

The Relationship between Distinctive Capabilities, Strategy Types, Environment and the Export Performance of Small and Medium-Sized Enterprises of the Malaysian Manufacturing Sector

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This study was conducted to investigate the relationship between distinctive capabilities, strategy types, environment and the export performance of SMEs in the Malaysian manufacturing sectors. The conceptual framework is developed based on the distinctive capabilities, strategy types, environment and export performance. This study is based on a sample survey consisting of 121 SMEs in the manufacturing sector. Using structured questionnaires, the data were collected by mail as well as by interviews with owner-managers of the SMEs. The findings indicate that there is no significant relationships between distinctive capabilities and the export performance of SMEs. However, the findings shows that there are significant relationship between differentiation strategy type and the export performance of SMEs. The findings also show that there is a significant environment moderating effect on the relationship between the differentiation strategy type and the export performance of SMEs.

Key words: small and medium-sized enterprises (SMEs), distinctive capabilities, strategy types, environment

Introduction

Small and medium-sized enterprises (SMEs) play a significant role in the business system of both developed and developing economies (United Nations 1993). This study examines the impact of distinctive capabilities and strategy types on the export performance of SMEs, and the environment moderating effect on the relationship between the distinctive capabilities and strategy types on the export performance of SMEs. The model built suggested that the relationship between distinctive capabilities and strategy types can affect SMEs export performance and that the environment moderates these relationships. In the Malaysian context, discussion on small-sized enter-

prise is always associated with medium-sized enterprises. Like other developing countries, Malaysia is also having difficulties in considering a definition of SMEs. This study defined SMEs as firms that employ fewer than 200 employees, based on the previous research done by Salleh (1990) and Asri (1999). This definition is similar to the one used by the World Bank (1984), United Nations (1986) and the Asian Development Bank (1990) who defined small enterprises as firms employing fewer than 50 employees and medium enterprises as firms employing between 50 to 199 employees.

Literature Review

THE DISTINCTIVE CAPABILITIES

The literature on strategic management suggests distinctive capabilities or competencies as an important part of an organization's resources and competitive advantage. Mintzberg and Quinn (1991) noted that the theoretical relevance of distinctive capabilities as a source of competitive advantage can be traced back to the early work by Selznick (1957).

Aaker (1989) noted that the assets and skills of the firm, which are the basis for competition, provide the foundation for sustainable competitive advantage. Furthermore, Aaker pointed out that it is the essence of strategic management to develop and maintain these assets and skills as well as to choose these strategies so that they can be turned into sustainable competitive advantages.

Basically, resources can be grouped into tangible and intangible assets. Ansoff (1965), Wheellen and Hunger (1995), and Price (1996) classified business functional areas into general administration, operations/ production, marketing, finance, human resource management, engineering and R&D and public relations. Hitt and Ireland (1985) developed a distinctive capabilities instrument comprising 55 capabilities grouped according to seven functional areas; (a) general administration, (b) production/operations, (c) engineering, research and development, (d) marketing, (e) finance, (f) personnel, and (g) public and governmental relations. The distinctive capabilities variables used in this study are adopted from this literature review.

STRATEGY

Strategy is defined as a major action taken or planned by the management of a business organization, considering its resources, skills and environment risks. Corporate strategy usually refers to the product-market choices of the firms (Hofer and Schendel 1978).

Strategic management is important to organisations (Wheelen and Hunger 1995). Firms use business strategy to outline the fundamental steps that they plan to follow in order to accomplish their objectives. Glueck and Jauch (1984) grouped the objectives to be achieved by organisations in order to achieve long range objectives such as to generate profits, improve marketing and sales, objectives related to the workforce such as efficiency, motivation, as well as improving corporate responsibility.

There are three different levels of corporate level strategy: business level strategy and functional level strategy, and the theoretical and empirical studies of the relationship between strategy and organisational, which have mainly emphasised business level strategy (Lee 1987).

Porter (1980) noted that a firm can gain its competitive advantage by producing value for its customers. Porter also stressed that a firm can gain its competitive advantage by performing the chain of strategically important activities (such as production, marketing, sales, service, human resource management, technology development, procurement activities) cheaply or better than its competitors. Further, Porter concluded that strategic types based on these activities are known as generic strategies. According to Porter, the three generic strategies are low cost, differentiation and focus. This study adopts Porter's three generic strategies (low cost, differentiation, focus) for the research. The low cost strategy is the strategy that focuses on high productivity, low margin products, budget price and cheapest product. The differentiation strategy is the strategy that focuses on best product, best quality, great image, best service, premium price and intensive campaign. The niche strategy is the strategy that focuses on custom-made, best meets customer needs, and a specific customer group or region.

