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Combined Effect of Competitive and Manufacturing Strategies on Export Performance of Small and Medium Enterprises in Malaysia

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Abstract - It is generally accepted that business strategy has a significant influence on the success of many organizations. However, it has been rarely tested in the context of export operation and performance on SMEs. Thus, the objective of this research is to determine the combined effect of competitive strategy and manufacturing strategy on export performance of small and medium enterprises (SMEs) in Malaysia. Quantitative survey method was employed and data were collected from 201 exporting SMEs through structured questionnaires.

Keywords: Competitive strategy, manufacturing strategy, export performance, small and medium enterprises.

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Combined Effect of Competitive and Manufacturing Strategies on Export Performance of Small and Medium Enterprises in Malaysia

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Abstract - It is generally accepted that business strategy has a significant influence on the success of many organizations. However, it has been rarely tested in the context of export operation and performance on SMEs. Thus, the objective of this research is to determine the combined effect of competitive strategy and manufacturing strategy on export performance of small and medium enterprises (SMEs) in Malaysia. Quantitative survey method was employed and data were collected from 201 exporting SMEs through structured questionnaires. The results from regression analysis found both competitive strategy and manufacturing strategy have significant and positive relationships to export performance. Manufacturing strategy was also found to be a more significant contributor to export performance of SMEs. These findings emphasize the importance of adopting both the competitive strategy and manufacturing strategy among the owner/managers of SMEs to enhance their performance and be successful in the international markets.

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I. Introduction

small and medium enterprises (SMEs) play an increasingly important role in a country's economy, and thereby the well-being of these businesses is a necessity for that country's future success. Malaysia boost around SMEs which employ over 56 percent of the total workforce and contributes 32 percent to the country's GDP, and makes up 19 percent of the nation's total export (Singh, 2013). The extent of this sector's economic consequence is highlighted by the fact that 99.2 percent of the total business establishments in Malaysia are SMEs (Business Times, 2012). Despite the increased attention paid to this sector, comparatively little is researched on SME export performance in Malaysia (Singh & Mahmood, 2013).

Past literature have seen a variety of variables being engaged to determine the effect on firms' export performance (Cadogan et al, 2002; Zhang et al, 2003; Styles et al, 2008; Boehe & Barin-Cruz, 2010) but only a few researches have incorporated the element of in

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strategy relation to the export operation and export success (Namiki, 1989; Singh & Mahmood, 2014). In addition, most of the studies on business strategy were focused on the domestic capacity, and research on the relationship between business strategy and export performance is still limited (Cavusgil & Zou, 1994; Salavou & Halikias, 2009). The business strategy which is a firm's internal element is a vital determining factor for the firm's success in exporting because it influences export performance directly (Aaby & Slater, 1989). Notwithstanding most studies on strategy-performance relationship have also been mainly focused on large or well established firms, and research on export related topics on SMEs has been scanty (Al-Hyari etl al., 2012; Okpara, 2010; Altintas et al., 2007; Anderson et al., 2004; Singh & Mahmood, 2013). Thus, there is a suggestion that more research should be conducted to examine the role of business strategy and its impact on export operation and export performance (Namiki, 1989: Boehe & Barin-Cruz, 2010). Hayes and Wheelwright (1984) argued that for the strategy to be effective there must be synergy in important areas such as competitive strategy and manufacturing strategy. Amoako-Gyampah and Acquaah (2008) and Raymond and Croteau (2009) have also called for a more research on business strategy and export performance to be carried out. Given that the business strategy is seen to be a critical determinant of success in many organizations, greater understanding implementation of of the competitive and manufacturing strategies in this context is a highly desirable research direction.

Thus the purpose of this study is to determine if significant relationships exist between competitive strategy, manufacturing strategy and export performance. It is also the aim of the study to identify which of the two strategies is the most significant contributor to the export performance of SMEs.

a) Competitive Strategy and Export Performance

Porter (1985) proposed that business strategy such as competitive strategy is strongly linked to profit performance. Strategy execution is the key link between competitive strategy and firm performance (Ward & Duray, 2000). Day (1994) who linked the competitive

advantage with performance argued that firms who possess higher competitiveness will relatively gain higher business performances. A well-structured business firm and product differentiation from its competitors in the industry generates firm's competitive advantage that leads to higher business performances (Hitt et al., 2004). Firms that pursue competitive strategy tend to create unique image in the mind of the customers by offering products that are inimitable by their competitors (Miller, 1988). The ability of the firms to offer this strategy in their product in terms of reliability, durability, features and aesthetics generates higher performance (Mintzberg, 1988; Dean & Evans, 1994; Amoako-Gympah & Acquaah, 2008). Therefore, competitive strategy generates a firm's competitive advantage over its competitors and results in higher performance (Amoako-Gympah & Acquaah, 2008).

