RC_Inc2	0.696	0.49		
RC_Inc3	0.734	0.54		
RC_Adcl	0.745	0.55		
RC_Adc2	0.766	0.59		
RC_Adc3	0.749	0.56		
RC_Adc4	0.785	0.62		

RC construct had factor loading values ranged from 0.696 to 0.785, which were all higher than 0.60. The R^2 values ranged from 0.49 to 0.62 which are within the acceptable range. Composite reliability at 0.898 indicated the acceptability of construct reliability. The acceptable AVE value must be higher 0.5 (Fornell & Larcker, 1981), the AVE from the model was 0.557, also indicating the acceptability of the construct reliability**.**

Table 3.13 Factor loading, R^2, Composite Reliability, Average Variance Extracted of Independent Variable (Competitive Environment : CE)

Variables	Factor loading	R^2	Composite Reliability	AVE
CE			0.793	0.491
CE_Demand	0.694	0.48		
CE_Relate	0.643	0.41		
CE_Firm	0.816	0.67		
CE_Gov	0.636	0.40		

CE construct had factor loading values ranged from 0.636 to 0.816, which were all higher than 0.60. The R^2 values ranged from 0.40 to 0.67 which are within the acceptable range. Composite reliability at 0.793 indicated the acceptability of construct reliability. The acceptable AVE value must be higher 0.5. (Fornell & Larcker, 1981), the model from the AVE was 0.491 which is lower than the criterion. However, Hatcher (1994:331), said that too often the construct validity can lead to the lower AVE. Therefore, the researcher consider construct reliability (CR), which should be greater than 0.60 and factor loading which should have a value ranging from 0.60 (absolute value).

Table 3.14 Factor loading, R^2, Composite Reliability, Average Variance Extracted of dependent Variable (Export Performance : EP)

Variables	Factor loading	R^2	Composite Reliability	AVE
EP			0.793	0.661
EP_Fin	0.697	0.49		
EP_NFin	0.914	0.83		

EP construct had factor loading values ranged from 0.697 to 0.914, which were all higher than 0.60. The R^2 values ranged from 0.49 to 0.83 which are within the acceptable range. Composite reliability at 0.793 indicated the acceptability of construct reliability. The acceptable AVE value must be higher 0.5 (Fornell & Larcker,

1981), the AVE from the model was 0.661, also indicating the acceptability of the construct reliability.

3.4.5.2 Discriminant Validity Testing

Discriminant validity testing is an evaluation to confirm that observed variable represents on the same latent variables and is not associated with other observed variables of the other latent variables. This proved that the construct is unique and captured some phenomena that are not similar to other constructs. The correlation coefficient should be ranged between ≥ 0.2 to 1.0 (Hair et al., 2010), whereby the coefficient from the model ranged from 0.200 to 0.850. The discriminant validity testing is done through the comparison between AVE value and the correlation coefficient, the discriminant validity was assessed based on the following criteria (Fornell & Larcker, 1981).

$$\sqrt{AVE} > r^2(\text{correlation})$$

The testing results showed that the values supported the discriminant validity as shown in Table 3.15 The value of square root AVE for each construct was greater than the level of correlation coefficient in involving constructs, except some of variable that might not pass testing criteria. However, it is appropriate to improve the measurement model to analyze the structural equations model to test hypotheses in the research.

Table 3.15 Comparison of Square root AVE with Correlation Between Constructs

	EO	**INNO**	**RC**	**CE**	**EP**
EO	**0.908**				
INNO	0.080	**0.791**			
RC	0.066	0.692	**0.746**		
CE	0.076	0.415	0.722	**0.701**	
EP	0.040	0.203	0.432	0.415	**0.813**

3.4.6 Analysis of measurement models

3.4.6.1 Validity means the ability of variables or indicators to measure latent variables in a model. Considering the significance of the factor loadings, it is possible to compare the significance of the observed variables, noting which variables are best used to measure latent variables. The factor loadings should be high and have a statistical significance of t-value greater than 1.96 (Diamantopoulos & Siguaw, 2000) confirming relationship between observed variables and latent variables. It also needs to be considered in conjunction with the standardized loading, which should have a minimum acceptable value of 0.5 or higher. For good standardized loading should be at 0.7 or higher (J. F. Hair et al., 2010).

3.4.6.2 Model analysis with confirmatory factor analysis (CFA) to measure latent variable and confirm that each observation variable is the appropriate indicator for the latent variable operated by specifying the model specifications by identifying the probability of a single value of the model, overall fit of measurement modeling and parameter estimation by using statistical package program.

3.4.6.3 Structural equation model analysis (SEM) to analyze the structural relationships of the effects of international entrepreneurship characteristics on export performance of small and medium enterprises in Thailand was conducted by examining the consistency of the structured relationship model given with empirical data and studying the direct effect, indirect effect and total effect of the effects of international entrepreneurship characteristics on export performance of small and medium enterprises in Thailand. The analysis was done via using statistical packages.

3.4.6.4 Goodness of fit is used to measure and study the overall of the model whether it is consistent with the empirical data based on the integration of criteria for measuring consistency from academics. The researcher used the statistics (Diamantopoulos & Siguaw, 2000; F. Hair, Black, Babin, & Anderson, 2010; Schumacker & Lomax, 2012; Tabachnick & Fidell, 2007) to be examined as follows:

Table 3.16 Model Compliance Assessment Criteria

Consistency index	Criteria for consideration	Source
1. χ^2	P < 0.05 (Statistically significant)	Hair et al., (2010) For the sample of more than 250 (N> 250) and 13-29 observed variables (12 <m <30)
or χ^2/df	Lower than 3.00	Arbuckle (2010)
2. GFI	Higher than 0.90	Schumacker and Lomax (2012)
3. RMSEA	Lower than 0.05-0.08	Schumacker and Lomax (2012)
4. CFI	Higher than 0.90	Hair et al., (2010) For the sample of more than 250 (N> 250) and group of variables observed were 13-29 (12 <m <30)

From Table 3.16, the indices used to evaluate model consistency are as follows.

1) Chi-square statistic is the value used to check the consistency between the model and the empirical data. In overall, the test of the consistency between the model and the empirical data has a hypothesis that Ho: $\Sigma = \Sigma (\theta)$ which is different from general analysis. The researcher wants to accept the assumption Ho that p-value is over 0.05 as required when tested with 95% confidence (P> .05) (Barrett, 2007; Diamantopoulos & Siguaw, 2000; F. Hair et al., 2010; Hooper, Coughlan, & Mullen, 2008; Schumacker & Lomax, 2012; Wiratchai, 1999). Thus, chi-square statistics at high values, it means that the consistency function is significantly different from zero at statistical significance. That is, the model is not consistent with the empirical data. However, if the chi-square value is very low, or even near zero, then the model is consistent with the empirical data (Ngudgratoke & Reckase, 2010; Wiratchai, 1999). However, if the sample size is very large, the chi-square is likely reject the assumptions. For this reason, the use of evaluation criteria based on the chi-squared only one value may not complete enough. Therefore, the researcher also considered the ratio of chi-square to the degree of independence (χ^2/df) or the relative chi-square (CMIN / DF) concurrently. Based on CMIN / DF, the value must be less than 3 (Arbuckle, 2011). If the CMIN / DF is closer to 0, the model is more consistent with the empirical data.

2) Goodness of fit index (GFI) is a measure of consistency. The ratio of the difference among the correspondents between the model and empirical data. If the value is high when it is compared to DF, the researcher has to adjust the new model and then analyze once again. If the value from the new analysis yields lower than the first time, it indicates that the new model is consistent with the empirical data. Indeed, GFI will have a value between 0-1. If the GFI is close to 1.0, it indicates that the model is consistent with the empirical data. Schumacker & Lomax (2012) defines a model with a higher GFI (greater than 0.90) is consistent with empirical data.

3) The root mean square error of approximation (RMSEA) is the index of the non-conformance of the constructed index (Schumacker & Lomax, 2012). Given a model with an RMSEA value between 0.05 - 0.08, the model is consistent with empirical data.

4) The Comparative fit index (CFI) is an index that shows a proportion of better comparison. The appropriateness of theoretical model or hypothetical model is that the model should not have a relationship between null model. The CFI is calculated from the chi-square test. The value is between 0-1 (Kline, 2011; Hair et al., 2010). A model with a higher-0.90-vale CFI refers the consistence of empirical data.

Goodness of fit measures and chi-square statistic are the statistic used to test the statistical hypothesis that the consistency function is zero. If the chi-square value is very low or even closer to zero, then the causal model data is consistent with the empirical data. No statistically significant chi-square value or p-value greater than 0.05 indicates that the model is consistent with empirical data.

Goodness of fit index (GFI), which is the ratio of the difference between the conformance function from the pre- and post-modulation model. In terms of the GFI function, if it is greater than 0.90, it shows that model is consistent with empirical data.

Model modification: the researcher will perform a model modification if it is found that theoretical models or hypothetical models do not correspond to empirical data. There are steps to use the model modification. The first is that model modification must explain the reason why it adjusts. The second is that the model must be adjusted only one parameter at a time and then analyze it again. The model will be adjusted repeatedly when the value is not desired. The third is that the researcher considers to

join the EFC (expected parameter change), this is the value that tells the size and direction of the parameter to be adjusted. The parameters to be adjusted should be high which this can consider from the value of EFCs and modification index (MI). The fourth is that the researcher can be based on the standardized residual. If the standard deviation is greater than 2.28 as a parameter, then the parameter should be considered and then re-analyzed. However, if it is less than -2.58, it should be removed from the model and then re-analyzed (Diamantopoulos & Siguaw, 2000).

3.5 Measurement Variables

The research on the effects of international entrepreneurship characteristics on export performance of small and medium enterprises in Thailand include latent variables covering entrepreneurial orientation, innovativeness, reconfiguration capability, competitive environment and export performances. The meanings and gauges can be portrayed as follows:
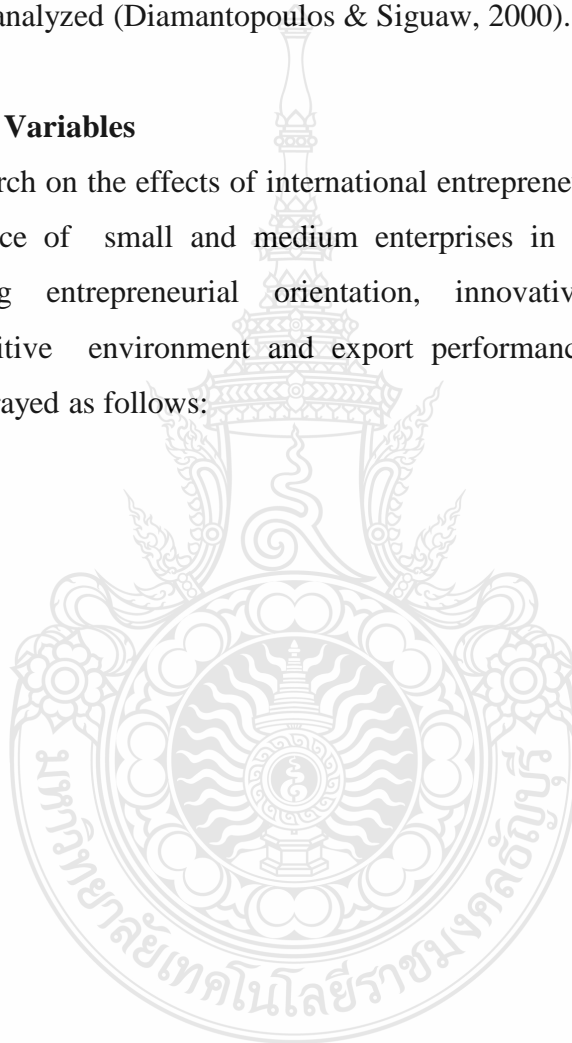
Table 3.17 Summary of Literature Review to the Export Performance

Variable	Definition	Item/Indicators	Source
Export Performance	Export performance is the result of business activities in the export of goods to foreign countries. It can measure both financial variables and non-financial variables.		Zou and Stan (1998) Baldauf et al. (2000) Leonidou et al. (2002) Navarro et al. (2010) Pitakannop (2015)
Financial	Financial is the measure of the organization's performance. It aims to assess asset efficiency. Generally, it consists of sales growth, market share and net profit.	Financial aspect : – Sales growth compared to the same period last year. – An increase in market share compared to the same period last year. – Net profit compared to the same period last year	Zou and Stan (1998) Enz et al. (2001) R. S. Kaplan and Norton (2004) Pitakannop (2015)
Non-Financial	Non-financial is a measure of the company's performance in terms of perceived success, satisfaction and goal achievement.	Non-Financial aspect : – In the past 3 years, your business has succeeded in creating a quality product or service that meets the required standards. – In the past 3 years, your business could meet the needs of customers to meet the target. – In the past 3 years, your business could achieve its target sales growth target.	Zou and Stan (1998) Pitakannop (2015)

Table 3.18 Summary of Literature Review to the Entrepreneurial Orientation

Variable	Definition	Item/Indicators	Source
Entrepreneurial Orientation	Entrepreneurial orientation is an organizational structure that is closely linked to strategic management and strategic decision-making. By the dimension associated with entrepreneurial orientation, it consists of risk-taking, innovativeness, proactiveness, human capital and institutions.		Covin and Slevin (1991) Mthanti and Ojah (2017) Mthanti and Ojah (2018)
Risk Taking Orientation	Risk taking is one of important dimensions of entrepreneurial orientation. It is believed to be necessary to perform well and survive as a business. The owners/managers of firms who have an international vision, will be favorable with perception and attitudes toward exports. They will be willing to take risk and have the capacity to engage positively in export activities and finally lead a company to export success.	Risk Taking aspect : – Your business is ready to take the risk of bringing in existing resources into the export market that is not yet known. – Your business is ready to take the risk of operating to make rapid changes. – Your business will choose to do risky things to generate high profits.	Naldi et al. (2007) J. Okpara (2009)

Table 3.18 Summary of Literature Review to the Entrepreneurial Orientation (Cont.)

Variable	Definition	Item/Indicators	Source
Proactiveness Orientation	Proactiveness is the opportunity-seeking and forward-looking perspective that involves in introducing new products / services and acting in anticipation of future demand. It can include a firm's ability to enter the export market and a wide variety of activities including identifying opportunities and market trends, assessing the strengths and weaknesses of opportunities, and forming capable teams of exploiting opportunities and market trends.	Proactiveness aspect : – Your business seeks new opportunities to export. – Your business focused on research and development of new products and services to gain competitive advantage in the international market.	Kropp and Zolin (2005) Okpara (2009)
Human capital	The human capital, which contains the education level, experience in the business and experience in administration, was extremely important to start the business operations. The human capital affects social capital, and that experience and cognitive ability influence personal relations and complicity. Organizational performance is strongly influenced by human capital through the cognitive ability of the manager.	Human capital aspect : – In your business, employees at all levels are encouraged to seek and educate themselves on a regular basis. – Administrators of your business encourage employees to attend training, seminars with external agencies to bring knowledge and exchange information with other employees for mutual learning. – Employees at all levels in your business can bring new knowledge and / or technology to the work process to find a way to work for new products or services.	Rose et al. (2006) J., Eduardo, and Jorge (2014)

Table 3.19 Summary of Literature Review to the Innovativeness

Variable	Definition	Item/Indicators	Source
Innovativeness	Innovation potential is currently considered to be a key prerequisite for a firm's competitiveness and performance. This applies especially to small and medium enterprises (SMEs). The simple organizational structures and administrative systems can respond faster to customers' requirements and development trends. A growing number of studies stresses the existing relationship between the innovation potential of an enterprise and market success.		Baden-Fuller (1995) BARKER III and Duhaime (1997) Christensen and Raynor (2003) Audretsch (2003) Andergassen et al. (2009) Zeng et al. (2010)
Technological innovation	Technological innovation will be used to create new products, new services or new processes to deliver to the market. The innovative technology can improve the performance in the service. The effects of non depending on the phase of the innovation process and organizational innovation which influences technological innovation persistence.	Technological innovation aspect : – Your business uses technology to support the work, such as using the computer to help decide production planning. – Your employees has the ability to use technology and it can be used in operations such as analysis of customer information. – Your business is encouraged the use of technology to gain knowledge from inside and outside the enterprise, such as searching knowledge from the Internet. – Your business has technology management system to meet the needs of diverse customers.	Landau (1991) Cited Orfila Sintes et al. (2005) Caroline and Thuc (2010) Christian, Caroline, and Uyen (2015)

Table 3.19 Summary of Literature Review to the Innovativeness (Cont.)

Variable	Definition	Item/Indicators	Source
Product innovation	Product innovation can be considered from the both view of consumers and entrepreneurs. For example from the consumer's view, the consumer might be considering the innovative features, new appearance, uniqueness and product originality. Product innovation occurs from the consistency in the development of new products or services to the market at the right time to enter the market and to gain a competitive advantage against competitors.	Product innovation aspect : – Your business can improve existing products and make new products that add value to your business and customers. – Your business can create new products that add value to your business and customers. – Your business clearly plans and assigns the employees' responsibility for product development. – Our business can apply new techniques to develop products that can create value for the business and customers, such as product analysis, from customer satisfaction.	Atuahene-Gima (1995); Danneels and Kleinschmidt (2001) Henard and Szymanski (2001) Wang and Ahmed (2004)
Process innovation	Process innovations is also very important to the organization or business to obtain the competitive advantage from the competition. This represents the introduction of new or significantly improved production and/or delivery methods.	Process innovation aspect : – Your business can improve the process existing production as a new process that adds value to the business and customers – Your business can create value-added production processes for your business and customers – Your business planned and assigned employees the responsibility for the development of the production process of the business	Schilling (2008) Zizlavsky (2014)

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Table 3.20 Summary of Literature Review to the Reconfiguration Capability

Variable	Definition	Item/Indicators	Source
Reconfiguration Capability	Reconfiguration capabilities is the organizational skill required to rebuild assets and learning in order for creativity to take place. Reconfiguration of current assets and capabilities through recent models of consolidation is enough for further complication than combination, as it includes the positioning of familiarized resources to create new worth, thus improving the mixtures inside and between firms.		David J. Teece (2007) Lockett et al. (2009) Jantunen et al. (2012)
Innovative Capabilities (Approach by 7S Model -Hard elements)	Innovative capabilities can be described in many dimensions such as the strategies promoting innovation, organization behavior, work process commitment, and pursuit of new markets or the vision and strategies that support innovation, capacity and resources for creative management, organization and structure, working atmosphere and organizational culture.	Innovative Capabilities aspect : – Your business has an appropriate management structure for its operations. – Your business has clearly defined the responsibilities of employees at all levels. – Your business decentralizes decisions to employees. – Your business has an operational strategy that is consistent with the goals of the business clearly. – Your business is conveying the operational strategy to the operation in accordance with the goals of the business clearly. – Your business is revising operational strategies that are clearly aligned with your goals.	K. Z. Zhou and Li (2010)

Table 3.20 Summary of Literature Review to the Reconfiguration Capability (Cont.)

Variable	Definition	Item/Indicators	Source
		– Your business has a clear working system. – Your business has a clear monitoring and evaluation system. – Your business has a risk management system to prevent errors within the organization.	
Adaptive Capabilities (Approach by 7S Model - Soft elements)	It is important to bring the product or service into the market quickly to respond the opportunity, including the management of existing resources to respond to the opportunity quickly. They also need to manage their resources in a timely manner.	Adaptive Capabilities aspect: – Your business has a clear management model for products or services, such as fast delivery, offering new products/ services, etc. – Your business has a management style that is in line with customer needs. – Your business has a control pattern, monitoring and supervising the management of the product or service clearly. – Your employees have the knowledge, capacity and skills needed to perform each job. – Your employees have operational skills that will drive the organization to evolve. – Your employees have been developing their knowledge and gaining experience in the continuous work, such as training and seminars.	S. Chakravarthy (1982) K. Z. Zhou and Li (2010) Drnevich and Kriauciunas (2011) Chatterji and Patro (2014)

Table 3.20 Summary of Literature Review to the Reconfiguration Capability (Cont.)

Variable	Definition	Item/Indicators	Source
		− Your employees have the right feature for each job.	
		− All levels of your employees collaborate in teamwork.	
		− Your business is constantly monitoring and evaluating performance.	
		− All levels of employees understand and strive to work together to achieve clearly defined goals.	
		− All levels of employees in work have performed their responsibilities with dedication and full capacity.	
		− All level of employees are ready and cooperate in making changes for organizational development.	

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Table 3.21 Summary of Literature Review to the Competitive Environment

Variable	Definition	Item/Indicators	Source
Competitive Environment	Competitive analysis considers and assesses the current circumstances of competitive environment to gain competitive advantage in the industry. It consists of four main elements as follows: -Factor Conditions -Demand Conditions -Related and supporting industries -Firm Strategy, Structure and Rivalry; and Government and Chance Influencing the ability to increase productivity.	Competitive Environment aspect: – Your business executives have extensive export experience in international markets. – Your business has sufficient potential and skillful labor. – Your products and / or services are needed both domestically and internationally. – Your business has the power to negotiate with buyers in foreign markets. – Your business is ready for the production process, management and quality control. – Your business can compete in terms of having lower production costs than other competitors in the exported market – Your business has a market that supports certain products or services. – Your business develops superior product or service quality.	Porter (1990)

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Table 3.21 Summary of Literature Review to the Competitive Environment (Cont.)

Variable	Definition	Item/Indicators	Source
		– Your business has a way to reduce problems and obstacles from increased commercial standard requirements.	
		– Your business has accessed and used full public sector measures.	
		– Your business is fully supported by the government.	
		– Your business is likely to increasingly expand to foreign markets.	

3.6 Sequence of Analysis

This research used quantitative research method which the sequence of analysis is presented as following:

Quantitative research

3.6.1 Survey Pretesting

1) Content validity testing

2) Reliability testing with 30 tryout sampling

- Cronbach's alpha testing

3) Redesigning of the questionnaire if required
(In case of Cronbach's alpha is less than 0.70)

3.6.2 Statistical Analysis

1) Descriptive statistic analysis

- Mean and Frequency

2) Reliability testing

- Cronbach's alpha testing

3) Validity testing

- Confirm factor analysis (convergent validity)

- SEM Method (discriminate validity)

4) Structural Equation Modeling

- Development of the model

- Analysis of the model

- Measure of good-fit model

1. Consider the Chi-square (χ^2) test, χ^2/df, degree of freedom, RMSEA, GFI and CFI

2. If the model does not fit, there will be a modification and re-analysis of the model

- If the model fits

1. Analysis of the regression weight, p-value

2. Analysis of direct/indirect relationship

5) Quantitative research report

CHAPTER 4
RESEARCH RESULTS

Introduction

This chapter presents detailed analysis and empirical test results to confirm the correctness of the conceptual framework, hypothesis, concept of construct and variables related to the issues of the Effects of International Entrepreneurship Characteristics on Export Performance of Small and Medium Enterprises in Thailand. The information analysis comprised 4 aspects as follows: 1. Characteristics of the respondents and data preparation included the characteristics of the population and sample 2. Results of general data analysis of respondents using basic statistics: Frequency Distribution, Percentage, Arithmetic Mean, and Standard Deviation.3. Development and validity of the results of the Confirmatory Factor Analysis (CFA) to measurement of model of the Entrepreneurial Orientation, Innovativeness, Reconfiguration Capability, Competitive Environment and Export Performance 4. Result of Analysis the causal relationship model on the Effects of International Entrepreneurship Characteristics on Export Performance of Small and Medium Enterprises in Thailand via Structural Equation Model Analysis (SEM)

4.1 Data Preparation

The research study of the Effects of International Entrepreneurship Characteristics on Export Performance of Small and Medium Enterprises in Thailand. This research was used to quantitative research method by collect data and quantitative analysis. The research instrument was a questionnaire to survey the population of small and medium enterprises who are 238 Units and members of the Department of International Trade and 534 Units from the list of outbound traders, Standard Office of Commerce Ministry in the year 2016 totaling 772 Units. The researcher will only provide information on the registered enterprise, but considering the conditions for being a small and medium enterprise with a registered capital of not more than Baht 100 million, the selection of small and medium enterprises who are exporter number was 454 units. The questionnaire will be identified by Unit of Analysis. The research is

controlled at the organizational level. It is defined as an entrepreneur. The business owner is an exporter. Export partnership Gartner et al. (1994) represent a unit of analysis of a company, divided into two groups. First, there will be 178 sample locations in the province. The questionnaire will be sent by mail and stamped. Provide addresses for the respondents to submit the survey results to the researcher to motivate the respondents. One questionnaire will be donated to the fund for the poor patients of Ramathibodi Foundation at Ramathibodi Hospital. The sample was located in the provinces outside of the province. The sample was returned to about 5 recipients because there were no recipients or the wrong address. Researcher received 55 questionnaires back which is 30.90 percent. Second group is 276 samples that allocate in Bangkok metropolitan area (Nonthaburi, Pathumthani, Samutprakarn). Most respondents responded to the questionnaire, but some declined to provide information. However, the questionnaire was returned to 240 respondents or 86.95 percent. When the questionnaires were collected from the sample in the provinces and their locations in Bangkok and its vicinity, there were 295 respondents or 64.98 percent. However, when the questionnaire was returned, only 238 could be used for the research. The 57 respondents found that the registered capital was over 100 million baht, so it cannot be used in small and medium enterprises with a registered capital of no more than 100 million baht. However, 238 respondents of the qualitative examination were found. The distribution of data has no bias. However, the basic information is unlikely to make the statistical analysis inexact.

4.2 Demographic Summary

Results of Personal Data Analysis and Business Data of the Respondents

The results of general data analysis were gender, age, education level, status in the business, experience in aboard, type of business, number of employees, registered capital, duration of operation, export value and the main export markets. The basic statistics were: Frequency Distribution, Percentage, Mean and Standard Deviation were shown in Table 4.1 as follows.

1. Gender: The people who answered the questionnaire were male for 50.0 percent and 49.6 percent was female. This showed that entrepreneurs or executives of

small and medium enterprises had proportion of entrepreneurship and leadership of the similar organization

2. Age: The majority of respondents were aged between 41-50 years as a percentage 33.2%, followed by 31-40 years of age, 25.2% Over 60 years old, or 3.8%

3. Education Level: Most respondents completed a bachelor's degree as a percentage for 47.9%. Second, a master degree as a percentage was 42.9% and the lowest was the undergraduate level representing 3.4%.

4. Status in the business: Most respondents were high-level executives who were involved in other policy as a percentage for 25.6%. Second the owner as a percentage was 25.2% and the lowest were Partnership representing 23.9 %.

5. Experience aboard: Most respondents had overseas experience. The average length of stay was 2.69 years ($\overline{X}$ = 2.69 SD = 3.398) and 61.8% had no overseas experience.

6. Type of business: Most respondents It is a business group of agricultural products representing 36.1%. Second, the food business. 16.8%, and the lowest was mineral, fuel and energy, representing 1.3%

7. The number of employees: Most of the respondents have the employees less than 50 representing 47.1% followed by the number of employees was 51 - 200, representing 39.1% and the least was more than 200 employees representing 13.4%.

8. Registered capital of the business. Most respondents have registered capital less than 26 - 100 million baht, or 55.9%, followed by the registered capital of less than 25 million baht or 44.1%. However, there were no respondents with more than 100 million THB.

9. Duration of operation: Most respondents have duration of business operation over 10 years, representing 48.7%, followed by the period of 5-10 years. The duration of business operation was less than 5 years, representing 16.4%.

10. Value of export compared to income of business: Most respondents exports account for less than 50% of revenue, representing 63.4% and exports more than 50% of revenues, representing 34.5%.

11. The main export markets: Most of the respondents had a group of export markets In Asia for 66%, followed by Europe for 13% and South America for 3% at the least.

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Table 4.1 Number and Percentage of Sample by Personal Data and Business Data of the Respondents

	General information	Number(place)	Percentage
Gender	Male	119	50.0
	Female	118	49.6
	No answer	1	0.4
Age	Between 20 to 30	32	13.4
	Between 31 to 40	60	25.2
	Between 41 to50	79	33.2
	Between 51 to 60	58	24.4
	More than 60	9	3.8
	No answer	0	0.0
Educational Level	Undergraduate	8	3.4
	Bachelor Degree	114	47.9
	Master Degree	102	42.9
	Higher than Master Degree	14	5.9
	No answer	0	0.0
Status in the Business	Owner	60	25.2
	Business Successor	58	24.4
	Partner	57	23.9
	High-level executives involving in other policy.	61	25.6
	No answer	2	0.8
Experience abroad	Experience	88	37.0
	No-experience	147	61.8
	No answer	3	1.3
Years of experience in abroad	$\overline{X}$ = 2.69 SD = 3.398		

Table 4.1 Number and Percentage of Sample by Personal Data and Business Data of the Respondents (Cont.)

	General information	Number(place)	Percentage
Business type	Agricultural products	86	36.1
	Minerals/ Fuels	3	1.3
	Foods	40	16.8
	Automotive / Auto Parts and Accessories	13	5.5
	Machinery / Equipment	17	7.1
	Chemicals / Plastics Raisin	15	6.3
	Cosmetics, toiletries, medical supplies/ Optical Goods	17	7.1
	Household Products	13	5.5
	Building Materials/ Hardware Items	5	2.1
	Electronics / Electrical Products and Parts	10	4.2
	Others	19	8.0
Number of Employee	Less than 50	112	47.1
	51-200	93	39.1
	More than 200	32	13.4
	No answer	1	0.4
Registered Capital	Less than 25 M THB	105	44.1
	Less than 26-100 M THB	133	55.9
	More than 100 M THB	0	0.0
Duration of Operation	Less than 5 year	39	16.4
	5 - 10 year	83	34.9
	More than 10 year	116	48.7
Export Value	Exports less than 50% of revenue.	151	63.4
	Exports more than 50% of revenue.	82	34.5
	No answer	5	2.1
Country of export markets.	Asia	224	66
	North America	25	7
	South America	10	3
	Europe	43	13
	Australia	19	6
	Africa	16	5

4.3 Descriptive Statistics

The following section summarized features of data collected for the study and presented in quantitative and a comparable fashion.

Summarized Features of Data

The attribute of the Effects of International Entrepreneurship Characteristics on Export Performance which were two exogenous construct was Entrepreneurial Orientation(EO) and Innovativeness(INNO), two endogenous construct was Reconfiguration Capability(RC) and Competitive Environment (CE) and one dependent was Export Performance. The statistical analysis of the minimum and maximum score, mean value and standard deviation value, as shown in table 4.2

Table 4.2 Descriptive Statistics for Overall Features of Data

Overall features of data	Number of Item	Min	Max	$\overline{X}$	S.D
1. Entrepreneurial Orientation	8	1	7	4.32	0.83
2. Innovativeness	11	1	7	5.40	0.83
3. Reconfiguration Capability	21	1	7	5.38	0.68
4. Competitive Environment	12	2	7	5.10	0.65
5. Export Performance	6	1	7	4.92	0.88
Total	**58**	**1**	**7**	**5.03**	**0.60**

Table 4.2 Evaluation of the overall variable, In overall, it was found that the mean score was rather much (mean = 5.03, SD = 0.60) When considering each aspect, it found that the level was much mean for Innovativeness and Reconfiguration Capability, respectively, Competitive Environment and Export Performance were at rather much respectively. Entrepreneurial Orientation was at neutral agreement mean.

4.3.1 Entrepreneurial Orientation (EO)

The attribute of Entrepreneurial Orientation construct was measured by three observed variables, which were Risk Taking orientation, Proactiveness orientation, and Human capital. The statistical analysis of the minimum and maximum score, mean value and standard deviation value, as shown in table 4.3

Table 4.3 Descriptive Statistics for Entrepreneurial Orientation (EO)

Entrepreneurial Orientation	Number of Item	Min	Max	$\overline{X}$	S.D
1. Risk Taking orientation	3	1	7	3.37	1.12
2. Proactiveness orientation	3	1	7	4.63	1.06
3. Human capital	3	1	7	5.06	0.96
Total	**9**	**1**	**7**	**4.35**	**0.83**

Table 4.3 Evaluation of the Entrepreneurial Orientation (EO) , In overall, it was found that the mean score was neutral agreement (mean= 4.35, SD=0.83). When considering each aspect, it found that the rather much levels mean value were Human capital and Proactiveness orientation and Risk Taking orientation was rather less agreement.

4.3.2 Innovativeness (INNO)

The attribute of Innovativeness construct was measured by three observed variables, which were Technological innovation, Product innovation and Process innovation. The statistical analysis of the minimum and maximum score, mean value and standard deviation value, as shown in table 4.4

Table 4.4 Descriptive Statistics for Innovativeness (INNO)

Innovativeness	Number of Item	Min	Max	$\overline{X}$	S.D
1. Technological innovation	4	1	7	5.49	0.96
2. Product innovation	4	1	7	5.34	0.95
3. Process innovation	3	1	7	5.35	0.91
Total	**11**	**1**	**7**	**5.39**	**0.83**

Table 4.4 Evaluation of the Innovativeness (INNO), In overall, it was found that the mean score was much agreement (mean= 5.39 , SD=0.83). When considering each aspect, it found that Technological innovation, Process innovation and Product innovation were at the much agreement levels respectively.

4.3.3 Reconfiguration Capability (RC)

The attribute of Reconfiguration Capability construct was measured by seven observed variables, which were Innovative Capabilities1, Innovative Capabilities2,

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Innovative Capabilities3, Adaptive Capabilities1, Adaptive Capabilities2, Adaptive Capabilities3 and Adaptive Capabilities4. The statistical analysis of the minimum and maximum score, mean value and standard deviation value, as shown in table 4.5

Table 4.5 Descriptive Statistics for Reconfiguration Capability (RC)

Reconfiguration Capability	Number of Item	Min	Max	$\overline{X}$	S.D
1. Innovative Capabilities1	3	1	7	5.29	0.85
2. Innovative Capabilities2	3	2	7	5.10	0.90
3. Innovative Capabilities3	3	1	7	5.43	0.86
4. Adaptive Capabilities1	3	1	7	5.45	0.82
5. Adaptive Capabilities2	3	2	7	5.40	0.80
6. Adaptive Capabilities3	3	1	7	5.56	0.77
7. Adaptive Capabilities4	3	1	7	5.49	0.84
Total	**21**	**1**	**7**	**5.39**	**0.68**

Table 4.5 Evaluation of the Reconfiguration Capability (RC), In overall, it was found that the mean score was much agreement. (mean= 5.39 , SD=0.68). When considering each aspect, it found that Adaptive Capabilities3 , Adaptive Capabilities4, Adaptive Capabilities1 , Innovative Capabilities2, Adaptive Capabilities2, Innovative Capabilities1 were much levels respectively while Strategy was rather much mean.

4.3.4 Competitive Environment (CE)

The attribute of Competitive Environment construct was measured by six observed variables, which were Factor Conditions, Demand Conditions, Related and supporting industries, Firm Strategy, Structure and Rivalry, Government Conditions and Chance Conditions. The statistical analysis of the minimum and maximum score, mean value and standard deviation value, as shown in table 4.6

Table 4.6 Descriptive Statistics for Competitive Environment (CE)

Competitive Environment	Number of Item	Min	Max	$\overline{X}$	S.D
1. Factor Conditions	2	2	7	5.45	0.80
2. Demand Conditions	2	1	7	5.22	0.88
3. Related and supporting industries.	1	1	7	5.43	0.92
4. Firm Strategy ,Structure and Rivalry	3	2	7	5.24	0.85
5. Government Conditions	3	1	7	4.58	0.92
6. Chance Conditions	1	1	7	4.94	1.12
Total	**12**	**1**	**7**	**5.14**	**0.65**

Table 4.6 Evaluation of the Competitive Environment (CE), In overall, it was found that the mean score was much levels. (mean= 5.14, SD=0.65). When considering each aspect, it found that Factor Conditions, Related and supporting industries were at the much levels respectively, Firm Strategy, Structure and Rivalry, Demand Conditions, Chance Conditions and Government Conditions were rather much level.

