

**THE MEDIATING EFFECT OF
INTERNATIONALISATION ON FIRM
PERFORMANCE AMONG E&E
MANUFACTURING SME'S**

by

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**Thesis submitted in fulfilment of requirement
for degree of
Masters of Arts**

August 2019

ACKNOWLEDGEMENT

Throughout the journey to complete this thesis, I have found incredible experience of a lifetime. Strength and discipline are the most vital aspects for me and they have been fundamental in the completion of my thesis.

First and foremost, I would like to express my sincere gratitude to my supervisor Associate Professor Dr. Shankar Chelliah, who had given me continuous motivation and inspiration throughout my post graduate journey. Critical suggestions, ideas and thoughts have been provided throughout the journey and he has given me considerable support.

I would also like to thank the respondents who were involved in the validation survey for this research project: Without their passionate participation and input, the validation survey could not have been conducted successfully.

Finally, I must express my very profound gratitude to my parents and family for providing me with unfailing support and continuous encouragement throughout my years of studies and through the process and research and writing this thesis. This accomplishment would not have been possible without them. Thank you

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**KESAN PENGANTARA INTERNASIONALISASI TERHADAP PRESTASI
FIRMA PKS DALAM KALANGAN INDUSTRI PEMBUATAN E&E
MALAYSIA**

ABSTRAK

Industri Pembuatan E&E (Elektrik & Elektronik) dianggap sebagai perniagaan yang menambah nilai kepada ekonomi Malaysia. Penyelidikan ini menyediakan rangka kerja teoritis yang baru untuk menerangkan hubungan kelebihan daya saing (pembezaan inovasi, pembezaan pemasaran, kepimpinan kos rendah, pembezaan kualiti dan perbezaan perkhidmatan), sikap pengurusan, dan internasionalisasi sebagai faktor pengantara terhadap prestasi firma PKS (Perusahaan Kecil dan Sederhana) untuk pembuatan E&E di Malaysia. Rangka konseptual yang baru, membantu firma-firma untuk menentukan faktor-faktor yang menyumbang kepada kejayaan prestasi firma dan keberkesanan internasionalisasi PKS untuk menyokong pembuatan E&E. Hasilnya, prestasi firma PKS E&E menunjukkan hubungan positif terhadap dengan kelebihan daya saing (pembezaan pemasaran, kepimpinan kos rendah). Kesan pengantara internasionalisasi, menunjukkan hubungan positif yang signifikan antara kelebihan daya saing (pembezaan inovasi, pembezaan pemasaran dan kepimpinan kos rendah) serta sikap pengurusan firm PKS E&E. Internasionalisasi membantu firma PKS E&E berkembang secara global dengan mewujudkan platform dan menyediakan sumber yang cukup untuk mengembangkan kelebihan daya saing firma (pembezaan inovasi, pembezaan pemasaran dan kepimpinan kos rendah) serta sikap pengurusan. Model penyelidikan diuji dengan teknik Partial Least Squad (PLS). Kaedah kuantitatif digunakan dalam menyelesaikan tesis ini.

THE MEDIATING EFFECT OF INTERNATIONALISATION ON FIRM PERFORMANCE AMONG E&E MANUFACTURING SME'S

ABSTRACT

E&E Manufacturing industry is considered as a value-added business to Malaysian economy. This research addresses new theoretical framework to describe the relationship between competitive advantages (innovation differentiation, marketing differentiation, low cost leadership, quality differentiation and service differentiation), management attitudes, and internationalisation as the mediating factor towards firm performance for the E&E manufacturing SME's. The conceptual framework, helps firms to determine the factors that contribute to the success of firm performance and effectiveness of internationalisation to support E&E manufacturing. The results indicate that E&E manufacturing SME's firm performance are positively related to competitive advantages (marketing differentiation, low cost leadership). With the moderating effect of internationalisation, shows significant positive relationship between competitive advantages (innovation differentiation, marketing differentiation and low cost leadership) and also management attitudes. Internationalisation is important to strengthen E&E manufacturing SME's firm performance, by helping to improve firm's competitive advantages and management attitudes. Internationalisation helps E&E firms to expand globally by creating a platform and provide sufficient source to expand the firms' competitive advantages (innovation differentiation, marketing differentiation and low cost leadership) and also management attitudes. The research model is tested using the Partial Least Squad (PLS) technique. The quantitative method was employed in completing this thesis.