ENVIRONMENT

Environment refers to the uncertainty of a firm's external task environment and the intensity of competition that affects its business activities. Mintzberg's view of strategy as an emergent resultant between firm's managers' intentions and environment influences (Mintzberg 1994) and co-evolutionary perception on organizational and industrial change (Volberda and Lewin 2003). These changes will propagate through value chains and sectors providing a new environment for SMEs. SMEs need to be suited to the environment and find their place and procedures as a structural continuum. Raymond and Croteau (2006) also suggest that SMEs in the business

environment require strategic choices for development in product innovation, market expansion and network extension.

There are two aspects in environments, i. e., internal environment and external environment. Over the years, numerous studies have been carried out examining the effectiveness of strategy development processes between environments with the firm's performance (Mintzberg 1990; Hart and Banburry 1994; Fredrickson 1984; Venkatraman and Prescott 1990). Furthermore, McLarney's (1997) study indicated that the environment is the primary force in firm performance.

Wheelen and Hunger (1995) noted that the external environment consists of variables, such as opportunities and threats that are usually beyond the control of the organizations. Griffin (1987) indicated that environment factors play a major role in determining an organization's success or failure. According to Griffin (1987), the external task environment of a firm includes its competitors, customers, suppliers, regulators, and associations. The intensity of competition refers to the degree of competition in price, product, technology, distribution, manpower and raw materials. In measuring the intensity of competition of the environment, this study adopted Porter's competitive forces model (Porter 1980) which consisted of price competition, product competition, technological competition, distribution, manpower and raw materials. Hashim (2000) studied the environment moderating effect on the relationship between strategy types and performance of SMEs, which showed that environment influenced the strategy types and performance of SMEs. In this study, the environment moderating factors were adopted from Porter (1980), Griffin (1987) and Hashim (2000), which are: uncertainty of the environment, comprising competitors, customers, suppliers, regulators; and associations and the intensity of competition, consisting of competition in price, product, technology, distribution, manpower and raw materials.

THE PERFORMANCE

The primary goal of adopting an effective management process is to ensure improved organisational performance. As such, some methods of measuring organisational performance are needed to determine how well an organisation is functioning as a result of adopting the strategic management process. Organisational performance can be measured by many criteria. In general, the literature suggests that organisational performance is commonly measured in terms of effectiveness, efficiency, growth and productivity.

However, according to Robinson (1982) and Montanari, Morgan and Bracker (1990), firms tend to focus on effectiveness when measuring their organisational performance.

Montanari, Morgan and Bracker (1990) suggested that organisational effectiveness may be measured in terms of financial measures, operational measures as well as behavioural measures. First, the authors noted that the financial measures such as profitability and growth can be used to access the financial performance of an organisation. Second, the operational measures such as productivity, resource acquisition, efficiency and employee reaction can be adopted to assess the effectiveness of the work flow as well as work support in organisations. Third, behavioural effectiveness measures – such as adaptability, satisfaction, absence of strain, development and open communication – can be adopted to determine individual performance.

Goodman and Pennings (1997) pointed out that there is still disagreement on the meaning of organisational effectiveness. According to the authors, in addition to various definitions by different authors, there is also the tendency among authors to view effectiveness as either one-dimensional or multidimensional.

Goodman and Pennings further claimed that the underlying differences in conceptualising organisational effectiveness resulted from the different views concerning the nature of organisations. According to the authors, the different views concerning the nature of organisations have implicitly or explicitly determined the conceptual definition of organisational effectiveness. The first view sees an organisation as a rational set of arrangements, emphasised toward achieving certain goals, and defining effectiveness in terms of the goals' attainment. Second, the open-system perspective of organisations defined effectiveness as the degree to which an organisation can maintain all its components.

The process of determining the performance of an organisation requires the selection and the measuring of a set of key variables that can allow the organisation to detect as well as monitor its competitive position in the business in which it engages. In another words, measuring performance is also one of the important steps in the strategic control process (Griffith 1987; Wheelen and Hunger 1995).