Based on the resource based view, the collection of a firm's internal resources and capabilities generates competitive advantage that leads to superior performance (Porter, 1985). Competitive strategy and the resource based view are two sides of the same coin (Wernerfelt, 1984). The firm poses unique internal resources and capabilities which can become firm's competitive advantage against its competitors and enhance its business performance and survivability (Barney, 2002; Day & Wensley, 1998; Penrose, 1959; Peteraf, 1993; Wernerfelt, 1984). Porter's proposition that competitive strategy creates competitive advantage for a firm and results superior business performances was also supported by many studies (Campbell-Hunt, 2000; Julien & Ramagalahy, 2003; Mandy, 2010; Young, 2005). Therefore, it was posited that competitive strategy has a significant relationship with export performance. Grounded on the argument above, the following hypothesis is proposed:

H1: There is a significant relationship between competitive strategy and export performance of SMEs.

b) Manufacturing Strategy and Export Performance

Past researchers have highlighted importance of manufacturing strategy towards attaining higher performance (Leong et al., 1990; Kim & Arnold, 1992; Ward & Durray, 2000). Amoako-Gyampah and Acquaah (2008) argued that there is a direct relationship between manufacturing strategy and firm's performance. Miltenburg (2008) suggested that firms that apply manufacturing strategy are most likely to achieve higher return on sales and better profit before tax to sales ration. Corporate performance is positively related to role of manufacturer managers in strategic decision making (Swamidass & Newell, 1987). Anderson et al.'s (1989) findings indicated that production competence is a measurable function of production and related to firms competence. Quality assurance and the firm's capabilities to deliver their products and services were also found to be significantly related to the firm's

performance (Williams et al., 1995). Advanced operating procedures and firm capabilities tend to build efficient delivery process; low operation cost generates competitive advantage and increase firm performance (Day, 1994). Nevertheless, no significant differences were found between firms using mixed (efficiency and flexibility) strategy and firms using a single strategy of efficiency or flexibility and their business performances (Ebben & Johnson, 2005). In addition firm's performance is not fully depending on manufacturing strategy; rather, it also depends on manufacturing strategy configuration and strategic configuration interaction (Popovska & Boer, 2008).

Manufacturing strategy dimensions of cost, quality, flexibility, and delivery were also studied in relation to firm performance and they are all found to be significantly related to the firm's financial performance (Butt, 2009). However, Swamidass and Newell (1987) found that flexibility was more related to the firm's business performance, while Amoako-Gyampah and Acquaah's (2008) study found that only quality appear to have a significant influence on the firm performance. Similarly other researchers also found manufacturing dimension of quality to be an important predictor of the firm performance (Flynn et al., 1994; William et al., 1995; Ward & Durray, 2000). Chi et al. (2009) indicated that alignment between business environment characteristics, competitive priorities and supply chain structure improve firm performance. However, cost must combined leadership strategy be manufacturing strategy capabilities in order for the cost reduction to be effective. Manufacturing capabilities focused on flexibility are more suitable for differentiation strategy adaptation. Dr. Silveira and Sousa's (2010) results indicated that capability learning and firm best practices are positively related to firm performances (flexibility and dependency) while firm's internal fit is negatively related to flexibility improvements. Popovska and Boer (2008) argued that firm's performance is not fully depending on manufacturing strategy; rather, it could also depend on manufacturing strategy configuration and strategic configuration interaction. Based on the above discussions, this research intends to examine the relationship between manufacturing strategy and firms export performance. Thus, the following hypothesis is formulated:

H2: There is a significant relationship between manufacturing strategy and export performance of SMEs.