4.3.5 Export Performance(EP)

The attribute of Export Performance construct was measured by two observed variables, which were Finance and Non-Finance. The statistical analysis of the minimum and maximum score, mean value and standard deviation value, as shown in table 4.7

Table 4.7 Descriptive Statistics for Export Performance (EP)

Export Performance	Number of Item	Min	Max	$\overline{X}$	S.D
1. Finance	3	1	7	4.78	1.07
2. Non-Finance	3	1	7	5.06	0.86
Total	**6**	**1**	**7**	**4.92**	**0.88**

Table 4.7 Evaluation of the Export Performance (EP), In overall, it was found that the mean score was rather much (mean= 4.92, SD=0.88). When considering each aspect, it found that showed that Finance and Non-Finance were rather much relatively.

Based on the Confirmatory Factor Analysis: (CFA), the development and validity of Confirmatory Factor Analysis results of Entrepreneurial Orientation, Innovativeness, Reconfiguration Capability, Competitive Environment and the export performance of small and medium enterprises in Thailand can be showed in the Measurement Model with statistical software in Figure 4.1
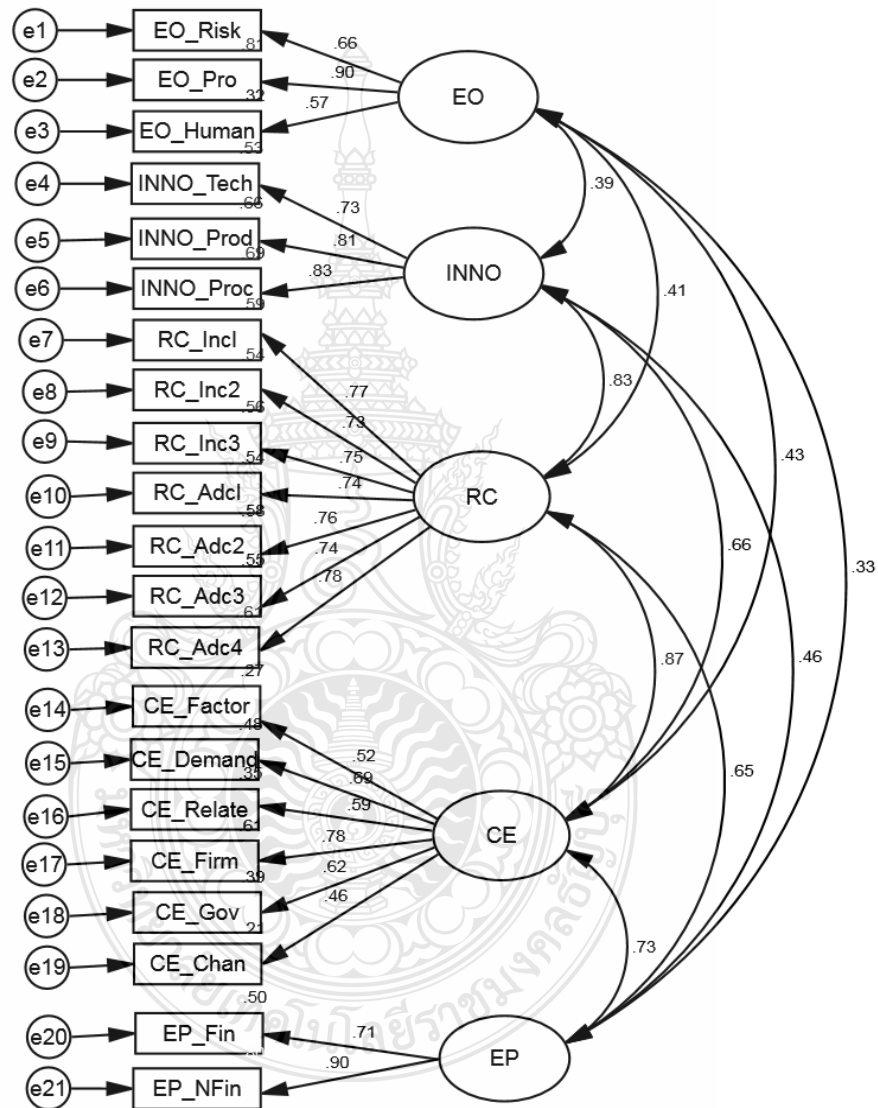
Chi-square = 493.694, Chi-square/df = 2.758, df = 179, GFI = .835, CFI = .877, RMSEA = .086, NFI = .822

Figure 4.1 The result of Confirmatory Factor Analysis of Entrepreneurial Orientation, Innovativeness, Reconfiguration Capability, Competitive Environment and Export Performance (before modification indices)

Table 4.8 Factor Loading of Observation Variable in Confirmatory Factor Analysis

Observation variable	Factor loading
EO_Risk	.665
EO_Pro	.900
EO_Human	.567
INNO_Tech	.830
INNO_Prod	.811
INNO_Proc	.728
RC_Incl	.768
RC_Inc2	.732
RC_Inc3	.752
RC_Adcl	.737
RC_Adc2	.759
RC_Adc3	.738
RC_Adc4	.782
CE_Fact	.523
CE_Demand	.690
CE_Relate	.590
CE_Firm	.778
CE_Gov	.623
CE_Chan	.463
EP_Fin	.710
EP_NFin	.897

Figure 4.1 The Confirmatory Factor Analysis (CFA) of Measurement model of Entrepreneurial Orientation, Innovativeness, Reconfiguration Capability, Competitive Environment and the Export Performances (before modification indices).The goodness-of-fit assessment found that The relative Chi-square (χ^2/df) equals to 2.758, which acceptable level at less than 3. In case of Group indexes set at levels greater than or equal 0.90. All indexes were GFI = 0.835, CFI = 0.877 and RMSEA = 0.086 did not

meet the criteria of lower than 0.08. In conclusion, the model of Entrepreneurial Orientation, Innovativeness, Reconfiguration Capability, Competitive Environment and the Export Performances did not meet the criteria of model fit as some of the indicator were still unfavorable to the acceptable level, So it is necessary to adjusted the model with the data reduction method in the model. (Raengsungnern, 2011) for three variables: EO_Human, CE_Fact and CE_Chan, as the factor loading should be greater than 0.6, as shown in Figure 4.2.

Chi-square = 223.799, Chi-square/df = 1.820, df = 123, GFI = .905, CFI = .955, RMSEA = .059, NFI = .906
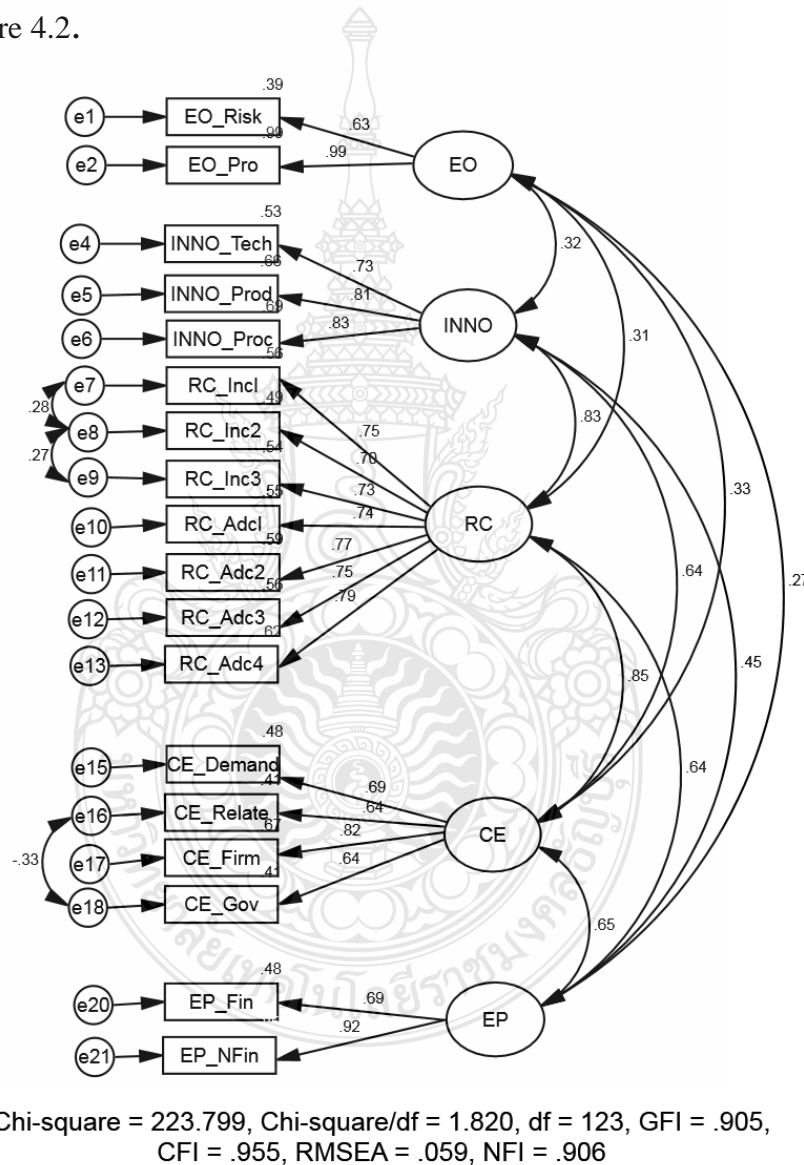
Figure 4.2 Confirmatory component analysis of Entrepreneurial Orientation, Innovativeness, Reconfiguration Capability, Competitive Environment and Export Performance (with modification indices)

Table 4.9 Factor Loading of Observation Variable in Confirmatory Factor Analysis (with modification indices)

Observation variable	Factor loading
EO_Risk	.534
EO_Pro	.990
INNO_Tech	.727
INNO_Prod	.814
INNO_Proc	.828
RC_Incl	.745
RC_Inc2	.696
RC_Inc3	.734
RC_Adcl	.745
RC_Adc2	.766
RC_Adc3	.749
RC_Adc4	.785
CE_Demand	.694
CE_Relate	.643
CE_Firm	.816
CE_Gov	.636
EP_Fin	.697
EP_NFin	.914

Figure 4.2 Confirmatory Factor Analysis: (CFA) of Measurement Model of Entrepreneurial Orientation, Innovativeness, Reconfiguration Capability, Competitive Environment and Export Performances of Small and Medium Enterprises in Thailand (with modification indices), the results found that relative Chi-square (χ^2/df) was equal to 1.820, which was less than 3 through the acceptable criteria. The specific group index at the level of 0.90 or higher found that all indexes were GFI = 0.905, CFI = 0.955, and the index was less than 0.08. RMSEA = 0.059 also acceptable the criteria. It can concluded that a measurement model of Entrepreneurial Orientation, Innovativeness,

Reconfiguration Capability, Competitive Environment and Export Performance of Small and Medium Enterprises in Thailand (with modification indices) were developed in model with the empirical data, as shown in Table 4.10

Table 4.10 Statistics of Measurement Models with Empirical Data

Index	Criteria	Value of statistics	
		before modification indices	with modification indices
χ^2/df	Lower than 3.00	2.758	1.820
GFI	Higher than 0.90	0.835	0.905
CFI	Higher than 0.90	0.877	0.955
RMSEA	Lower or equal to 0.05-0.08	0.086	0.059
Conclusion		Model not Fit	Model Fit

4.4 Proposed Structural Model Analysis

This section presented the analysis of the proposed model through SEM analysis in order to test the hypotheses and identify the answers for research questions set forth.

A goodness-of-fit test was carried out as to measure how well the observed data corresponded to the proposed model.

For this study, the four structural models had been proposed. The structural Model 1 was to evaluate the direct effects of the constructs and variables, and the structural Model 2 to 4a, 4b was to evaluate the direct effects and indirect effects of the constructs and variables through the mediating variables and moderator variables.

4.4.1 Structural Model 1:

The Structural Model 1 or Direct Effects Model was to examine the relationship between Entrepreneurial Orientation, Innovativeness, and Export performance as shown in figure 4.3
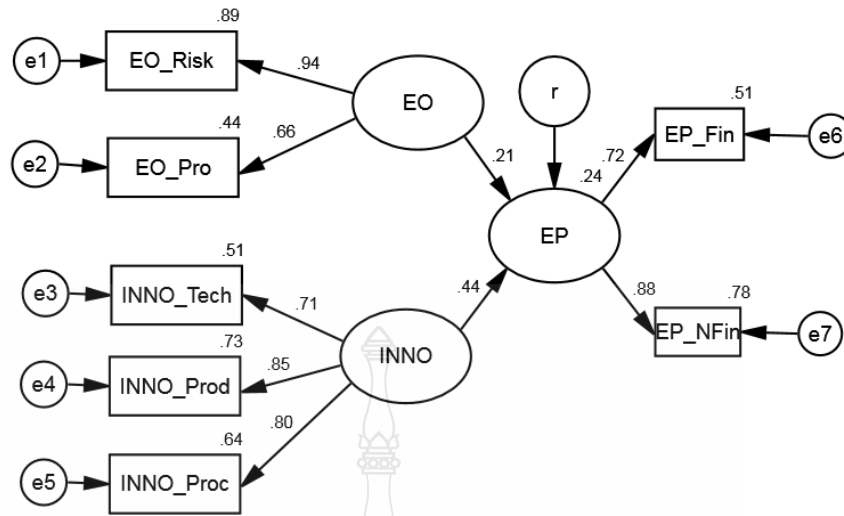
Chi-square = 36.866, Chi-square/df = 3.072, df = 12, GFI = .961,
CFI = .957, RMSEA = .094, NFI = .939

Figure 4.3 Structural Model 1

The structural Model 1 was to investigate the direct effects of EO, INNO on EP. The goodness-of-fit assessment were as follows: Chi-Square = 36.866,   df = 12, Chi-Square/Degree of freedom = 3.072, p-value = .000,   GFI = 0.961,   AGFI = 0.910, RMR = 8.508 ,RMSEA = 0.094 (PCLOSE = 0.019),   NFI = 0.939,   CFI = 0.957,   and Hoelter's value = 169 (0.01). The summary and the comparison with acceptable level for each value, as shown in table 4.11

Table 4.11 Model fit Analysis for Model 1

Model Fit Criteria	Value	Acceptable level
Chi-Square	36.866	-
Degree of freedom	12.000	-
Chi-Square/ df	3.072	< 3.0
GFI	0.961	> 0.90
AGFI	0.910	> 0.80
RMSEA	0.094	< 0.08
NFI	0.939	> 0.90
CFI	0.957	> 0.90

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The results suggested that The Chi-Square/ Degree of freedom was 3.072 and the acceptable level at < 3.0 However, it was found that the model did not meet the criteria of model fit as some of the indicators were still unfavorable to the acceptable level. The model was adjusted by using modification indices, the covariance between residual error; e2-e3, e2-e4, and e2-e5 had been added. The criteria after modification were met and suggested model fit, as followed: Chi-Square = 12.613, df = 9, Chi-Square/Degree of freedom = 1.401, p-value = .181, GFI = 0.986, AGFI = 0.956, RMR = 3.665, RMSEA = 0.041 (PCLOSE = 0.558), NFI = 0.979, CFI = 0.994, and Hoelter's value = 408 (0.01).

The summary and the comparison with acceptable level for each value, as shown in table 4.12

Chi-square = 12.613, Chi-square/df = 1.401, df = 9, GFI = .986,
CFI = .994, RMSEA = .041, NFI = .979
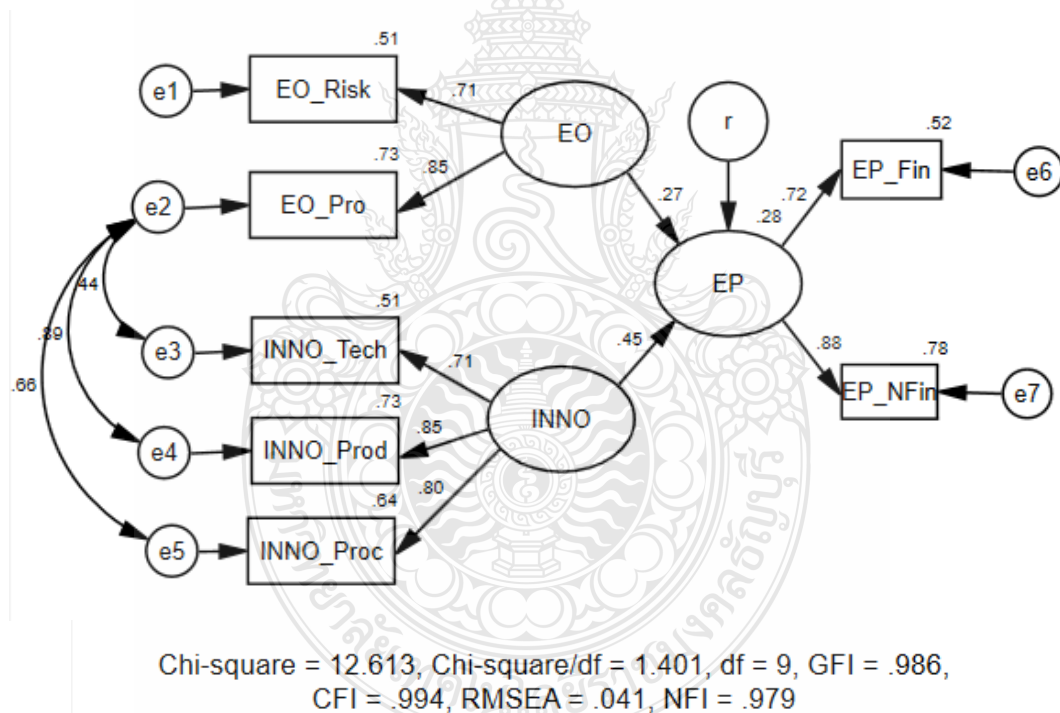
Figure 4.4 Structural Model 1 (with modification indices)

Table 4.12 Model fit Analysis for Model 1 (with modification indices)

Model Fit Criteria	Value	Acceptable level
Chi-Square	12.613	-
Degree of freedom	9	-
Chi-Square/ df	1.401	< 3.0
GFI	0.986	> 0.90
AGFI	0.956	> 0.80
RMSEA	0.041	< 0.08
NFI	0.979	> 0.90
CFI	0.994	> 0.90

The analysis of structural Model 1, the results showed direct relationship between EO and EP at $\beta = 0.274$ ($p<0.01$), As for the relationship between INNO and EP, it showed direct relationship at $\beta = 0.449$($p<0.001$) respectively.

Table 4.13 Hypothesis Testing for Model 1

			Estimate	Beta(β)	S.E.	C.R.	*p*-value
H1: EO	→	EP	0.323	0.274	0.105	3.089	**
H2: INNO	→	EP	0.451	0.449	0.095	4.762	***

***p-value < 0.001 (statistical significance at 0.001 level)
** p-value < 0.01 (statistical significance at 0.01 level)
* p-value < 0.05 (statistical significance at 0.05 level

4.4.2 Structural Model 2:

The Structural Model 2 or Mediating Model was to examine the relationship between Entrepreneurial Orientation(EO), Innovativeness(INNO) with Export performance(EP) through Reconfiguration Capability(RC) as the mediating variables as shown in figure 4.5
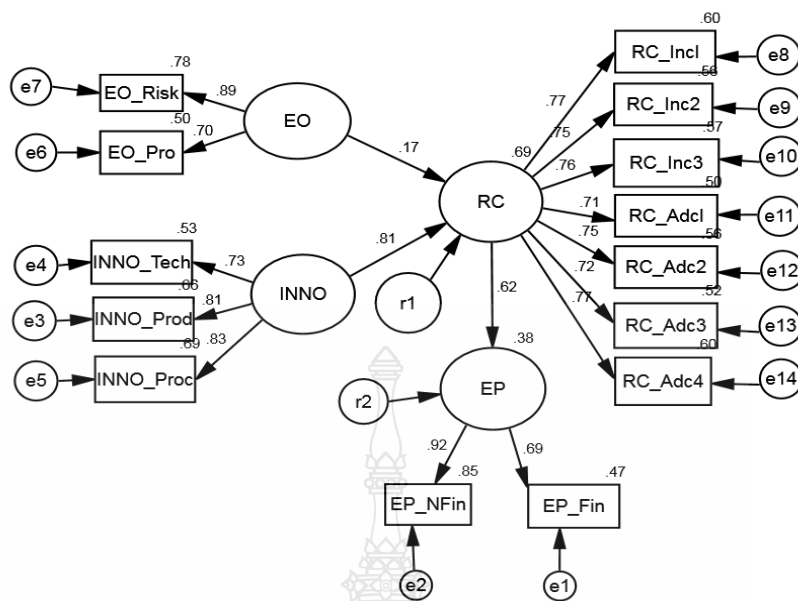
Chi-square = 188.985, Chi-square/df = 2.554, df = 74, GFI = .897,
CFI = .933, RMSEA = .081, NFI = .896

Figure 4.5 Structural Model 2

The structural Model 2 was to investigate the indirect effects of EO and INNO on EP through RC as the mediating variables.

The goodness-of-fit assessment were as follows: Chi-Square = 188.985, df = 74, Chi-Square/Degree of freedom = 2.554, p-value = .000, GFI = 0.897, AGFI = 0.853, RMR = 6.826, RMSEA = 0.081 (PCLOSE = 0.000), NFI = 0.896, CFI = 0.933, and Hoelter's value = 132 (0.01), the summary and the comparison with acceptable level for each value, as shown in table 4.14

Table 4.14 Model fit Analysis for Model 2

Model Fit Criteria	Value	Acceptable level
Chi-Square	188.985	-
Degree of freedom	74	-
Chi-Square/df	2.554	< 3.0
GFI	0.897	> 0.90
AGFI	0.853	> 0.80
RMSEA	0.081	< 0.08
NFI	0.896	> 0.90
CFI	0.933	> 0.90

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The results suggested The Chi-Square / Degree of freedom was 2.554, the acceptable level at < 3.0 that the model did not meet the criteria of model fit as some of the indicators were still unfavorable to the acceptable level. The GFI values was 0.897 against the acceptable level at > 0.90. The model were adjusted by using modification indices, the covariance between residual errors; e8- e9, e9 –e10, e10-e14 and e12 –e13 were added. The criteria after modification were met and suggested model fit, as followed: Chi-Square = 138.704, df = 70, Chi-Square/Degree of freedom = 1.981, p-value = .000, GFI = 0.926, AGFI = 0.888, RMR = 6.849, RMSEA = 0.064 (PCLOSE = 0.067), NFI = 0.924, CFI = 0.960, and Hoelter's value = 172 (0.01)

Chi-square = 138.704, Chi-square/df = 1.981, df = 70, GFI = .926,
CFI = .960, RMSEA = .064, NFI = .924
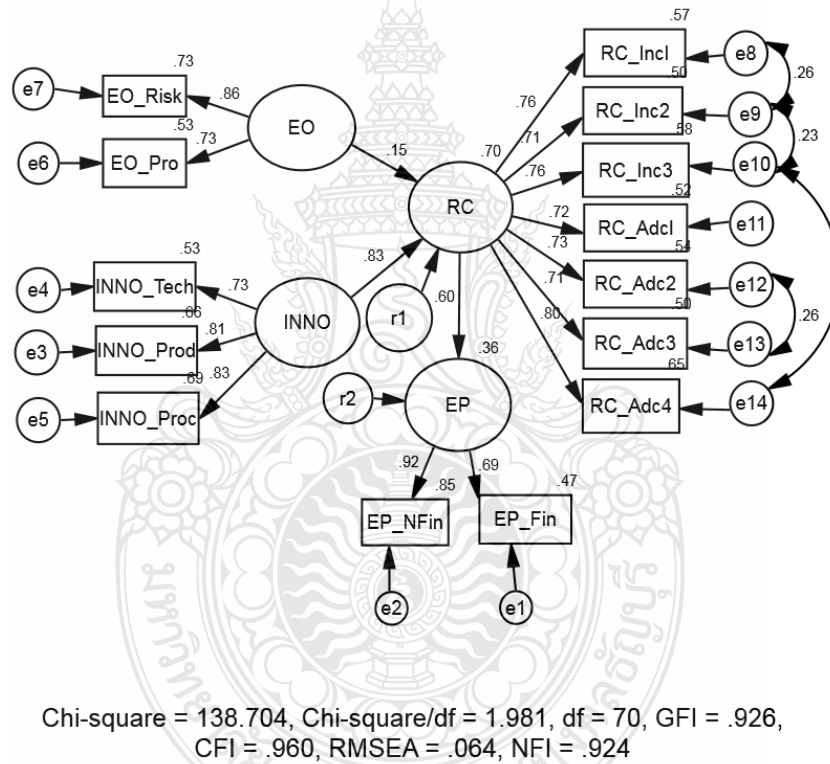
Figure 4.6 Structural Model 2 (with modification indices)

Table 4.15 Model fit Analysis for Model 2 (with modification indices)

Model Fit Criteria	Value	Acceptable level
Chi-Square	138.704	-
Degree of freedom	70	-
Chi-Square/df	1.981	< 3
GFI	0.926	> 0.90
AGFI	0.888	> 0.80
RMSEA	0.064	< 0.08
NFI	0.924	> 0.90
CFI	0.960	> 0.90

The analysis of structural Model 2 indicates that EO and INNO were also found to have direct relationship with RC, the results showed that there was direct relationship between EO and RC at $\beta = 0.151$ ($p<0.01$) and there was direct relationship between INNO and RC at $\beta = 0.826$ ($p<0.001$). These indicated that Reconfiguration Capability was affected by Entrepreneurial Orientation and Innovativeness.

As for the relationship between RC and EP, the results indicated direct relationship at $\beta = 0.602$ ($p<0.001$), this suggested that Reconfiguration Capability affected Export performance.

Table 4.16 Hypothesis Testing for of Model 2

			Estimate	Beta(β)	S.E.	C.R.	*p*-value
H3:	EO	→ RC	0.134	0.151	0.050	2.694	**
H4:	INNO	→ RC	0.702	0.826	0.067	10.414	***
H5:	RC	→ EP	0.621	0.602	0.100	6.188	***

***p-value < 0.001 (statistical significance at 0.001 level)
** p-value < 0.01 (statistical significance at 0.01 level)
* p-value < 0.05 (statistical significance at 0.05 level)

4.4.3 Structural Model 3:

The Structural Model 3 or Mediation Model was to examine the relationship between Entrepreneurial Orientation(EO), Innovativeness(INNO) with Export performance through Reconfiguration Capability (RC) as the mediating variables as shown in figure 4.7
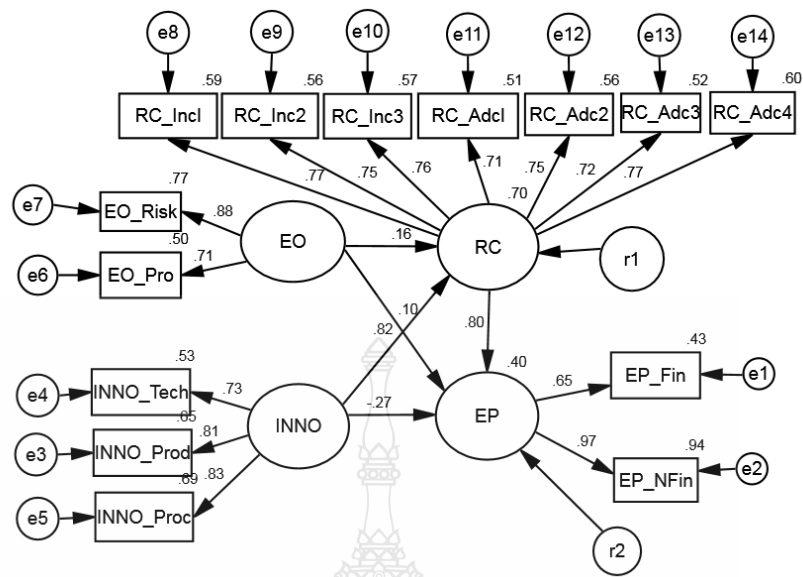
Chi-square = 181.728, Chi-square/df = 2.524, df = 72, GFI = .901,
CFI = .936, RMSEA = .080, NFI = .900

Figure 4.7 Structural Model 3

The structural Model 3 was to investigate the direct effects of EO, INNO and RC on EP and the indirect effects of EO and INNO on EP through RC as the mediating variables.

The goodness-of-fit assessment were as follows: Chi-Square = 181.728, df = 72, Chi-Square/Degree of freedom = 2.524, p-value = .000, GFI = 0.901, AGFI = 0.855, RMR = 6.860, RMSEA = 0.080 (PCLOSE = 0.000), NFI = 0.900, CFI = 0.936, and Hoelter's value = 135 (0.01), the summary and the comparison with acceptable level for each value, as shown in table 4.17

Table 4.17 Model fit Analysis for Model 3

Model Fit Criteria	Value	Acceptable level
Chi-Square	181.728	-
Degree of freedom	72	-
Chi-Square/df	2.524	< 3.0
GFI	0.901	> 0.90
AGFI	0.855	> 0.80
RMSEA	0.080	< 0.08
NFI	0.900	> 0.90
CFI	0.936	> 0.90

The results suggested The Chi-Square/ Degree of freedom was 2.524 vs. the acceptable level at < 3.0 However, it was found that the model did not meet the criteria of model fit as some of the indicators were still unfavorable to the acceptable level. The model was adjusted by using modification indices, the covariance between residual errors; e8- e9, e9 –e10, e8 –e10,e10-e14 and e12 –e13 were added. The criteria after modification were met and suggested model fit, as followed: Chi-Square = 125.482, df = 67, Chi-Square/Degree of freedom = 1.873, p-value = .000, GFI = 0.934, AGFI = 0.897, RMR = 6.908, RMSEA = 0.061 (PCLOSE = 0.137), NFI = 0.931, CFI = .966, and Hoelter's value = 183 (0.01)

Chi-square = 125.482, Chi-square/df = 1.873, df = 67, GFI = .934,
CFI = .966, RMSEA = .061, NFI = .931
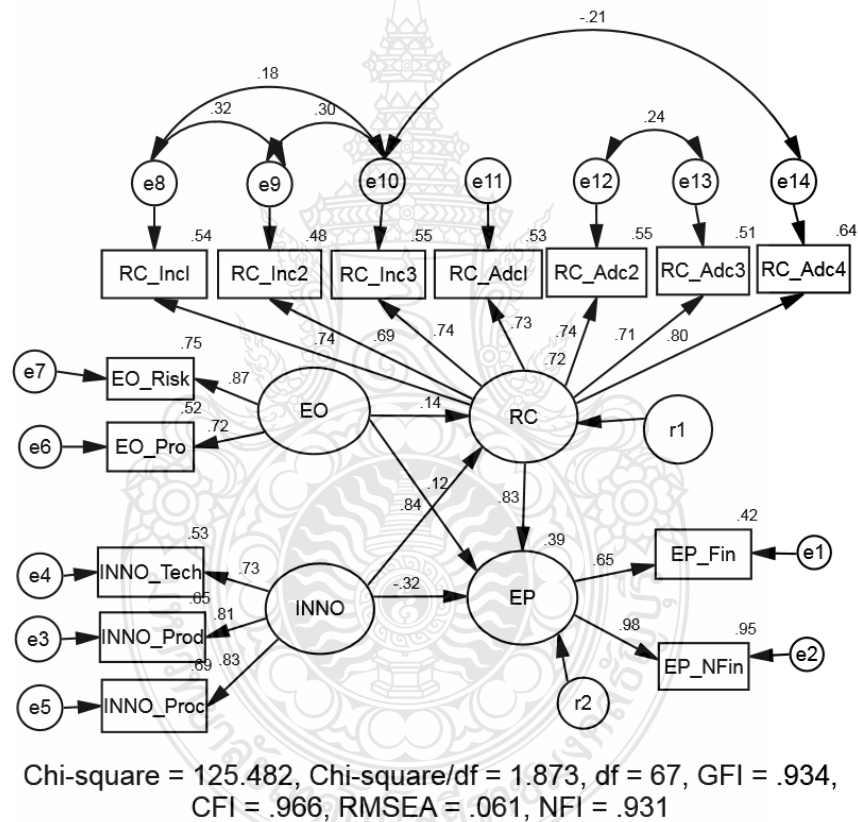
Figure 4.8 Structural Model 3 (with modification indices)

Table 4.18 Model fit Analysis for Model 3 (with modification indices)

Model Fit Criteria	Value	Acceptable level
Chi-Square	125.482	-
Degree of freedom	67	-
Chi-Square/df	1.873	< 3
GFI	0.934	> 0.90
AGFI	0.897	> 0.80
RMSEA	0.061	< 0.08
NFI	0.931	> 0.90
CFI	0.966	> 0.90

The analysis of structural Model 3 indicates that there was no direct relationship between EO and EP ($\beta = 0.118$, $p = 0.095$), and as well, there was no direct relationship between INNO and EP ($\beta = -0.316$, $p = 0.054$), the relationship between EO and EP and INNO and EP were no statistical significant.

EO and INNO were also found to have direct relationship with RC, the results showed that there was direct relationship between EO and RC at $\beta = 0.140$ ($p<0.05$) and there was direct relationship between INNO and RC at $\beta = 0.837$ ($p<0.001$). These indicated that Reconfiguration Capability was affected by Entrepreneurial Orientation and Innovativeness.

As for the relationship between RC and EP, the results indicated direct relationship at $\beta = 0.830$ ($p<0.001$), this suggested that Reconfiguration Capability affected Export performance.