The study by Kemp et al. (2003) on the innovativeness and the firm performance indicated that the firm's performance could be measured by various concepts, such as sales per employee, value of export, total assets and operation profit ratio. This study has adopted the Kemp et al. measurement of export performance. In this study,

the export performance refers to the sales of manufactured products exported to other countries for sale. Export performance is measured in terms of average of export sales (average value of export).

Relationship between Distinctive Capabilities, Strategy Types, Environment and Export Performance.

The ability of an organisation to survive and succeed is influenced by various factors, some of which can and some of which can't be controlled. Therefore the performance of an organisation is a function of the controllable and uncontrollable variables (Kim and Lim 1988).

In this study, the distinctive capabilities variable was based on the seven general functional areas found in most manufacturing firms. The distinctive capabilities variable was measured by using the instrument developed by Hitt and Ireland (1985). The previous literature review showed that there is a relationship between distinctive capabilities and performance (Stoner 1987; Hubbard et al. 1997). Javidan (1998) and Ghosh et al. (2001) further indicated that distinctive capabilities contributed to the performance of an organization. On this basis, the following hypothesis is posed:

H1 *There is a significant relationship between distinctive capabilities and the export performance of SMEs.*

Management chooses and implements competitive strategies to face the fast and dynamic changes in the environment. Since strategy is meant for competing with other organisations, the results of strategy implementation can be seen from the performance achieved by the organisation (Beard and Dess 1981; Parnell and Wright 1993).

The strategies developed by organisations can be influenced by how management perceives the environment facing by them (Daft, Sormunen and Parks 1988). Even though firms face the same environment, they might choose different strategies (Thomas, Litschert and Ramasamy 1991). Therefore, the second hypothesis is proposed:

H2 *There is a significant relationship between strategy types and the export performance of SMEs.*

As reported earlier in the literature review on environment and performance of organizations, it is generally recognized that organization must adapt to their organizational environment in order to survive. Organizational environment is believed to be associated with organizational performance. The dynamics of the environments create uncertainty for organizations. Uncertainty of the organizational environment and intensity of competition are threats to organizational performance. If a firm is to be rational, it must strive to

reduce the uncertainties. The contingency theory also suggests that a firm can reduce the uncertainties by changing its activities and the way it operates in an uncertain environment. Firms facing relatively static environments will face relatively less uncertainty. Likewise, firms operating in less dynamic environments will experience less competition. Hence, hypothesis 3 suggests that the environment will moderate the relationships between distinctive capabilities and the export performance of SMEs.

H3 *The environment will moderate the relationships between distinctive capabilities and the export performance of SMEs.*

Organisations in a turbulent environment are likely to choose a differentiation strategy compared to organisations operating in a stable environment (Marlin et al. 1994). In their analysis, Kim and Lim (1988) found that high performance organisations adopting the cost leadership and differentiation strategy operate in different environments. In addition, Parnell and Wright (1993) stressed that organisations implementing the prospector strategy or differentiation strategy enjoy high-income growth as compared to organisations implementing cost leadership and focus strategy. In this context, hypothesis 4 is put forward.

H4 *The environment will moderate the relationships between strategy types and the export performance of SMEs.*

In assisting the foreign manufacturing firms in Malaysia to cope with the new challenges, the Malaysia government has already begun accelerating the operation of the manufacturing firms through various steps, such as focusing on quality, encouraging more high technology ventures, introducing further tax cuts, developing efficient operations and upgrading the standards of health and safety. These will influence the strategy practices and performance of the foreign manufacturing firms in Malaysia. Furthermore, the Malaysia government will continue to transform the manufacturing industry into a more dynamic sector with high value added, capital intensive, high technology as well as a skill and knowledge intensive manufacturing industry.