CHAPTER 1

INTRODUCTION

1.0 Introduction

In this chapter, background of the study, problem statement, research objectives and research questions, significance of study, and the key definition in addition to the study organization will be discussed. In background of the study section, this research will discuss about Electrical and Electronics (E&E) manufacturing of Small and Medium Enterprises (SME's) in Malaysia. Problem statement section will discuss about the problem that will be addressed in this study. Research objectives and research questions will raise the key questions that needs answers for the problem statement. This chapter will also discuss regarding implication of the study in terms of academic and practice. Key definitions section will discuss about the definition of key terms that to be used in this study. Finally, it will discuss about organizations of chapters that are to be added in this study.

1.1 Background of the Study

The government has set a high expectation to attain a high-income nation status. Henceforth, the Malaysian economy needs to achieve a higher level of growth. SME is the significant sector that can contribute to the economic growth and E&E manufacturing SME's have the prospect to perform better (Wiesner, 2016). Thus, as more and more SME's are engaged in international business, the contribution to the economic growth increases eventually.

Instead of one of Malaysia's most crucial ecosystems, the manufacturing sector plays an important role in the economy of Malaysia. Malaysia is currently the world 's

leading location for semiconductor assembly and testing, contributing more than 40 percent of Malaysia's exports of E&E, and is home to six of the world's ten largest semiconductor companies, along with more than 50 international companies, including Texas Instruments, Freescale Semiconductor, Infineon and Intel (Chiang, 2017).

The manufacturing sector of E&E is expected to increase the impact of RM53.4 billion on gross national income (GNI) and create 157,000 new jobs by 2020. In addition, in the next few years, the connectivity of information or the Internet of Things (IoT) will initiate the sustainable development of the semiconductor industry (Chiang, 2017).

As from a survey, in Malaysia, the involvement of SMEs to total GDP by key economic activity increases from 29.4 % for the year 2005 to 32.7 % in the year 2012 and its projected to increase by 41% reaching the year 2020 (Taylor, 2013).

Table 1.1: *Contribution of SMEs to Overall GDP by Key Economic Activity (%)*

Year	2005	2006	2007	2008	2009	2010	2011*	2012*
	% share to GDP							
Agriculture	3.4	3.5	3.4	3.3	3.4	3.4	3.4	3.3
Mining & Quarrying	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Construction	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.9
Manufacturing	8.1	8.1	8.2	7.8	7.4	7.7	7.9	7.9
Services	17.0	17.2	18.2	19.1	19.9	19.8	20.1	20.2
Plus: import duties	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.4
Share of SME GDP to Overall GDP	29.4	29.6	30.7	31.2	31.7	32.0	32.5	32.7

Source: Department of Statistics, Malaysia and SME CORP, Malaysia Annual Report 2016

Moreover, from the table above, manufacturing industries in Malaysia has a decreased in the overall GDP contribution from the year 2008 to 2009, which is from 7.8% to 7.4 %. The drop in the overall GDP is due to global recession that has taken place in the years. However, the manufacturing sector has shown an increase in the

GDP for the following years because of a recovery from the global economic recession (Aaby, 2013). Thus, many SME's especially in E&E sectors in manufacturing industry has gained advantage as rising growth stimulates new investments and regulators are recognizing the sector's importance and are increasingly putting more emphasis on bolstering manufacturing SME's across the country (Mazur, 2013).

Over the last year or so, regulators have rolled out several initiatives and incentives to encourage the growth of SMEs. In recent years, the Malaysian annual national budgets have also given considerable allocations to the development of manufacturing SME's. Various efforts were implemented to facilitate financing and market access for small businesses. Focus was also given to capacity building and talent development (Kukenova, 2015).

Hence, to compete with the international market today, SMEs needs to capitalise their key competitive advantage to sustain themselves in the international platform and increase the respective firm's performance. It is therefore well recognized that SMEs need dedicated skills to fight in global markets (Kuivalainen, 2010). Although globalization has removed barriers to domestic and global markets that allow small and medium-sized enterprises to export their products successfully, SMEs still face obstacles in terms of resource restrictions (Aaby, 2013) . SMEs must have organizational capabilities in order to establish their limited resources competently, as resources are not productive on their own (Grant, 2002).

In the global era, SMEs faces challenges to survive and adapt to the new setting and policy from internal and external factors. By spotting and analysing the firm's reaction and decision in overcoming these changes, it will help us to understand the growth pattern of a company.