II. Research Methodology

a) Sample and data collection

The sample for the study was drawn from the Federation of Malaysian Manufacturers (FMM) directory of manufacturing SMEs. From the listing, only firms which fulfilled the following criteria; manufacturing firms

with an annual sales turnover of between RM250,000 and less than RM25 million, or manufacturing firms with fulltime employees ranging from 5 to less than 150, and engaged in the exporting activity, were chosen. A total of 779 SMEs made up the target population. Based on Krejcie and Morgan (1970), a sample size of 260 was determined, and due to response rates of between 20 to 25 percent for a mail survey, the number of questionnaires sent should be four or five times than the intended sample size. A questionnaire accompanied by a cover letter and a postage-paid return envelope was to the owner/manager of each firm. mailed Owner/managers were targeted in this study because they were involved in the overall running of the businesses, and their views often represent the views of the entire firm. A total of 201 useable questionnaires were received, yielding a response of 25.8 percent.

There is also an issue of a non response bias in the data collection. Non response bias exists when there is significant difference between the answers of those who responded and those who do not respond. To test for non response bias, an extrapolation method as suggested by Armstrong and Everton (1977) was employed where the early respondents were compared with the late respondents. No significant differences were found in the mean responses for any of the constructs, suggesting no indication of non response bias in this study.

b) Measures

The instruments for this study were developed using established measures from previous studies. The

competitive strategy scales were adapted from previous study by Young (2005), and the items were measured on a seven-point Likert scales where '1' represents very strongly disagree and '7' represents very strongly agree. The manufacturing strategy of fifteen items was measured using scales adapted from Ward and Duray (2000). This measurement was selected because it has been shown to possess valid psychometric measure properties. Self-report technique was used to measure export performance, and subjective assessment was emploved because it was expected owner/managers would be unwilling to disclose full financial data. This study measured export performance with four items; sales volume, profitability, market share, and new markets, and the owner/managers were asked to rate their export performance on a seven point rating scale. It has been found that the subjective measures of performance are correlated with the objective measures of performance (Dess & Robinson, 1984).

c) Reliability and validity

Cronbach's alpha was used to assess the instruments reliability. Generally, 0.70 or higher is considered to be agreed value for alpha's reliability (Hair et al., 2011). Table 1 below shows that all the variables have values which vary from 0.75 to 0.97 which are considered acceptable for exploratory research.

Table 1: Reliability scores for variables

Variable	No. of items	Alpha value
Manufacturing strategy	15	.97
Competitive strategy	13	.95
Export performance	4	.75

Factor analysis was conducted to verify the construct validity of the variables. Before performing the analysis, the suitability of the data was assessed through two tests; Kaiser-Meyer-Olkin measure of sampling adequacy (KMO) and Bartlett's Test of Sphericity. The KMO values were 0.889, 0.958 and 0.755, and the Bartlett's Test of Sphericity was significant at p<0.001 (See Tables 2, 3 and 4). The results support the factorability of the data. Varimax rotated principal component analysis has resulted in single factor loading in each of the three constructs; competitive strategy, manufacturing strategy, and export performance that explained 79.045 percent, 75.338 percent, and 58.118 percent of the variance, respectively. Only factors with a loading value of 0.50 and above were considered, and therefore no items were deleted (Hair et al., 2011).

Table 2: Factor Analysis - Competitive Strategy

No.	Item	Loadings
1.	Reduce inventory	0.915
2.	Increase capacity utilization	0.882
3.	Increase equipment utilization	0.912
4.	Reduce production costs	0.905
5.	Statistical process control	0.851
6.	Real time process control systems	0.925
7.	Updating process equipment	0.889
8.	Developing new process for new products	0.851
9.	Developing new process for old products	0.875
10.	Lead time reduction	0.718
11.	Setup time reduction	0.861
12.	Ability to change priorities of jobs on the shop floor	0.875
13.	Ability to change machine assignments of jobs on the job floor	0.763
14.	Provide fast deliveries	0.867
15	Meet delivery promises	0.904
	Eigen values	11.301
	Percentage of variance explained	75.338
	KMO	0.958
	Bartlett Test of Sphericity:	
	Aprox Chi Square	3793.105
	Df	105.00
	Sig	0.000

Table 3: Factor Analysis - Export Performance

No.	Item	Loading
1.	The level of our export sales volume.	0.747
2.	The profitability of our export operation.	0.709
3.	Our share of export market sales.	0.828
4.	The rate at which we are able to enter new markets. Eigenvalues	0.759
	Percentage of variance explained	2.325
	KMO	58.118
	Bartlett Test of Sphericity:	0.755
	Approx. Chi Square	
	Df	189.328
	Sig.	6.000
		0.000
		0.000