Table 4.19 Hypothesis Testing for of Model 3

			Estimate	Beta(β)	S.E.	C.R.	*p*-value
H1: EO	→	EP	0.103	0.118	0.062	1.671	0.095
H2: INNO	→	EP	-0.261	-0.316	0.136	-1.923	0.054
H3: EO	→	RC	0.122	0.140	0.048	2.544	*
H4: INNO	→	RC	0.692	0.837	0.068	10.165	***
H5: RC	→	EP	0.831	0.830	0.200	4.162	***

***p*-value < 0.001 (statistical significance at 0.001 level)
** *p*-value < 0.01 (statistical significance at 0.01 level)
* *p*-value < 0.05 (statistical significance at 0.05 level)

4.4.4 Structural Model 4:

The Structural Model 4 was to examine the relationship between Entrepreneurial Orientation (EO), Innovativeness (INNO) with Export performance through Reconfiguration Capability(RC) as the mediating variables and Competitive Environment(CE) as the moderator variables

4.4.4.1 Structure Model 4a:

The structural Model 4a was to investigate the direct effects of EO,INNO and RC on EP ,the indirect effects of EO and INNO on EP through RC as the mediating variables and the direct effects of EO on EP increase with favorable CE as the moderator variables and as shown in figure 4.9

Chi-square = 1408.581, Chi-square/df = 4.824, df = 292, GFI = .696, CFI = .724, RMSEA = .127, NFI = .678
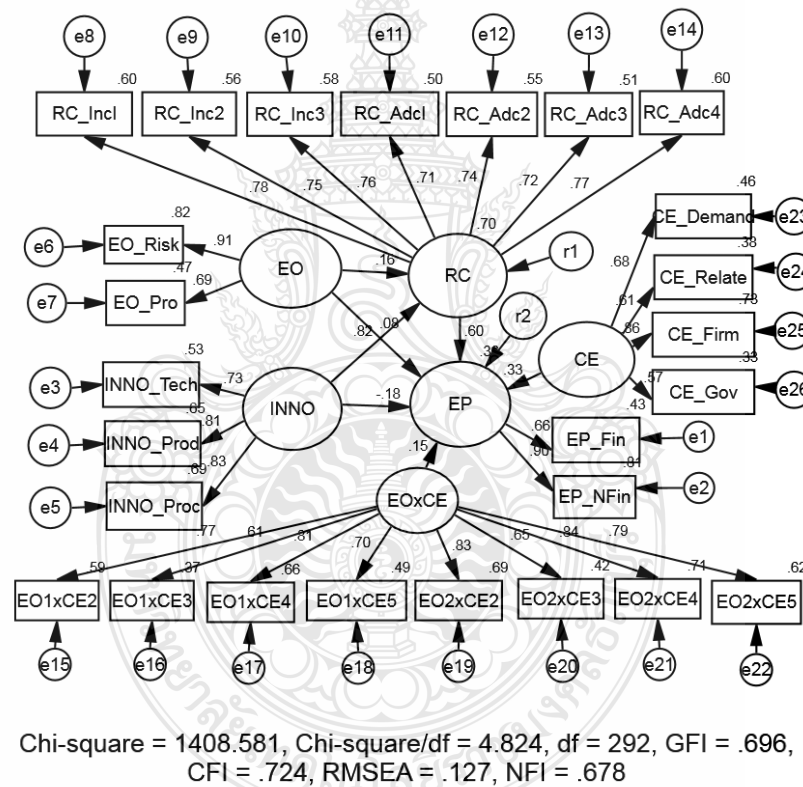
Figure 4.9 Structural Model 4a

The goodness-of-fit assessment were as follows: Chi-Square = 1408.581, df = 292, Chi-Square/Degree of freedom = 4.824, p-value = .000, GFI = 0.696, AGFI = 0.635, RMR = 11.883, RMSEA = 0.127 (PCLOSE = 0.000), NFI = 0.678, CFI = 0.724 and Hoelter's value = 60 (0.01), the summary and the comparison with acceptable level for each value, as shown in table 4.20

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Table 4.20 Model fit Analysis for Model 4a

Model Fit Criteria	Value	Acceptable level
Chi-Square	1408.581	-
Degree of freedom	292	-
Chi-Square/df	4.824	< 3.0
GFI	0.696	> 0.90
AGFI	0.635	> 0.80
RMSEA	0.127	< 0.08
NFI	0.678	> 0.90
CFI	0.724	> 0.90

The results suggested that the model did not meet the criteria of model fit as some of the indicators were still unfavorable to the acceptable level. The Chi-Square/ Degree of freedom was 4.824 vs. the acceptable level at < 3.0. The GFI value was 0.696 against the acceptable level at > 0.90. The AGFI value was 0.635 against the acceptable level at > 0.80. The RMSEA value was 0.127 against the acceptable level at < 0.08. The NFI value was 0.678 against the acceptable level at > 0.90. The CFI value was 0.724 against the acceptable level at > 0.90. The model was adjusted by using modification indices, the covariance between residual error; The criteria after modification were met and suggested model fit, as followed: Chi-Square = 356.267, df = 228, Chi-Square/Degree of freedom = 1.563, p-value = .000, GFI = 0.902, AGFI = 0.849, RMR = 7.773, RMSEA = 0.049 (PCLOSE = 0.576), NFI = 0.919, CFI = 0.968, and Hoelter's value = 187 (0.01).
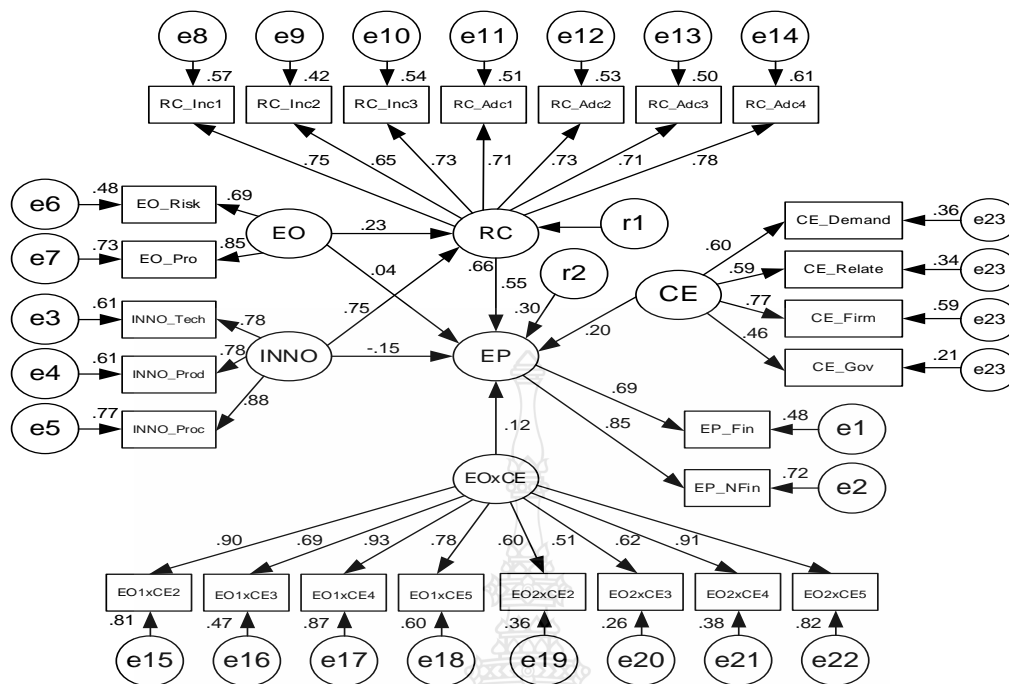
Chi-square = 356.267, Chi-square/df = 1.563, df = 228, GFI =.902, CFI = .968,
RMSEA = .049, NFI = .919

Figure 4.10 Structural Model 4a (with modification indices)

Table 4.21 Model fit Analysis for Model 4a (with modification indices)

Model Fit Criteria	Value	Acceptable level
Chi-Square	356.267	-
Degree of freedom	228	-
Chi-Square/df	1.563	< 3
GFI	0.902	> 0.90
AGFI	0.849	0.80
RMSEA	0.049	< 0.08
NFI	0.919	> 0.90
CFI	0.968	> 0.90

The analysis of structural Model 4a indicates that there was no direct relationship between EO and EP ($\beta = 0.036$, $p = 0.659$)), and as well, there was no direct relationship between INNO and EP ($\beta = -0.154$, $p = 0.218$), the relationship between EO and EP , INNO and EP were no statistical significant.

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EO and INNO were also found to have direct relationship with RC, the results showed that there was direct relationship between EO and RC at β = 0.227 ($p<0.001$)and there was direct relationship between INNO and RC at β = 0.750 ($p<0.001$). These indicated that Reconfiguration Capability (RC) was affected by Entrepreneurial Orientation and Innovativeness

RC was also found to have direct relationship with EP, the results showed that there was direct relationship between RC and EP at β = 0.552 ($p<0.001$). These indicated that Reconfiguration Capability was affected Export performance.

EO was also found to have effects on EP increase with favorable CE as the moderator variables, the results showed that there was direct relationship effects on EP at β (EOxCE) = 0.124($p < 0.05$). These indicated that EO was positively effected on EP increase with favorable CE.

Table 4.22 Hypothesis Testing for of Model 4a

			Estimate	**Beta(β)**	**S.E.**	**C.R.**	**p-value**
H1: EO	→	EP	0.028	0.036	0.064	0.441	0.659
H2: INNO	→	EP	-0.135	-0.154	0.110	-1.231	0.218
H3: EO	→	RC	0.172	0.227	0.048	3.621	***
H4: INNO	→	RC	0.636	0.750	0.060	10.637	***
H5: RC	→	EP	0.569	0.552	0.154	3.687	***
H6: EOxCE	→	EP	0.660	0.124	0.289	2.228	*

   ***p-value < 0.001 (statistical significance at 0.001 level)
   ** *p*-value < 0.01 (statistical significance at 0.01 level)
   * *p*-value < 0.05 (statistical significance at 0.05 level)

4.4.4.2 Structure Model 4b:

The structural Model 4b was to investigate the direct effects of EO,INNO and RC on EP ,the indirect effects of EO and INNO on EP through RC as the mediating variables and the direct effects of INNO on EP increase with favorable CE as the moderator variables and as shown in figure 4.11
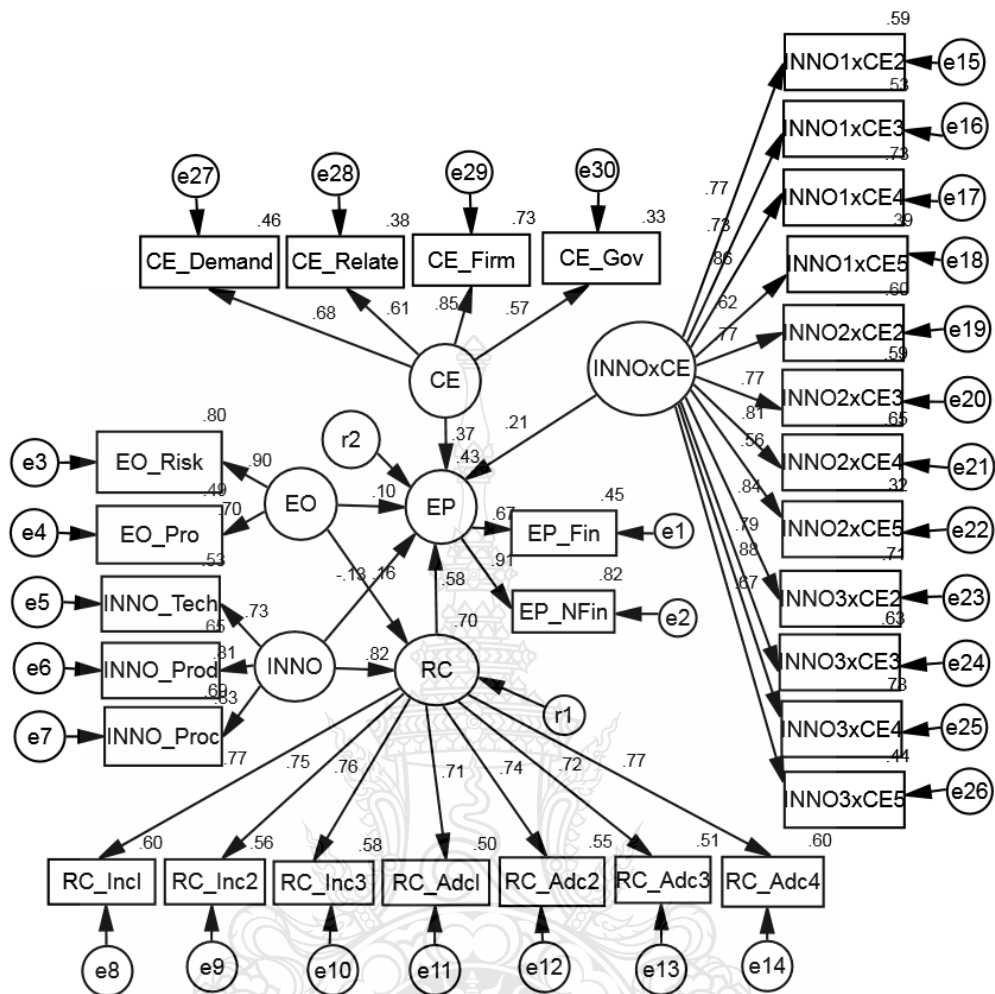
Figure 4.11 Structural Model 4b

The goodness-of-fit assessment were as follows: Chi-Square = 2107.160 , df = 398, Chi-Square/Degree of freedom = 5.294, *p*-value = .000, GFI = 0.651, AGFI = 0.593, RMR = 10.260, RMSEA = 0.135 (PCLOSE = 0.000), NFI = 0.644, CFI = 0.688 and Hoelter's value = 53 (0.01), the summary and the comparison with acceptable level for each value, as shown in table 4.23

Table 4.23 Model fit Analysis for Model 4b

Model Fit Criteria	Value	Acceptable level
Chi-Square	2107.160	-
Degree of freedom	398	-
Chi-Square/df	5.294	< 3.0
GFI	0.651	> 0.90
AGFI	0.593	> 0.80
RMSEA	0.135	< 0.08
NFI	0.644	> 0.90
CFI	0.688	> 0.90

The results suggested that the model did not meet the criteria of model fit as some of the indicators were still unfavorable to the acceptable level. The Chi-Square/ Degree of freedom was 5.294 vs. the acceptable level at < 3.0. The GFI value was 0.651 against the acceptable level at > 0.90. The AGFI value was 0.593 against the acceptable level at > 0.80. The RMSEA value was 0.135 against the acceptable level at < 0.08. The NFI value was 0.644 against the acceptable level at > 0.90. The CFI value was 0.688 against the acceptable level at > 0.90. The model was adjusted by using modification indices, the covariance between residual error; The criteria after modification were met and suggested model fit, as followed: Chi-Square = 431.018, df = 324, Chi-Square/Degree of freedom = 1.330, p-value = .000, GFI = 0.901, AGFI = 0.858, RMR = 3.180, RMSEA = 0.037 (PCLOSE = 0.991), NFI = 0.927, CFI = 0.980, and Hoelter's value = 213 (0.01).
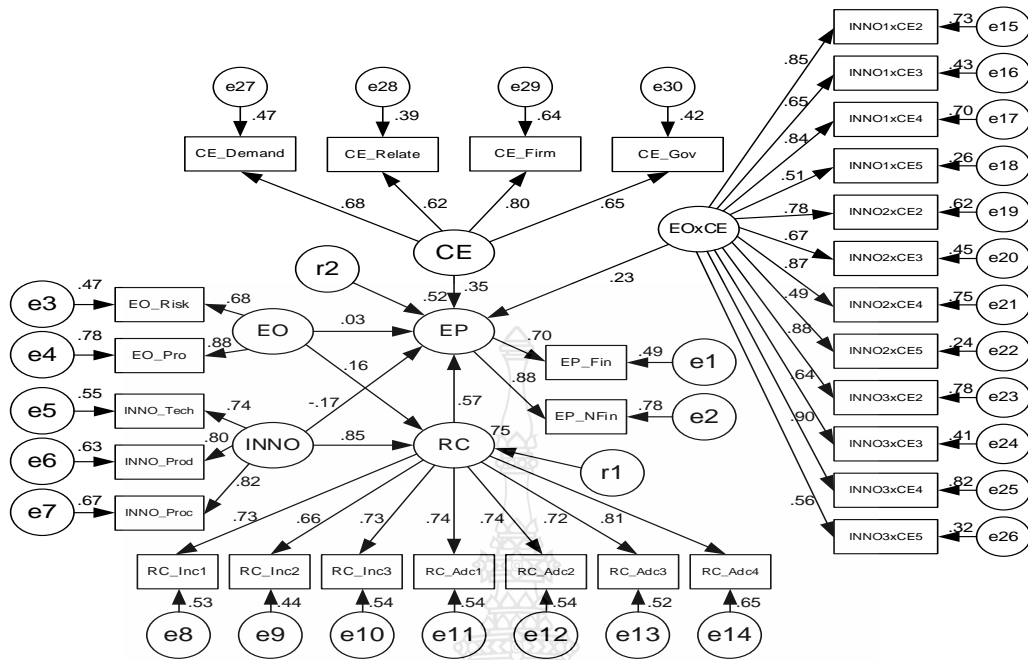
Chi-square = 431.018, Chi-square/df = 1.330, df = 324, GFI =.901, CFI = .980, RMSEA = .037, NFI = .927

Figure 4.12 Structural Model 4b (with modification indices)

Table 4.24 Model fit Analysis for Model 4b (with modification indices)

Model Fit Criteria	Value	Acceptable level
Chi-Square	431.018	-
Degree of freedom	324	-
Chi-Square/df	1.330	< 3
GFI	0.901	> 0.90
AGFI	0.858	> 0.80
RMSEA	0.037	< 0.08
NFI	0.927	> 0.90
CFI	0.980	> 0.90

The analysis of structural Model 4b indicates that there was no direct relationship between EO and EP (β = 0.032, p = 0.082), and as well, there was no direct relationship between INNO and EP (β = -0.182, p = 0.179), the relationship between EO and EP , INNO and EP were no statistical significant.

EO and INNO were also found to have direct relationship with RC, the results showed that there was direct relationship between EO and RC at $\beta = 0.132$ ($p<0.05$)and there was direct relationship between INNO and RC at $\beta = 0.793$ ($p<0.001$). These indicated that Reconfiguration Capability (RC) was affected by Entrepreneurial Orientation and Innovativeness

RC was also found to have direct relationship with EP, the results showed that there was direct relationship between RC and EP at $\beta = 0.793$ ($p<0.001$). These indicated that Reconfiguration Capability was affected Export performance.

INNO was also found to have effects on EP increase with favorable CE as the moderator variables, the results showed that there was direct relationship effects on EP at β (INNOxCE) = 0.184 ($p < 0.01$). These indicated that INNO was positively effected on EP increase with favorable CE.

Table 4.25 Hypothesis Testing for of Model 4b

			Estimate	Beta(β)	S.E.	C.R.	*p*-value
H1: EO	→	EP	0.025	0.032	0.052	0.480	0.631
H2: INNO	→	EP	-0.155	-0.169	0.162	-0.957	0.338
H3: EO	→	RC	0.111	0.158	0.044	2.521	*
H4: INNO	→	RC	0.717	0.851	0.069	10.316	***
H5: RC	→	EP	0.620	0.569	0.266	2.329	*
H7: INNOxCE	→	EP	1.314	0.232	0.377	3.489	***

***p-value < 0.001 (statistical significance at 0.001 level)
** *p*-value < 0.01 (statistical significance at 0.01 level)
* *p*-value < 0.05 (statistical significance at 0.05 level)

4.5 Summary of Structural Model Analysis

Structural Model 1 (Direct Effects Model) was constructed without the Mediating of RC and Moderator of CE, it found that the Entrepreneurial Orientation (EO: β = 0.274, p < 0.01) and Innovativeness (INNO: β = 0.449, p < 0.001) had a direct effect influence on the Export Performance

Structural Model 2 (Mediating Model) was constructed with the presence of RC, The results showed that the indirect paths from Model 2 are statistically significant

which indicated that mediating by RC effect had occurred in the model. The indirect path that mediating by RC from EO to EP was statistically significant with path coefficient $\beta = 0.753$ ($p<0.01$), the indirect path that mediating by RC from INNO to EP was statistically significant with path coefficient $\beta = 1.428$ ($p<0.001$), the direct path that there was direct relationship between RC and EP as statistically significant with path coefficient $\beta = 0.602$ ($p<0.001$). These indicated that Reconfiguration Capability was affected Export performance and as well that mediating by RC the relationship between EO, INNO and EP.

Structural Model 3 (Direct Effects Model and Mediating Model) was constructed with the presence of RC, Further, Preacher & Hayes, 2008 suggested that the fully mediating effect occurs in the model if the indirect path is statistically significant and the direct path become no significant, while the partially mediating effect occurs in the model if the indirect path is statistically significant and the direct path still be statistically significant. The results showed that there was no direct relationship between EO and EP ($\beta = 0.118$, $p = 0.095$), and as well, there was no direct relationship between INNO and EP ($\beta = -0.316$, $p = 0.054$), the relationship between EO and EP ,INNO and EP were no statistical significant and the indirect paths from Model 3 are statistically significant which indicated that mediating by RC effect had occurred in the model. The indirect path that mediating by RC from EO to EP was statistically significant with path coefficient $\beta = 0.970$ ($p<0.001$), the indirect path that mediating by RC from INNO to EP was statistically significant with path coefficient $\beta = 1.667$ ($p<0.001$), This suggested that mediating by RC the relationship between EO and EP was fully mediated by RC and as well, the relationship between INNO and EP was fully mediated by RC. the direct path that there was direct relationship between RC and EP as statistically significant with path coefficient $\beta = 0.830$($p<0.001$). These indicated that Reconfiguration Capability was affected Export performance and as well that mediating by RC the relationship between EO, INNO and EP.

Structural Model 4a (Direct Effects Model ,Mediating Model and Moderator Model) was constructed with the presence of the direct effects of EO, INNO and RC on EP ,the indirect effects of EO and INNO on EP through RC as the mediating variables and the direct effects of EO (EOxCE) on EP increase with favorable CE as the

moderator variables. The results showed that the Entrepreneurial Orientation (EO: β = 0.036, p = 0.659) and   Innovativeness (INNO: β = -0.154, p = 0.218) had no direct effect influence on the Export Performance However, Entrepreneurial Orientation (EO: β = 0.227,p<0.001) and Innovativeness (INNO: β = 0.750 , p<0.001) were also found to have direct relationship with RC, and as well RC was also found to have direct relationship with EP , the results showed that there was direct relationship between RC and EP at β = 0.552 (p<0.001). These indicated that Reconfiguration Capability was affected Export performance. the direct effects of EO (EOxCE) on EP increase with favorable CE as the moderator variables. The results showed that EO (EOxCE) was to have effects on EP increase with favorable CE at β = 0.124 (p<0.05). These indicated that EO (EOxCE) was positively effected on EP with favorable of CE.

Structural Model 4b (Direct Effects Model ,Mediating Model and Moderator Model) was constructed with the presence of the direct effects of EO, INNO and RC on EP ,the indirect effects of EO and INNO on EP through RC as the mediating variables and the direct effects of INNO(INNOxCE) on EP increase with favorable CE as the moderator variables. The results showed that the Entrepreneurial Orientation (EO: β = 0.032, p = 0.631) and   Innovativeness (INNO: β = -0.155, p = 0.338) had no direct effect influence on the Export Performance However, Entrepreneurial Orientation (EO: β = 0.158,p<0.05) and Innovativeness (INNO: β = 0.851 , p<0.001) were also found to have direct relationship with RC, and as well RC was also found to have direct relationship with EP , the results showed that there was direct relationship between RC and EP at β = 0.569 (p<0.001). These indicated that Reconfiguration Capability was affected Export performance. the direct effects of INNO (INNOxCE) on EP increase with favorable CE as the moderator variables. The results showed that INNO (INNOxCE) was to have effects on EP increase with favorable CE at β = 0.232 (p<0.001). These indicated that INNO (INNOxCE) was positively effected on EP with favorable of CE.

The comparison of the path coefficients between Model 1 to Model 4a-b as shown in table 4.26

Table 4.26 Comparison of the Path Coefficients Between Model 1 to model 4a-b

						Model 1 (β)	Model 2 (β)	Model 3 (β)	Model 4a (β)	Model 4b (β)
EO	$\rightarrow$	EP				0.274**	-	0.118	0.036	0.032
INNO	$\rightarrow$	EP				0.449***	-	-0.316	-0.154	-0.169
EO	$\rightarrow$	RC	$\rightarrow$	EP		-	0.753**	0.970***	0.779***	0.727*
INNO	$\rightarrow$	RC	$\rightarrow$	EP		-	1.428***	1.667***	1.302***	1.420***
RC	$\rightarrow$	EP				-	0.602***	0.830**	0.552***	0.569*
EOxCE	$\rightarrow$	EP				-	-	-	0.124*	-
INNOxCE	$\rightarrow$	EP				-	-	-	-	0.232***

   ***p-value < 0.001 (statistical significance at 0.001 level)
   ** *p*-value < 0.01 (statistical significance at 0.01 level)
   * *p*-value   < 0.05 (statistical significance at 0.05 level)

The standardized direct, indirect and total effect coefficients and the R^2 associated with the SEM as shown in table 4.27 - 4.31

Table 4.27 Standardized Direct, Indirect and Total Effects among Variables(Model 1)

		Standardized direct Effect			Standardized Indirect Effect			Standardized Indirect Effect		
	R^2	EO	INNO	EP	EO	INNO	EP	EO	INNO	EP
EO	-	-	-	-	-	-	-	-	-	-
INNO	-	-	-	-	-	-	-	-	-	-
EP	.28	.274	.449	-	-	-	-	.274	.449	-

Table 4.28 Standardized Direct, Indirect and Total Effects among Variables (Model 2)

		Standardized Direct Effect				Standardized Indirect Effect				Standardized Total Effects			
	R^2	EO	INNO	RC	EP	EO	INNO	RC	EP	EO	INNO	RC	EP
EO	-	-	-	-	-	-	-	-	-	-	-	-	-
INNO	-	-	-	-	-	-	-	-	-	-	-	-	-
RC	.70	.151	.826	-	-	-	-	-	-	.151	.826	-	-
EP	.36	-	-	.602	-	.091	.497	-	-	.091	.497	.602	-

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Table 4.29 Standardized Direct, Indirect and Total Effects among Variables (Model 3)

	R^2	Standardized Direct Effect				Standardized Indirect Effect				Standardized Total Effects			
		EO	INNO	RC	EP	EO	INNO	INTER	EP	EO	INNO	RC	EP
EO	-	-	-	-	-	-	-	-	-				
INNO	-	-	-	-	-	-	-	-	-				
RC	.72	.140	.837	-	-	-	-	-	-	.140	.837		
EP	.39	.118	-.316	.830	-	.116	.695	-	-	.234	.379	.830	

Table 4.30 Standardized Direct, Indirect and Total Effects among Variables (Model 4a)

	R^2	Standardized Direct Effect					Standardized Indirect Effect					Standardized Total Effects				
		EO	INNO	RC	EOxCE	EP	EO	INNO	RC	EOxCE	EP	EO	INNO	RC	EOxCE	EP
EO	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
INNO	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RC	.67	.227	.750	-	-	-	-	-	-	-	-	.227	.750	-	-	-
EOxCE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EP	.30	.036	-.154	.552	.124	-	.125	.414	-	-	-	.161	.260	.552	.124	-

Table 4.31 Standardized Direct, Indirect and Total Effects among Variables (Model 4b)

	R^2	Standardized Direct Effect					Standardized Indirect Effect					Standardized Total Effects				
		EO	INNO	RC	INNOxCE	EP	EO	INNO	RC	INNOxCE	EP	EO	INNO	RC	INNOxCE	EP
EO	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
INNO	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RC	.75	.158	.851	-	-	-	-	-	-	-	-	.158	.851	-	-	-
INNOxCE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EP	.53	.032	-.169	.569	.232	-	.090	.484	-	-	-	.122	.315	.569	.232	-

Analysis of the Influence of Variables in Model 1

Considering the R-Square coefficient of the structural equation of the dependent variables as follows: Entrepreneurial Orientation and Innovativeness found that the variance of the variable performance variable ($R^2 = 0.28$) was 28.0%. The researcher would like to present the following.

Export Performance

When considering the influence of Standardized coefficients variables on predictor variable or causal factor of Export Performance, it found that the Entrepreneurial Orientation (EO: $\beta = 0.274$, $p < 0.01$) and Innovativeness (INNO: $\beta = 0.449$, $p < 0.001$) had a direct effect influence on the Export Performance that the most influence on Export Performance were Innovativeness (INNO), followed by Entrepreneurial Orientation (EO) with the influences were 0.449 and 0.274, respectively. This showed than Innovativeness variable included with Technological innovation (INNO_Tech), Production innovation (INNO_Prod) and Process innovation (INNO_Proc) had positive effects on the Export Performance. The Entrepreneurial Orientation (EO) , which includes Risk Taking orientation (EO_Risk) and Proactiveness orientation (EO_Pro), had positive effects on Export performance**.**

When considering the total effect (TE), the direct effect (DE) and the indirect effect (IE) of the Export performance variable in Model 1, there were only direct effect found that was the variables that had the most direct effect influence on the export performance were Innovativeness (INNO: DE = 0.449) and Entrepreneurial Orientation (EO: DE = 0.274) respectively.

The Analysis of Influence of Variables in Model 2

The R-Square coefficients of the structural equation of the internal variables were the dependent variables and Mediating variables were export performance ($R^2 = 0.36$) and Reconfiguration Capability ($R^2 = 0.70$) the Predictors variable or causal factor of Reconfiguration Capability (RC) described the variance of export performance by 36.0%. the Predictors variable or causal factor of Entrepreneurial Orientation (EO) and Innovativeness (INNO) shared the variance of Reconfiguration Capability (RC) by 70.0%. The analysis result of the influence of variables: The researcher divided into the following research variables:

Export Performance

When considering the influence of Standardized coefficients variables on predictor variables or causal factor of Export Performance, it found that the Reconfiguration Capability ($\beta = 0.602$, $p < 0.001$) had a direct effect influence on the Export Performance with the influences was 0.602. The Entrepreneurial Orientation (β

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= 0.753, p < 0.01) and Innovativeness(INNO) (β = 1.428, p < 0.001) had indirect effect to Export Performance that the Entrepreneurial Orientation (EO) indirect effect influences was 0.091 to Export Performance through the Reconfiguration Capability. The Innovativeness indirect effect to Export Performance through Reconfiguration Capability with indirect influence was 0.497.

When considering the total effect (TE), direct effect (DE), and indirect effect (IE) of the Export Performance, the most influences variables for the Export Performance were Reconfiguration Capability (RC: TE = 0.602), followed by Innovativeness (INNO: TE = 0.497) and Entrepreneurial Orientation (EO:TE = 0.091), respectively.

The most direct influence variables in Export Performance were Reconfiguration Capability (RC: DE = 0.602). The most influence indirect variables to the Export Performance were Innovativeness (INNO; IE = 0.497), followed by the Entrepreneurial Orientation (EO; IE = 0.091), respectively.

Reconfiguration Capability

When considering the influence of Standardized coefficients variables on predictors variable or causal factors of Reconfiguration Capability (RC), it found that the most direct effect influence variables on Reconfiguration Capability (RC) were Innovativeness (INNO), followed by Entrepreneurial Orientation (EO) with the influences were 0.826 and 0.151 respectively. This showed that Innovativeness contain with Technological innovation (INNO_Tech), Production innovation (INNO_Prod) and Process innovation (INNO_Proc). Entrepreneurial Orientation (EO) , which includes Risk Taking Orientation (EO_Risk) and Proactiveness Orientation (EO_Pro), will lead to a more Reconfiguration Capability and a more Reconfiguration Capability will result in higher export performance.

Analysis of the Influence of Variables in Model 3

Considering the R-Square coefficient of the structural equation of the internal variables as the dependent variables and Mediating variables, namely, the Export performance ($R^2 = 0.39$) and the Reconfiguration Capability ($R^2 = 0.72$), it found that the predictors variable or casual model of Reconfiguration Capability(RC) describes the variance of the export performance to 39.0%. predictors variable or casual model of

Entrepreneurial Orientation (EO) and Innovativeness (INNO) shared the variance of Reconfiguration Capability(RC) by 72.0%. The research was divided into the following research variables:

Export Performance

When considering the influence of Standardized coefficients variables on predictors variable or causal factor of export performance, it was found that Reconfiguration Capability variables had direct influence on export performance with the influences was 0.830. The Entrepreneurial Orientation (β = 0.118, p =0.095) and innovativeness (β = -0.316, p = 0.054) had no direct effect on the export performance. However, these two variables indirect effected to export performance. The Entrepreneurial Orientation (EO) indirect effected to Export Performance through Reconfiguration Capability with an indirect influence of 0.116. Innovativeness indirect effected to export performance through Reconfiguration Capability with indirect influence of 0.695

When considering the total effect (TE), direct effect (DE), and indirect effect (IE) of the export performance, The most total effect variables to export performance were the Reconfiguration Capability(RC: TE = 0.830), followed by Innovativeness (INNO; TE = 0.379) and Entrepreneurial Orientation (EO; TE = 0.234) respectively. The variables that had the most direct effect influence on export performance was Reconfiguration Capability (RC: DE = 0.830). The variables that had the most indirect effect influence on export performance were Innovativeness (INNO: IE = 0.695) followed by Entrepreneurial Orientation (EO: IE = 0.116) respectively.

Reconfiguration Capability

When considering the influence of Standardized coefficients variables on predictors variable or causal factor of Reconfiguration Capability (RC), it found that the most direct effect influence variables on Reconfiguration Capability(RC) were Innovativeness (INNO), followed by Entrepreneurial Orientation (EO) . The direct influences were 0.837 and 0.140 respectively. Innovativeness contains with Technological innovation (INNO_Tech), Product innovation (INNO_Prod) and Process innovation (INNO_Proc). The Entrepreneurial Orientation (EO) , which Risk Taking Orientation (EO_Risk) and Proactiveness Orientation (EO_Pro), will lead to a more

Reconfiguration Capability and a more Reconfiguration Capability will result in higher Export Performance as well.

Analysis of Influence of Variables in Model 4a

Considering the R-Square coefficient of the structural equation of the internal variables as the dependent variables and Mediating variables, namely the export performance ($R^2 = 0.30$) and the reconfiguration capability ($R^2 = 0.67$). It found that the predictor variables or causal factor of Reconfiguration Capability (RC) describes the variance of the export performance to 30.0%, predictor variable or causal factors of Entrepreneurial Orientation (EO) and Innovativeness (INNO) describes the variance of Reconfiguration Capability(RC) by 67.0%. The research was divided into the following research variables:

Export Performance

When considering the influence of Standardized coefficients variables on predictors variable or causal factor of export performance, it was found that the Reconfiguration Capability variables had direct effect influence to export performance with the influences of 0.552. The Entrepreneurial Orientation ($\beta = 0.036$, $p = 0.659$) and Innovativeness ($\beta = -0.154$, $p = 0.218$) had no direct effect influence on the Export Performance. However, these two variables indirect effect to Export Performance whereas Entrepreneurial Orientation (EO) had indirect effected to Export performance through Reconfiguration Capability with indirect effect of 0.125. Innovativeness indirect effected to Export Performance through the Reconfiguration Capability with the indirect effect was 0.414 and as well the direct effects of EOxCE on EP increase with favorable CE as the moderator variables., it was found that the Entrepreneurial Orientation (EOxCE: $\beta = 0.124$, $p <0.05$) had direct effect influence to export performance with the influences of 0.124

When considering the total effect (TE) direct effect (DE) and indirect effect (IE) of the export performance, the most total effect influence variables for the export performance were Reconfiguration Capability(RC : TE = 0.552), followed by the Innovativeness (INNO : TE = 0.260), Entrepreneurial Orientation (EO : TE = 0.161) and Entrepreneurial Orientation (EOxCE : TE=0.124) ,respectively. the most direct effect influence variables for the Export performance were Reconfiguration

Capability(RC : DE = 0.552), followed by the Entrepreneurial Orientation (EOxCE :
DE = 0.124), Entrepreneurial Orientation (EO : DE = 0.036) and Innovativeness(INNO
: DE = -0.154), respectively. the most indirect effect influence variables for Export
performance include Innovativeness (INNO:IE = 0.414), followed by the
Entrepreneurial Orientation (EO : IE = 0.125), respectively.