The annual report of Malaysia SME 2015/2016, shown that the government has implemented few policies and assigned the funds to assist Malaysian SME's. Each allocation allocated by the government were pointed at improving the SME's position in export market (Malaysian SME Corp, 2016). For instance, the government provided the technical knowledge training to improve the labour productivity for SMEs.

Table 1.2: *Total Establishment and number of SME's by sector in Malaysia*

Sector	Total Establishment (a)	Total SMEs (b)	Percentage (%) of SMEs over Total Establishments (b)/(a) *100	Percentage of total SME's by sector
Services	591,883	580,985	98.1	90.0%
Manufacturing	39,669	37,861	95.4	5.9%
Agriculture	8,829	6,708	76.0	1.0%
Mining & Quarrying	418	299	71.5	0.1%
Construction	22,140	19,283	87.1	3%
Overall Total	662,939	645,136	97.3	1.0

Source: Department of Statistics, under "Selected Agricultural Indicators 2015"

Table 1.2 illustrates the total establishment of by sectors. The top numbers of SME's establishment are from the services sectors then followed by manufacturing sector. The manufacturing sectors owned 5.9% of the total SME's. And in terms of total employments, the manufacturing sector contributes the more employment opportunities for the local. This is because 5.9% of SMEs in the manufacturing sector contributes about 19.1% of jobs to local citizens. The Table 1.3 below shows the total employment of SME's by sectors.

Table 1.3: *Distribution of Total Employment by Size and Sector*

Sector	Micro	Small	Medium	Total Employment	Percentage of Total Employment by Sector
Services	1,219,801	1,002,186	388,386	2,619,373	71.2%
Manufacturing	67,891	360,299	270,522	698,713	19.0%
Agriculture	13,718	24,864	40195.0	78,777	2.1%
Mining & Quarrying	274	1,454	4,037	5,756	0.2%
Construction	65,153	89,277	121,201	275,631	7.5%
Overall Total	1,366,837	1,478,080	824,341	3,678,250	100.0%

Source: Department of Statistics, Malaysia and SME Corp. Malaysia Annual Report 2016

Table 1.4: *GDP of Economic Activity at Constant 2010 prices in Percentage share to overall GDP*

Sector	Percentage Share to GDP by Year					
	2010	2011	2012	2013	2014	2015
Services	51.2	52.0	52.5	53.2	53.5	53.5
Manufacturing	23.4	23.5	23.2	22.9	23.0	23.0
Agriculture	10.1	10.2	9.8	9.5	9.2	8.9
Construction	3.4	3.4	3.8	4.0	4.3	4.4
Mining & Quarrying	10.9	9.9	9.5	9.2	9.0	9.0
Plus: import duties	0.9	1.0	1.1	1.1	1.1	1.3
Overall Total	100	100	100	100	100	100

Source: Department of Statistics, under “Selected Manufacturing Indicators 2015”

Table 1.4 illustrates that the manufacturing sector is the second highest sector that major contributes to the economic growth lead by the highest as the service sector. The growth by the manufacturing sectors is led by the continuous growth and expansion in the recent times.

The data above shows in the Annual Report of Malaysian SMEs 2014/2015, the main contributor of GDP is services sectors that owned 53.5% for the year 2015 following by the manufacturing industry that is 23%. However, referring to the total numbers of SMEs in Table 1.2, service sector owned the most numbers of SME and only 5.9% of SMEs are manufacturers. This is shown that manufacturing sector can bring a greater growth on the Malaysian GDP as manufacturing sectors are much more active in export market compare to other sectors. This could be related to most of the multinational companies depends on SME's manufacturers as their preferred suppliers as well.

Table 1.5 illustrates the growth of GDP share within the year 2010 and 2015 is a positive of 0.7%. The statistical data had proven that manufacturing industry is performing well in comparison to other sectors.

Table 1.5: *SME GDP share by Key Economic Activity (constant prices 2010 prices)*

Sector	Percentage Share to GDP by Year			SME GDP Growth
	2010 (%share)	2015 (%share)	Increase/Decrease in share	CAGR1 2011-2014
Overall Total	32.2	36.3	+4.1	6.7
Agriculture	4.3	4.3	0.0	2.9
Services	19.6	21.4	+1.8	7.1
Mining & Quarrying	0.0	0.2	+0.15	9.3
Construction	0.9	2.1	+1.2	10.9
Manufacturing	7.2	7.9	+0.7	6.7

Source: Department of Statistics, Malaysia & SME Corp. Malaysia Annual Report, 2016

The growth of manufacturing sector is increasing and E&E manufacturing business remains as one of the foremost contributors to the manufacturing sector. Therefore, the increase in the sector will bring a positive effect to the E&E industry.