Research Methodology

The SMEs registered in the Small and Medium Industry Development Corporation (SMIDEC) were used as the sampling frame in the study. The organisations selected from the list are those that are involved in manufacturing activities and have been listed for at least five years. This survey was conducted between year 2004 to year

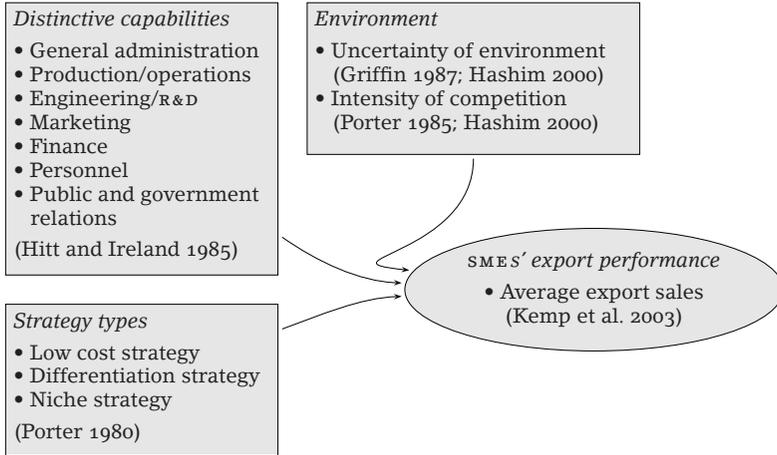


FIGURE 1 The research model

2006, owing to the fact that the questionnaires set contains more than 250 questions and it was time consuming. Mailed questionnaires were used to collect the data required for the study, at the same time, an interview with the Chief Executive Officer (CEO) of certain SMEs was conducted for those SMEs which did not return the questionnaires. The questionnaires were sent to the chief executive officer of each firm requesting them to respond.

The 50 distinctive capabilities developed by Hitt and Ireland (1985), which grouped into seven functions, were tested in the questionnaires. The seven functions in this study were measured in terms of their levels (degree) in the firms. The levels of the distinctive capabilities were determined by requesting the owners/manager to rate each capability on a five-point numerical scale ranging from 'none' to 'very high.'

This study adopts a low cost strategy, differentiation strategy and niche strategy as the measures of SMEs' strategy types, which, grouped into three groups, were tested in the questionnaires. The three types of strategies in this study were measured in terms of their rating in the firms. The rating of the strategy types was determined by requesting the owners/manager to rate each strategy type on a five-point numerical scale ranging from 'least applicable' to 'most applicable.'

For the environment moderating variable, the uncertainty of the task environment was measured in terms of the degree of uncer-

tainty of the firms surveyed. The responses for the degree of uncertainty of environment were recorded on a five-point numerical scale ranging from 'very predictable' to 'very unpredictable.' Respondents were asked to indicate the degree of uncertainty of each type of environment. The intensity of competition was used to measure the various competitive forces that can affect all firms in the industry as well as the profitability of an industry. The six competitive factors were price competition, product competition, technological competition, distribution, manpower and raw material. The responses for intensity of competition of these factors were measured on a five-point interval scale ranging from 'none' to very 'intense competition.' The respondents were asked to indicate the degree of intensity of competition of each type of factor.

There are various concepts in measuring performance, such as sales per employee, export sales, growth rates of sales, total assets, total employment, operation profit ratio, turnover and return on investment (Kemp et al. 2003). Further, according to Yusuf (2002), alternative measures of performance may be different, depending on the size and type of firm or its ownership. This study adopted the study by Kemp et al. (2003) in measuring the export of the firm.

STATISTICAL METHODS USED

This study used various statistical methods to test the hypotheses of the research model. The hypotheses were tested using the regression analysis. The first part of the analysis is concerned with the descriptive statistics of each of the items under each main variable. The regression analysis is used to test hypotheses 1 and 2. The regression analysis is used to test the significant relationship between the export performance measure and the distinctive capabilities and strategy types variables. Hierarchical regression is used to test hypotheses 3 and 4 for the moderating effect of the environment variable.

RESULTS

This study managed to cover 26 of the 35 manufacturing industries identified by the Ministry of International Trade and Industry (MITI). Table 1 presents the summary of the firms by type of industry.

The descriptive statistic output for the firm characteristics is presented in table 2.