Reconfiguration Capability

When considering the influence of Standardized coefficients variables on
predictors variable or causal factor of reconfiguration capability(RC), it was found that
the most direct effect influence variables of reconfiguration capability were
Innovativeness (INNO), followed by Entrepreneurial Orientation (EO) with direct
effect influences were 0.750 and 0.227 respectively which shown that Innovativeness
contains with Technological innovation (INNO_Tech), Production innovation
(INNO_Prod) and Process innovation (INNO_Proc). Entrepreneurial Orientation (EO) ,
which includes Risk Taking Orientation (EO_Risk) and Proactivity Orientation
(EO_Pro), will cause more reconfiguration capability and more reconfiguration
capability will result in higher export performance.

Competitive Environment

Competitive Environment (Diamond Framework), which is used as a
moderating variable in the conceptual model, outlines four broad attributes of a nation
that shape the environment in which local firms compete: factor conditions, demand
conditions, related and supporting industries, firm strategy, structure and rivalry. There
are two additional factors that can affect the model indirectly: chance and government.
According to Porter (1990), the collective strength of these attributes for a country
promotes or impedes the creation of Competitive Advantage for that particular nation.

When considering the influence of Standardized coefficients variables on
predictors variable or causal factor of Entrepreneurial Orientation (EOxCE) on EP
increase with favorable CE as the moderator variables. it was found that the direct
effect influence variables for EOxCE with influences of 0.124, Entrepreneurial
Orientation (EO) which includes Risk Taking Orientation (EO_Risk) and Proactivity
Orientation (EO_Pro) were effects on the Export Performance increase with favorable
of CE .These indicated that Factor conditions of Competitive Environment (CE) which

includes demand conditions, related and supporting industries, firm strategy, structure and rivalry, and government have positively influences with Entrepreneurial Orientation (EO) .

Analysis of Influence of Variables in Model 4b

Considering the R-Square coefficient of the structural equation of the internal variables as the dependent variables and Mediating variables, namely the export performance ($R^2 = 0.53$) and the reconfiguration capability ($R^2 = 0.75$). It found that the predictor variables or causal factor of Reconfiguration Capability (RC) describes the variance of the export performance to 53.0%, predictor variable or causal factors of Entrepreneurial Orientation (EO) and Innovativeness (INNO) describes the variance of Reconfiguration Capability(RC) by 75.0%. The research was divided into the following research variables:

Export Performance

When considering the influence of Standardized coefficients variables on predictors variable or causal factor of export performance, it was found that the reconfiguration capability variables had direct effect influence to export performance with the influences of 0.569. The Entrepreneurial Orientation ($\beta = 0.032$, p = 0.631) and Innovativeness ($\beta = -0.169$, p = 0.338) had no direct effect influence on the Export Performance. However, these two variables indirect effect to Export Performance whereas Entrepreneurial Orientation (EO) had indirect effected to Export performance through Reconfiguration Capability with indirect effect of 0.090. Innovativeness indirect effected to Export Performance through the Reconfiguration Capability with the indirect effect was 0.484 and as well the direct effects of INNOxCE on EP increase with favorable CE as the moderator variables., it was found that the Innovativeness (INNOxCE: $\beta = 0.232$, $p < 0.001$) had direct effect influence to export performance with the influences of 0.232

When considering the total effect (TE) direct effect (DE) and indirect effect (IE) of the export performance, the most total effect influence variables for the export performance were Reconfiguration Capability(RC : TE = 0.569), followed by the Innovativeness (INNO : TE = 0.315), Innovativeness (INNOxCE : TE=0.232) and Entrepreneurial Orientation (EO : TE = 0.122), respectively. the most direct effect

influence variables for the Export performance was Reconfiguration Capability(RC : DE = 0.569), followed by the Innovativeness (INNOxCE : DE=0.232), Entrepreneurial Orientation (EO : DE = 0.032) and Innovativeness(INNO : DE=-0.169), respectively. the most indirect effect influence variables for Export performance include Innovativeness (INNO:IE = 0.484), followed by the Entrepreneurial Orientation (EO : IE = 0.090), respectively.

Reconfiguration Capability

When considering the influence of Standardized coefficients variables on predictors variable or causal factor of Reconfiguration Capability(RC), it was found that the most direct effect influence variables of Reconfiguration Capability were Innovativeness (INNO), followed by Entrepreneurial Orientation (EO) with direct effect influences were 0.851 and 0.158 respectively which shown that Innovativeness contains with Technological innovation (INNO_Tech), Production innovation (INNO_Prod) and Process innovation (INNO_Proc). Entrepreneurial Orientation (EO) , which includes Risk Taking Orientation (EO_Risk) and Proactivity Orientation (EO_Pro), will cause more Reconfiguration Capability and more Reconfiguration Capability will result in higher export performance.

Competitive Environment

Competitive Environment (Diamond Framework), which is used as a moderating variable in the conceptual model, outlines four broad attributes of a nation that shape the environment in which local firms compete: factor conditions, demand conditions, related and supporting industries, firm strategy, structure and rivalry. There are two additional factors that can affect the model indirectly: chance and government. According to Porter (1990), the collective strength of these attributes for a country promotes or impedes the creation of Competitive Advantage for that particular nation.

When considering the influence of Standardized coefficients variables on predictors variable or causal factor of Innovativeness (INNOxCE) on EP increase with favorable CE as the moderator variables. It was found that the direct effect influence variables for INNOxCE with direct influences of 0.232 ,the results showed that Innovativeness contains with Technological innovation (INNO_Tech), Production innovation (INNO_Prod) and Process innovation (INNO_Proc) were effects on the

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Export Performance increase with favorable of CE. These indicated that Factor conditions of Competitive Environment (CE) which includes demand conditions, related and supporting industries, firm strategy, structure and rivalry and government have positively influences with Innovativeness (INNO).

4.6 Hypothesis Testing

The following research questions were raised in the earlier discussion whether: do core International Entrepreneurship Characteristics and Export Performance relate; do core International Entrepreneurship Characteristics as Entrepreneurial Orientation and Innovativeness, Reconfiguration Capability as mediating , Competitive Environment as moderator and Export Performance.

Therefore the following hypotheses were proposed:

H1: There is a positive relationship between Entrepreneurial Orientation and Export performance of Thai SMEs.

H2:   There is a positive relationship between Innovativeness and Export Performance of Thai SMEs.

H3: Entrepreneurial Orientation positively affect Reconfiguration Capability

H4: Innovativeness   positively affect Reconfiguration Capability.

H5: Reconfiguration Capability have positive impact on Export performance of Thai SMEs.

H6: The effect of the Entrepreneurial Orientation on Export performance increase with favorable Competitive Environment.

H7: The effect of the Innovativeness on Export performance increase with favorable Competitive Environment.

4.6.1 Hypothesis H1 Testing

H1: There is a positive relationship between Entrepreneurial Orientation and Export performance of Thai SMEs.

The Result of Model 1 showed that the analysis of the relationship between Entrepreneurial Orientation (EO) and Export performance (EP) indicated that there was positive relationship between EO and EP. The results indicated that the path coefficient between EO and EP was 0.274 standard error was 0.105, critical ratio was 3.089 and the

p-value was lower than 0.01 The factor loading values for each item of the observed variables, which were Risk Taking Orientation and Proactiveness Orientation were 0.713 and 0.854 respectively. It was found that the *p*-value which was the means to measure the evidence against the null hypothesis, whereby the smaller the *p*-value indicated stronger evidence against the null. The *p*-value for this relationship was lower than 0.01, this suggested that the result did have statistically significance and indicated that hypothesis H1 was supported.

The Result of Model 3 showed that the analysis of the relationship between Entrepreneurial Orientation (EO) and Export performance (EP) indicated that there was no positive relationship between EO and EP. The results indicated that the path coefficient between EO and EP was 0.118 standard error was 0.062, critical ratio was 1.671 and the *p*-value was greater than 0.05. The factor loading values for each item of the observed variables, which were Risk Taking Orientation and Proactiveness Orientation were 0.868 and 0.719 respectively. It was found that the *p*-value which was the means to measure the evidence against the null hypothesis, whereby the smaller the *p*-value indicated stronger evidence against the null. The *p*-value for this relationship was greater than 0.05, this suggested that the result did not have statistically significance and indicated that hypothesis H1 was not supported.

The Result of Model 4a showed that the analysis of the relationship between Entrepreneurial Orientation (EO) and Export performance (EP) indicated that there was no positive relationship between EO and EP. The results indicated that the path coefficient between EO and EP was 0.036 standard error was 0.064, critical ratio was 0.441 and the *p*-value was greater than 0.05 he factor loading values for each item of the observed variables, which were Proactiveness Orientation and Risk Taking Orientation and were 0.852 and 0.693 respectively. It was found that the *p*-value which was the means to measure the evidence against the null hypothesis, whereby the smaller the *p*-value indicated stronger evidence against the null. The *p*-value for this relationship was greater than 0.05, this suggested that the result did not have statistically significance and indicated that hypothesis H1 was not supported.

The Result of Model 4b showed that the analysis of the relationship between Entrepreneurial Orientation (EO) and Export performance (EP) indicated that there was

no positive relationship between EO and EP. The results indicated that the path coefficient between EO and EP was 0.032 standard error was 0.052, critical ratio was 0.480 and the p-value was greater than 0.05 The factor loading values for each item of the observed variables, which were Proactiveness Orientation and Risk Taking Orientation were 0.885 and 0.684 respectively. It was found that the p-value which was the means to measure the evidence against the null hypothesis, whereby the smaller the p-value indicated stronger evidence against the null. The p-value for this relationship was greater than 0.05, this suggested that the result did not have statistically significance and indicated that hypothesis H1 was not supported.

4.6.2 Hypothesis H2 Testing

H2: There is a positive relationship between Innovativeness and Export performance of Thai SMEs.

The Result of Model 1 showed that the analysis of the relationship between Innovativeness (INNO) and Export performance (EP) indicated that there was positive relationship between INNO and EP. The results indicated that the path coefficient between INNO and EP was 0.449, standard error was 0.095, critical ratio was 4.762 and the p-value was lower than 0.001. The factor loading values for each item of the observed variables, which were Innovativeness based for Technological innovation, Product innovation, and Process innovation were 0.712, 0.854, and 0.802 respectively. It was found that the p-value which was means to measure the evidence against the null hypothesis, whereby the smaller the p-value indicated stronger evidence against the null. The p-value for this relationship was lower than 0.001, this suggested that there was direct relationship between INNO and EP which indicated that hypothesis H2 was supported.

The Result of Model 3 showed that the analysis of the relationship between Innovativeness (INNO) and Export performance (EP) indicated that there was no positive relationship between INNO and EP. The results indicated that the path coefficient between INNO and EP was -0.316, standard error was 0.136, critical ratio was -1.923 and the p-value was greater than 0.05. The factor loading values for each item of the observed variables, which were Innovativeness based for Technological innovation, Product innovation, and Process innovation were 0.731, 0.808, and 0.830

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respectively. It was found that the *p*-value which was means to measure the evidence against the null hypothesis, whereby the smaller the *p*-value indicated stronger evidence against the null. The *p*-value for this relationship was greater than 0.05, this suggested that there was direct relationship between INNO and EP which indicated that hypothesis H2 was not supported.

The Result of Model 4a showed that the analysis of the relationship between Innovativeness (INNO) and Export performance (EP) indicated that there was no positive relationship between INNO and EP. The results indicated that the path coefficient between INNO and EP was -0.154, standard error was 0.110, critical ratio was -1.231 and the *p*-value was greater than 0.05. The factor loading values for each item of the observed variables, which were Innovativeness based for Process innovation, Product innovation and Technological innovation were 0.876, 0.780, and 0.779 respectively. It was found that the *p*-value which was means to measure the evidence against the null hypothesis, whereby the smaller the *p*-value indicated stronger evidence against the null. The *p*-value for this relationship was greater than 0.05, this suggested that there was no direct relationship between INNO and EP which indicated that hypothesis H2 was not supported.

The Result of Model 4b showed that the analysis of the relationship between Innovativeness (INNO) and Export performance (EP) indicated that there was no positive relationship between INNO and EP. The results indicated that the path coefficient between INNO and EP was -0.169, standard error was 0.162, critical ratio was -0.957 and the *p*-value was greater than 0.05. The factor loading values for each item of the observed variables, which were Innovativeness based for Process innovation, Product innovation and Technological innovation were 0.816, 0.797, and 0.741 respectively. It was found that the *p*-value which was means to measure the evidence against the null hypothesis, whereby the smaller the *p*-value indicated stronger evidence against the null. The *p*-value for this relationship was greater than 0.05, this suggested that there was no direct relationship between INNO and EP which indicated that hypothesis H2 was not supported.

4.6.3 Hypothesis H3 Testing

H3: Entrepreneurial Orientation positively affect Reconfiguration Capability.

The Result of Model 2 showed that the analysis of the relationship between Entrepreneurial Orientation (EO) and Reconfiguration Capability(RC) indicated that there was a positive relationship between EO and RC The results indicated that the path coefficient between EO and RC was 0.151, standard error was 0.050, critical ratio was 2.694 and the *p*-value was lower than 0.01 RC served as mediating for the model with the following seven items factors were including Innovative Capabilities1, Innovative Capabilities2, Innovative Capabilities3, Adaptive Capabilities1, Adaptive Capabilities2, Adaptive Capabilities3 and Adaptive Capabilities4.

The path coefficient and the *p*-value indicated significant relationship with between EO and RC, which also indicated that EO positively affected RC. Therefore, the hypothesis H3 was supported.

The Result of Model 3 showed that the analysis of the relationship between Entrepreneurial Orientation (EO) and Reconfiguration Capability (RC) indicated that there was a positive relationship between EO and RC. The results indicated that the path coefficient between EO and RC was 0.140, standard error was 0.048, critical ratio was 2.544 and the *p*-value was lower than 0.05, RC served as mediating for the model with the following seven items factors were including Innovative Capabilities1, Innovative Capabilities2, Innovative Capabilities3, Adaptive Capabilities1, Adaptive Capabilities2, Adaptive Capabilities3 and Adaptive Capabilities4.

The path coefficient and the *p*-value indicated significant relationship with between EO and RC, which also indicated that EO positively affected RC. Therefore, the hypothesis H3 was supported.

The Result of Model 4a showed that the analysis of the relationship between Entrepreneurial Orientation (EO) and Reconfiguration Capability(RC) indicated that there was a positive relationship between EO and RC The results indicated that the path coefficient between EO and RC was 0.227, standard error was 0.048, critical ratio was 3.621 and the *p*-value was lower than 0.001. RC served as mediating for the model with the following items factors were including Innovative Capabilities1, Innovative

Capabilities2, Innovative Capabilities3, Adaptive Capabilities1, Adaptive Capabilities2, Adaptive Capabilities3 and Adaptive Capabilities4.

The path coefficient and the p-value indicated significant relationship with between EO and RC, which also indicated that EO positively affected RC. Therefore, the hypothesis H3 was supported.

The Result of Model 4b showed that the analysis of the relationship between Entrepreneurial Orientation (EO) and Reconfiguration Capability(RC) indicated that there was a positive relationship between EO and RC The results indicated that the path coefficient between EO and RC was 0.158, standard error was 0.044, critical ratio was 2.521 and the p-value was lower than 0.05. RC served as mediating for the model with the following items factors were including Innovative Capabilities1, Innovative Capabilities2, Innovative Capabilities3, Adaptive Capabilities1, Adaptive Capabilities2, Adaptive Capabilities3 and Adaptive Capabilities4.

The path coefficient and the p-value indicated significant relationship with between EO and RC, which also indicated that EO positively affected RC. Therefore, the hypothesis H3 was supported.

4.6.4 Hypothesis H4 Testing

H4: Innovativeness positively affect Reconfiguration Capability.

The Result of Model 2 showed that the analysis of the relationship between Innovativeness (INNO) and Reconfiguration Capability(RC) indicated that there was a positive relationship between INNO and RC The results indicated that the path coefficient between INNO and RC was 0.826, standard error was 0.067, critical ratio was 10.414 and the p-value was lower than 0.001 , RC served as mediating for the model with the following seven items factors were including Innovative Capabilities1, Innovative Capabilities2, Innovative Capabilities3, Adaptive Capabilities1, Adaptive Capabilities2, Adaptive Capabilities3 and Adaptive Capabilities4.

The path coefficient and the p-value indicated significant relationship with between INNO and RC, which also indicated that INNO positively affected RC. Therefore, the hypothesis H4 was supported

The Result of Model 3 showed that the analysis of the relationship between Innovativeness (INNO) and Reconfiguration Capability (RC) indicated that there was a

positive relationship between INNO and RC. The results indicated that the path coefficient between INNO and RC was 0.837, standard error was 0.068, critical ratio was 10.165 and the *p*-value was lower than 0.001, RC served as mediator for the model with the following seven items factors were including Innovative Capabilities1, Innovative Capabilities2, Innovative Capabilities3, Adaptive Capabilities1, Adaptive Capabilities2, Adaptive Capabilities3 and Adaptive Capabilities4.

The path coefficient and the *p*-value indicated significant relationship with between INNO and RC, which also indicated that INNO positively affected RC. Therefore, the hypothesis H4 was supported

The Result of Model 4a showed that the analysis of the relationship between Innovativeness (INNO) and Reconfiguration Capability (RC) indicated that there was a positive relationship between INNO and RC. The results indicated that the path coefficient between INNO and RC was 0.750, standard error was 0.060, critical ratio was 10.637 and the *p*-value was lower than 0.001. RC served as mediator for the model with the following items factors were including Innovative Capabilities1, Innovative Capabilities2, Innovative Capabilities3, Adaptive Capabilities1, Adaptive Capabilities2, Adaptive Capabilities3 and Adaptive Capabilities4.

The path coefficient and the *p*-value indicated significant relationship with between INNO and RC, which also indicated that INNO positively affected RC. Therefore, the hypothesis H4 was supported.

The Result of Model 4b showed that the analysis of the relationship between Innovativeness (INNO) and Reconfiguration Capability (RC) indicated that there was a positive relationship between INNO and RC. The results indicated that the path coefficient between INNO and RC was 0.851, standard error was 0.069, critical ratio was 10.316 and the *p*-value was lower than 0.001. RC served as mediator for the model with the following items factors were including Innovative Capabilities1, Innovative Capabilities2, Innovative Capabilities3, Adaptive Capabilities1, Adaptive Capabilities2, Adaptive Capabilities3 and Adaptive Capabilities4.

The path coefficient and the *p*-value indicated significant relationship with between INNO and RC, which also indicated that INNO positively affected RC. Therefore, the hypothesis H4 was supported.

4.6.5 Hypothesis H5 Testing

H5: Reconfiguration Capability have positive impact on Export performance of Thai SMEs.

The Result of Model 2 showed that the analysis of the relationship between Reconfiguration Capability (RC) and Export performance (EP) indicated that there was a positive relationship between RC and EP. The results indicated that the path coefficient between RC and EP was 0.602, standard error was 0.100, critical ratio was 6.188 and the p-value was lower than 0.001 The factor loading values for each item of the observed variables, those were Financial aspect Sales growth ,market share ,Net profit and Non-financial aspects succeeded in creating a quality product or service that meets the required standards, the needs of customers to meet the target and target sales growth target were 0.686, and 0.924 respectively. These values indicated significant positive relationship between Reconfiguration Capability and Export performance and therefore, the hypothesis H5 was supported.

The Result of Model 3 showed that the analysis of the relationship between Reconfiguration Capability (RC) and Export performance (EP) indicated that there was a positive relationship between RC and EP. The results indicated that the path coefficient between RC and EP was 0.830, standard error was 0.200, critical ratio was 4.162 and the p-value was lower than 0.001 The factor loading values for each item of the observed variables, those were Financial aspect Sales growth ,market share , Net profit and Non-financial aspects succeeded in creating a quality product or service that meets the required standards, the needs of customers to meet the target and target sales growth target were 0.648 and 0.976 respectively. These values indicated significant positive relationship between Reconfiguration Capability and Export performance and therefore, the hypothesis H5 was supported.

The Result of Model 4a showed that the analysis of the relationship between Reconfiguration Capability (RC) and Export performance (EP) indicated that there was a positive relationship between RC and EP. The results indicated that the path coefficient between RC and EP was 0.552, standard error was 0.154, critical ratio was 3.687 and the p-value was lower than 0.001. The factor loading values for each item of the observed variables, those were Financial aspect Sales growth ,market share , Net

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profit and Non-financial aspects succeeded in creating a quality product or service that meets the required standards, the needs of customers to meet the target and target sales growth target were 0.695 and 0.851 respectively.

The path coefficient and the *p*-value indicated significant relationship with between RC and EP, which also indicated that RC positively affected EP. Therefore, the hypothesis H5 was supported.

The Result of Model 4b showed that the analysis of the relationship between Reconfiguration Capability (RC) and Export performance (EP) indicated that there was a positive relationship between RC and EP. The results indicated that the path coefficient between RC and EP was 0.569, standard error was 0.266, critical ratio was 2.329 and the *p*-value was lower than 0.01. The factor loading values for each item of the observed variables, those were Financial aspect Sales growth ,market share , Net profit and Non-financial aspects succeeded in creating a quality product or service that meets the required standards, the needs of customers to meet the target and target sales growth target were 0.703 and 0.882 respectively.

The path coefficient and the *p*-value indicated significant relationship with between RC and EP, which also indicated that RC positively affected EP. Therefore, the hypothesis H5 was supported.

4.6.6 Hypothesis H6 Testing

H6: The effect of the Entrepreneurial Orientation on Export performance increases with favorable Competitive Environment.

The Result of Model 4a showed that the analysis of the relationship between Entrepreneurial Orientation (EOxCE) were effects on the Export Performance (EP) increase with favorable of Competitive Environment (CE) as the moderator variables, it was found that the path coefficient between EOxCE and EP was 0.124, standard error was 0.289, critical ratio was 2.228 and the *p*-value was lower than 0.05. Entrepreneurial Orientation (EO) , which includes Risk Taking Orientation (EO_Risk) and Proactivity Orientation (EO_Pro) were effects on the Export Performance increase with favorable of CE.These indicated that Factor conditions of Competitive Environment (CE) , which includes demand conditions, related and supporting industries, firm strategy, structure

and rivalry, and government have positively influences with Entrepreneurial Orientation (EO) .

The path coefficient and the *p*-value indicated no significant relationship with between EOxCE and EP which also indicated that EOxCE have positively affected with Export Performance (EP) Therefore, the hypothesis H6 was supported

4.6.7 Hypothesis H7 Testing

H7: The effect of the Innovativeness on Export performance increases with favorable Competitive Environment.

The Result of Model 4b showed that the analysis of the relationship between Innovativeness (INNOxCE) were effects on the Export Performance (EP) increase with favorable of Competitive Environment (CE) as the moderator variables, it was found that the path coefficient between INNOxCE and EP was 0.232, standard error was 0.377, critical ratio was 3.489 and the *p*-value was lower than 0.001. Innovativeness (INNO) which includes Technological innovation (INNO_Tech), Production innovation (INNO_Prod) and Process innovation (INNO_Proc) were effects on the Export Performance through the moderator of the Competitive Environment (CE). These indicated that Factor conditions of Competitive Environment (CE), which includes demand conditions, related and supporting industries, firm strategy, structure and rivalry, and government have positively influences with Innovativeness (INNO).

The path coefficient and the *p*-value indicated no significant relationship with between INNOxCE and EP, which also indicated that INNOxCE have positively affected with Export Performance (EP). Therefore, the hypothesis H7 was supported.

Export performance was the dependent variable of the model, observed variables for firm performance measurement had become the greatest challenges for strategic management research due to the wide variety of concept and definition of firm performance. Variables used for this study were Financial aspect Sales growth, market share, Net profit and Non-financial aspects succeeded in creating a quality product or service that meets the required standards, the needs of customers to meet the target and target sales growth target, all these aspects of Export performance had been thoroughly reviewed from the earlier relevant studies and were chosen to represent as good measurement for Export performance construct. The summary of hypothesis testing as shown in table 4.32

Table 4.32 Hypotheses Testing Results Model 1 to 4a-4b

Hypothesis	Result				
	Model 1	**Model 2**	**Model 3**	**Model 4a**	**Model 4b**
H1: There is a positive relationship between Entrepreneurial Orientation and Export performance of Thai SMEs.	Supported	-	Not Supported	Not Supported	Not Supported
H2: There is a positive relationship between Innovativeness and Export performance of Thai SMEs.	Supported	-	Not Supported	Not Supported	Not Supported
H3: Entrepreneurial Orientation positively affects Reconfiguration Capability.	-	Supported	Supported	Supported	Supported
H4: Innovativeness positively affects Reconfiguration Capability.	-	Supported	Supported	Supported	Supported
H5: Reconfiguration Capability have positive impact on Export performance of Thai SMEs.	-	Supported	Supported	Supported	Supported
H6: The effect of the Entrepreneurial Orientation on Export performance increase with favorable Competitive Environment	-	-	-	Supported	-

Table 4.32 Hypotheses Testing Results Model 1 to 4a-4b (Cont.)

Hypothesis	Result				
	Model 1	**Model 2**	**Model 3**	**Model 4a**	**Model 4b**
H7: The effect of the Innovativeness on Export performance increase with favorable Competitive Environment	-	-	-	-	Supported

4.6.8 Graphical presentation of tested hypotheses

Solid line indicates hypotheses supported (H1-H2)
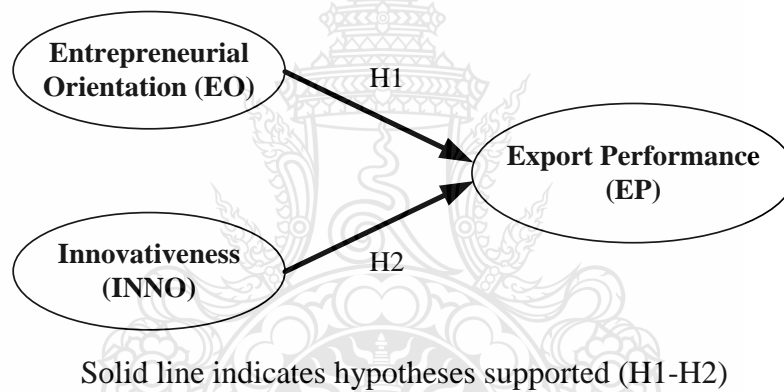
Figure 4.13 Graphical Presentation of Tested Hypothesis (Model 1)

Solid line indicates hypotheses supported (H3,H4,H5)
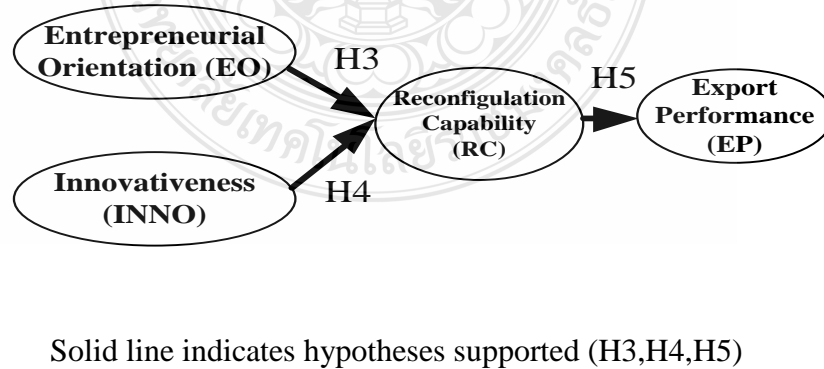
Figure 4.14 Graphical presentation of Tested Hypothesis (Model 2)

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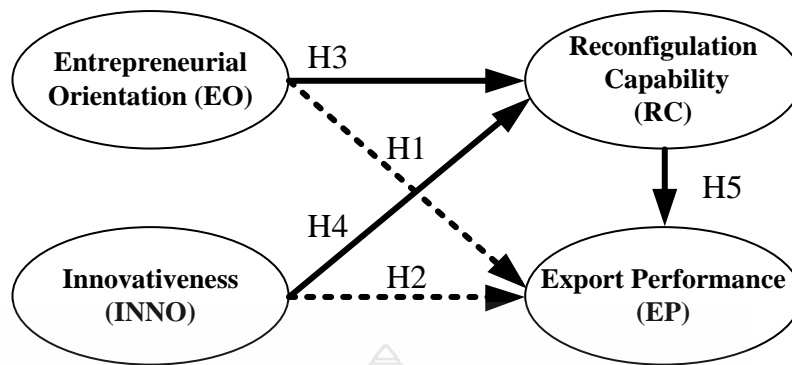
Solid line indicates hypotheses supported (H3,H4,H5)

Dashed line indicates hypotheses not supported (H1-H2)

Figure 4.15 Graphical Presentation of Tested Hypothesis (Model 3)
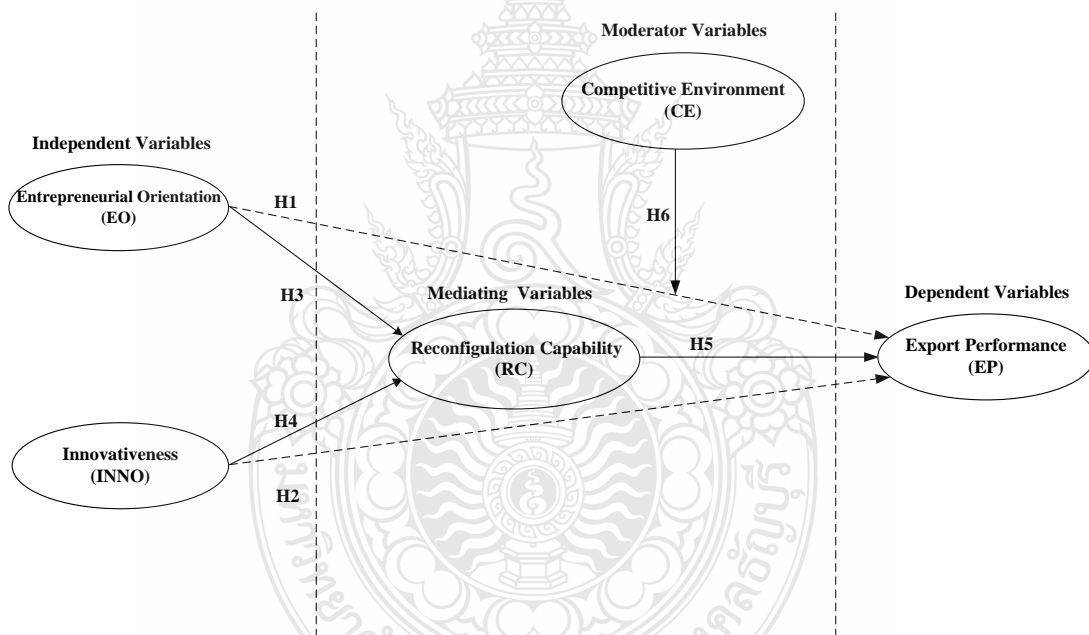
Solid line indicates hypotheses supported (H3-H4-H5-H6).

Dashed line indicates hypotheses not supported (H1-H2)

Figure 4.16 Graphical Presentation of Tested Hypotheses (Model 4a)
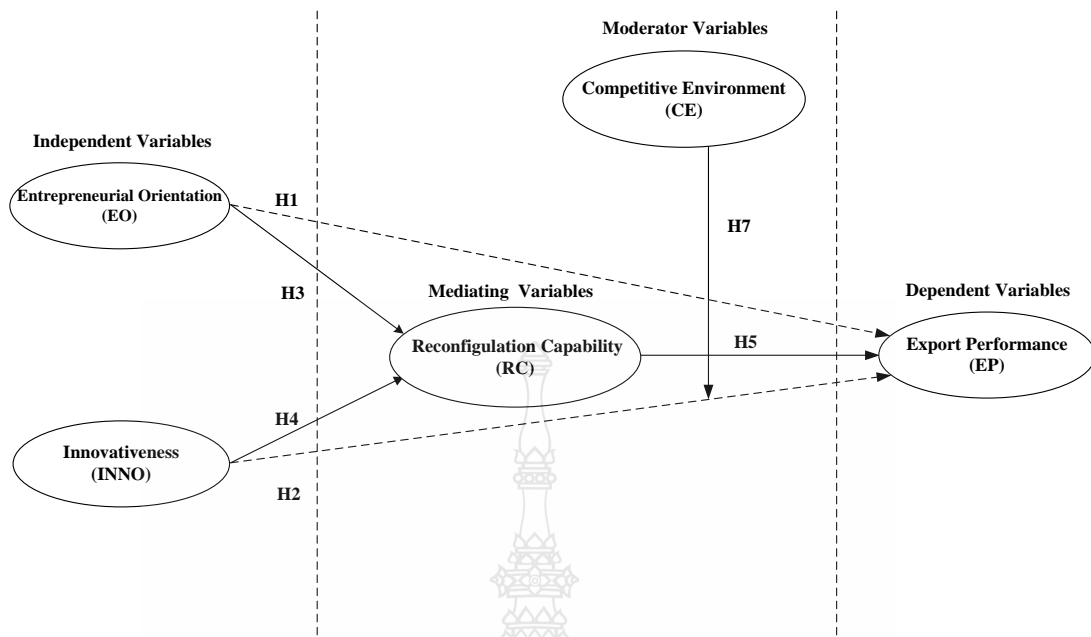
Solid line indicates hypotheses supported (H3-H4-H5-H7).

Dashed line indicates hypotheses not supported (H1-H2)

Figure 4.17 Graphical Presentation of Tested Hypotheses (Model 4b)

CHAPTER 5
CONCLUSION AND RECOMMENDATIONS

Introduction

In this chapter the conclusions derived from the findings of this study on the effect of international entrepreneurship characteristics on the export performance that consists of entrepreneurial orientation and innovativeness were described. The conclusions were based on the purpose, research questions and results of this study. The implications of these findings and the resultant recommendations were explained. Recommendations were based on the conclusions and purpose of the study.

5.1 Summary of the Findings

Major studies of business performance of international small and medium enterprises in various cases showed a similar conclusion that the performance results were linked to the entrepreneur (Kuratko, 2009b; Raymond & St-Pierre, 2003b). Given that SME sector is the backbone of most economies and has gained attention and support from the government in most countries in the past years, it was found that performance was driven by entrepreneurial factors because it was directly related to the risks and uncertainties of the business and could lead the business to achieve its goals, success and profitability (Anderson, 2000; Kuratko, 2009b). Accordingly, the purpose of this study is to study the role of international entrepreneurship characteristics including international entrepreneurship operating locally or internationally on entrepreneurial internationalization.

Entrepreneur is assumed as an important agent of change who is capable of and willing to take the risk in making different decisions: they must be innovative and able to take advantage of business opportunities in different market environments according to the internationalization theory as described by OECD (OECD, 2000). International entrepreneurship characteristics have three theoretical foundations as follows. The first foundation is the resource-based theory that mentions the specific resources and capabilities of the organization. The second foundation is international entrepreneurship that states that an international entrepreneur is a cross-country entrepreneur who can focus on how to

discover, analyze and utilize opportunities to create new products or services (Oviatt & McDougall, 2005). And the third foundation is competitive advantage which is the collective strength of a nation that shape the environment which includes factor conditions, demand conditions, related and supporting industries, firm strategy, structure and rivalry, chance and government for a country to promote or impede the creation of competitive advantage for that particular nation. This study makes a proposition that the concept of international entrepreneurship characteristics is based on the perception that an entrepreneur is an experienced person who searches for risk with the ability to work by integrating existing resources into business operations to achieve competitive advantage which leads to the effectiveness of business performance.