Bearing in mind, the close the connection between the manufacturing sector and E&E industry, conducting this research is essential to find out the best possible ways and solutions to increase more the productivity of the E&E industry will have a huge and direct impact on the growth of the manufacturing sector as well on the economic growth of the country.

Therefore, it could be concluded from Table 1.1 to Table 1.5, that manufacturing sector is performing in a constant growth rate at 0.7% over the last five years. Therefore, the growth of the manufacturing industry will positively influence the growth of E&E industries over the coming years.

This research provides ideas to generate effective framework, which will help SMEs to grow in the export performance in the long run. Therefore, competitive advantages play an important role that could highly influence the performance of E&E manufacturing SME's in international market today. Thus, competitive advantages would be the drive for SMEs because the direction of SMEs purely depends on the perspectives and directions received from the top management or the CEOs of the organisation itself (Coviello, 2009). Therefore, this would eventually influence the performance of SMEs in global platform.

Furthermore, those E&E manufacturing SMEs with a competent managerial attitude would be able to enrich both their innovation competences and their competencies within the organisation itself to meet the performance standards internationally which helps to lead the firm's performance to a next level for improvement. This could be done through those top-level managers or CEO who transform themselves as a good leader than just a boss by having good interpersonal skills and applying high order thinking to drive their organisation to the global platform (Pla-Barber, 2007).

A study found that those managers or CEO who developed interpersonal managerial skills as their managerial attitude could develop industry networking, innovation competencies, and abilities to meet performance standards that remain critical for Malaysian SMEs' performance in the global platforms.

In the present day, E&E manufacturing SMEs are playing progressively more essential parts in international platforms. Some of these SMEs earn more than local markets on intercontinental markets. Internationalization has triggered many discussions about the potentials of theories of economic internationalization, traditional theories of internationalization and international theories of entrepreneurship, especially the combination of several theoretical points of view. Instead of some SMEs, the traditional path of internationalization may not be taken while it has a competitive advantage in terms of products or resources.

Several firms, however, start intercontinental set-ups while they are still relatively small and progressively grow their business overseas. Study on the export experience of small businesses has found a wide range of important issues; the impact of the size of the company (Ali, 1991), competitive advantages, management characteristics and international knowledge and experience (Moini, 1995) for the internationalization of an organization.

It is therefore useful to understand the role of size in the development of internationalization for SMEs and to uncover the elements of internationalization. The range of internationalization of SMEs has recognized significant scientific attention. In the last half-decade, academics and researchers have focused their attention on the internationalization of small and medium-sized enterprises in emerging economies, such as China (Ahlstrom, 2008), India (Saini, 2008), Malaysia (Shankar, 2010), Taiwan and Singapore (Sim, 2003), and Vietnam (Thai Chong, 2008).

In general, questions relate mainly to the capacity of internationalization arrays (Anderson, 2006) and the influence of interaction on the internationalization of Malaysian SMEs (Zain, 2007). However, not all small and medium-sized enterprises face significant prospects for internationalization. Internationalization approaches diverge thoroughly in accordance with inborn company characteristics such as early productivity, skill intensity, innovation and management characteristics.

Aspects manipulating internationalization decisions of manufacturing small and medium-sized enterprises can be divided into two clusters comprising internal and external aspects of the firm. Company-specific aspects include company size, labour productivity, and intensity of skills, innovation companies and foreign ownership. External elements include individualities of the home country, such as programs to promote exports, costs and time associated with exports and transport costs, and characteristics of the host country, such as tariffs, regulations, political risk factors and geographical and cultural space.

To the extent that internationalization is a crucial tactic used by small and medium-sized enterprises manufacturing in E&E to significantly increase their competitiveness and development performance, it is obviously essential to take into account the details of the external internationalization undertakings of primary enterprises, both in terms of their choice of methods and how intensively they are involved in them.

One of the utmost outline for economic expansion of emergent marketplaces is to progress the economical competence of the small and medium enterprises (SMEs) to attain a positive international business. To overcome the restraint of internal resources E&E manufacturing SMEs look for supportive connection with external associates, which in this perspective serves as a source of resources. In addition, the

performance of small firms is powerfully connected to the human capital precisely the managerial attitudes.