III. FINDINGS AND DISCUSSIONS

a) Hypotheses Test

The first hypothesis (H1) stated that there is a significant relationship between competitive strategy and export performance, while the second hypothesis (H2) stated that there is significant relationship between manufacturing strategy and export performance. To test these hypotheses, multiple regression was used where the dependent variable (export performance) was regressed simultaneously on the two independent variables; competitive strategy and manufacturing strategy. Table 5 displays the result of the analysis which reveals the value of R squared as 0.544 indicating that 54.4 percent of the dependent variable (export performance) was accounted and explained by the two variables; competitive strategy and manufacturing strategy. The results also show significant and positive

relationships between competitive strategy and export performance, and manufacturing strategy and export performance. Thus both hypotheses H1 and H2 are supported. It can be inferred that the more the SME the owner/managers adopt competitive manufacturing strategies in their firms, the higher the export performance is yielded. In addition, the strength of the relationships as measured by ($\beta = 0.323$) for competitive strategy and ($\beta = 0.560$) for manufacturing strategy shows that manufacturing strategy is also a more crucial predictor of export performance. This result is consistent with previous studies and the general notion that manufacturing strategy is associated with superior firm performance.

Table 4: Relationship between Competitive Strategy, Manufacturing Strategy and Export performance

Independent Variable	Standardized Beta	Т	Sig. (p-value)	R ²
Competitive Strategy Manufacturing Strategy	0.323 0.560	10.931 6.302	0.000	0.544

IV. Discussions

Most of empirical studies showed that firms that could successfully implement those generic strategies in their business settings would outperform their competitors successfully. These studies also found that competitive strategy and manufacturing strategy could enhance the firm's performance.

Competitive strategy is a part of firm's internal element and it is a vital determinant factor for the export success, because this strategy influences export performance directly (Aaby & Slater, 1989). The findings of this research concurs to many past studies that found competitive strategy contributes significantly towards improving the firms export performance. According to the literature there are two types of competitive strategy which are commonly found in the small and medium types firms, that is differentiation strategy and focus strategy. Firms that pursue differentiation strategy tend to create unique image in the mind of customers by offering products that are inimitable by their competitors. The ability of these firms to offer differentiation in their products in terms of reliability, durability, features and aesthetics generates competitive advantage over their competitors and results in higher performance. In addition, by adopting focus strategy such as targeting a niche market, these firms have better chances of survival and growth rather than competing in a broad area to market their products.

The link between manufacturing strategy and export performance of manufacturing SMEs was investigated in this study. It was found that positive and significant relationship exists between manufacturing strategy and export performance. Thus adopting manufacturing strategy in the firm would result in higher export performance. However, the firm's ability to gain positive benefits from the manufacturing strategy will depend on the availability of resources, such that firms with higher availability of resources will be able to make better use of the strategy for achieving superior performance. This links well with resource-based view of the firm which postulates that the presence of assets that are difficult to imitate are associated with the firm's competitive advantage (Barney, 1991). The finding of this research concurs with many past studies that manufacturing strategy contributes significantly towards improving export performance.

The ability to regulate the manufacturing capacity instantaneously as part of the firms' flexibility

ability in manufacturing strategy will enable them to meet greater demand from their customers while maintaining lower production cost and greater products quality. SMEs' flexibility to meet market demand will not only increase its goodwill but also retain customer loyalty and increase its export performance. Similarly, firms that emphasize on lead time reduction, set-up time reduction, are able to change priority on the job floor, able to change machine assignment and maintain high flexibility qualities could increase their market share and sales growth. Less wastage and theft on raw material would occur, as they would purchase their product inputs just in time which reduces chances of obsolesce of stock or damage to their resources. These firms may also increase the production capacity whilst utilizing their machinery efficiently. The ability to make on time delivery of product and reliability will capture higher customers' satisfaction which in turn would increase greater market share and sales growth. Those that are able to produce and deliver its products earlier that what was promised also retain customer satisfaction and trust which builds customer loyalty which, in turn could increase export performance. The firm's ability to delivery on time is an important determinant of a firm effectiveness in the eyes of a customer. An organization should have high order rates, short order cycle time, upto-date shipping information and frequent delivery time as all these elements could build firms capabilities; increased customer satisfaction leads to higher market performance (Tracey et al., 1999). Therefore, firms that are able to increase their delivery value in the customer's eyes would increase their performance (Cavusgil & Zou, 1994). The firm's ability to achieve low cost, high flexibility, dependability and quality is a form of manufacturing process that enables it to increase its competitive advantage based on manufacturing strategy (Cleveland et al., 1989; Hayes & Wheelwright, 1984; Hill, 2000; Vickery et al., 1993). Thus, the manufacturing strategy is a competency and advantage that a firm builds around its operation process that gives the firm a competitive advantage over the rivals.