From literature review and research results, it was found that the international entrepreneurship characteristics affected the effectiveness of business performances, in which in this case refers to the export performance. The international entrepreneurship characteristics would affect the export performance that consists of entrepreneurial orientation and innovativeness. In addition, the results showed that the reconfiguration capability, which is one aspect in dynamics capability, had both direct and indirect effects on the export performance. The results of this study are consistent with the previous literature review advocating that the ability to create and improve resources (Reconfiguring), such as improving work processes, organizational restructuring, knowledge management and others will enable and strengthen the business as well as will increase competitiveness and deliver long-term export achievement.

In addition, entrepreneurial orientation and innovativeness have influences on export performance and it will increase in favor of competitive environment as a moderator variable. From the concepts and theories related to creating competitive advantage, it demonstrated that the businesses needs to analyze the competitive environment so that the business entrepreneurs can be ready to respond quickly to changing environments, both production and service. From the results of this research indicating about the competitive environment analysis based on Porter's Diamond Model including demand conditions, industrial strategy, firm strategy, rivalry, and government, the Entrepreneurial Orientation (EO) and Innovativeness (INNO) can more effectively affect the Export Performance (EP).

5.2 Research Questions and the Answers

This study raised three major research questions which are:

RQ 1: How do Entrepreneurial Orientation and Innovativeness have Causal Relationship to Export Performance of Thai SMEs?

RQ 2: How do Entrepreneurial Orientation and Innovativeness have Causal Relationship to Export Performance of Thai SMEs through Reconfiguration Capability?

RQ 3: How do Entrepreneurial Orientation and Innovativeness have Causal Relationship to Export Performance of Thai SMEs increase with favorable Competitive Environment?

The Seven hypotheses were developed and tested in order to determine answers for the above research questions, as shown below:

Table 5.1 Summary of Research Questions, Tested Hypotheses and Results

Research questions	Hypothesis	Answer for research question				
		Model 1	Model 2	Model 3	Model 4a	Model 4b
RQ1	H1: There is a positive relationship between Entrepreneurial Orientation and Export performance of Thai SMEs.	Yes	-	No	No	No
	H2:There is a positive relationship between Innovativeness and Export performance of Thai SMEs.	Yes	-	No	No	No
RQ2	H3:Entrepreneurial Orientation positively affects Reconfiguration Capability	-	Yes	Yes	Yes	Yes

Table 5.1 Summary of Research Questions, Tested Hypotheses and Results (Cont.)

Research questions	Hypothesis	Answer for research question				
		Model 1	Model 2	Model 3	Model 4a	Model 4b
	H4:Innovativeness positively affects Reconfiguration Capability	-	Yes	Yes	Yes	Yes
	H5:Reconfiguration Capability have positive impact on Export performance of Thai SMEs	-	Yes	Yes	Yes	Yes
RQ3	H6: The effect of the Entrepreneurial Orientation on Export performance increase with favorable	-	-	-	Yes	-
	H7: The effect of the Innovativeness on Export performance increase with favorable Competitive Environment	-	-	-	-	Yes

5.3 Discussion and Conclusion of the Findings

This section provided results of the interpretations, discussions, and conclusions of the research questions.

5.3.1 Discussion of Research Question 1

Research Question 1 was raised in order to determine the significant direct relationship between core International Entrepreneurship Characteristics and Export Performance. From previous literature review (Kuhn et al., 2010; Rauch et al., 2009), it was found that the International Entrepreneurship Characteristics that affected the

Export Performance consist of Entrepreneurial Orientation and Innovativeness. This is an important element for corporate success and profitability.

This study proposed a focus on Entrepreneurial Orientation in three aspects: (1) Risk Taking Orientation - the willingness of the entrepreneur to bring the most resources that the organization has to perform high-cost failure in hopes of high returns (D. Miller & Friesen, 1982), (2) Proactiveness Orientation - the expression of new opportunities for the organization and the last is the Human Capital and (3) the Human Capital - the ability of an entrepreneur to manage human resources, learn, promote and develop knowledge as well as the ability to work towards the goals of the business.

Innovativeness is an important part of the entrepreneurial activity in which successful entrepreneurs in international businesses need not only to discover valuable innovations but also must be able to take such innovation to succeed in the global market (Michael A. Hitt et al., 2001). This study identified innovativeness as key importance to the International Entrepreneurship Characteristics into three categories: (1) Technological innovation - the organizational activities in the use of technology to create new products or services to lead to competitiveness; (2) Products innovation-the ability of a business to create and use new ideas in developing new products or services to make economic benefits to the business and (3) Process innovation- an effort to develop a business or a business process to be effective and effective in applying innovation to successful development. In discussing the results in question 1, the next section will present the results of each model as follows:

H1: There is a positive relationship between Entrepreneurial Orientation (EO) and Export performance (EP) of Thai SMEs.

H2: There is a positive relationship between Innovativeness (INNO) and Export Performance (EP) of Thai SMEs

The results in Model 1 (H1, H2) showed that both Entrepreneurial Orientation (EO) and Innovativeness (INNO) have direct relationship with Export Performance (E0). The relationship between EO and INNO with EP were statistically significant. Entrepreneurial Orientation (EO) and Innovativeness (INNO) were used to describe the variability of the Export Performance (EP: R^2 = 0.277) by 27.7%. The most direct variables influencing the export performance were Innovativeness (INNO: DE = 0.449),

which is consistent with: Sher and Yang (2005) who found that: Innovativeness is most positively correlated to performance when assessed by asset yield; and Guan and Ma (2003) who found that the growth of exports was related to the potential for innovation, learning, research and development, marketing, corporate management, human resources and strategy. As for Entrepreneurial Orientation (EO; DE = 0.274), the findings are consistent with: a previous research by K. D. Miller and Bromiley (1990) who found the impact on the overall business performance, such as returns to shareholders, assets and sales, etc.; Zahra (1991)) who found that there was a positive correlation between Entrepreneurial Orientation, profitability, and business growth; and Wiklund (1999) who stated that there was a positive correlation between Entrepreneurial Orientation and Business Performance. There were also reports of significant positive correlations between Entrepreneurial Orientation and business performance (Al-Swidi & Mahmood, 2011; Zahra & Covin, 1995)

However, the results in Model 3, Model 4a and Model 4b (H1, H2) showed that: both Entrepreneurial Orientation (EO) and Innovativeness (INNO) did not have any direct relationship with Export performance; there was no direct relationship between EO and EP; and there was no direct relationship between INNO and EP, whereas the relationship between EO and INNO with EP were statistically insignificant. However, these two variables indirectly affected the export performance. The Entrepreneurial Orientation (EO) variable indirectly influenced the export performance through the Reconfiguration Capability (RC). Indeed, Preacher & Hayes, 2008 suggested that the fully mediating effect occurs in a model if the indirect path is statistically significant and the direct path become insignificant, while the partially mediating effect occurs in the model if the indirect path is statistically significant and the direct path also remains statistically significant. The results showed that the indirect paths from Model 3, Model 4a and Model 4b are statistically significant which indicated that mediating effect occurred in the model. This suggested that the relationship between Entrepreneurial Orientation (EO), Innovativeness (INNO) and Export performance (EP) in Model 3, Model 4a and Model 4b was fully mediated by Reconfiguration Capability (RC). The results showed that the Entrepreneurial Orientation and Innovativeness had no direct relationship with Export performance. But

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in order to allow the relationship indirectly influence the export performance through RC as described, these two variables played some role and influence increased if through   Reconfiguration Capability(RC) which consists of Adaptive Capabilities and Innovative Capabilities. This is consistent with the study of Ambrosini and Bowman (2009) that the relationship between enterprise resources and export performance are evidenced in the dynamic capabilities documentation that enables companies to create, develop and protect resources that help them achieve superior long-term performance. Also, Wu (2006) confirmed that entrepreneurs should underline the importance of dynamic capabilities in transforming resources into organizational performance. They should expect that the effect will occur in the international market.

5.3.2 Discussion of Research Question 2

Research question 2 was raised in order to determine entrepreneurial orientation and innovativeness have causal relationship to export performance of Thai SMEs through reconfiguration capability.

Hypotheses H3 and H4 were developed in order to investigate direct relationship between entrepreneurial orientation and innovativeness with reconfiguration capability. The results in Model 2, Model 3, Model 4a and Model 4b (H3, H4) showed that both entrepreneurial orientation and innovativeness had direct relationship with Reconfiguration Capability (RC).   There was direct relationship between EO, INNO and RC. The details are provided as follows.

Model 2 showed that Entrepreneurial Orientation (EO) and Innovativeness (INNO) were used to describe the variability of the Reconfiguration Capability(RC:R^2 = 0.70) by 70%. Model 3 showed that Entrepreneurial Orientation (EO) and Innovativeness (INNO) were used to describe the variability of the Reconfiguration Capability (RC: R^2 = 0.72) by 72%. Model 4a showed that Entrepreneurial Orientation (EO) and Innovativeness (INNO) were used to describe the variability of the Reconfiguration Capability (RC: R^2 = 0.66) by 66%. And Model 4b showed that Entrepreneurial Orientation (EO) and Innovativeness (INNO) were used to describe the variability of the Reconfiguration Capability (RC: R^2 = 0.75) by 75%. The results indicated that there were positive relationships between Entrepreneurial Orientation and Innovativeness with Reconfiguration Capability. This was consistent with Resource-

based theory that Entrepreneurial Orientation is an important resource and represents the ability of a business to deliver sustainable competitive advantage and superior business performance. In this light, Bontis et al. (2009) confirmed that the company's internal resources development formulated competitive advantage in small and medium-sized businesses. Other relevant studies (Wiklund and Shepherd, 2003; Zahra and Covin, 1995) have also confirmed that competitive advantages of businesses that drive business performances derive from the use of influences on internal resources of business entrepreneur. For Innovativeness, many researches focused on innovation and productivity in increasing competitiveness. Most competitive advantages derive from product differentiation using product and/or service innovation. In addition, Henard and Szymanski (2001) said that organizations need to be innovative at all time because innovation is important in enabling organizations to gain competitive advantage through higher performance.

H3: Entrepreneurial Orientation positively affects Reconfiguration Capability (RC).

Hypothesis H3 was developed in order to investigate direct relationship between Entrepreneurial Orientation and Innovativeness with Reconfiguration Capability (RC). The results in Model 2, Model 3, Model 4a and Model 4b (H3, H4) showed that both Entrepreneurial Orientation and Innovativeness had direct relationship with Reconfiguration Capability (RC). There was direct relationship between EO, INNO and RC. This indicated that Reconfiguration Capability was affected by Entrepreneurial Orientation and Innovativeness. The result indicated that there were positive relationships between Entrepreneurial Orientation with Reconfiguration Capability which is consistent with what Sirmon and Hitt (2003) pointed out: In a changing environment, managers must be able to use resources to create new markets and respond to customer needs. Also, Wiklund (1999) confirmed that EO affects organizational culture through learning process and advanced capabilities. Similar to Jantunen et al. (2005), EO has a positive impact on Reconfiguration Capability and entrepreneurs should pay attention to the details and support their organizations. Furthermore, Jiao et al. (2010) found that EO has a positive effect on other Dynamic Capability. Accordingly, the most important for executives to deal with entrepreneurial

thinking and Reconfiguration Capability is Creativity, Self-confidence, Expertise, Experience, Tolerance, and Adaptability to dynamic change.

H4: Innovativeness positively affects Reconfiguration Capability (RC)

Hypothesis H4 was developed in order to investigate direct relationship between Innovativeness and Reconfiguration Capability. The results indicated that there were positive relationships between Innovativeness and Reconfiguration Capability. From the literature review, it was found that there was relationship between Innovativeness and Reconfiguration Capability. This is a result of the creativity of employees in the organization, which must always be maintained because it can bring value to the organization. It was found that innovation was based on knowledge, skills and experience of the person. Therefore, it can be said that human beings are an irreplaceable element in the process of innovation (Molina-Morales et al., 2011). Innovative people will help organizations to benefit from competition differently from their competitors. This may be some competitive advantage over a short period of time or in the long run to create competitive advantage. These capabilities can be individual or organizational competence (Lynch et al., 2010). The finding is consistent with Jiao et al. (2010) who conducted a study of dynamic environments, innovation and Reconfiguration Capability in China.

H5: Reconfiguration Capability has positive impact on Export performance of Thai SMEs.

Hypothesis H5 was developed in order to investigate direct relationship between Reconfiguration Capability and Export Performance. The results indicated that there were positive relationships between Reconfiguration Capability and Export Performance which is consistent with a previous study that the dynamic view of capabilities is especially important in the international market (Griffith & Harvey, 2001; Prange & Verdier, 2011; David J. Teece, 2007). Success depends upon the organization's ability to renew and reconfigure its resources as well as ability to adjust them to international constraints constantly. It is therefore important for organizations to gather their internal resources to meet their needs (Camuffo & Volpato, 1996). Reconfiguration Capability is reflected by the company's ability to adapt in terms of

strategic flexibility, resource and alignment between company assets, organizational forms, and changing strategic needs (Rindova & Kotha, 2001).

Consequently, superior Reconfiguration Capability enables firms to respond to opportunities in the marketplace more easily (Eisenhardt & Martin, 2000; Teece et al., 1997), This has helped improve the efficiency of the export market (Kaleka, 2002; Lisboa et al., 2011).

5.3.3 Discussion of Research Question 3

Research question 3 was raised in order to determine the relationship between Entrepreneurial Orientation and increase in Innovativeness on Export performance in a favorable Competitive Environment.

Competitive Environment (CE: Diamond Framework), used as a moderator variable in the conceptual model, outlines four broad attributes of a nation that shape the environment in which local firms compete: factor conditions, demand conditions, related and supporting industries, firm strategy, structure and rivalry. There are two additional factors that can affect the model indirectly: chance and government. According to Porter (1990), the collective strength of these attributes for a country promotes or impedes the creation of Competitive Advantage for that particular nation.

H6: The effect of the Entrepreneurial Orientation on Export performance increase with favorable Competitive Environment

Hypothesis H6 was developed in order to investigate direct relationship between Entrepreneurial Orientation (EOxCE) and Export Performance. This is to study the effects on EP increase with favorable CE as the moderator variables. The results showed that Entrepreneurial Orientation had direct relationship with export performance increase with favorable of CE. This was consistent with the relevant research. From the literature, it was found that Entrepreneurial focus is an important resource and represents the ability of a business to deliver sustainable competitive advantage and superior performance over other businesses. This can be explained by Resource-based theory that competitive advantage can only arise from the use of scarce assets (Intangible assets and business of limited assets). Bontis et al. (2009) argued that internal resource development is a factor of competitive advantage in small and medium-sized businesses. Other studies (Wiklund & Shepherd, 2003; Zahra & Covin,

1995) also confirmed that businesses with competitive advantage and good performance are largely influenced by entrepreneurial behavior of the businesses. This indicated that Factor conditions of Competitive Environment (CE) including demand conditions, related and supporting industries, firm strategy structure and rivalry and chance and government have positive influences on Entrepreneurial Orientation (EO) and Export Performance. Therefore, it can be said that Entrepreneurial Orientation has influence on Export Performance increase with favorable of CE.

H7: The effect of the Innovativeness on Export performance increase with favorable Competitive Environment.

Hypothesis H7 was developed in order to investigate direct relationship between Innovativeness (INNOxCE) and Export Performance whether or not it affects EP increase with favorable CE as the moderator variables. The results showed that there was relationship that directly affects influence to export performance through the moderator of CE, which was consistent with the relevant research. From the literature (G. Tomas M. Hult et al., 2003), it was found that most researches focused on innovation and productive effectiveness in increasing competency because innovation reflects the advantage of differentiated products so that it can meet the demand for new products from the customers. To date, it is evident that innovation is very important to the business. Any business that invests and capitalizes on innovation will have great competitive advantage over its competitors. Today, innovation can be considered as a tool for the organization to use to gain competitive advantage because it leads to higher performance (Henard & Szymanski, 2001). This is why innovation involves creating new products and/or services while entrepreneurs can learn more from new work processes and develop ability to change in order to take advantage of market opportunities and achieve sustainable competitive advantage. This marks that Factor conditions of Competitive Environment (CE) including demand conditions, related and supporting industries, firm strategy, structure and rivalry, chance and government have positive influences with Innovativeness (INNO) on Export Performance.

5.4 Theoretical Contribution

Based on the literature research on entrepreneurship conceptions over the past three decades, it has been found that there has begun to be better and better understanding of the definitions of the term. From past to present, the definition of entrepreneurial status has evolved (Amit et al., 1993). Entrepreneurship is not just about entrepreneurs running some businesses in general, but it involves all functions and activities related to the acquisition of opportunities and the creation of organizations to pursue that opportunity (Bygrave & Hofer, 1991). As a today's entrepreneur, an entrepreneur is considered as agent of change (Anderson, 2000). Executives should be willing to take risk in making the decision, innovating and leveraging on business opportunities in different market environments (OECD, 2000). Oftentimes, these opportunities can be recognized in international markets, and cross-border entrepreneurs can be formulated. Today, countries around the world share consistent consensus that one of the key to building growth. The economy for the country is creating new businesses and promoting entrepreneurship because it is seen as a cornerstone of economic growth in the era of free trade. Governments in different countries are trying to expand and be more entrepreneurial to the international market.

In this respect, understanding how to deal with business behavior in the international market is utmost important for SMEs (Dhanaraj & Beamish 2003; Piercy, Kaleka & Katsikeas, 1998; Sousa, Martínez-López, & Coelho, 2008), especially accumulating importing and exporting skills as well as developing international market penetration approach strongly enough to enter the global market. Recent researches (Dalli, 1995; Kogut & chang, 1996) pointed out that the internationalization of SMEs is often a priority in the export sector because exports are the main means of growth. Exporting is a way to start in the international arena as it can respond to the expansion of the business. More than any other methods (Kogut & chang, 1996), exporting methods can reduce some limitations, such as resource constraints (Dalli, 1995) as well as international marketability (Root, 1994).

In this study, internationalization was defined to cover export performance of small and medium enterprise sector - known as exportation, which is the most basic way of operating a business. Oman (1984) Internationalization theory portrayed a concept

used to describe the characteristics of international Entrepreneurship, which is consistent with theoretical assumptions as follows. The first theory is Resource-based theory, which discusses specific resources and capabilities of the organization, influenced by the ideas of economists Chamberlin and Ronbinson. In 1930, Chamberlin proposed the term key capabilities of firm of business, which referred to technical knowledge, team working, ability to create brand awareness from the existing reputation and of course patent trademark (John Fahy & Alan Smithee, 1999), This study investigated diversity of entrepreneurs and resources through resource-based theoretical view to abreast competitive advantages. At the same time, appreciating prevention of resource depletion, displacement or loss of organizational resources is also another facet of competitive advantage (Barney, 1991; Peteraf, 1993). This can be explained by the entrepreneurial nature of resource allocation to achieve optimal competitive advantage.

Next is the international entrepreneurship theory, which premises that international entrepreneurship is a study of cross-country entrepreneurial behavior with an emphasis on new discovery - analyzing and utilizing opportunities to create new products or services (Oviatt & McDougall, 2005). Most academicians stated that key success factor for today's internationalization is that an entrepreneur should have information searching skills strongly enough to look for opportunities in the marketplace and establish long-term relationships with other companies. Therefore, a prime scope of this study focuses on human resources factors. With resource-based view, where entrepreneurship plays a very important role in getting started into internationalization or international entrepreneurship, is consistent with the international entrepreneurship theory as well.

Based on the results of the literature review above, it is possible to set a proposition that an entrepreneur is a person of knowledge and experience, a person who does not avoid risk, a person who looks for innovation, and a person who has some ability to use a combination of resources available to achieve optimal performance. This is a great quality for an entrepreneur who knows how to build competitive advantage leading to productivity of the business. It can be said that the export performance must be composed of entrepreneurial orientation and innovativeness.

To be a great entrepreneur, the entrepreneur must be well oriented. Entrepreneurial orientation is a corporate structure that is closely linked to strategic management and strategic decision-making and thus entrepreneurs should be willing to innovate, search for risk self-directed and take proactive action (G Tom Lumpkin & Gregory G Dess, 1996). Therefore, the entrepreneurial orientation should be an internal, incremental process to induce innovation within the organization (G Tomas M Hult, 2004), ensuring key elements for organizational success and profitability (Kuhn et al., 2010; Rauch et al., 2009). This will warrant high-efficiency performance.

To obtain high-efficiency performance, company should have a strong focus on entrepreneurship. A collection of literatures (Covin & Slevin, 1991; Zahra, 1993) helped this study discover some chief characteristics of entrepreneurial orientation which come in three aspects: (1) Risk Taking Orientation - Venture risk is the willingness of an entrepreneur to bring most of the resources that the organization used to carry out high-cost failure projects hoping that there will be high returns and opportunistic exchanges; (2) Proactiveness orientation - A demonstration of creating new opportunities for organizations by proactively engaging in organizations that need to be followed and monitored, as well as identifying customer needs and market trends by anticipating the need to change or anticipate problems and obstacles from the investment. Not only proactive work that needs to focus on change, but also it also has to focus on the work of the organization in order to gain competitive advantage; (3) The last one is the human capital- human capital is the ability of entrepreneurs to manage their human resources to learn Promote and develop knowledge and the ability to work towards the goals of the business.

The previous sections help the study consider Innovativeness as an important tool for entrepreneurs. It is an important strategy for gaining competitive advantage, marketing opportunities and successes for businesses, should entrepreneurs be willing to adjust or change to take advantage of the opportunity to make a difference in the business. It is generally understood that an entrepreneur and innovation is related (F. Zhao, 2001). Innovation is an important part of entrepreneurial activity (Michael A. Hitt et al., 2001). And successful entrepreneurs in international business must not only discover valuable innovations but also take note that classification of innovation may be

multi-dimensional in order to lead innovation to success in the market world (Acs et al., 2001). In this research, it can be seen that innovations are important to the characteristics of international entrepreneurs in three categories: (1) Technological Innovation – Implementation of organizational activities by using technology to build processes, new products or services to move towards competitiveness; (2) Product Innovation - The ability of a business to create and use new ideas in developing new products or services; and (3) Process Innovation- an effort to develop a business or a business process to be effective and effective in applying innovation to successful development.

In addition to the literature review and empirical results, it was found that the international entrepreneurship characteristics including Entrepreneurial Orientation (EO) and Innovativeness (INNO) had direct effect on export achievement. In addition to the direct effect of Entrepreneurial Orientation (EO) and Innovativeness (INNO) on the export achievement, they can also have an indirect effect on export achievement through the reconfiguration capability, which is considered by one of the dynamic capability variables. The results showed that the reconfiguration capability is very important for export achievement by acting as the full mediating effect. The results of this study are consistent with the literature review of Teece et al. (1997) who defined the meaning of reconfiguration capability as the ability to create and improve resources (reconfiguring) such as work process improvement, organizational restructuring, knowledge management services and others in order that the organizations can maintain the benefits from new opportunities that occur and avoid the adherence to what the organization used to do, which may no longer create benefits when the external environment changes. In addition, the study results are consistent with the characteristics that are explained in the context of SMEs, carrying out exports of Thailand which the entrepreneurs must seek and exploit the arisen opportunities. The aforementioned characteristics can be divided into 2 areas: adaptive capability and innovative capability. The Adaptive Capability means that the organization must monitor business opportunities and be able to prepare the organization to utilize, learn and change the opportunities that can be useful in the competition and creation of sustainable competitive advantage for the organization. Another one is the Innovative

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Capability which means that the entrepreneurs can convert concepts and knowledge into the effective products, processes and systems that will benefit the organization. Finally, it can affect and help organizations become more efficient (Lawson & Samson, 2001).

In addition to those mentioned above points, the research also found the important issue which is the competitive environment variable. In this research, the competitive environment acts as a moderator and its results in strengthening the Entrepreneurial Orientation (EO) and Innovativeness (INNO) in influencing the export achievement. For the "competitive environment" variable in this research, the diamond model by Porter was found that it can influence Entrepreneurial Orientation (EO) and Innovativeness (INNO) by increasing export achievement. The study results are consistent with the current situation of SMEs that the entrepreneurs have to create competitive advantage from the intense world competition, especially in terms of technology, and it is a reason for businesses to create appropriate management patterns and competitive advantage according to the environment at that time. Consequently, an important foundation for long-term business success is the ability to create, attain, maintain and maintain a competitive advantage.

From concepts and theories related to creating competitive advantage, it showed that businesses that have a competitive advantage need to have business management capabilities that can respond quickly to changing environments, both in the production of products and services, which finally it can satisfy customers and stakeholders. In the meantime, the competitors cannot compete in the same direction with the same strategy. This is in line with the concept of Professor Michael E. Porter (1985), which focuses on strategic planning to determine the competitive position under the existing industrial environment. Therefore, the competitive environment analysis of the organization is very important because it can help understand the organization condition and current situation in order to search for strengths and weaknesses involving the business operation to match the future desired condition. If the company has more competitive advantage than the competitors have, it will have more successful business opportunity.

From that, it can be concluded that the competitive environment variables can have an influence on promoting Entrepreneurial Orientation (EO) and Innovativeness

(INNO) in creating an international competitive advantage for SMEs which finally it will affect the export achievement.

5.5 Managerial Implications

This study demonstrates the role or function of the international entrepreneurship characteristics in terms of entrepreneurial orientation and Innovativeness that can be used as a benchmark to monitor and enhance the business performance. The subject of investigation is the international entrepreneurship of small and medium enterprises (SME's).

The success of small and medium-sized enterprises (SMEs) operating in the export-import sector can lead to the development of international entrepreneurial characteristics in addition to local practice of traditional management including marketing management, production management, organization management and financial management. Incorporating international entrepreneurship strategies into general management and business administration will make SMEs in the export sector more competitive.

The study reveals the relationship between international entrepreneurship characteristics and export performance of small and medium enterprises operating in the export sector. It shows that, for the development of small and medium enterprises, entrepreneurs can run their businesses through Entrepreneurial Orientation (EO) and Innovativeness (INNO), which directly affected the efficiency and effectiveness of export SMEs. From a literature review, the researcher therefore aimed to study three aspects of Entrepreneurial Orientation including risk taking orientation, proactiveness orientation and human capital. The Risk taking orientation refers to the willingness of entrepreneurs to utilize the most organizational resources on operating the high failure business from high production cost. In this regard, such actions are expected to receive high returns as well high advantage gained from the market. Therefore, SMEs entrepreneurs who carry out the export must therefore be able to bring their own business to invest in new opportunities, especially in daring to face and be responsible for the risks that will occur in the operation.

Subsequently, SMEs entrepreneurs have to run business by using the concept of Proactiveness Orientation by expressing new opportunities for organizations such as tracking, monitoring and identifying the customers' demand trends that exist in the same market as well as by anticipating the need to change or anticipate the problems and obstacles expectedly arisen from investments. Indeed, the entrepreneurs should not be only focusing on change, but they must pay attention to observe the internal operations as well as to gain competitive advantage. Finally, the SMEs entrepreneurs must have a good knowledge, expertise and human capital. For the "human capital", it can refers to the ability of SMEs for export to manage the human resources in order to create, promote and develop learning and knowledge. The human capital also include the ability to work to reach the goals of the business and create innovation for the organization. For innovativeness (INNO), it is one of the most important aspects of entrepreneurial activity (Hitt et al, 2001). The entrepreneurs who are successful in international business must not just discover the valuable innovations, they must also be able to bring that innovation to penetrate the global market (ACS et all, 2001).

In this research, the researcher identifies innovations that they are important to the international entrepreneur's characteristics. Herewith, the characteristics were divided into 3 types: technological innovation, product innovation and process innovation. The first is the technological innovations, which refers to the implementation of organizational activities in the use of technology to operate the business and produce new product or service in order to lead to business competitiveness. The second one is the product innovation, which means the ability of the business to create and use new ideas to develop new products or services in order to bring economic benefits to the business. The last one is the process innovation, which means the effort to develop the business or the process of managing the business to be efficient and effective in applying innovation to succeed in the work development.

In addition, the results showed that the international entrepreneurship characteristics could be adapted or adopted through Reconfiguration Capability as mediating, which will result in higher export performance. From the literature review, the results of the research found that Entrepreneurial Orientation (EO) and Innovativeness (INNO) have an indirect effect on reconfiguration capability. In this

research, the results advocated the important thing for SMEs to operate international business is to have positive relationship with reconfiguration capability which indeed consisted of two aspects: adaptive capability and innovative capability. First, adaptive capability means always being prepared to keep pace with changes. Because business opportunities can always occur, SMEs that carry out export must be prepared at all times. The ability to adapt to the organization is important in seeking and exploiting those opportunities. Second, innovative capability means the ability to change concepts and knowledge into product creation, processes and systems that benefit the organization (Lawson & Samson, 2001). Innovation capabilities are not just focusing on creating new things alone, but there must be coordination between new thing creation and business management process in the organization.

Finally, this research also found another important thing that made international entrepreneurship characteristics; these are Entrepreneurial Orientation (EO) and Innovativeness (INNO). These two characteristics can positively result in increasing export achievement. The positive relationship between Entrepreneurial Orientation (EO) and Innovativeness (INNO) can affect the Competitive Environment (CE) as the moderator variables. At present, there are various businesses attempting to find the sustainable and successful business advantages, including recognition of customer value on products/services that the business itself can respond by using the differentiation strategies and trying to maintain the standard values needed by the customers. Besides, the application of competitive advantage theory is another necessary matter for entrepreneurs. Therefore, the study of the factors increasing the competitive advantage and survival in an increasingly competitive environment must take into an account. This is consistent with the results of this research indicating that the Competitive Environment (CE) consisting of demand conditions, related industries, firm strategy, structure and rivalry, and government, can positively influence the Entrepreneurial Orientation (EO) and Innovativeness (INNO) resulting in increasing export achievement.

5.6 Limitation of the Study

It is necessary to address certain limitation of this study to help advance future research.

First, the data collection of this study is questionnaire survey of which the samples of respondents were drawn from different types of small and medium size enterprises (SME) in different export businesses and industries. The findings are analyzed based on data from different sample groups using different methods of data collection. This is a limitation of research because unclassified data may represent uncertainty in the population. The findings only represent a combination of sampling groups or in other words an overall confirmation but not of a particular group of respondent.

Second, The cross-sectional approach is another limitation in the study of phenomenal international entrepreneurship that takes a certain amount of time to be effective (Low & MacMillan, 1988). The use of cross-sectional data makes it necessary to cite causality as a causal model for the relationship between international entrepreneurship and export performance from the literature review.

Third, although higher level of multivariate analysis was used in order to formulate structural equation model for the study, there could have been higher confidence level if more cooperation was gained from the entrepreneurs, owners, partnerships and executives who were responsible for exports. In particular, it was not very easy to access entrepreneurs because they could not afford the time to answer the questionnaires.

Lastly, this research measured Export Performance in terms of both financial and non-financial measures. Self-Assessment was used because of its reliability and accuracy (Dess & Robinson, 1984; Venkatraman & Ramanujam, 1987; Yang, 2006) and it is suitable for multi cross-sectioned data collection (Kauranen, 1993).

5.7 Suggestion for Future Research

The findings from this research consist of international entrepreneurship characteristics including entrepreneurial orientation and innovativeness, which showed positive effects on export performance. Although these are confirmed features for

international entrepreneurship, the framework for researching the international entrepreneurship characteristics from other theories especially psychology and sociology may be addressed.

To analyze the causal relationship model of the international entrepreneurship characteristics on export performance of Small and Medium Enterprises in the export industry is very specific: using these variables may be different in different countries. Statistical significance of the international entrepreneurship characteristics in different industries may also be related or not related and in different orders. Therefore, other researchers can conduct similar research with the same subject in different geographical setting.

Some further studies may explore the relationships of variables more by using qualitative research in relation to key success factor for exports businesses for small and medium enterprises (SMEs) or for Small-Medium-and-Large enterprises (SML) in Thailand using either quantitative or qualitative or both research approaches. This is to provide more distinct results with respect to entrepreneurial orientation and innovativeness that may or may not affect export performance in Thailand or another country.

The future study of the international entrepreneurship characteristics can perhaps focus on dividing the population into individual industry in order to oversee the vivid role of Entrepreneurial Orientation (EO) and Innovativeness (INNO) affecting export achievement. This may allow the opportunity to compare or analyze the causes of those differences, which it will be useful in future studies.

Finally, the study of the international entrepreneurship characteristics on export performance is a cross-sectional study. A study of the relationship between international entrepreneurship characteristics and the effect on different export performance using longitudinal research approach may be conducted.

5.8 Conclusion

This study described the characteristics of international entrepreneurship through Resource-Based Theory (RBV) and international entrepreneurship from a stream of related literature review on entrepreneurial orientation and innovativeness

together with an empirical research. The findings of the research showed that the international entrepreneurial characteristic that affected the export performance of most SMEs in the exports businesses is innovativeness regarding technological innovation, product innovation and process innovation. What predominantly underlines these is Entrepreneurial Orientation (EO) comprising Risk Taking Orientation and Proactiveness respectively.

This study also discovered another important issue that entrepreneurial orientation and innovativeness will affect export performance more efficiently if it is implemented through mediating variables, Reconfiguration Capability. Particularly, it was found that there existed relationship between Entrepreneurial Orientation (EO) and Innovativeness (INNO) with Export Performance (EP) would positively increased with favorable of Competitive Environment (CE) as the moderator variables.

The findings of this research contribute to entrepreneurs who run exports business. This research can be used to examine and develop the international entrepreneurship characteristics in order to improve the export business performance while the entrepreneurs can also develop their ability to export in the future. In addition, this research has found one important issue that SMEs cannot manage their business in traditional and sufficient ways in the current technological world, due to the rapidly and constantly changing current business environment. Therefore, to creating competitive advantage is necessary. In this research, studies from literature review and research results have found that variables that will allow businesses to be able to drive at all times and can enable the business to adjust and change Including creating new knowledge in developing business to achieve better results than long-term competitors, it is the Dynamic Capability. The Dynamic Capability can create the long-run competitive advantage, new knowledge and opportunity of successful business. This research focused on studying Reconfiguration Capability, which is one aspect in dynamics capability and will be consistent with the strategic plan to increase the capacity of Thai SMEs for export. The study emphasized on two areas: Adaptive Capability and Innovative Capability. The Adaptive Capability emphasizes the importance of bringing products or services into the market quickly in responding to the arisen opportunities (Chatterji & Patro, 2014; Drnevich & Kriauciunas, 2011). Another

aspect is Innovative Capability, which refers to the ability to change concepts and knowledge into product creation, processes and systems that benefit the business and stakeholders continuously (Lawson & Samson, 2001).

From the study, finding found that exports are very important to the economy of Thailand. Therefore, the government and the cabinet have formulated a plan to promote the business promotion (2nd plan of SMEs promotion, 2007-2011). One of the strategies that has been defined in the plan is to develop entrepreneurs to be able to export more products effectively in order to lay the foundation for export in the medium and long term as well as to encourage Thai entrepreneurs to operate more international production and service business. In line with above mention, this research results will be very useful for governmental organizations such as the Office of Small and Medium Enterprises Promotion as well as the Department of International Trade to bring the derived factors found in the research to consider whether there are any relevant factors that should promote or develop the international entrepreneurs characteristics. In addition, the empirical findings from this study will be beneficial for international entrepreneurs who continue to focus on export activities to adopt the results of studies to increase their ability to work, work efficiency and ability to compete with foreign competitions. At the end, these things will be beneficial to Thai SMEs businesses in terms of profit and success as well as contribute the nation's long-term economic development and growth.