One of the utmost vital plan for economic growth of developing marketplaces is to progress the competitive capability of the small and medium enterprises (SMEs) to attain a positive global trade. In addition, experimental market research have shown that in the area of export marketing and the internationalization of SMEs, precisely managerial attitudes of human capital are important (Chiang, 2017)

Due to its compactness, small businesses are restricted by the lack of tangible resources to compete on the global market. It is even more so because international business is activity that requires resources. Therefore, international knowledge and experience is vital to overcoming the resource constraints of SMEs, seeking a supportive relationship with foreign partners (Knight, 2004).

This is because a strong and close relationship serves as a channel for the information flow between partners (Ambler, 2000). Because information and knowledge are a prerequisite for global business success (Johanson, 2006), developing a relationship of quality is a top priority for SMEs. In spite of the standing of managerial attitude and international knowledge and experience excellence among SMEs in emergent markets is rare. Therefore, in line with the research gap, this study attempts to investigate the role of top competitive advantage competence in relationship with the turn affects the firm's performance in international markets.

1.2 Problem Statement

Electrical & Electronics (E&E) is a major Malaysian sector that has developed since 1972 through leaps and bounds. Manufacturing contributes 23% of total GDP and one of Malaysia's highest GDP (Malaysia SME Corp, 2017). Malaysia is a lead hub for the manufacture of electrical components, with global companies such as factories Intel, AMD, Freescale Semiconductor, ASE, Infineon, STMicroelectronics, Texas Instruments, Fairchild Semiconductor, Renesas, X-FAB and major Malaysian-owned companies such as Green Packet, Silterra, Globetronics, Unisem and Inari which have subsidized to the stable development of the semiconductor industry in Malaysia (Wong Siew, 2015) .

There are more than 50 companies in Malaysia to date, mostly MNCs producing semiconductor devices. The E&E segment is focused on deepening and strengthening technology as Malaysia progresses (Wong Siew, 2015). Semiconductors are expected to continue spearheading the growth of the E&E industry in Malaysia. Therefore, with the growth of E&E segments, Multinational Companies (MNC) are very much dependant on SME's as suppliers to sustain their presence in Malaysia. As SME's are referred as the backbones of MNC's today adhering the operation support rendered.

Therefore, SME's in E&E sector globally should be competitive enough to continue being and serving to be a better supplier to the MNC's. Looking at another perspective, MNC's are expanding regionally today. Thus, this urges SME's in Malaysia to be able to export their products to the regions MNCs are expanding. However, the internationalisation of SME's in E&E sector is still as low as 9% (Chiang, 2017) .

One of the main reason that is adhering E&E SME's to go global today is due to the constraints that SME's fails to identify and capitalise on their competitive advantages. For example from difficulty in facing recession, barrier from global sourcing, low productivity, lack of managerial capabilities, lack of financing, difficulty in accessing management and technology, heavy regulatory burden and others (Zehir, 2006).

Besides, SMEs are dealing with intensified global challenges, new emerging technologies in ICT and production process as well as increasing factor costs, which affect the firm competitiveness. SME's are unlikely to survive in the present situation without making fast move to improve productivity, to conform to international standards, to train and employ skill management and professional staff to face competitions (Hai, 2014).

Most nations are currently showing a diminishing economic growth and increasing costs of production, which indicates that recession is unavoidable. The common aftermaths of a recession are lower expenditures by consumers, lower demand for products and services, lower productions and job cuts. SMEs, small in nature, are affected in larger degree especially those involved with trading and supplying products or services to other businesses. Lower cash flows and limited financing are the major challenges faced by the SMEs during this bearish period. However, evidence from other regional economies suggests that SMEs came through the crisis better than large enterprises. The avoidance of a future crisis could, therefore, depend upon developing a competitive SME sector that is able to compete in both domestic and external markets (Mazur, 2013).

Creating workable model for the E&E manufacturing SME's will directly resolve the reason of the firms being not competitive enough to internationalise. Firms will perform better once the competitive advantages are capitalise through internationalisation.

1.3 Research Questions

Based on the fundamental ideas behind this study, together with the background of the study and problem statement, four research questions have been identified:

- Does competitive advantages (innovation differentiation, marketing differentiation, low cost leadership, quality differentiation and service differentiation) has a positive relationship with internationalisation among E&E manufacturing SME's?
- Does management attitude has a positive relationship with internationalisation of E&E manufacturing SME's?
- Does internationalisation has a positive relationship mediating between competitive advantages (innovation differentiation, marketing differentiation, low cost leadership, quality differentiation and service differentiation) and firm performance of E&E manufacturing SME's?
- Does internationalisation has a positive relationship mediating between management attitude and firm performance of E&E manufacturing SME's?