As shown in table 2, most of the respondents, 68 (56.2%) are hired or promoted by the company. 23 (19.0%) of the respondents are the founder and 12 (9.0%) of them are the cofounder; 11 (9.1%) of the re-

TABLE 1 The sample firms by type of industry

Type of industry	Frequency (%)
1. Food	17 (14.0)
2. Beverage	8 (6.6)
3. Agricultural products	2 (1.7)
4. Building material and related products	10 (8.3)
5. Stationery	3 (2.5)
6. Packaging, labeling and printing	6 (5.0)
7. Ceramics and tiles	2 (1.7)
8. Tobacco	1 (0.8)
9. Textile products	10 (8.3)
10. Wood products	1 (0.8)
11. Furniture and fixtures	6 (5.0)
12. Paper Products	4 (3.3)
13. Industrial chemical	3 (2.5)
14. Pharmaceutical products	3 (2.5)
15. Rubber products	2 (1.7)
16. Plastic products	4 (3.3)
17. Non-metallic products	1 (0.8)
18. Electrical, electronics products	15 (12.4)
19. Supporting products	8 (6.6)
20. Souvenirs and handicrafts	2 (1.7)
21. Sports goods and equipment	1 (0.8)
22. Jewellery and related products	1 (0.8)
23. Motor vehicles components	2 (1.7)
24. Household appliances	6 (5.0)
25. Laboratory equipment	1 (0.8)
26. Miscellaneous	2 (1.7)
Total	121

TABLE 2 Firm characteristics

Firm Characteristics	Frequency (%)
Founder	23 (19.0)
Cofounder	12 (9.0)
Inherited from family	7 (5.8)
Purchased business not from family	11 (9.1)
Hired or promoted by the company	68 (56.2)
Total	121

spondents purchased the business not from family, and seven (5.8%) of them inherited or purchased the business from the family.

TABLE 3 Regression analyses results between the distinctive capabilities towards the export performance of SMEs (dependent variable: export performance)

Independent variable	R^2	Sig. F -value	β coeff.	t -value
Distinctive capabilities	0.030	0.058	0.173	1.916

Regression analysis was adopted to examine the significant relationship between distinctive capabilities and the performance of SMEs. Table 3 presents the results for regression analysis for distinctive capabilities variables towards the export performance of SMEs.

By looking at the regression results, distinctive capabilities explain 3.0% ($R^2 = 0.030$) of the variation in SMEs' performance. The relationship between the distinctive capabilities and performance is not significant ($p = 0.058 > 0.005$). As such, hypothesis 1 was rejected. Therefore, it could be concluded that the distinctive capabilities do not influence the export performance of SMEs.

The results of the regression analyses for strategy types on export performance are shown in table 4. The results showed that low cost strategy did not contribute significantly to the export performance of SMEs ($p = 0.027 > 0.005$). For the regression analysis results of differentiation strategy types towards export performance, it is significant ($p = 0.003 < 0.005$). It showed that there is a significant relationship between the differentiation strategy type and the export performance. This meant that the SMEs which adopted different prices for products exported to different country have better performance. The differentiation strategy with different pricing which suits the different export markets will lead to a better export performance of SMEs. Therefore, SMEs should place the market prices according to the export markets to achieve better export performance.

On the other hand, the results showed that the niche strategy did not contribute significantly ($p = 0.081 > 0.005$) to the export performance of SMEs. Among the three strategy types, the differentiation strategy has a significant relationship with the export performance. The other two strategy types, namely, low cost strategy and niche strategy do not influence the performance of SMEs. It is therefore interpreted with the strategy types that have a partial relationship with the export performance of SMEs. However, the differentiation strategy contributed significantly to the export performance of SMEs. In this study, hypothesis 3 was accepted. This meant that the SMEs which apply a differentiation strategy, obtain better export sales to overseas. Since there is a significant result for the differentiation strategy and the export performance, hierarchical regression anal-

TABLE 4 Regression analyses result between the strategy types towards the export performance of SMEs (dependent variable: export performance)

Independent variable	R ²	Sig. F-value	β coeff.	t-value
Low cost strategy	0.041	0.027	0.202	2.246
Differentiation strategy	0.074	0.003**	0.272	3.081

NOTES ** significant at 0.01 level (2-tailed).

TABLE 5 Moderating effect of environment on differentiation strategy type and export performance of SMEs (dependent variable: export performance)

Variables	Step 1		Step 2		Step 3	
	(1)	(2)	(1)	(2)	(1)	(2)
Differentiation strategy (DS)	0.272	0.003	0.288	0.001	1.294	0.000
Environment			-0.200	0.023	4.074	0.000
DS* Environment					-4.493	0.000**
R ²	0.074		0.114		0.371	
R ² changes	—		0.040		0.203	
Significant F change	0.003		0.360		0.826	

NOTES Column headings are as follows: (1) standardized coefficients (β), (2) Sig. F. ** Significant at 0.01 level (2-tailed).

ysis was carried out to test the moderating effect of the environment on the relationship between the differentiation strategy and the export performance as shown in table 5.