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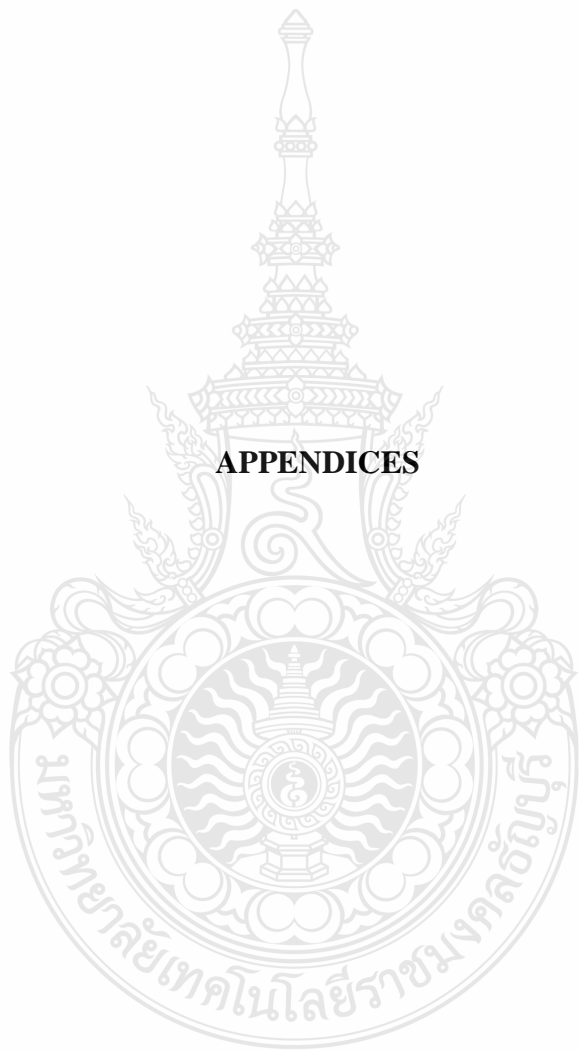
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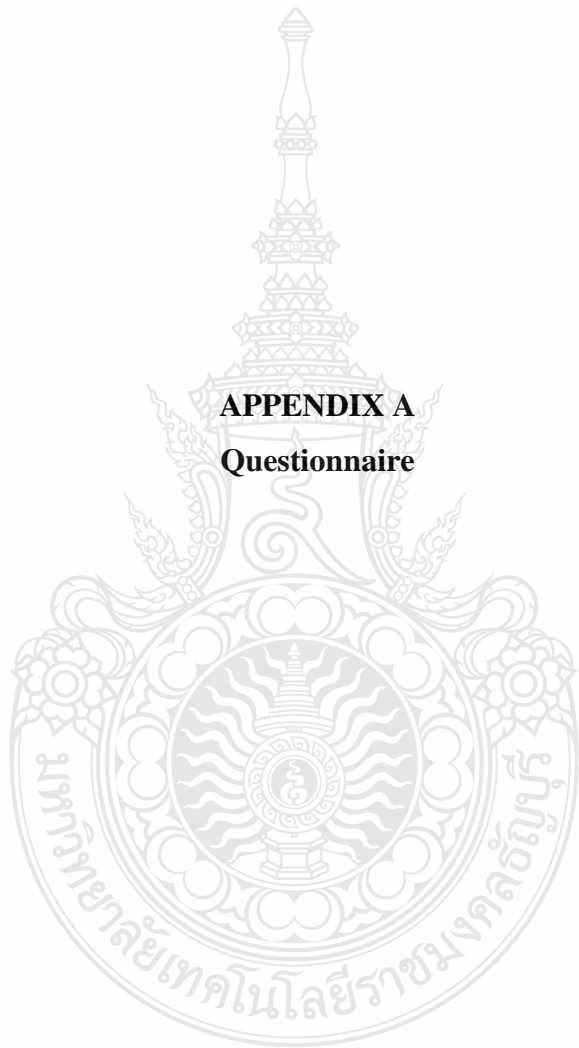
APPENDIX A

Questionnaire

Questionnaire

Title: The Effects of International Entrepreneurship Characteristics on Export Performance of Small and Medium Enterprises in Thailand

Facuty of Business Administration, Rajamangala University of Technology Thanyaburi

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Notice

1.) To obtain the most appropriate and useful information for research, Researcher require the respondents to responsible for the position of the business owner or heir, the entity or the business partner or the senior management involved in setting the policy of the business. **Please provide the most appropriate answer.**

2.) The purpose of this research is to know the level of opinions in various aspects, divided into 5 parts as follows:

   Part 1: Demographic and background characteristics of the surveyed respondent

   Part 2: The characteristics of international entrepreneurship comprise the Entrepreneurship Orientation and innovativeness.

   Part 3: Reconfiguration Capability

   Part 4: Competitive Environment

   Part 5: Export Performance

3.) Your information cited in the questionnaire will only be used in this research study. We ensure that all answers are kept strictly confidential. It will not be revealed to any person or organization without your permission.

The researcher would like to thank you very much for your valuable time and helpfulness in answering the questionnaire, which will help to complete this research.

Please indicate your level of agreement with the following statements
Instruction: Please mark ☑ into your selected

1 = the least 2 = less 3 = rather less 4 = neutral 5 = rather much 6 = much 7 = the most
1. Gender
    ☐ 1. Male   ☐ 2. Female
2. Age
    ☐ 1. Between 20 to 30 ☐ 2. Between 31 to 40 ☐ 3. Between 41 to 50
    ☐ 4. Between 51 to 60 ☐ 5. More than 60
3. Educational Level
    ☐ 1. Undergraduate ☐ 2. Bachelor Degree
    ☐ 3. Master Degree ☐ 4. Higher than Master Degree
4. Status in the business
    ☐ 1. Owner ☐ 2. Business Successor
    ☐ 3. Partner ☐ 4. High-level executives involving in other policy.
5. Experience abroad
    ☐ 1. No-experience ☐ 2. Experience ....Years
6. Business type
    ☐ 1. Agricultural products
    ☐ 2. Minerals/ Fuels
    ☐ 3. Foods
    ☐ 4. Automotive / Auto Parts and Accessories
    ☐ 5. Machinery / Equipment
    ☐ 6. Chemicals / Plastics Raisin
    ☐ 7. Cosmetics, toiletries, medical supplies/ Optical Goods
    ☐ 8. Household Products
    ☐ 9. Building Materials/ Hardware Items
    ☐ 10. Electronics / Electrical Products and Parts
7. Number of employee
    ☐ 1. Less than 50 ☐ 2. 51-200 ☐ 3. More than 200
8. Registered Capital
    ☐ 1. Less than 25 M. THB
    ☐ 2. Less than 26-100 M THB
    ☐ 3. More than 100 M THB
9. Duration of operation
    ☐ 1. Less than 5 year ☐ 2. 5 - 10 year ☐ 3. More than 10 year
10. Export Value
    ☐ 1. Exports less than 50% of revenue
    ☐ 2. Exports more than 50% of revenue

11. Country of export markets (More than 1 answer questions.)
- ☐ 1. Asia
- ☐ 2. North America
- ☐ 3. South America
- ☐ 4. Europe
- ☐ 5. Australia
- ☐ 6. Africa

Please indicate your level of agreement with the following statements
1 = the least 2 = less 3 = rather less 4 = neutral 5 = rather much 6 = much 7 = the most

Statement	Level of agreement						
	1	2	3	4	5	6	7
International Entrepreneurship Characteristics							
1. Entrepreneurial Orientation							
1.1 Risk Taking Orientation							
1. Your business is ready to take the risk of bringing in existing resources into the export market that is not yet known	1	2	3	4	5	6	7
2. Your business is ready to take the risk of operating to make rapid changes	1	2	3	4	5	6	7
3. Your business will choose to do risky things to generate high profits	1	2	3	4	5	6	7
1.2 Proactiveness Orientation							
4. Your business seeks new opportunities to export	1	2	3	4	5	6	7
5. Your business is focused on research and development of new products and services to gain competitive advantage in the international market	1	2	3	4	5	6	7
1.3 Human capital							
6. In your business, employees at all levels are encouraged to seek and educate themselves on a regular basis	1	2	3	4	5	6	7

Statement	Level of agreement						
	1	**2**	**3**	**4**	**5**	**6**	**7**
7. Administrators of your business encourage employees to attend training, seminars with external agencies To bring knowledge and exchange information with other employees for mutual learning	1	2	3	4	5	6	7
8. Employees at all levels In your business Can bring new knowledge and / or technology. Come trial to the work process to find a way to work. New products or services	1	2	3	4	5	6	7
2. Innovativeness							
2.1 Technological innovation							
9. Your business uses technology to support the work, such as using the computer to help decide production planning	1	2	3	4	5	6	7
10. Your employees has the ability to technology and can be used in operations such as analysis of customer information	1	2	3	4	5	6	7
11. Your business is encouraged the use of technology to gain knowledge from inside and outside the enterprise, such as researching from the Internet	1	2	3	4	5	6	7
12. Your business has technology management system to meet the needs of diverse customers	1	2	3	4	5	6	7
2.2 Product innovation							
13. Your business can improve existing products and make new products that add value to your business and customers	1	2	3	4	5	6	7
14. Your business can create new products that add value to your business and customers	1	2	3	4	5	6	7
15. Your business is planned and assigned employees responsible for product development clear	1	2	3	4	5	6	7

Statement	Level of agreement						
	1	**2**	**3**	**4**	**5**	**6**	**7**
16. Our business แan apply new techniques. To develop products that can create value for the business and customers, such as product analysis, from customer satisfaction	1	2	3	4	5	6	7
2.3 Process innovation							
17. Your business can improve the process existing production as a new process that adds value to the business and customers	1	2	3	4	5	6	7
18. Your business can create value-added production processes for your business and customers	1	2	3	4	5	6	7
19. Your business is planned and assigned employees responsible for the development of the production process of the business	1	2	3	4	5	6	7

Please indicate your level of agreement with the following statements
1 = the least 2 = less 3 = rather less 4 = neutral 5 = rather much 6 = much 7 = the most

Statement	Level of agreement						
	1	**2**	**3**	**4**	**5**	**6**	**7**
Reconfiguration Capability							
1. Innovative Capabilities1(Structure)							
20. Your business has an appropriate management structure for its operations	1	2	3	4	5	6	7
21. Your business has clearly defined the responsibilities of employees at all levels	1	2	3	4	5	6	7
22. Your business decentralizes decisions to employees	1	2	3	4	5	6	7
2. Innovative Capabilities2(Strategy)							
23. Your business has an operational strategy that is consistent with the goals of the business clearly	1	2	3	4	5	6	7

Statement	Level of agreement						
	1	**2**	**3**	**4**	**5**	**6**	**7**
24. Your business is conveying the operational strategy to the operation in accordance with the goals of the business clearly	1	2	3	4	5	6	7
25. Your business is revising operational strategies that are clearly aligned with your goals	1	2	3	4	5	6	7
3. Innovative Capabilities3(System)							
26. Your business has a clear working system	1	2	3	4	5	6	7
27. Your business has a clear monitoring and evaluation system	1	2	3	4	5	6	7
28. Your business has a risk management system to prevent errors within the organization	1	2	3	4	5	6	7
4. Adaptive Capabilities1(Style)							
29. Your business has a clear management model for products or services. Such as fast delivery Offering new products or services, etc	1	2	3	4	5	6	7
30. Your business has a management style that is in line with customer needs	1	2	3	4	5	6	7
31. Your business has a control pattern Monitoring and supervision the management of the product or service clearly	1	2	3	4	5	6	7
5. Adaptive Capabilities2(Skill)							
32. Your employees have the knowledge, capacity and skills needed to perform each job	1	2	3	4	5	6	7
33. Your employees have operational skills that will drive the organization to evolve	1	2	3	4	5	6	7
34. Your employees have been developing their knowledge and gaining experience in the continuous work, such as training and seminars	1	2	3	4	5	6	7

Statement	Level of agreement						
	1	**2**	**3**	**4**	**5**	**6**	**7**
6. Adaptive Capabilities3(Staff)							
35. Your employees have the right feature for each job	1	2	3	4	5	6	7
36. All levels of your employees collaborate in teamwork and teamwork	1	2	3	4	5	6	7
37. Your business is constantly monitoring and evaluating performance	1	2	3	4	5	6	7
7. Adaptive Capabilities4(Shared Value)							
38. All levels of employees understand and strive to work together to achieve clearly defined goals	1	2	3	4	5	6	7
39. All levels of employees in work on responsibilities with dedication and full capacity	1	2	3	4	5	6	7
40. All level of employees are ready and cooperate in making changes for organizational development	1	2	3	4	5	6	7

Please indicate your level of agreement with the following statements
1 = the least 2 = less 3 = rather less 4 = neutral 5 = rather much 6 = much 7 = the most

Statement	Level of agreement						
	1	**2**	**3**	**4**	**5**	**6**	**7**
Competitive Environment							
41. Your business executives have extensive export experience in international markets	1	2	3	4	5	6	7
42. Your business has sufficient potential and skillful labor	1	2	3	4	5	6	7
43. Your products and / or services are needed both domestically and internationally	1	2	3	4	5	6	7
44. Your business has the power to negotiate with buyers in foreign markets	1	2	3	4	5	6	7

Statement	Level of agreement						
	1	**2**	**3**	**4**	**5**	**6**	**7**
45. Your business is ready for the production process, management and quality control	1	2	3	4	5	6	7
47. Your business can compete for lower production costs than other competitors. In the export market	1	2	3	4	5	6	7
49. Your business has a market that supports certain products or services	1	2	3	4	5	6	7
50. Your business develops superior product or service quality	1	2	3	4	5	6	7
51. Your business has a way to reduce problems and obstacles. From increased commercial standard requirements	1	2	3	4	5	6	7
52. Your business has access to and full use of public sector measures	1	2	3	4	5	6	7
53. Your business is fully supported by the government	1	2	3	4	5	6	7
54. Your business is likely to expand to foreign markets increased	1	2	3	4	5	6	7

Please indicate your level of agreement with the following statements

1= decreased over 30% 2= decreased during 10-30% 3= decreased less 10% 4= Not change 5= increased less 10% 6= increased during 10-30% 7= increased over 30%

Statement	Level of agreement						
	1	**2**	**3**	**4**	**5**	**6**	**7**
Export Performance							
Financial Measurement							
55. Sales growth compared to the same period last year	1	2	3	4	5	6	7
56. An increase in market share compared to the same period last year	1	2	3	4	5	6	7
57. Net profit compared to the same period last year	1	2	3	4	5	6	7

Statement	Level of agreement						
	1	2	3	4	5	6	7
Non Financial Measurement							
58. In the past 3 years, your business has succeeded in creating a quality product or service that meets the required standards	1	2	3	4	5	6	7
59. In the past 3 years, your business could meet the needs of customers to meet the target	1	2	3	4	5	6	7
60. In the past 3 years, your business could achieve its target sales growth target	1	2	3	4	5	6	7

Thank you for your kind participation

แบบสอบถามเรื่อง คุณลักษณะของผู้ประกอบการระหว่างประเทศที่ส่งผลต่อผลสัมฤทธิ์การส่งออก
ของสถานประกอบการวิสาหกิจขนาดกลางและขนาดย่อมในประเทศไทย

คณะบริหารธุรกิจ มหาวิทยาลัยเทคโนโลยีราชมงคล ธัญบุรี

คำชี้แจง

1.) เพื่อให้ได้ข้อมูลที่เหมาะสมและเป็นประโยชน์ต่อการวิจัยมากที่สุด ผู้วิจัยขอความอนุเคราะห์ผู้ตอบแบบสอบถาม
เป็นผู้ที่มีหน้าที่ความรับผิดชอบในตำแหน่งเจ้าของกิจการ หรือ ทายาทกิจการ หรือหุ้นส่วนกิจการ หรือ ผู้บริหาร
ระดับสูงที่มีส่วนเกี่ยวข้องในการกำหนดนโยบายของกิจการ **โดยขอความกรุณาระบุคำตอบที่ตรงกับความ
คิดเห็นของท่านมากที่สุด**

2.) งานวิจัยนี้มีวัตถุประสงค์เพื่อต้องการทราบถึงระดับความคิดเห็นในด้านต่าง ๆ โดยแบ่ง 5 ส่วน ดังนี้
    ส่วนที่ 1   ด้านข้อมูลส่วนบุคคลและข้อมูลกิจการของผู้ตอบแบบสอบถาม
    ส่วนที่ 2   ด้านคุณลักษณะของผู้ประกอบการระหว่างประเทศ ประกอบด้วย การมุ่งเน้นความเป็น
                ผู้ประกอบการ และความสามารถทางนวัตกรรม
    ส่วนที่ 3   ด้านความสามารถในการสร้างและปรับปรุงทรัพยากร (Reconfiguration Capability)
    ส่วนที่ 4   ด้านความได้เปรียบสภาพแวดล้อมทางการแข่งขัน (Competitive Environment)
    ส่วนที่ 5   ด้านผลสัมฤทธิ์การส่งออก (Export Performance)

3.) ข้อมูลในการตอบคำถามของท่านจะถูกใช้เฉพาะในการศึกษาวิจัยเพื่อการทำวิทยานิพนธ์เท่านั้น และขอรับรองว่า
ทุกคำตอบจะถูกเก็บไว้เป็นความลับอย่างเคร่งครัด โดยจะไม่มีการเปิดเผยให้กับบุคคล หรือหน่วยงานภายนอก
โดยไม่ได้รับอนุญาตจากท่านโดยเด็ดขาด

ทั้งนี้ ผู้วิจัยขอขอบพระคุณท่านเป็นอย่างสูง ที่ท่านกรุณาสละเวลาอันมีค่า และให้ความอนุเคราะห์ในการตอบ
แบบสอบถามอย่างสมบูรณ์ ซึ่งจะเป็นการช่วยเหลือให้การทำวิจัยครั้งนี้สำเร็จลุล่วงต่อไปได้

<div align="right">

อรนุช รู้ปิติวิริยะ

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<div align="right">

นักศึกษาปริญญาเอก
สาขาวิชาการจัดการ
มทร.ธัญบุรี

</div>

คำชี้แจง: โปรดทำเครื่องหมาย √ ลงใน ☐ตรงกับท่านมากที่สุด

1. เพศ
   - ☐ 1. ชาย
   - ☐ 2. หญิง

2. อายุ
   - ☐ 1. 20-30 ปี
   - ☐ 2. 31-40 ปี
   - ☐ 3. 41-50 ปี
   - ☐ 4. 51-60 ปี
   - ☐ 5. มากกว่า 60 ปี

3. ระดับการศึกษา
   - ☐ 1. ต่ำกว่าระดับปริญญาตรี
   - ☐ 2. ระดับปริญญาตรี
   - ☐ 3. ระดับปริญญาโท
   - ☐ 3. สูงกว่าระดับปริญญาโท

4. สถานะของท่านในกิจการ
   - ☐ 1. เจ้าของกิจการ
   - ☐ 2. ทายาทกิจการ
   - ☐ 3. หุ้นส่วนกิจการ
   - ☐ 4. ผู้บริหารระดับสูงที่มีส่วนเกี่ยวข้องในการกำหนดนโยบาย

5. ประสบการณ์ในการดำเนินชีวิต/ทำงานของท่านในต่างประเทศ
   - ☐ 1. ไม่มี
   - ☐ 2. มี โปรดระบุ .... ปี

6. ประเภทกิจการ
   - ☐ 1. กลุ่มผลิตภัณฑ์ทางการเกษตร
   - ☐ 2. กลุ่มแร่เชื้อเพลิงและพลังงาน
   - ☐ 3. กลุ่มอาหาร
   - ☐ 4. กลุ่มอุปกรณ์/ชิ้นส่วนประกอบรถยนต์
   - ☐ 5. กลุ่มเครื่องจักรและเครื่องมือการเกษตร
   - ☐ 6. กลุ่มเคมีภัณฑ์/พลาสติก
   - ☐ 7. กลุ่มเครื่องสำอาง ห้องน้ำ วัสดุทางการแพทย์
   - ☐ 8. กลุ่มผลิตภัณฑ์ครัวเรือน
   - ☐ 9. วัสดุและเครื่องมือก่อสร้าง
   - ☐ 10. เครื่องใช้ไฟฟ้า/ชิ้นส่วนอุปกรณ์ไฟฟ้า

7. จำนวนพนักงาน
   - ☐ 1. น้อยกว่า 50 คน
   - ☐ 2. 51-200 คน
   - ☐ 3. มากกว่า 200 คน

8. จำนวนเงินทุนจดทะเบียนของกิจการ
   - ☐ 1. น้อยกว่า 25 ล้านบาท
   - ☐ 2. 26-100 ล้านบาท
   - ☐ 3. มากกว่า 100 ล้านบาท

9. ระยะเวลาในการดำเนินกิจการนับตั้งแต่ก่อตั้ง
   - ☐ 1. น้อยกว่า 5 ปี
   - ☐ 2. 5 - 10 ปี
   - ☐ 3. มากกว่า 10 ปี

10. มูลค่าการส่งออก เทียบกับรายได้ของกิจการ

     ☐ 1. ส่งออกน้อยกว่า 50% ของรายได้

     ☐ 2. ส่งออกมากกว่า 50% ของรายได้

11. กลุ่มประเทศที่เป็นตลาดในการส่งออกของกิจการ(ตอบได้มากกว่า 1 ข้อ)

     ☐ 1. ทวีปเอเชีย

     ☐ 2. ทวีปอเมริกาเหนือ

     ☐ 3. ทวีปอเมริกาใต้

     ☐ 4. ทวีปยุโรป

     ☐ 5. ทวีปออสเตรเลีย

     ☐ 6. ทวีปแอฟริกา

คำชี้แจง: โปรดทำเครื่องหมาย √ ในช่องที่เป็นจริงเกี่ยวกับกิจการของท่านมากที่สุด

1=น้อยที่สุด 2=น้อยมาก 3=ค่อนข้างน้อย 4=ปานกลาง 5=ค่อนข้างมาก 6=มาก 7=มากที่สุด

คำถาม	ระดับความคิดเห็น						
	1	2	3	4	5	6	7
คุณลักษณะของผู้ประกอบการ							
1. การมุ่งเน้นความเป็นผู้ประกอบการ							
1.1 ความกล้าเสี่ยง							
1. กิจการของท่านพร้อมจะเสี่ยงในการนำทรัพยากรที่มีอยู่เข้าไปลงทุนในตลาดส่งออกที่ยังไม่เป็นที่รู้จัก	1	2	3	4	5	6	7
2. กิจการของท่านพร้อมที่จะกล้าเสี่ยงในการดำเนินงานเพื่อให้เกิดการเปลี่ยนแปลงอย่างรวดเร็ว	1	2	3	4	5	6	7
3. กิจการของท่านจะเลือกทำในสิ่งที่มีความเสี่ยงเพื่อสร้างผลกำไรในระดับสูง	1	2	3	4	5	6	7
1.2 การดำเนินงานเชิงรุก							
4. กิจการของท่านแสวงหาโอกาสใหม่ ๆ ในการส่งออก	1	2	3	4	5	6	7
5. กิจการของท่านให้ความสำคัญในการวิจัยและพัฒนาผลิตภัณฑ์และบริการใหม่ ๆ เพื่อความได้เปรียบในการแข่งขันในตลาดต่างประเทศ	1	2	3	4	5	6	7

คำถาม	ระดับความคิดเห็น						
	1	2	3	4	5	6	7
1.3 ภูมิความรู้ความชำนาญ							
6. ในกิจการของท่าน พนักงานทุกระดับได้รับการส่งเสริมให้แสวงหาความรู้และพัฒนาตนเองอย่างสม่ำเสมอและต่อเนื่อง	1	2	3	4	5	6	7
7. ผู้บริหารในกิจการของท่าน สนับสนุนให้พนักงานเข้าร่วมอบรม สัมมนากับหน่วยงานภายนอก เพื่อนำความรู้มาถ่ายทอดและ แลกเปลี่ยนข้อมูลให้กับพนักงานคนอื่น ๆ เพื่อให้เกิดการเรียนรู้ร่วมกัน	1	2	3	4	5	6	7
8. พนักงานทุกระดับ ในกิจการของท่าน สามารถนำความรู้และหรือเทคโนโลยีใหม่ ๆ มาทดลองใช้ในการกระบวนการทำงานเพื่อนำไปสู่การค้นหาแนวทางการทำงาน ผลิตภัณฑ์หรือบริการใหม่ ๆ	1	2	3	4	5	6	7
3. ความสามารถทางนวัตกรรม							
3.1 นวัตกรรมทางเทคโนโลยี							
9. กิจการของท่าน ใช้เทคโนโลยีเพื่อสนับสนุนการทำงาน เช่น การใช้คอมพิวเตอร์ในการช่วยตัดสินใจการวางแผนการผลิต	1	2	3	4	5	6	7
10. พนักงานในกิจการของท่าน มีความสามารถด้านเทคโนโลยีและสามารถประยุกต์ใช้ในการปฏิบัติงานได้ เช่น การวิเคราะห์ข้อมูลของลูกค้า	1	2	3	4	5	6	7
11. กิจการของท่าน ได้สนับสนุนให้ใช้เทคโนโลยีในการให้ได้มาซึ่งความรู้จากภายในและภายนอกกิจการ เช่น การค้นคว้าจากอินเตอร์เน็ต	1	2	3	4	5	6	7
12. กิจการของท่าน มีระบบการจัดการด้านเทคโนโลยีในการตอบสนองความต้องการของลูกค้าที่หลากหลาย	1. 1	2. 2	3. 3	4. 4	5. 5	6. 6	7. 7
13. กิจการของท่าน ได้สนับสนุนให้ใช้เทคโนโลยีในการให้ได้มาซึ่งความรู้จากภายในและภายนอกกิจการ เช่น การค้นคว้าจากอินเตอร์เน็ต	8. 1	9. 2	10.3	11.4	12.5	13.6	14.7

คำถาม	ระดับความคิดเห็น						
	1	2	3	4	5	6	7
14. กิจการของท่าน มีระบบการจัดการด้านเทคโนโลยีในการตอบสนองความต้องการของลูกค้าที่หลากหลาย	1	2	3	4	5	6	7
3.2 นวัตกรรมผลิตภัณฑ์							
15. กิจการของท่านสามารถปรับปรุงพัฒนาผลิตภัณฑ์ที่มีอยู่แล้วให้เป็นผลิตภัณฑ์ใหม่ที่เพิ่มมูลค่าให้กับกิจการและลูกค้า	1	2	3	4	5	6	7
16. กิจการของท่านสามารถสร้างผลิตภัณฑ์ใหม่ที่เพิ่มมูลค่าให้กับกิจการและลูกค้า	1	2	3	4	5	6	7
17. กิจการของท่านมีการวางแผนและกำหนดพนักงานที่รับผิดชอบการพัฒนาผลิตภัณฑ์ที่ชัดเจน	1	2	3	4	5	6	7
18. กิจการของท่าน สามารถประยุกต์ใช้เทคนิคใหม่ๆ เพื่อพัฒนาผลิตภัณฑ์ที่สามารถสร้างมูลค่าให้กับกิจการและลูกค้า เช่น การวิเคราะห์ผลิตภัณฑ์จากความพึงพอใจของลูกค้า	1	2	3	4	5	6	7
3.3 นวัตกรรมกระบวนการ							
19. กิจการของท่านสามารถปรับปรุงพัฒนากระบวนการ การผลิตที่มีอยู่แล้วให้เป็นกระบวนการใหม่ที่เพิ่มมูลค่าให้กับกิจการและลูกค้า	1	2	3	4	5	6	7
20. กิจการของท่านสามารถสร้างกระบวนการผลิตที่เพิ่มมูลค่าให้กับกิจการและลูกค้า	1	2	3	4	5	6	7
21. กิจการของท่านมีการวางแผนและกำหนดพนักงานที่รับผิดชอบการพัฒนากระบวนการผลิตของกิจการ	1	2	3	4	5	6	7

คำชี้แจง: โปรดทำเครื่องหมาย √ ในช่องที่เป็นจริงเกี่ยวกับกิจการของท่านมากที่สุด

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คำถาม	ระดับความคิดเห็น						
	1	2	3	4	5	6	7
Reconfiguration Capability							
1. ความสามารถด้านนวัตกรรม 1(โครงสร้าง)							
22. กิจการของท่านมีโครงสร้างการบริหารงานที่เหมาะสมต่อการดำเนินงาน	1	2	3	4	5	6	7
23. กิจการของท่านมีการกำหนดหน้าที่ความรับผิดชอบของพนักงานทุกระดับไว้อย่างชัดเจน	1	2	3	4	5	6	7
24. กิจการของท่านมีการกระจายอำนาจการตัดสินใจให้แก่พนักงาน	1	2	3	4	5	6	7
2.ความสามารถด้านนวัตกรรม2 (กลยุทธ์)							
25. กิจการของท่านมีกลยุทธ์การดำเนินงานที่สอดคล้องกับเป้าหมายของกิจการได้อย่างชัดเจน	1	2	3	4	5	6	7
26. กิจการของท่านมีการถ่ายทอดกลยุทธ์การดำเนินงานไปสู่การปฏิบัติที่สอดคล้องกับเป้าหมายของกิจการได้อย่างชัดเจน	1	2	3	4	5	6	7
27. กิจการของท่านมีการทบทวนกลยุทธ์การดำเนินงานที่สอดคล้องกับเป้าหมายของกิจการได้อย่างชัดเจน	1	2	3	4	5	6	7
3. ความสามารถด้านนวัตกรรม3 (ระบบ)							
28. กิจการของท่านมีการจัดระบบการทำงาน(Working System) ที่เหมาะสมชัดเจน	1	2	3	4	5	6	7
29. กิจการของท่านมีระบบการติดตามและประเมินผลการปฏิบัติงานที่ชัดเจน	1	2	3	4	5	6	7
30. กิจการของท่านมีระบบการบริหารจัดการความเสี่ยงเพื่อป้องกันข้อผิดพลาดภายในองค์กร	1	2	3	4	5	6	7

คำถาม	ระดับความคิดเห็น						
	1	2	3	4	5	6	7
4. ความสามารถในการปรับตัว1 (รูปแบบการจัดการ)							
31. กิจการของท่าน มีรูปแบบการดำเนินงานการจัดการ ด้านผลิตภัณฑ์หรือบริการที่ชัดเจน เช่นการส่งมอบ สินค้าอย่างรวดเร็ว การนำเสนอผลิตภัณฑ์หรือ บริการรูปแบบใหม่ เป็นต้น	1	2	3	4	5	6	7
4. ความสามารถในการปรับตัว1:ต่อ (รูปแบบการจัดการ)							
32. กิจการของท่านมีรูปแบบการจัดการที่สอดคล้องกับ ความต้องการของลูกค้าเป็นหลัก	1	2	3	4	5	6	7
33. กิจการของท่าน มีรูปแบบการควบคุม การติดตาม และกำกับดูแล การดำเนินงานด้านการจัดการของ ผลิตภัณฑ์หรือบริการอย่างชัดเจน	1	2	3	4	5	6	7
5. ความสามารถในการปรับตัว2 (ทักษะ)							
34. พนักงานในกิจการของท่าน มีความรู้ ความสามารถ และทักษะที่จำเป็นในการปฏิบัติงานแต่ละสายงาน	1	2	3	4	5	6	7
35. พนักงานในกิจการของท่าน มีทักษะในการ ปฏิบัติงานที่จะช่วยผลักดันให้องค์กรมีการพัฒนา อย่างชัดเจน	1	2	3	4	5	6	7
36. พนักงานในกิจการของท่าน ได้รับการพัฒนาความรู้ และเพิ่มพูนประสบการณ์ในการทำงานอย่าง ต่อเนื่อง เช่น การอบรม สัมมนา	1	2	3	4	5	6	7
6. ความสามารถในการปรับตัว3 (ทีมงาน)							
37. พนักงานในกิจการของท่าน มีคุณสมบัติที่เหมาะสม กับงานที่รับผิดชอบในแต่ละสายงาน	1	2	3	4	5	6	7
38. พนักงานทุกระดับในกิจการของท่าน ร่วมมือกันใน การปฏิบัติงานและทำงานเป็นทีมได้อย่างชัดเจน	1	2	3	4	5	6	7
39. กิจการของท่าน มีการดำเนินงานการติดตามและ ประเมินผลการปฏิบัติงานอย่างสม่ำเสมอ	1	2	3	4	5	6	7

คำถาม	ระดับความคิดเห็น						
	1	2	3	4	5	6	7
7. ความสามารถในการปรับตัว4 (ค่านิยมร่วม)							
40. พนักงานทุกระดับในกิจการของท่าน มีความเข้าใจและมุ่งมั่นที่จะปฏิบัติงานร่วมกันให้บรรลุเป้าหมายที่กำหนดไว้อย่างชัดเจน	1	2	3	4	5	6	7
41. พนักงานทุกระดับในกิจการของท่าน ปฏิบัติงานในหน้าที่ความรับผิดชอบด้วยความทุ่มเทและเต็มกำลังความสามารถ	1	2	3	4	5	6	7

คำชี้แจง: โปรดทำเครื่องหมาย √ ในช่องที่เป็นจริงเกี่ยวกับกิจการของท่านมากที่สุด

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คำถาม	ระดับความคิดเห็น						
	1	2	3	4	5	6	7
42. พนักงานทุกระดับในกิจการของท่าน มีความพร้อมและให้ความร่วมมือในการเปลี่ยนแปลงเพื่อให้	1	2	3	4	5	6	7
43. ผู้บริหารกิจการของท่านมีประสบการณ์ด้านการส่งออกในตลาดต่างประเทศ	1	2	3	4	5	6	7
44. กิจการของท่านมีแรงงานที่มี ศักยภาพ ทักษะและความชำนาญอย่างเพียงพอ	1	2	3	4	5	6	7
45. ผลิตภัณฑ์และ/หรือบริการของท่านเป็นที่ต้องการทั้งตลาดภายในและภายนอกประเทศ	1	2	3	4	5	6	7
46. กิจการของท่านมีอำนาจต่อรองกับผู้ซื้อในตลาดต่างประเทศได้	1	2	3	4	5	6	7
47. กิจการของท่านมีความพร้อมเกี่ยวกับกระบวนการผลิต การจัดการและการควบคุมคุณภาพ	1	2	3	4	5	6	7
48. กิจการของท่านสามารถแข่งขันด้านต้นทุนการผลิตที่ต่ำกว่าคู่แข่งรายอื่นๆ ในตลาดส่งออกได้	1	2	3	4	5	6	7

คำถาม	ระดับความคิดเห็น						
	1	2	3	4	5	6	7
49. กิจการของท่านมีตลาดที่รองรับผลิตภัณฑ์และ/หรือบริการที่แน่นอน	1	2	3	4	5	6	7
50. กิจการของท่านมีการพัฒนาคุณภาพของผลิตภัณฑ์และ/หรือบริการเหนือกว่าคู่แข่ง	1	2	3	4	5	6	7
51. กิจการของท่านมีแนวทางในการลดปัญหาและอุปสรรคต่างๆ จากข้อกำหนดมาตรฐานทางการค้าที่เพิ่มขึ้น	1	2	3	4	5	6	7
52. กิจการของท่านสามารถเข้าถึงและใช้ประโยชน์จากมาตรการของภาครัฐได้อย่างเต็มที่	1	2	3	4	5	6	7
53. กิจการของท่านได้รับการสนับสนุนจากรัฐบาลอย่างเต็มที่	1	2	3	4	5	6	7
54. กิจการของท่านมีแนวโน้มขยายตัวไปยังตลาดต่างประเทศเพิ่มขึ้น	1	2	3	4	5	6	7