1.4 Research Objective

The main objective of this research is to study the significant determinants of competitive advantages and SME's internationalisation. In doing so, this research will recognise the following main competitive advantages that adds to SME's performance:

- To examine the relationship between competitive advantages (innovation differentiation, marketing differentiation, low cost leadership, quality differentiation and service differentiation) with internationalisation among E&E manufacturing SME's.
- To examine the relationship between management with internationalisation of E&E manufacturing SME's.
- To examine the mediating effect of internationalisation between competitive advantages (innovation differentiation, marketing differentiation, low cost leadership, quality differentiation and service differentiation), and firm performance of E&E manufacturing SME's
- To examine the mediating effect of internationalisation between management attitude, and firm performance of E&E manufacturing SME's

1.5 Significance of Study

On the theoretical contribution, this research shall contribute to the academic standpoint in terms of improvement in the existing theories of competitive advantage theory (Porter, 1980). The significances of this research shall support above mentioned theories as well as it will add more acquaintance towards firm performance and internationalization of SMEs as an overall and in manufacturing industry to be specific.

This study will highlight the key for Malaysian E&E manufacturing SME's to succeed in the international markets and create a benchmark for all E&E manufacturing SME's to improve their quality and competence. Competitive advantages in terms of innovation differentiation, marketing differentiation, low cost leadership, quality differentiation and service differentiation are one of the major factors that influence technological firms to venture into the international markets.

Furthermore, this research is also significant for SMEs to expand their product differentiations and create brand new products that are equally competitive with other international brands. Thus, by creating brand new products through product differentiations, this could also be avenue for SME's to widen and grow the sales of an organisation which could eventually be a strong factor of competitive advantage that contributes to the performance of SMEs to internationalise.

On the practical contribution, this research on E&E manufacturing companies owned different methods of supply chain compared to companies from other sector. It should be noted that the evolution of technology and demand of E&E products across the globe are impacting the demand and supply quantities. The supply and demand of E&E materials are difficult to predict or forecast due to continuous evolution of E&E technologies.

On the other hand, E&E manufacturing SME's are also required to have a certain level of management attitudes that enable them to survive, and to optimise their production level (Vukelic, 2014). This research will add more knowledge to SMEs for internationalization and that intend to upsurge the firm performance. It will help to the top management, decision makers as well as the marketing personnel to understand

the progression of internationalization and how it adds benefits for the firm for maximizing the performance.

This research is also significant to enhance the human capital among the SME's to perform well at international platform. Hence, through this research, SME's could be able to come up with a solution to tackle their major problems arising due to managing the human capital. For example, when SME's perform well in export performance by going global, resources constraints like inadequate skills of workers can be overcome.

Scarcity of skilful and capable workforces could be easily obtained when SME's goes international, organisation may have a diverse pool to recruit talented and skilled workers with required skill set.

Besides that, this research would also assist SME's to obtain knowledge and technology management as the organisation grows internationally to perform well in firm performance and become a driver for its competitive advantage as well.

The importance and potential of E&E manufacturing industry have highlighted the need for this research to be conducted. At the same time, the study will enable better understanding of the E&E manufacturing company's abilities and needs to survive in the global market. E&E manufacturing industry is one of the most important sectors for a country to sustain on its own and export to the global market. E&E industry is one of the industries that can be foreseen to support the demand of E&E manufacturing components and its potential to expand is immense.

On the other hand, among all manufacturing SME's, the E&E manufacturing companies are ranked as the second highest important companies in Malaysia (Malaysian SME Corp, 2016). For the time being, more international firms from

developed countries are beginning to provide orders and participate because this economic sector has shown rapid growth, especially in the industrial sector.

1.6 Definitions of Key Terms

Competitive Advantages: Competitive advantage is the favourable position an organization seeks in order to be more profitable than its rivals. To gain and maintain a competitive advantage, an organization must be able to demonstrate a greater comparative or differential value than its competitors and may be measured or state to the competences which allow a firm to shape its product so defined and differentiate itself from its competitors (Sin Li, 2006).

Internationalisation: Internationalisation is defined as the development of a firm's accomplishments through national boundaries. It is defined as the process where business gets more involved in the international markets. In the contemporary world, businesses begin operations domestically but must draw up a long-term plan on how the business will be going international. Internationalization phenomenon has significantly changed the landscape for most business resulting to a very dynamic market situation with severe competition for the companies.