Generally, the results of the regression analyses for the variables tested in this study have low R-square. The previous studies on Malaysia SMEs done by Hashim (2000) with 100 respondents and Tarsiah (2007) with 84 respondents also show the low R-square, within range 0.1 to 0.9. The low R-square may be influenced by the limited sample size. Owing to the time constraints, the respondents for this study are limited to 121 respondents. This is one of the limitation of this study.

Table 5 presents the results of the moderating effect of environment on the relationship between the differentiation strategy and the export performance.

In this study, the results show that there is no significant relationship between distinctive capabilities and the export performance. Owing to there being no significant relationship between the distinctive capabilities and the export performance, the moderating effect of the environment on the relationship between the distinctive capabilities and the export performance was not carried out.

From table 5, environment moderates ($p = 0.000 < 0.005$) the relationship between differentiation strategy and export performance of

SMEs. The F changes in step 2 and step 3 are significant as shown in table 5. From table 5, when the interaction terms were added to the regression analysis in step 3, the R -square was changed by 16.3% and F changes were significant ($p = 0.000 < 0.005$), which indicated that there is a moderating impact. The environment has a significant moderating effect on the relationship between differentiation strategy and export performance ($p = 0.000 < 0.005$). The inclusion of the interaction terms significantly moderate the said relationship. Therefore, it can be concluded that there is a moderating effect of environment on the relationship between the differentiation strategy types and the export performance. As such, Hypothesis 4 was accepted in this study. This means that the environment influences the relationship between the differentiation strategy and export performance of SMEs. From the very significant p -value ($p = 0.000 < 0.005$) it could be inferred that a small change in the environment will influence the relationship between the differentiation strategy type and the export performance of SMEs.

Discussion and Conclusion

This study focuses on SMEs from the perspective of strategic management. The study attempted to examine the influence of strategic management variables on the export performances of SMEs. More specifically, the primary objective was to examine empirically the influence of distinctive capabilities and the strategy types on the export performance of SMEs in the Malaysian manufacturing sector, and the environment moderating effect on the said relationship.

As shown in table 3, Hypothesis 1, stating that there is a significant relationship between distinctive capabilities and the performance of SMEs, is rejected. These findings appear not to be consistent with the study conducted by Stoner (1987). According to Stoner, most small firms recognised the need for building and developing distinctive capabilities as a competitive strategy. Besides Stoner's (1987) study, there are many previous researchers on distinctive capabilities. Hubbard et al. (1997) indicated that distinctive capabilities are a skill that an organization possesses that enables it to perform activities. According to Javidan (1998), the distinctive capabilities will influence the core competencies of the organization. Further, Ghosh et al. (2001) found that the key success factors and distinctive capabilities contributed to the performance of SMEs. Ghosh et al. (2001) measured distinctive capabilities from the aspects of management team, leaderships, correct strategic approach, marketing, developing and sustaining capability and good customer and client relationship.

Although the study by Hitt and Ireland (1985) indicated that distinctive capabilities variables do influence the performance of the firm, this study is not congruent with Hitt and Ireland's (1985) study. This might be attributed to Hitt and Ireland's (1985) instrument, which is developed in the United States of America to measure distinctive capabilities of SMEs in Malaysia. Owing to the different environment in United States of America and Malaysia, it gives different findings. These reasons needed to be taken into consideration. Novel conclusions have emerged from the present study, that are different from previous researches. As indicated in the study by Ghosh et al. (2001) there were other aspects in measuring distinctive capabilities. On top of that, Chameeva (2006) also indicated that there are other competencies for enhancing advantages in SMEs to lead to better performance. Furthermore, the results of this study, which show the insignificant relationship between distinctive capabilities and the export performance of SMEs, also open a broader way for future research to identify the relationship between this said relationship and others. Therefore, it is recommended that more comprehensive studies be conducted on this distinctive capabilities variable in order to identify the reasons behind the contradictory findings.