คำชี้แจง: โปรดทำเครื่องหมาย √ ในช่องที่เป็นจริงเกี่ยวกับกิจการของท่านมากที่สุด

1=ลดลงมากกว่า 30% 2=ลดลงระหว่าง 10-30% 3=ลดลงไม่เกิน 10% 4=ไม่มีการเปลี่ยนแปลง 5=เพิ่มขึ้นไม่เกิน 10% 6=เพิ่มขึ้นระหว่าง 10-30% 7=เพิ่มขึ้นมากกว่า 30%

คำถาม	ระดับความคิดเห็น						
	1	2	3	4	5	6	7
ผลสัมฤทธิ์การส่งออก							
การวัดทางด้านการเงิน							
55. การเติบโตของยอดขายเมื่อเทียบกับช่วงเดียวกันของปีก่อน	1	2	3	4	5	6	7
56. การเพิ่มขึ้นของส่วนแบ่งทางการตลาดเมื่อเทียบกับช่วงเดียวกันของปีก่อน	1	2	3	4	5	6	7
57. ผลกำไรสุทธิเมื่อเทียบกับช่วงเดียวกันของปีก่อน	1	2	3	4	5	6	7

คำถาม	ระดับความคิดเห็น						
	1	2	3	4	5	6	7
การวัดด้านที่ไม่ใช่การเงิน							
1. ในระยะ 3 ปี ที่ผ่านมา กิจการของท่านประสบความสำเร็จใน การสร้างคุณภาพของผลิตภัณฑ์หรือบริการให้มีมาตรฐาน ตามที่กำหนด	1	2	3	4	5	6	7
2. ในระยะ 3 ปีที่ผ่านมา กิจการของท่านสามารถตอบสนอง ความต้องการของลูกค้าได้ตามเป้าหมายที่กำหนด	1	2	3	4	5	6	7
3. ในระยะ 3 ปีที่ผ่านมา กิจการของท่านสามารถบรรลุ เป้าหมายในการเติบโตของยอดขายได้ตามเป้าหมายที่กำหนด	1	2	3	4	5	6	7

ขอขอบพระคุณท่านเป็นอย่างสูงที่กรุณาให้ความร่วมมือในการตอบแบบสอบถาม

APPENDIX B

The Symbols used in Data Analysis
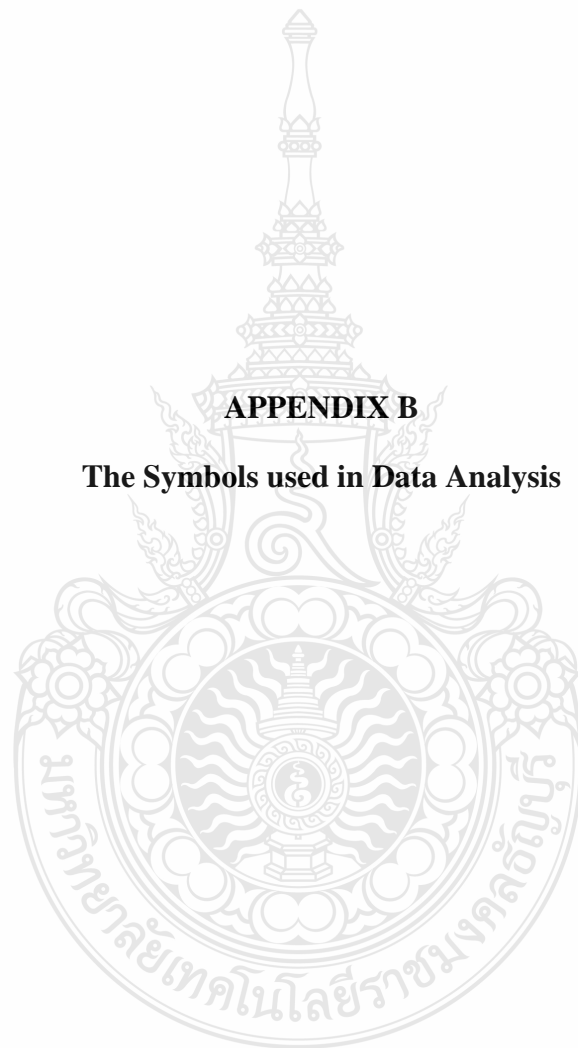
Symbol	Explanation
N	Sample Size
$\overline{X}$	Mean
S.D.	Standard Deviation
r	Pearson Product Moment Correlation Coefficient
χ^2	Chi-square
Df	Degree of Freedom
χ^2/df	Relative Chi-Square
GFI	Goodness of Fit
AGFI	Adjust Goodness of Fit Index
NFI	Normal Fit Index
CFI	Comparative Fit Index
RMSEA	Root Mean Square Error of Approximation
S.E.	Standard Error
R	Multiple Correlation
R^2	Square Multiple Correlation
P	P-value
C.R.	Critical Ratio
β	Beta
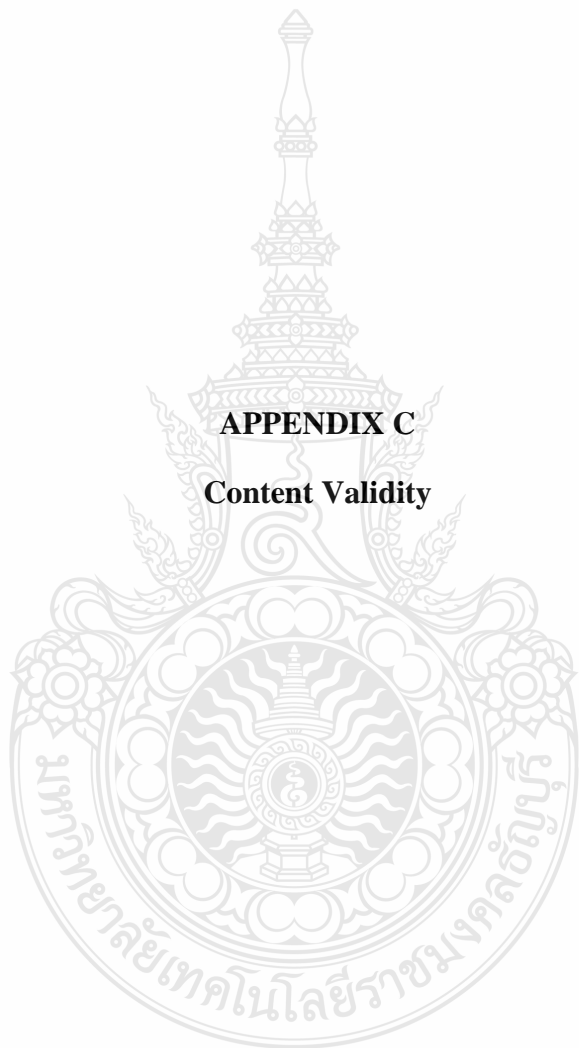
APPENDIX C

Content Validity

Table Index of Item-Objective Congruence (IOC).

Variable	Latent	Experts' Responses						Total	Average
		1	2	3	4	5	6		
Entrepreneurial Orientation(EO)									0.98
-Risk Taking Orientation	EO_Risk_1	1	1	1	1	1	1	1	
	EO_Risk_2	1	1	1	1	1	1	1	
	EO_Risk_3	1	1	1	1	1	1	1	
-Proactiveness Orientation	EO_Pro _1	1	1	1	1	1	1	1	
	EO_Pro _2	1	1	1	1	1	1	1	
-Human capital	EO_Human_1	0	1	1	1	1	1	0.83	
	EO_Human_2	1	1	1	1	1	1	1	
	EO_Human_3	1	1	1	1	1	1	1	
Innovativeness (INNO)									0.86
- Technological innovation	INNO_Tech _1	1	1	1	1	1	1	1	
	INNO_Tech _2	1	1	1	1	1	1	1	
	INNO_Tech _3	1	1	1	1	1	1	1	
	INNO_Tech _4	1	1	1	1	1	1	1	
-Product innovation	INNO_Prod_1	1	1	1	1	1	1	1	
	INNO_Prod_2	1	0	1	1	1	1	0.83	
	INNO_Prod_3	0	1	1	0	0	1	0.5	
	INNO_Prod_4	0	1	1	1	1	1	0.83	
-Process innovation	INNO_Proc_1	1	0	1	1	1	1	0.83	
	INNO_Proc_2	1	0	1	1	1	1	0.83	
	INNO_Proc_3	0	0	1	1	1	1	0.67	
Reconfiguration Capability (RC)									0.95
- Innovative Capabilities1 (Structure)	RC_Incl_1	1	1	1	1	1	1	1	
	RC_Incl _2	1	1	1	1	1	1	1	
	RC_Incl _3	1	1	1	1	1	1	1	
- Innovative Capabilities2 (Strategy)	RC_Inc2 _1	1	1	1	1	1	1	1	
	RC_Inc2 _2	1	1	1	1	1	1	1	
	RC_Inc2 _3	1	1	1	1	1	1	1	
- Innovative Capabilities3 (Structure)	RC_Inc3 _1	0	1	1	1	1	1	0.83	
	RC_Inc3 _2	1	1	1	0	1	1	0.83	
	RC_Inc3 _3	1	1	1	0	1	1	0.83	
- Adaptive Capabilities1 (Style)	RC_Adcl_1	0	1	1	1	1	1	0.83	
	RC_Adcl_2	0	1	1	1	1	1	0.83	
	RC_Adcl_3	0	1	1	1	1	1	0.83	
- Adaptive Capabilities2 (Skill)	RC_Adc2_1	1	1	1	1	1	1	1	
	RC_Adc2_2	1	1	1	1	1	1	1	
	RC_Adc2_3	1	1	1	1	1	1	1	
- Adaptive Capabilities3 (Staff)	RC_Adc3_1	1	1	1	1	1	1	1	
	RC_Adc3_2	1	1	1	1	1	1	1	
	RC_Adc3_3	1	1	1	1	1	1	1	
- Adaptive Capabilities4 (Shared Value)	RC_Adc4_1	1	1	1	1	1	1	1	
	RC_Adc4_2	1	1	1	1	1	1	1	
	RC_Adc4_3	1	1	1	1	1	1	1	

Table Index of Item-Objective Congruence (IOC) (Cont.)

Variable	Latent	Experts' Responses						Total	Average
		1	2	3	4	5	6		
Competitive Environment(CE)									0.93
- Factor Conditions	CE_Fact _1	1	1	1	1	1	1	1	
	CE_Fact _2	1	1	1	1	1	1	1	
- Demand Conditions	CE-Demand_1	1	1	1	1	1	0	0.83	
	CE-Demand_2	0	1	1	1	1	1	0.83	
- Related and supporting industries	CE_Relate _1	0	1	1	1	1	1	0.83	
	CE_Relate _2	1	1	1	1	1	1	1	
- Firm Strategy, Structure and Rivalry	CE_Firm_1	0	1	1	1	1	1	0.83	
	CE_Firm_2	0	1	1	1	1	1	0.83	
	CE_Firm_3	1	1	1	1	1	1	1	
- Government Conditions	CE_Gov_1	1	1	1	1	1	1	1	
	CE_Gov_2	1	1	1	1	1	1	1	
- Chance Conditions	CE_Chan_1	1	1	1	1	1	1	1	
Export Performance(EP)									1.00
Finance	EP_Fin_1	1	1	1	1	1	1	1	
	EP_Fin_2	1	1	1	1	1	1	1	
	EP_Fin_3	1	1	1	1	1	1	1	
Non-Finance	EP_NFin_1	1	1	1	1	1	1	1	
	EP_NFin_2	1	1	1	1	1	1	1	
	EP_NFin_3	1	1	1	1	1	1	1	
Total IOC Average									0.94
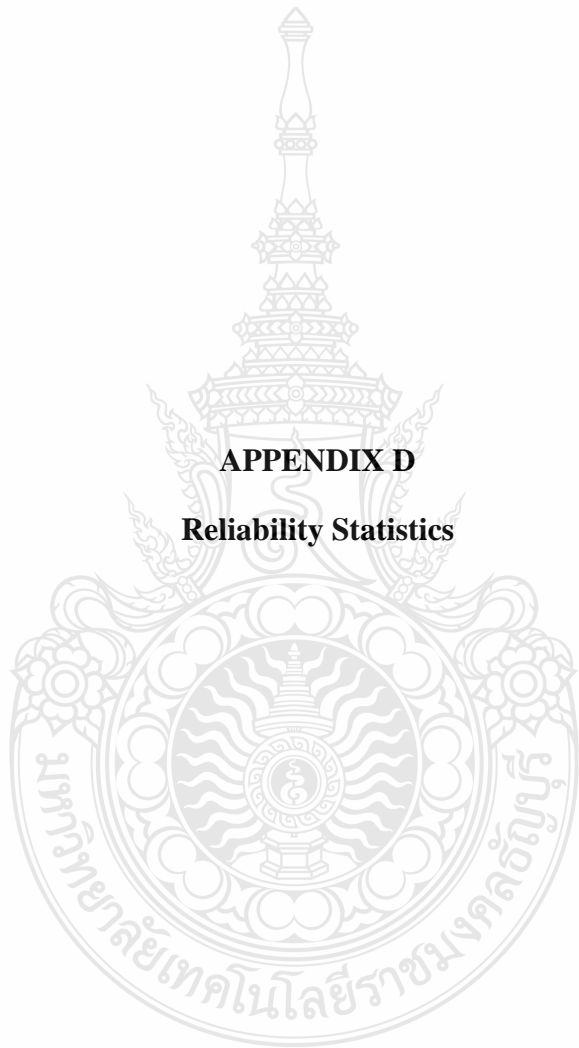
APPENDIX D

Reliability Statistics

Case Processing Summary

		N	%
Cases	Valid	238	100.0
	Excluded[a]	0	.0
	Total	238	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.925	.927	21

Summary Item Statistics

	Mean	Min	Max	Range	Max / Min	Variance	N of Items
Inter-Item Correlations	.377	-.008	.685	.693	-86.317	.020	21

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
EO	686.0105	20084.023	.560	.994	.944
EO_Risk	692.7132	20539.623	.290	.980	.947
EO_Pro	682.7942	19955.183	.440	.944	.946
EO_Human	678.8752	19644.865	.617	.965	.943
INNO	675.4969	19538.306	.749	.999	.942
INNO_Tech	674.3094	19603.638	.586	.996	.944
INNO_Prod	675.9065	19502.525	.651	.991	.943
INNO_Proc	675.8336	19546.030	.670	.995	.943
RC	675.9422	19528.833	.906	.999	.941
RC_Incl	676.7070	19521.848	.708	.962	.942
RC_Inc2	678.5009	19431.756	.701	.991	.942
RC_Inc3	675.0699	19559.015	.677	.983	.942
RC_Adcl	674.9541	19561.646	.705	.981	.942
RC_Adc2	675.5512	19675.436	.688	.977	.942
RC_Adc3	673.8271	19732.107	.673	.976	.943
RC_Adc4	674.5409	19512.279	.721	.978	.942
CE	678.9625	19784.923	.844	.998	.942
CE_Factor	675.0222	20089.311	.464	.959	.945
CE_Demand	677.3467	19774.222	.612	.965	.943
CE_Relate	675.0778	19941.075	.485	.882	.945
CE_Firm	677.2076	19679.893	.691	.983	.942
CE_Gov	683.5386	19833.066	.593	.987	.943
CE_Chan	679.7165	19849.430	.430	.919	.946
Export_P	680.4029	19709.202	.655	.998	.943
EP_Fin	681.3775	19747.285	.532	.996	.944
EP_NFin	679.0335	19710.235	.649	.993	.943

APPENDIX E

Result of Structural Model Analysis
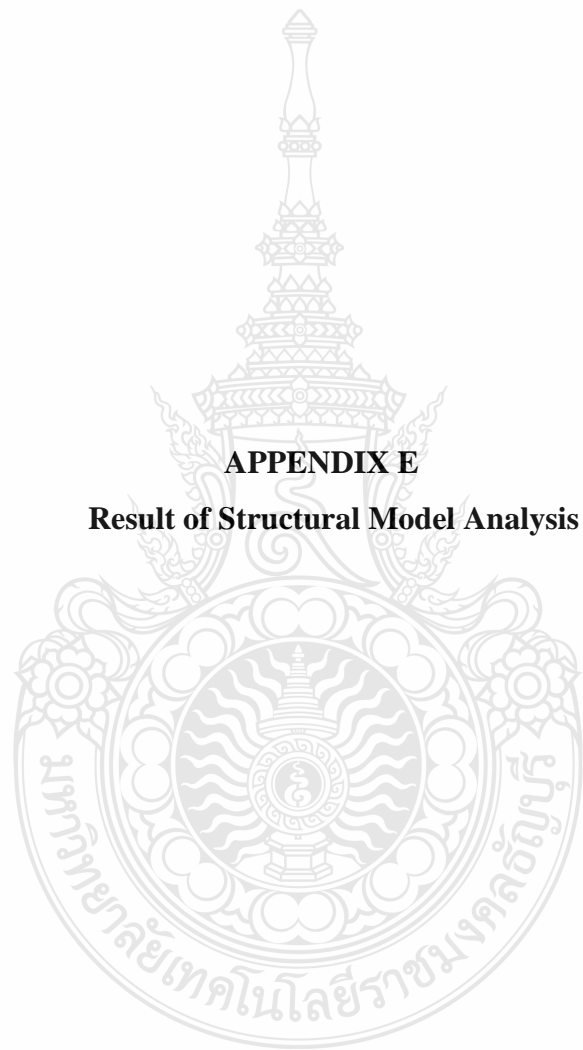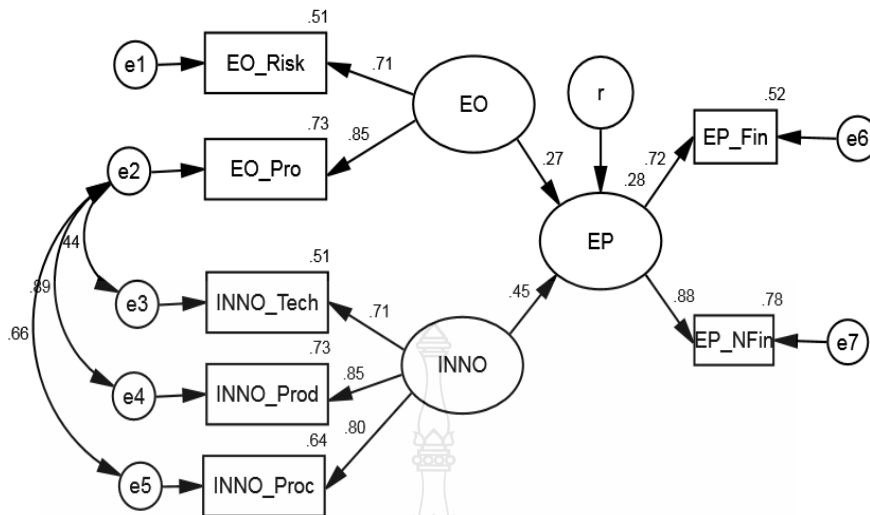
Chi-square = 12.613, Chi-square/df = 1.401, df = 9, GFI = .986,
CFI = .994, RMSEA = .041, NFI = .979

Figure 1 Structural model one (with modification indices)

Regression Weights: (Group number 1 - Default model)

			Estimate	S.E.	C.R.	P	Label
EP	<---	EO	.323	.105	3.089	.002	par_5
EP	<---	INNO	.451	.095	4.762	***	par_6
EO_Risk	<---	EO	1.000				
EO_Pro	<---	EO	1.424	.424	3.360	***	par_1
INNO_Tech	<---	INNO	1.000				
INNO_Prod	<---	INNO	1.156	.106	10.898	***	par_2
INNO_Proc	<---	INNO	1.032	.096	10.750	***	par_3
EP_Fin	<---	EP	1.000				
EP_NFin	<---	EP	1.047	.165	6.363	***	par_4

Standardized Regression Weights: (Group number 1 - Default model)

			Estimate
EP	<---	EO	.274
EP	<---	INNO	.449
EO_Risk	<---	EO	.713
EO_Pro	<---	EO	.854
INNO_Tech	<---	INNO	.712
INNO_Prod	<---	INNO	.854
INNO_Proc	<---	INNO	.802
EP_Fin	<---	EP	.719
EP_NFin	<---	EP	.881

Factor Score Weights (Group number 1 - Default model)

Standardized Total Effects (Group number 1 - Default model)

	INNO	EO	EP
EP	.449	.274	.000
EP_NFin	.396	.242	.881
EP_Fin	.322	.197	.719
INNO_Proc	.802	.000	.000
INNO_Prod	.854	.000	.000
INNO_Tech	.712	.000	.000
EO_Pro	.000	.854	.000
EO_Risk	.000	.713	.000

Standardized Direct Effects (Group number 1 - Default model)

	INNO	EO	EP
EP	.449	.274	.000
EP_NFin	.000	.000	.881
EP_Fin	.000	.000	.719
INNO_Proc	.802	.000	.000
INNO_Prod	.854	.000	.000
INNO_Tech	.712	.000	.000
EO_Pro	.000	.854	.000
EO_Risk	.000	.713	.000

Standardized Indirect Effects (Group number 1 - Default model)

	INNO	EO	EP
EP	.000	.000	.000
EP_NFin	.396	.242	.000
EP_Fin	.322	.197	.000
INNO_Proc	.000	.000	.000
INNO_Prod	.000	.000	.000
INNO_Tech	.000	.000	.000
EO_Pro	.000	.000	.000
EO_Risk	.000	.000	.000

Squared Multiple Correlations: (Group number 1 - Default model)

	Estimate
EP	.277
EP_NFin	.777
EP_Fin	.516
INNO_Proc	.643
INNO_Prod	.730
INNO_Tech	.506
EO_Pro	.729
EO_Risk	.508

Factor Score Weights (Group number 1 - Default model)

	EP_NFin	EP_Fin	INNO_Proc	INNO_Prod	INNO_Tech	EO_Pro	EO_Risk
INNO	.054	.017	.282	.401	.153	-.279	.190
EO	.076	.024	-.049	-.104	-.009	.441	.172
EP	.572	.184	.026	.034	.015	.004	.033
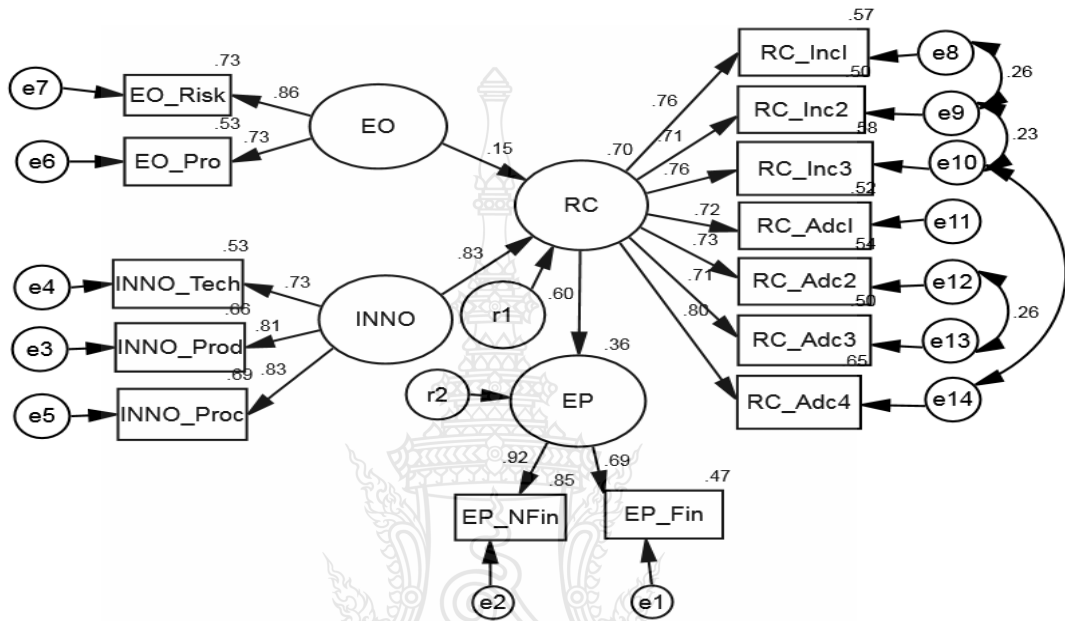
Chi-square = 138.704, Chi-square/df = 1.981, df = 70, GFI = .926, CFI = .960, RMSEA = .064, NFI = .924

Figure 2 Structural model 2 (with modification indices)

Regression Weights: (Group number 1 - Default model)

			Estimate	S.E.	C.R.	P	Label
RC	<---	EO	.134	.050	2.694	.007	par_4
RC	<---	INNO	.702	.067	10.414	***	par_6
EP	<---	RC	.621	.100	6.188	***	par_5
INNO_Prod	<---	INNO	1.000				
INNO_Tech	<---	INNO	.937	.081	11.621	***	par_1
INNO_Proc	<---	INNO	.974	.073	13.359	***	par_2
EO_Pro	<---	EO	1.000				
EO_Risk	<---	EO	.977	.344	2.836	.005	par_3
RC_Adc3	<---	RC	.862	.079	10.978	***	par_7
RC_Adc4	<---	RC	1.048	.084	12.544	***	par_8
RC_Adc2	<---	RC	.909	.079	11.472	***	par_9

Regression Weights: (Group number 1 - Default model) (Cont.)

			Estimate	S.E.	C.R.	P	Label
RC_Adcl	<---	RC	.930	.083	11.207	***	par_10
RC_Inc3	<---	RC	1.026	.087	11.749	***	par_11
RC_Inc2	<---	RC	.991	.078	12.665	***	par_12
RC_Incl	<---	RC	1.000				
EP_NFin	<---	EP	1.150	.148	7.769	***	par_13
EP_Fin	<---	EP	1.000				

Standardized Regression Weights: (Group number 1 - Default model)

			Estimate
RC	<---	EO	.151
RC	<---	INNO	.826
EP	<---	RC	.602
INNO_Prod	<---	INNO	.810
INNO_Tech	<---	INNO	.730
INNO_Proc	<---	INNO	.829
EO_Pro	<---	EO	.728
EO_Risk	<---	EO	.857
RC_Adc3	<---	RC	.707
RC_Adc4	<---	RC	.804
RC_Adc2	<---	RC	.735
RC_Adcl	<---	RC	.718
RC_Inc3	<---	RC	.763
RC_Inc2	<---	RC	.709
RC_Incl	<---	RC	.758
EP_NFin	<---	EP	.924
EP_Fin	<---	EP	.686

Suared Multiple Correlations: (Group number 1 - Default model)

	Estimate
RC	.705
EP	.363
EP_Fin	.471
EP_NFin	.855
RC_Incl	.575
RC_Inc2	.503
RC_Inc3	.582
RC_Adcl	.516
RC_Adc2	.540
RC_Adc4	.647
RC_Adc3	.500
EO_Risk	.735
EO_Pro	.529
INNO_Proc	.688
INNO_Tech	.533
INNO_Prod	.655

Standardized Total Effects (Group number 1 - Default model)

	EO	INNO	RC	EP
RC	.151	.826	.000	.000
EP	.091	.497	.602	.000
EP_Fin	.062	.341	.413	.686
EP_NFin	.084	.460	.557	.924
RC_Incl	.114	.626	.758	.000
RC_Inc2	.107	.586	.709	.000
RC_Inc3	.115	.630	.763	.000
RC_Adcl	.108	.593	.718	.000
RC_Adc2	.111	.607	.735	.000
RC_Adc4	.121	.664	.804	.000
RC_Adc3	.107	.584	.707	.000
EO_Risk	.857	.000	.000	.000
EO_Pro	.728	.000	.000	.000
INNO_Proc	.000	.829	.000	.000
INNO_Tech	.000	.730	.000	.000
INNO_Prod	.000	.810	.000	.000

Standardized Direct Effects (Group number 1 - Default model)

	EO	INNO	RC	EP
RC	.151	.826	.000	.000
EP	.000	.000	.602	.000
EP_Fin	.000	.000	.000	.686
EP_NFin	.000	.000	.000	.924
RC_Incl	.000	.000	.758	.000
RC_Inc2	.000	.000	.709	.000
RC_Inc3	.000	.000	.763	.000
RC_Adcl	.000	.000	.718	.000
RC_Adc2	.000	.000	.735	.000
RC_Adc4	.000	.000	.804	.000
RC_Adc3	.000	.000	.707	.000
EO_Risk	.857	.000	.000	.000
EO_Pro	.728	.000	.000	.000
INNO_Proc	.000	.829	.000	.000
INNO_Tech	.000	.730	.000	.000
INNO_Prod	.000	.810	.000	.000

Standardized Indirect Effects (Group number 1 - Default model)

	EO	INNO	RC	EP
RC	.000	.000	.000	.000
EP	.091	.497	.000	.000
EP_Fin	.062	.341	.413	.000
EP_NFin	.084	.460	.557	.000
RC_Incl	.114	.626	.000	.000
RC_Inc2	.107	.586	.000	.000
RC_Inc3	.115	.630	.000	.000
RC_Adcl	.108	.593	.000	.000
RC_Adc2	.111	.607	.000	.000
RC_Adc4	.121	.664	.000	.000
RC_Adc3	.107	.584	.000	.000
EO_Risk	.000	.000	.000	.000
EO_Pro	.000	.000	.000	.000
INNO_Proc	.000	.000	.000	.000
INNO_Tech	.000	.000	.000	.000
INNO_Prod	.000	.000	.000	.000
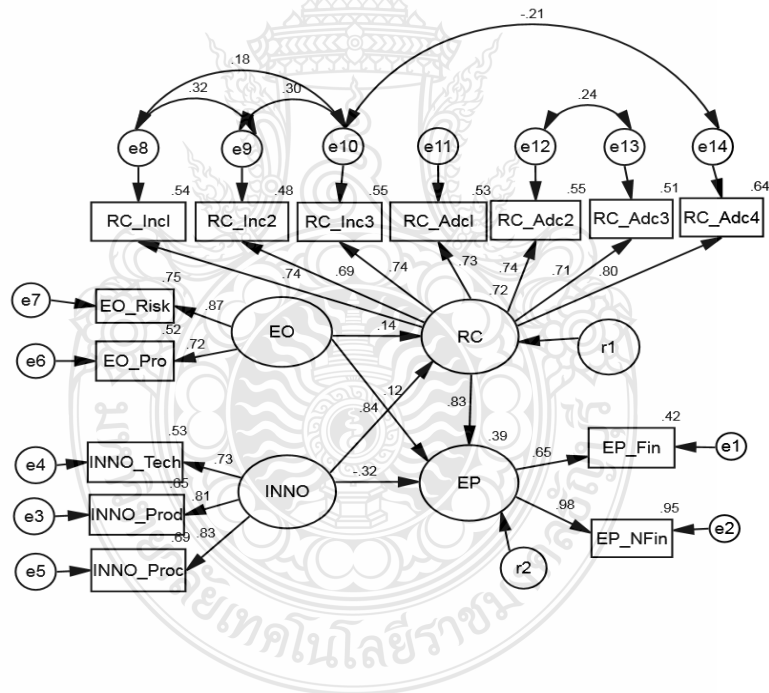
Chi-square = 125.482, Chi-square/df = 1.873, df = 67, GFI = .934, CFI = .966, RMSEA = .061, NFI = .931

Figure 3 Structural model 3 (with modification indices)

Regression Weights: (Group number 1 - Default model)

			Estimate	S.E.	C.R.	P	Label
RC	<---	EO	.122	.048	2.544	.011	par_12
RC	<---	INNO	.692	.068	10.165	***	par_14
EP	<---	INNO	-.261	.136	-1.923	.054	par_1
EP	<---	EO	.103	.062	1.671	.095	par_5
EP	<---	RC	.831	.200	4.162	***	par_13
INNO_Prod	<---	INNO	1.000				
INNO_Tech	<---	INNO	.940	.081	11.628	***	par_2
INNO_Proc	<---	INNO	.977	.073	13.355	***	par_3
EO_Pro	<---	EO	1.000				
EO_Risk	<---	EO	1.001	.282	3.548	***	par_4
EP_Fin	<---	EP	1.000				
EP_NFin	<---	EP	1.280	.175	7.309	***	par_6
RC_Incl	<---	RC	1.000				
RC_Inc2	<---	RC	1.002	.080	12.567	***	par_7
RC_Inc3	<---	RC	1.025	.084	12.154	***	par_8
RC_Adcl	<---	RC	.973	.089	10.889	***	par_9
RC_Adc2	<---	RC	.944	.086	11.027	***	par_10
RC_Adc3	<---	RC	.897	.084	10.623	***	par_11
RC_Adc4	<---	RC	1.077	.090	11.955	***	par_15

Standardized Regression Weights: (Group number 1 - Default model)

			Estimate
RC	<---	EO	.140
RC	<---	INNO	.837
EP	<---	INNO	-.316
EP	<---	EO	.118
EP	<---	RC	.830
INNO_Prod	<---	INNO	.808
INNO_Tech	<---	INNO	.731
INNO_Proc	<---	INNO	.830
EO_Pro	<---	EO	.719
EO_Risk	<---	EO	.868
EP_Fin	<---	EP	.648
EP_NFin	<---	EP	.976
RC_Incl	<---	RC	.735
RC_Inc2	<---	RC	.694
RC_Inc3	<---	RC	.739
RC_Adcl	<---	RC	.729
RC_Adc2	<---	RC	.740
RC_Adc3	<---	RC	.714
RC_Adc4	<---	RC	.802

Squared Multiple Correlations: (Group number 1 - Default model)

	Estimate
RC	.720
EP	.391
RC_Adc4	.643
RC_Adc3	.510
RC_Adc2	.548
RC_Adcl	.531
RC_Inc3	.546
RC_Inc2	.482
RC_Incl	.541
EP_NFin	.952
EP_Fin	.420
EO_Risk	.753
EO_Pro	.516
INNO_Proc	.689
INNO_Tech	.535
INNO_Prod	.653

Standardized Total Effects (Group number 1 - Default model)

	EO	INNO	RC	EP
RC	.140	.837	.000	.000
EP	.234	.379	.830	.000
RC_Adc4	.112	.671	.802	.000
RC_Adc3	.100	.598	.714	.000
RC_Adc2	.104	.619	.740	.000
RC_Adcl	.102	.610	.729	.000
RC_Inc3	.103	.618	.739	.000
RC_Inc2	.097	.581	.694	.000
RC_Incl	.103	.615	.735	.000
EP_NFin	.228	.370	.810	.976
EP_Fin	.151	.245	.538	.648
EO_Risk	.868	.000	.000	.000
EO_Pro	.719	.000	.000	.000
INNO_Proc	.000	.830	.000	.000
INNO_Tech	.000	.731	.000	.000
INNO_Prod	.000	.808	.000	.000

Standardized Direct Effects (Group number 1 - Default model)

	EO	INNO	RC	EP
RC	.140	.837	.000	.000
EP	.118	-.316	.830	.000
RC_Adc4	.000	.000	.802	.000
RC_Adc3	.000	.000	.714	.000
RC_Adc2	.000	.000	.740	.000
RC_Adcl	.000	.000	.729	.000
RC_Inc3	.000	.000	.739	.000
RC_Inc2	.000	.000	.694	.000
RC_Incl	.000	.000	.735	.000
EP_NFin	.000	.000	.000	.976
EP_Fin	.000	.000	.000	.648
EO_Risk	.868	.000	.000	.000
EO_Pro	.719	.000	.000	.000
INNO_Proc	.000	.830	.000	.000
INNO_Tech	.000	.731	.000	.000
INNO_Prod	.000	.808	.000	.000