Management Attitude: Management attitude refers to the capabilities of management within the organisation, management knowledge and network (Mason, 2014). Management attitude also include the ability of managers to create a strong workplace and culture that facilitate the employees to grow and engage, and ensuring that the business goals and objectives can be achieved. It includes leadership qualities, collaborative decision-making and nurturing creativity and innovation

Firm Performance: In the company's resource-based view (J. Barney, 1991; Wernerfelt, 1984), company-specific capital and capabilities are represented as the grounds for the emerging competitive advantage and thus for the global performance capacity of a company.

SME (Small and Medium Enterprise): The definitions of SME's, can hardly be subsumed into one specific definitions, as there is no regional, or indeed global, consensus on the definition of a Small & Medium Enterprise (SME). Traditionally, SME is defined as a company with 500 or fewer employees (Cavusgil, Knight Riesenberger, 2008). According to the SME Corporation in Malaysia, the definition of an SME is a small scale firm with less than 50 full time employees with an annual turnover of not more than RM10 million; whereas, a medium-scale enterprise is a company with 51 to 150 employees and with an annual turnover of between RM10 million and RM25 million ((Malaysian SME Corp, 2016)

Electrical & Electronics (E&E) sector: The electrical and electronics (E&E) sector is a key driver of industrial development and contributes significantly to GDP growth, export earnings, investment and employment. The E&E industry is targeted under the National Key Economic Areas (NKEA) to gear the nation towards high-income economy by focusing on high-value and high-growth manufacturing activities. The E&E industry can be classified into four sub-sectors namely, electronic components, consumer electronics, industrial electronics, and electrical products.

1.7 Organization of Chapters

Chapter 1 of this study introduced the problem statement and defined the specific problem and design components addressed in the study.

Chapter 2 introduces a literature review and important research related to the problem addressed in this study. It also defines most important theories useful for these studies, followed by a thorough literature review based on all the components referred to in Chapter 1, as well as discussing the research framework and hypothesis development.

Chapter 3 introduces the approach and procedures that used to collect and analyse data. It includes population and sampling, measurements and description of all the necessary analysis for this research study.

Chapter 4 will focus on the variables and measurement methods, data sources, interpretation of the findings. In the later part of Chapter 4 the results from the analysis, including respondents demographic, hypothesis results and analytical results will also further discussed.

Chapter 5 will be the conclusion and recommendations of the research. The end of chapter will be including summary of the chapter able to summarise information of the whole chapter. Chapter 5 will also discuss on the limitation and suggestion for future studies.

CHAPTER 2

LITERATURE REVIEW

2.0 Introduction

Chapter 2 will focus on literature regarding E&E manufacturing SME's, competitive advantages, management attitude, internationalisation and firm performance. The beginning of chapter 2 relates to SME's in Malaysia, discussing all related literature on E&E manufacturing SME's, including the competitive advantages dimensions ; innovation differentiation, marketing differentiation, low cost leadership, quality differentiation and service differentiation and also management attitudes. The later part of chapter 2 will discuss on the internationalisation and firm performance of E&E manufacturing SME's. Framework model will be constructed by extracting views from the literature review, theory and past studies.

2.1 General SME's definition.

It is hard to unite all definitions of SME's into one as there is no regional or global consensus on the definition of a Small & Medium Enterprise (SME). SME's definition differ widely among the East Asian economies and the Asia Pacific Economic Cooperation (APEC). The definition of SME is dependent on the phase of the economic development as well as prevailing social conditions. Some indexes are traditionally utilised to define SME's such as the number of employees; the invested capital; the amount of assets, the sales volume, and the production capability. The commonly used index, however is the number of employees. In Unites States, SME is defined as a company with 500 or fewer employees (Cavusgil, 2008). In Taiwan, SME is defined as an establishment or firm with not more than 650 employees (Chaney, 2007).

In Malaysia, the definition of SME is determined by government agencies and outstanding researchers according to the condition of SME's from all sectors in Malaysia. According to the SME Corporation in Malaysia, a small-scale firm in the manufacturing sector is a company with less than 75 full-time employees and an annual sales turnover ranging between RM300'000 to RM15 million. For other sectors, SME's is defined as a company which has less than 30 employees and an annual sales turnover of between RM300'000 to RM 3 million. On the other hand, a medium-scale enterprise in the manufacturing sector is a company with 75 to 200 employees and with an annual sales turnover of between RM15 million to RM50 million. Whereas for other sectors, companies with a sales turnover of between RM3 million to RM20 million with 30 to 75 employees are classified as medium sized firms (SME CORP, 2016).