Novel conclusions have emerged from the present study, that are different from previous researches. Besides the above contribution, this study has also reviewed the relevant literature that has emerged since 1985 and the present time. In the last 20 years or so, aspects of the distinctive capabilities and performance of SMEs in exporting may have changed considerably. As a consequence, the distinctive capabilities may no longer relate significantly to the performance of SMEs. Changes in the strategy of SMEs with the passage of time provide an opportunity to undertake further studies in this area, to clarify the dynamics of the change process.

As shown by table 4, the findings appear congruent with Porter's (1980) study of the three generic strategy types (low cost, differentiation, and focus). Porter noted that the ability of firms to survive will depend upon their ability to adopt strategy types that can differentiate them from their competitors. It has been concluded from previous studies that there is a significant relationship between the strategy types and the firms' performance, as highlighted in the study by Porter (1987). It was found in the present study that the differentiation strategy type had a significant relationship towards the export performance of SMEs. Therefore, the SMEs should practice differentiation strategies to suit the different export markets in order to obtain better export performance.

This study supports the theory of contingency, stating that firms should adopt different strategies in different environments. It contributes to the fact that Malaysian SMEs need to concentrate their efforts on formulating and implementing different strategies in the changing environment, especially in the export markets in other countries.

The findings of this study are congruent with the previous studies by Porter (1985), Griffin (1987), Hashim (2000) indicating that environment has an influence on SMEs' performance. Smallbone (1995) noted that the growths of SMEs are influenced by both the external and internal factors. Further, McLarney's (1997) study indicated that the environment is the primary force in firm performance. On top of that, Volberda and Lewin (2003) have suggested that firms faced changes through value chains and sectors providing a new environment for SMEs. In addition, Raymond and Croteau (2006) also suggested that SMEs in the business environment strategic choices are required for development in product innovation, market expansion and network extension. The SMEs should put emphasis on the environment, especially in the globalization and liberalization business world, which creates different kinds of opportunities, while at the same time, the SMEs will face more threats owing to the open markets. If the SMEs is alert to the change of the environment, and at the same time, practises a different strategy in the firm, this will lead to a better performance. Therefore, the SMEs should adopt a different strategy to cope with the environment to achieve performance.

This study has expanded the knowledge regarding the relative contributions of distinctive capabilities, strategy types and environment to the export performance of SMEs. This research has furthered the understanding and knowledge regarding the effects of the moderator variable, that is the environment, on the relationship between differentiation strategy type and export performance of SMEs.

LIMITATIONS OF THE STUDY

A few limitations have been identified and recognized while conducting this research. Although the research has been done, it can be further refined by not following the limitations. It is assumed that the literature review is applicable to the Malaysian environment.

The first limitation of the study was related to the number of SMEs in the manufacturing sector which could be selected for this study. Getting the SMEs to participate in the research was the major prob-

lem that this study faced. This study successfully gathered the data from 121 SMEs.

Secondly, the 121 sample firms were confined to 26 types of industries in the Malaysian manufacturing sector as shown in table 1. Their small numbers in each industry could have affected the variance of the variables, particularly those related to industry and firm effects.

Thirdly, the data used in the export performance measure were assumed to be accurate and reliable in accordance with the data used in the study, depending entirely on the figures as reported by the respondents.

Some of the above limitations that accompanied this research might be overcome in the future if more SMEs could be encouraged to participate, and the research should be expanded to include SMEs in the other states in Malaysia.

SUGGESTION FOR FUTURE RESEARCH

The empirical research in these areas is still very limited in Malaysia. This research suggests opportunities for researchers interested in further exploring the notion to find out the variables which can influence the export performances of SMEs.

More empirical research is therefore needed and will be particularly useful in providing more empirical evidence to improve the export performance of the SMEs. Besides that, there is a need to conduct studies on SMEs in the other different sectors such as wholesaling, retailing, and construction in order to develop a more comprehensive theory and understanding of SMEs.

Future research on SME-strategic management might also fruitfully focus on investigating on the impact of industrial types and entrepreneurial types on SMEs performance. Hopefully, these efforts would increase the level of sophistication and practical utility of strategic management in SMEs.

Future research should also attempt to incorporate other relevant components of the strategic management process, such as the implementation, evaluation and control of strategy in SMEs. This will help in the understanding as well as assist in developing the whole prescriptive theory of the strategic management process (formulation, implementation, evaluation and control of strategy).

Finally, the significant findings among the variables provide insights into some of the factors influencing SMEs' export performance, as well as providing the direction for future research in this area of study.

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