Standardized Indirect Effects (Group number 1 - Default model)

	EO	INNO	RC	EP
RC	.000	.000	.000	.000
EP	.116	.695	.000	.000
RC_Adc4	.112	.671	.000	.000
RC_Adc3	.100	.598	.000	.000
RC_Adc2	.104	.619	.000	.000
RC_Adcl	.102	.610	.000	.000
RC_Inc3	.103	.618	.000	.000
RC_Inc2	.097	.581	.000	.000
RC_Incl	.103	.615	.000	.000
EP_NFin	.228	.370	.810	.000
EP_Fin	.151	.245	.538	.000
EO_Risk	.000	.000	.000	.000
EO_Pro	.000	.000	.000	.000
INNO_Proc	.000	.000	.000	.000
INNO_Tech	.000	.000	.000	.000
INNO_Prod	.000	.000	.000	.000

Factor Score Weights (Group number 1 - Default model)

	RC_Adc4	RC_Adc3	RC_Adc2	RC_Adc1	RC_Inc3	RC_Inc2	RC_Inc1	EP_NFin	EP_Fin	EO_Risk	EO_Pro	INNO_Proc	INNO_Tech	INNO_Prod
EO	.009	.004	.005	.005	.005	.002	.004	.037	.002	.587	.206	-.014	-.007	-.011
INNO	.084	.038	.045	.049	.053	.015	.034	-.016	-.001	-.021	-.007	.285	.154	.237
RC	.182	.084	.097	.107	.116	.033	.075	.075	.004	.010	.004	.065	.035	.054
EP	.010	.004	.005	.006	.006	.002	.004	.704	.033	.005	.002	-.002	-.001	-.001
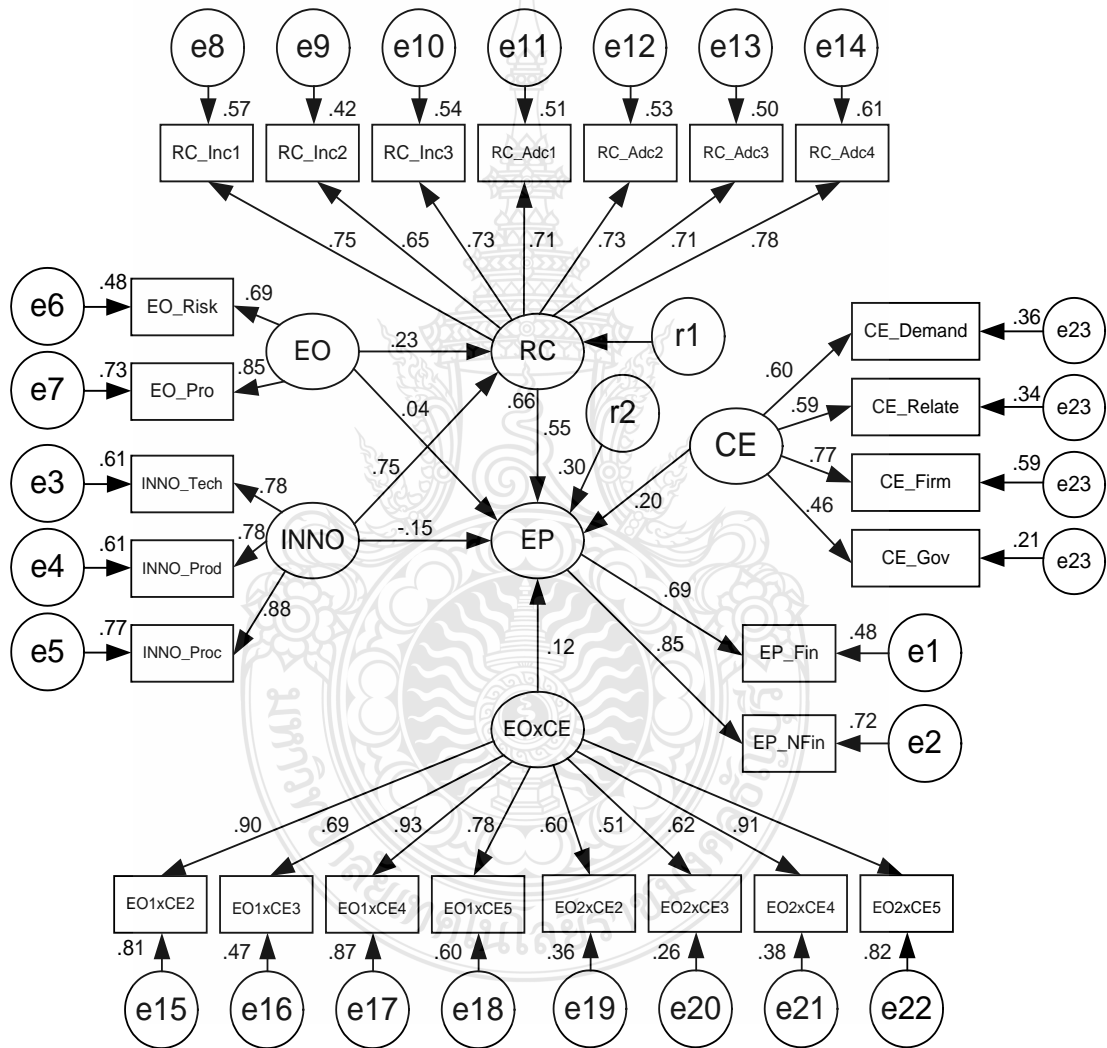
Chi-square = 356.267, Chi-square/df = 1.563, df = 228, GFI =.902, CFI = .968,
RMSEA = .049, NFI = .919

Figure 4 Structural model 4a (with modification indices)

Regression Weights: (Group number 1 - Default model)

			Estimate	S.E.	C.R.	P	Label
RC	<---	EO	.172	.048	3.621	***	par_12
RC	<---	INNO	.636	.060	10.637	***	par_14
EP	<---	INNO	-.135	.110	-1.231	.218	par_1
EP	<---	EO	.028	.064	.441	.659	par_5
EP	<---	RC	.569	.154	3.687	***	par_13
EP	<---	EOxCE	.660	.289	2.288	.022	par_23
EP	<---	CE	.280	.109	2.570	.010	par_63
INNO_Prod	<---	INNO	1.000				
INNO_Tech	<---	INNO	1.018	.091	11.193	***	par_2
INNO_Proc	<---	INNO	1.046	.083	12.633	***	par_3
EO_Pro	<---	EO	1.000				
EO_Risk	<---	EO	.679	.130	5.218	***	par_4
EP_Fin	<---	EP	1.000				
EP_NFin	<---	EP	1.010	.131	7.691	***	par_6
RC_Incl	<---	RC	1.000				
RC_Inc2	<---	RC	.893	.076	11.786	***	par_7
RC_Inc3	<---	RC	.986	.087	11.389	***	par_8
RC_Adcl	<---	RC	.931	.083	11.267	***	par_9
RC_Adc2	<---	RC	.911	.079	11.502	***	par_10
RC_Adc3	<---	RC	.884	.079	11.165	***	par_11
RC_Adc4	<---	RC	1.007	.081	12.472	***	par_15
EO1xCE2	<---	EOxCE	.889	.073	12.245	***	par_16
EO1xCE3	<---	EOxCE	.635	.070	9.098	***	par_17
EO1xCE4	<---	EOxCE	.931	.072	12.927	***	par_18
EO1xCE5	<---	EOxCE	.930	.077	12.113	***	par_19
EO2xCE2	<---	EOxCE	.642	.058	10.996	***	par_20
EO2xCE3	<---	EOxCE	.503	.060	8.380	***	par_21
EO2xCE4	<---	EOxCE	.690	.057	12.059	***	par_22
EO2xCE5	<---	EOxCE	1.000				
CE_Demand	<---	CE	1.000				
CE_Relate	<---	CE	1.153	.172	6.692	***	par_60
CE_Firm	<---	CE	1.195	.161	7.419	***	par_61
CE_Gov	<---	CE	.827	.144	5.741	***	par_62

Standardized Regression Weights: (Group number 1 - Default model)

			Estimate
RC	<---	EO	.227
RC	<---	INNO	.750
EP	<---	INNO	-.154
EP	<---	EO	.036
EP	<---	RC	.552
EP	<---	EOxCE	.124
EP	<---	CE	.200
INNO_Prod	<---	INNO	.780
INNO_Tech	<---	INNO	.779
INNO_Proc	<---	INNO	.876
EO_Pro	<---	EO	.852
EO_Risk	<---	EO	.693
EP_Fin	<---	EP	.695
EP_NFin	<---	EP	.851
RC_Incl	<---	RC	.753
RC_Inc2	<---	RC	.652
RC_Inc3	<---	RC	.733
RC_Adcl	<---	RC	.714
RC_Adc2	<---	RC	.726
RC_Adc3	<---	RC	.708
RC_Adc4	<---	RC	.784
EO1xCE2	<---	EOxCE	.898
EO1xCE3	<---	EOxCE	.686
EO1xCE4	<---	EOxCE	.931
EO1xCE5	<---	EOxCE	.775
EO2xCE2	<---	EOxCE	.602
EO2xCE3	<---	EOxCE	.506
EO2xCE4	<---	EOxCE	.620
EO2xCE5	<---	EOxCE	.906
CE_Demand	<---	CE	.598
CE_Relate	<---	CE	.586
CE_Firm	<---	CE	.771
CE_Gov	<---	CE	.459

Squared Multiple Correlations: (Group number 1 - Default model)

	Estimate
RC	.662
EP	.300
CE_Gov	.211
CE_Firm	.594
CE_Relate	.343
CE_Demand	.358
EO2xCE5	.821
EO2xCE4	.384
EO2xCE3	.256
EO2xCE2	.362
EO1xCE5	.601
EO1xCE4	.867
EO1xCE3	.471
EO1xCE2	.807
RC_Adc4	.615
RC_Adc3	.502
RC_Adc2	.528
RC_Adcl	.510
RC_Inc3	.537
RC_Inc2	.425
RC_Incl	.567
EP_NFin	.723
EP_Fin	.482
EO_Risk	.480
EO_Pro	.726
INNO_Proc	.767
INNO_Tech	.606
INNO_Prod	.609
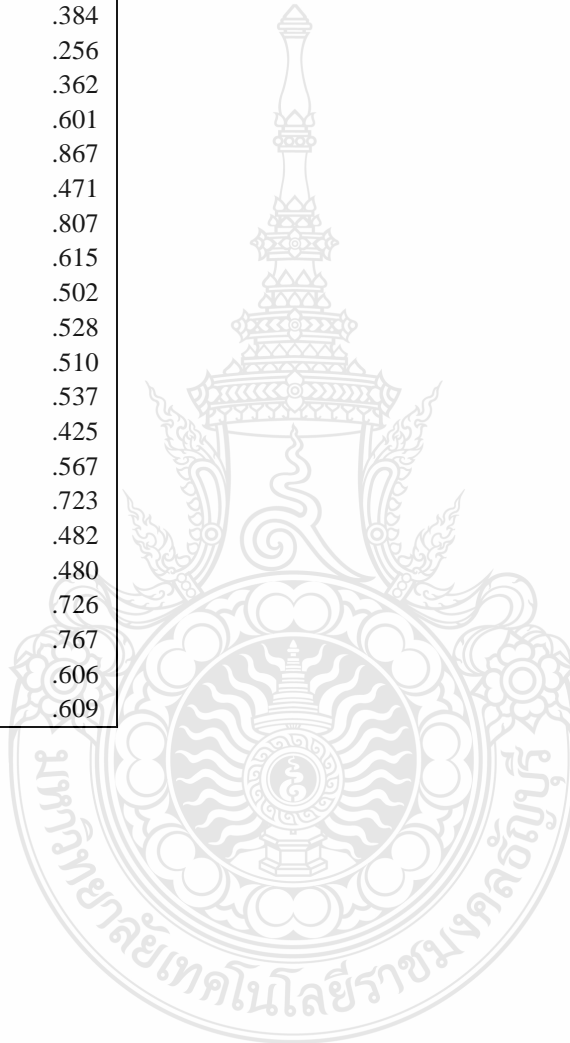
Standardized Total Effects (Group number 1 - Default model)

	CE	EOxCE	EO	INNO	RC	EP
RC	.000	.000	.227	.750	.000	.000
EP	.200	.124	.162	.260	.552	.000
CE_Gov	.459	.000	.000	.000	.000	.000
CE_Firm	.771	.000	.000	.000	.000	.000
CE_Relate	.586	.000	.000	.000	.000	.000
CE_Demand	.598	.000	.000	.000	.000	.000
EO2xCE5	.000	.906	.000	.000	.000	.000
EO2xCE4	.000	.620	.000	.000	.000	.000
EO2xCE3	.000	.506	.000	.000	.000	.000
EO2xCE2	.000	.602	.000	.000	.000	.000
EO1xCE5	.000	.775	.000	.000	.000	.000
EO1xCE4	.000	.931	.000	.000	.000	.000
EO1xCE3	.000	.686	.000	.000	.000	.000
EO1xCE2	.000	.898	.000	.000	.000	.000
RC_Adc4	.000	.000	.178	.588	.784	.000
RC_Adc3	.000	.000	.161	.531	.708	.000
RC_Adc2	.000	.000	.165	.545	.726	.000
RC_Adcl	.000	.000	.162	.535	.714	.000
RC_Inc3	.000	.000	.166	.550	.733	.000
RC_Inc2	.000	.000	.148	.489	.652	.000
RC_Incl	.000	.000	.171	.565	.753	.000
EP_NFin	.170	.106	.137	.221	.470	.851
EP_Fin	.139	.086	.112	.180	.383	.695
EO_Risk	.000	.000	.693	.000	.000	.000
EO_Pro	.000	.000	.852	.000	.000	.000
INNO_Proc	.000	.000	.000	.876	.000	.000
INNO_Tech	.000	.000	.000	.779	.000	.000
INNO_Prod	.000	.000	.000	.780	.000	.000

Standardized Direct Effects (Group number 1 - Default model)

	CE	EOxCE	EO	INNO	RC	EP
RC	.000	.000	.227	.750	.000	.000
EP	.200	.124	.036	-.154	.552	.000
CE_Gov	.459	.000	.000	.000	.000	.000
CE_Firm	.771	.000	.000	.000	.000	.000
CE_Relate	.586	.000	.000	.000	.000	.000
CE_Demand	.598	.000	.000	.000	.000	.000
EO2xCE5	.000	.906	.000	.000	.000	.000
EO2xCE4	.000	.620	.000	.000	.000	.000
EO2xCE3	.000	.506	.000	.000	.000	.000
EO2xCE2	.000	.602	.000	.000	.000	.000
EO1xCE5	.000	.775	.000	.000	.000	.000
EO1xCE4	.000	.931	.000	.000	.000	.000
EO1xCE3	.000	.686	.000	.000	.000	.000
EO1xCE2	.000	.898	.000	.000	.000	.000
RC_Adc4	.000	.000	.000	.000	.784	.000
RC_Adc3	.000	.000	.000	.000	.708	.000
RC_Adc2	.000	.000	.000	.000	.726	.000
RC_Adcl	.000	.000	.000	.000	.714	.000
RC_Inc3	.000	.000	.000	.000	.733	.000
RC_Inc2	.000	.000	.000	.000	.652	.000
RC_Incl	.000	.000	.000	.000	.753	.000
EP_NFin	.000	.000	.000	.000	.000	.851
EP_Fin	.000	.000	.000	.000	.000	.695
EO_Risk	.000	.000	.693	.000	.000	.000
EO_Pro	.000	.000	.852	.000	.000	.000
INNO_Proc	.000	.000	.000	.876	.000	.000
INNO_Tech	.000	.000	.000	.779	.000	.000
INNO_Prod	.000	.000	.000	.780	.000	.000

Standardized Indirect Effects (Group number 1 - Default model)

	CE	EOxCE	EO	INNO	RC	EP
RC	.000	.000	.000	.000	.000	.000
EP	.000	.000	.125	.414	.000	.000
CE_Gov	.000	.000	.000	.000	.000	.000
CE_Firm	.000	.000	.000	.000	.000	.000
CE_Relate	.000	.000	.000	.000	.000	.000
CE_Demand	.000	.000	.000	.000	.000	.000
EO2xCE5	.000	.000	.000	.000	.000	.000
EO2xCE4	.000	.000	.000	.000	.000	.000
EO2xCE3	.000	.000	.000	.000	.000	.000
EO2xCE2	.000	.000	.000	.000	.000	.000
EO1xCE5	.000	.000	.000	.000	.000	.000
EO1xCE4	.000	.000	.000	.000	.000	.000
EO1xCE3	.000	.000	.000	.000	.000	.000
EO1xCE2	.000	.000	.000	.000	.000	.000
RC_Adc4	.000	.000	.178	.588	.000	.000
RC_Adc3	.000	.000	.161	.531	.000	.000
RC_Adc2	.000	.000	.165	.545	.000	.000
RC_Adcl	.000	.000	.162	.535	.000	.000
RC_Inc3	.000	.000	.166	.550	.000	.000
RC_Inc2	.000	.000	.148	.489	.000	.000
RC_Incl	.000	.000	.171	.565	.000	.000
EP_NFin	.170	.106	.137	.221	.470	.000
EP_Fin	.139	.086	.112	.180	.383	.000
EO_Risk	.000	.000	.000	.000	.000	.000
EO_Pro	.000	.000	.000	.000	.000	.000
INNO_Proc	.000	.000	.000	.000	.000	.000
INNO_Tech	.000	.000	.000	.000	.000	.000
INNO_Prod	.000	.000	.000	.000	.000	.000

Factor Score Weights (Group number 1 - Default model)

	CE_Gov	CE_Firm	CE_Relate	CE_Demand	EO2xCE5	EO2xCE4	EO2xCE3	EO2xCE2	EO1xCE5	EO1xCE4	EO1xCE3	EO1xCE2	RC_Adc4	RC_Adc3	RC_Adc2	RC_Adcl	RC_Inc3	RC_Inc2	RC_Incl	EP_NFin	EP_Fin	EO_Risk	EO_Pro	INNO_Proc	INNO_Tech	INNO_Prod
CE	.037	.459	.148	.242	.269	-.714	1.246	-.422	-.300	.703	-.841	.250	-.091	-.049	-.025	-.142	-.022	-.067	-.065	-.004	-.035	.118	.012	.016	.012	.040
EOxCE	-.028	.010	-.008	.015	1.546	-.987	.151	-.370	-.871	1.164	.075	.625	-.007	.001	.010	-.005	.006	.016	-.016	-.005	-.002	.011	-.016	-.014	.005	-.011
EO	.064	-.028	.013	-.010	.156	.754	.422	-.901	-.174	-.477	-.205	.626	.089	.158	-.028	.005	.115	-.282	.111	-.040	.077	.296	.616	-.030	.063	-.151
INNO	.035	-.021	.002	-.035	-1.073	3.002	-.535	-1.179	.763	-2.079	.394	.594	.044	.000	.004	.019	.014	-.018	.077	.004	.003	.010	-.036	.485	.286	.092
RC	-.014	.021	.042	.052	-.484	.988	.256	-.546	.458	-1.002	-.084	.313	.208	.069	.083	.083	.147	-.008	.116	-.021	.053	.014	.026	.098	.060	.013
EP	.069	.009	.015	.023	-.025	.204	.212	-.254	.091	-.223	-.071	.241	.120	-.055	-.059	.012	.086	-.122	.061	.529	.189	.019	.030	.007	.009	-.007

Chi-square = 431.018, Chi-square/df = 1.330, df = 324, GFI =.901, CFI = .980, RMSEA = .037, NFI = .927

Figure 4 Structural model 4b (with modification indices)

Regression Weights: (Group number 1 - Default model)

			Estimate	S.E.	C.R.	P	Label
RC	<---	EO	.111	.044	2.521	.012	par_4
RC	<---	INNO	.717	.069	10.316	***	par_23
EP	<---	INNO	-.155	.162	-.957	.338	par_21
EP	<---	EO	.025	.052	.480	.631	par_22
EP	<---	INNOxCE	1.314	.377	3.489	***	par_25
EP	<---	RC	.620	.266	2.329	.020	par_26
EP	<---	CE	.441	.187	2.361	.018	par_31
INNO_Prod	<---	INNO	1.000				
INNO_Tech	<---	INNO	.990	.081	12.221	***	par_1
INNO_Proc	<---	INNO	.990	.074	13.439	***	par_2
EO_Pro	<---	EO	1.000				
EO_Risk	<---	EO	.643	.188	3.421	***	par_3
RC_Adc3	<---	RC	.929	.085	10.992	***	par_5
RC_Inc2	<---	RC	.950	.077	12.412	***	par_6
RC_Incl	<---	RC	1.000				
RC_Inc3	<---	RC	1.028	.084	12.302	***	par_7
RC_Adcl	<---	RC	.997	.088	11.289	***	par_8
RC_Adc4	<---	RC	1.096	.089	12.278	***	par_9
RC_Adc2	<---	RC	.956	.085	11.241	***	par_10
INNO2xCE2	<---	INNOxCE	.862	.053	16.243	***	par_11
INNO1xCE4	<---	INNOxCE	.920	.053	17.409	***	par_12
INNO1xCE5	<---	INNOxCE	.516	.052	10.003	***	par_13
INNO2xCE3	<---	INNOxCE	.723	.059	12.173	***	par_14
INNO2xCE4	<---	INNOxCE	.971	.067	14.473	***	par_15
INNO2xCE5	<---	INNOxCE	.494	.059	8.423	***	par_16
INNO3xCE2	<---	INNOxCE	1.040	.058	17.902	***	par_17
INNO3xCE3	<---	INNOxCE	.767	.068	11.292	***	par_18
INNO3xCE4	<---	INNOxCE	1.089	.071	15.358	***	par_19
INNO3xCE5	<---	INNOxCE	.580	.061	9.550	***	par_20
INNO1xCE3	<---	INNOxCE	.721	.060	11.923	***	par_24
INNO1xCE2	<---	INNOxCE	1.000				
EP_Fin	<---	EP	1.000				
EP_NFin	<---	EP	1.073	.116	9.243	***	par_27
CE_Firm	<---	CE	1.173	.114	10.310	***	par_28
CE_Relate	<---	CE	1.062	.145	7.324	***	par_29
CE_Demand	<---	CE	1.063	.116	9.184	***	par_30
CE_Gov	<---	CE	1.000				

Standardized Regression Weights: (Group number 1 - Default model)

			Estimate
RC	<---	EO	.158
RC	<---	INNO	.851
EP	<---	INNO	-.169
EP	<---	EO	.032
EP	<---	INNOxCE	.232
EP	<---	RC	.569
EP	<---	CE	.350
INNO_Prod	<---	INNO	.797
INNO_Tech	<---	INNO	.741
INNO_Proc	<---	INNO	.816
EO_Pro	<---	EO	.885
EO_Risk	<---	EO	.684
RC_Adc3	<---	RC	.724
RC_Inc2	<---	RC	.660
RC_Incl	<---	RC	.730
RC_Inc3	<---	RC	.734
RC_Adcl	<---	RC	.736
RC_Adc4	<---	RC	.807
RC_Adc2	<---	RC	.737
INNO2xCE2	<---	INNOxCE	.784
INNO1xCE4	<---	INNOxCE	.839
INNO1xCE5	<---	INNOxCE	.513
INNO2xCE3	<---	INNOxCE	.673
INNO2xCE4	<---	INNOxCE	.866
INNO2xCE5	<---	INNOxCE	.494
INNO3xCE2	<---	INNOxCE	.881
INNO3xCE3	<---	INNOxCE	.640
INNO3xCE4	<---	INNOxCE	.904
INNO3xCE5	<---	INNOxCE	.563
INNO1xCE3	<---	INNOxCE	.653
INNO1xCE2	<---	INNOxCE	.854
EP_Fin	<---	EP	.703
EP_NFin	<---	EP	.882
CE_Firm	<---	CE	.798
CE_Relate	<---	CE	.622
CE_Demand	<---	CE	.684
CE_Gov	<---	CE	.649

Squared Multiple Correlations: (Group number 1 - Default model)

	Estimate
RC	.750
EP	.525
CE_Demand	.467
CE_Relate	.387
CE_Gov	.421
CE_Firm	.636
EP_Fin	.494
INNO1xCE2	.729
INNO1xCE3	.426
EP_NFin	.777
INNO1xCE4	.704
INNO3xCE5	.316
INNO3xCE4	.816
INNO3xCE3	.410
INNO3xCE2	.776
INNO2xCE5	.244
INNO2xCE4	.750
INNO2xCE3	.453
INNO1xCE5	.263
INNO2xCE2	.615
RC_Adc4	.651
RC_Adc2	.544
RC_Adcl	.542
RC_Inc3	.539
RC_Adc3	.525
RC_Inc2	.435
RC_Incl	.532
EO_Risk	.468
EO_Pro	.783
INNO_Proc	.665
INNO_Tech	.549
INNO_Prod	.635
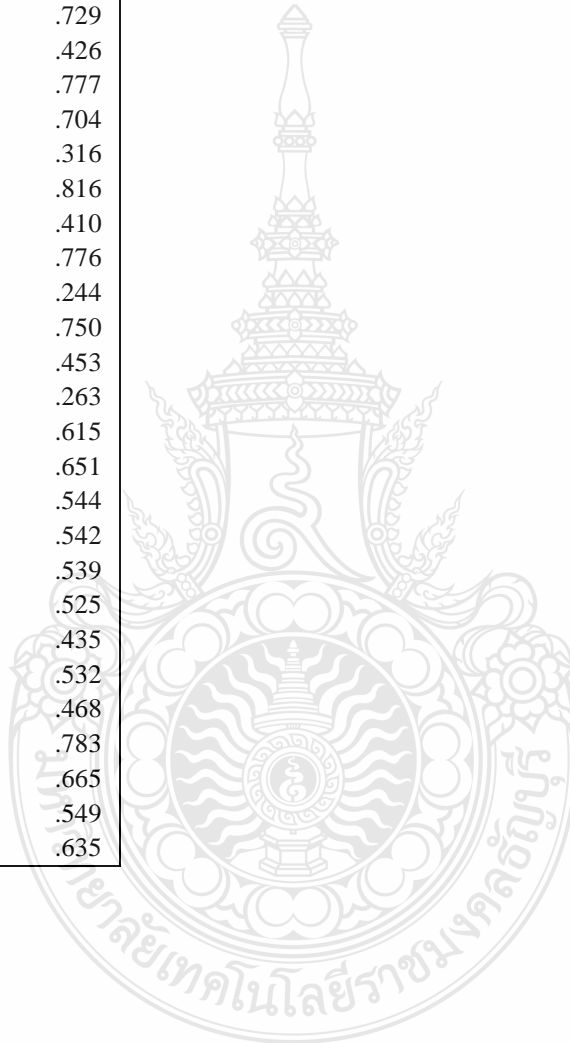
Standardized Total Effects (Group number 1 - Default model)

	CE	INNOxCE	EO	INNO	RC	EP
RC	.000	.000	.158	.851	.000	.000
EP	.350	.232	.122	.315	.569	.000
CE_Demand	.684	.000	.000	.000	.000	.000
CE_Relate	.622	.000	.000	.000	.000	.000
CE_Gov	.649	.000	.000	.000	.000	.000
CE_Firm	.798	.000	.000	.000	.000	.000
EP_Fin	.246	.163	.086	.222	.400	.703
INNO1xCE2	.000	.854	.000	.000	.000	.000
INNO1xCE3	.000	.653	.000	.000	.000	.000
EP_NFin	.309	.204	.108	.278	.502	.882
INNO1xCE4	.000	.839	.000	.000	.000	.000
INNO3xCE5	.000	.563	.000	.000	.000	.000
INNO3xCE4	.000	.904	.000	.000	.000	.000
INNO3xCE3	.000	.640	.000	.000	.000	.000
INNO3xCE2	.000	.881	.000	.000	.000	.000
INNO2xCE5	.000	.494	.000	.000	.000	.000
INNO2xCE4	.000	.866	.000	.000	.000	.000
INNO2xCE3	.000	.673	.000	.000	.000	.000
INNO1xCE5	.000	.513	.000	.000	.000	.000
INNO2xCE2	.000	.784	.000	.000	.000	.000
RC_Adc4	.000	.000	.127	.687	.807	.000
RC_Adc2	.000	.000	.116	.628	.737	.000
RC_Adcl	.000	.000	.116	.627	.736	.000
RC_Inc3	.000	.000	.116	.625	.734	.000
RC_Adc3	.000	.000	.114	.617	.724	.000
RC_Inc2	.000	.000	.104	.562	.660	.000
RC_Incl	.000	.000	.115	.621	.730	.000
EO_Risk	.000	.000	.684	.000	.000	.000
EO_Pro	.000	.000	.885	.000	.000	.000
INNO_Proc	.000	.000	.000	.816	.000	.000
INNO_Tech	.000	.000	.000	.741	.000	.000
INNO_Prod	.000	.000	.000	.797	.000	.000

Standardized Direct Effects (Group number 1 - Default model)

	CE	INNOxCE	EO	INNO	RC	EP
RC	.000	.000	.158	.851	.000	.000
EP	.350	.232	.032	-.169	.569	.000
CE_Demand	.684	.000	.000	.000	.000	.000
CE_Relate	.622	.000	.000	.000	.000	.000
CE_Gov	.649	.000	.000	.000	.000	.000
CE_Firm	.798	.000	.000	.000	.000	.000
EP_Fin	.000	.000	.000	.000	.000	.703
INNO1xCE2	.000	.854	.000	.000	.000	.000
INNO1xCE3	.000	.653	.000	.000	.000	.000
EP_NFin	.000	.000	.000	.000	.000	.882
INNO1xCE4	.000	.839	.000	.000	.000	.000
INNO3xCE5	.000	.563	.000	.000	.000	.000
INNO3xCE4	.000	.904	.000	.000	.000	.000
INNO3xCE3	.000	.640	.000	.000	.000	.000
INNO3xCE2	.000	.881	.000	.000	.000	.000
INNO2xCE5	.000	.494	.000	.000	.000	.000
INNO2xCE4	.000	.866	.000	.000	.000	.000
INNO2xCE3	.000	.673	.000	.000	.000	.000
INNO1xCE5	.000	.513	.000	.000	.000	.000
INNO2xCE2	.000	.784	.000	.000	.000	.000
RC_Adc4	.000	.000	.000	.000	.807	.000
RC_Adc2	.000	.000	.000	.000	.737	.000
RC_Adcl	.000	.000	.000	.000	.736	.000
RC_Inc3	.000	.000	.000	.000	.734	.000
RC_Adc3	.000	.000	.000	.000	.724	.000
RC_Inc2	.000	.000	.000	.000	.660	.000
RC_Incl	.000	.000	.000	.000	.730	.000
EO_Risk	.000	.000	.684	.000	.000	.000
EO_Pro	.000	.000	.885	.000	.000	.000
INNO_Proc	.000	.000	.000	.816	.000	.000
INNO_Tech	.000	.000	.000	.741	.000	.000
INNO_Prod	.000	.000	.000	.797	.000	.000

Standardized Indirect Effects (Group number 1 - Default model)

	CE	INNOxCE	EO	INNO	RC	EP
RC	.000	.000	.000	.000	.000	.000
EP	.000	.000	.090	.484	.000	.000
CE_Demand	.000	.000	.000	.000	.000	.000
CE_Relate	.000	.000	.000	.000	.000	.000
CE_Gov	.000	.000	.000	.000	.000	.000
CE_Firm	.000	.000	.000	.000	.000	.000
EP_Fin	.246	.163	.086	.222	.400	.000
INNO1xCE2	.000	.000	.000	.000	.000	.000
INNO1xCE3	.000	.000	.000	.000	.000	.000
EP_NFin	.309	.204	.108	.278	.502	.000
INNO1xCE4	.000	.000	.000	.000	.000	.000
INNO3xCE5	.000	.000	.000	.000	.000	.000
INNO3xCE4	.000	.000	.000	.000	.000	.000
INNO3xCE3	.000	.000	.000	.000	.000	.000
INNO3xCE2	.000	.000	.000	.000	.000	.000
INNO2xCE5	.000	.000	.000	.000	.000	.000
INNO2xCE4	.000	.000	.000	.000	.000	.000
INNO2xCE3	.000	.000	.000	.000	.000	.000
INNO1xCE5	.000	.000	.000	.000	.000	.000
INNO2xCE2	.000	.000	.000	.000	.000	.000
RC_Adc4	.000	.000	.127	.687	.000	.000
RC_Adc2	.000	.000	.116	.628	.000	.000
RC_Adcl	.000	.000	.116	.627	.000	.000
RC_Inc3	.000	.000	.116	.625	.000	.000
RC_Adc3	.000	.000	.114	.617	.000	.000
RC_Inc2	.000	.000	.104	.562	.000	.000
RC_Incl	.000	.000	.115	.621	.000	.000
EO_Risk	.000	.000	.000	.000	.000	.000
EO_Pro	.000	.000	.000	.000	.000	.000
INNO_Proc	.000	.000	.000	.000	.000	.000
INNO_Tech	.000	.000	.000	.000	.000	.000
INNO_Prod	.000	.000	.000	.000	.000	.000

Factor Score Weights (Group number 1 - Default model)

	CE_Demand	CE_Relate	CE_Gov	CE_Firm	EP_Fin	INNO1xCE2	INNO1xCE3	EP_NFin	INNO1xCE4	INNO3xCE5	INNO3xCE4	INNO3xCE3	INNO3xCE2	INNO2xCE5	INNO2xCE4	INNO2xCE3	INNO1xCE5	INNO2xCE2	RC_Adc4	RC_Adc2	RC_Adcl	RC_Inc3	RC_Adc3	RC_Inc2	RC_Incl	EO_Risk	EO_Pro	INNO_Proc	INNO_Tech	INNO_Prod
CE	.106	.130	.158	.199	.025	.144	-.103	.047	.273	.294	-.106	.278	-.450	-.413	.083	-.302	-.023	.313	.074	.024	.011	.051	-.028	-.030	.018	.008	.015	.001	.005	.040
INNOxCE	-.010	.005	.012	.002	-.002	.392	.046	-.002	.133	-.037	.370	-.296	.328	.052	.216	.121	-.214	-.219	-.011	-.002	.000	-.001	.004	-.003	.003	-.009	.013	.006	.003	.001
EO	-.031	.036	.038	.010	.002	-.015	-.545	-.042	1.909	.340	2.594	-.883	-1.724	-.211	-2.246	1.055	-1.031	.648	-.012	-.028	.035	.103	.191	-.337	.115	.198	.811	.048	.001	-.096
INNO	-.011	.025	.006	.000	.016	-.082	-.358	-.015	.720	.406	-1.155	.910	-.028	-.161	.609	-.865	-.334	-.099	.092	.043	.055	.043	.044	.018	.024	.012	-.058	.222	.152	.252
RC	.024	.029	.035	.024	.045	-.205	-.395	.022	.522	.262	-.416	.169	-.176	-.180	-.087	.217	-.069	.218	.181	.089	.100	.106	.067	.002	.061	-.001	.019	.049	.040	.063
EP	.013	.029	.030	.044	.163	.127	-.134	.511	.182	.094	.022	-.043	.032	-.083	.085	.117	-.092	.047	.089	.036	.015	.035	-.075	-.011	.013	.008	.007	.001	.005	-.003

Biography

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