The definition for Malaysian SME is different as compared to other countries, according to (Harvie, 2004). Although definitions within countries might differ, one commonality can be found. The clear majority of SME's are relatively small and over 95% of SME's in the region employ less than 100 people. There are broad companies of the role of SME's across countries despite the differing definitions. However, the different adopted definitions fundamentally show no effect on the key issues related to SME's.

New SME definition based on size			
Category	Micro	Small	Medium
Manufacturing	Sales turnover of less than RM300,000 or employees of less than 5	Sales turnover of less than RM300,000 to less than RM15 mil or employees from 5 to less than 75	Sales turnover from RM15 mil to not exceeding RM50 mil or employees from 75 to not exceeding 200
Services and other sectors	Sales turnover of less than RM300,000 or employees of less than 5	Sales turnover from RM300,000 to less than RM3 mil or employees from 5 to less than 30	Sales turnover from RM3 mil to not exceeding RM20 mil or employees from 30 to not exceeding 75

Figure 2.1: The New SME Definition Bases on Size & Sales Turnover

Source: Malaysia SME Corporation, Annual Report year 2016

Malaysia researchers have conducted researches to understand the weakness and inconsistencies in the definition of SME and in response redefined SME, (Hashim, 2000) developing more uniform and consistent definitions of SME's in Malaysia for all sector.

2.2 E&E Manufacturing SME's in Malaysia

Electrical and electronics (E&E) industry have been the major catalyst for the growth of Malaysia's manufacturing sector. Of the various export-based industries in Malaysia, the E&E sector has been the major catalyst for the country's economic growth since the 70s. It is therefore not surprising that Malaysia's E&E manufacturing sector is highly important for the growth of the nation. With this having said, E&E manufacturing SME's plays a prominent role contributing to the growth of the sector as well.

Malaysian E&E manufacturing SME's already show capabilities in this area but are small and need the impetus and assistance to grow to become globally

competitive entities. As SME's do not enjoy the economies of scale that larger MNCs enjoy, therefore SME's can thus leverage on their firm's competitive advantages.

Subsequently, SMEs in this research comply with these investigation criteria. In this review, the E&E manufacturing sector refers to the monetary area associated with activities such as processing, assembly and production of local market and export end products.

With E&E manufacturing SME's are also vastly involves in investigating new ideas or materials for items just to improve existing items gradually. Researchers moreover challenge to locate the next big thing that gives the edge to your organization in the market by presenting thoughts for an enhanced product or through development of a new, propelled process.

The manufacturing business in Malaysia is vast, however has shown longstanding dominance in electronics and other sectors. Malaysia was broadly perceived as a standout amongst the best nations in the world. The manufacturing sector has indeed helped Malaysian exports, in particular electrical and electronic products, and has become the crucial aspect in persistent rapid financial development. This monetary change prompted the foundation of many SMEs in the manufacturing industry. In any case, the development technique for SMEs are mainly emphasized on the domestic – oriented market, small-scale enterprises of the commercial and industrial community (NSDC, 2005).

Therefore, this research will study of the mediating effect of internationalisation of SME's in E&E manufacturing sectors. The determinants of this research are based on the literature discussion of by the mediating effect of internationalisation on firm performance.

This review of studies highlighted some critical evaluations of the relationship between competitive advantages, management attitudes through internationalisation towards firm performance. The results showed that SMEs tend to carry out internalization activities more strongly than large companies.

SMEs have also been observed progressively investigating business sector potential in the global field. At the end of the day, these organizations are searching for more extensive market for their items. Obviously, all companies in the investigation believe that internationalisation is an attractive action and can promote the growth and benefit of the company.

Proposed by Shankar (2010) that future studies should discover the link between modern theories of management and the performance of small and medium-sized enterprises in the rapidly developing economy and develop an integrative framework for the successful examination and understanding of strategic factors for the management of SMEs.

Hence, the studies by Shankar (2010) have looked at the current strategy practices, performance measurement and problems faced by local SMEs (Shankar, 2010). The results revealed that the organization of efficient production and the development of business strategy lacks skills and knowledge. The results of this literature indicated that SME's lacked a documented strategy and appropriate procedures for developing and measuring performance. Most of the E&E manufacturing SMEs could not plan the long-term strategies that are essential for internationalization for more than five years.

The literature further noted that E&E manufacturing SMEs in Malaysia are well behind SMEs in Asian countries like Taiwan, Korea or Singapore in terms of