v. Conclusion

This research adds to the existing knowledge by providing empirical evidence of the contribution of both competitive strategy and manufacturing strategy to export performance of SMEs in Malaysia. This research

also responds to calls for more exploration of the business strategy in an international context and its impact on performance. In addition, this research provides owner/managers of SMEs with more information for making right decisions in selecting appropriate strategies to achieve competitive advantage and enhance performance. These strategies act as an impetus that affects firm's manufacturing capabilities and competitive advantage which consequently have effects on export performance. Thus SME owner/managers should focus efforts on adopting competitive strategy and manufacturing strategy in order to realize the potential value of the international markets.

This study is a novel attempt to investigate the variables of influence to export performance of SMEs in Malaysia but it also contains several limitations. First the relatively low sample size may limit the generalizability of the findings. The resultant sample cannot be accurately described as a truly representative sample. Furthermore, the sample frame was based on a data set comprising only SMEs that were registered with the Federation of Malaysian Manufacturers (FMM), and there are many SMEs which were not registered with the FMM. Therefore, it would be meaningful in the future to conduct research by surveying a wider range of SMEs. Second, the use of a single respondent for each firm may be subject to common method bias. Only owner/managers of the firms were chosen to collect the data for the study. Although the owner/manager may be the key person in the SME, one person's authority cannot represent the entire strategy of the firm. In addition, the perceptual opinions of the owner/manager may be biased because of subjective judgments of his or her own firm. Nevertheless, necessary steps were taken to minimize any biases that may have resulted, and future research might consider employing multiple informants. The third limitation was the cross-sectional nature of the study. Cross-sectional study may only provide data of a snap shot at one point of time and does not provide information on changes in the firm environment. Thus, future research should consider the use of a longitudinal investigation that would allow firms to be studied over time and provide further insights into the dynamic nature behind the findings.

References Références Referencias

- 1. Aaby, N.E. & Slater, S.F. (1989). Management influences on export performance: a review of the empirical literature 1978-1988. International Marketing Review, 6(4), 53-68.
- Al-Hyari, K., Al-Weshah & Alnsour, M. (2012). Barriers to internationalization in SMEs: evidence from Jordan. Marketing Intelligence & Planning, 30(2), 188-211.
- Altintas, M.H., Tokol, T. & Harcar, T. (2007). The effects of export barriers on perceived export

- performance: an empirical research on SMEs in Turkey. EuroMed Journal of Business, 2(1), 36-56.
- Amoaka-Gyampah, K. & Acquaah, M. (2008). Manufacturing strategy, competitive strategy and firm performance: an empirical study in a developping economy environment. International Journal of Production Economics, 111(2), 575-592.
- Anderson, J.C., Cleveland, G. & Schroeder, R.G. (1989). Operations strategy: a literature review. Journal of Operations Management, 8(2), 133-158.
- Anderson, S., Gabrielsson, J. & Wictor, I. (2004). International activities in small firms: examining factors influencing the internationalization and export growth of small firms. Canadian Journal of Administrative Sciences, 21(1), 22-34.
- 7. Armstrong, S. & Overton, T.S. (1977). Estimating non-response in mailed surveys. Journal of Marketing Research, 14, 396-402.
- 8. Barney, J. (2002). Gaining and sustaining competitive advantage. New Jersey: Prentice Hall.
- 9. Barney, J. (1991). Firm resources and sustained competitive advantage. Journal of Management, 17(1), 99-120.
- 10. Boehe, D.M. & Barin-Cruz, L. (2010). Corporate social responsibility, product differentiation strategy and export performance. Journal of Business Ethics, 91, 325-346.
- 11. Business Times (2012, December 24). SMEs the backbone of nation's growth, p.6.
- 12. Butt, I. (2009). The impact of product positioning strategy, manufacturing strategy and their coalignment on firm's performance. Unpublished Phd dissertation, Carleton University, Canada.
- 13. Cadogan, J.W., Sungqvist, S., Salimen, R.T. & Puumalainen, K. (2002). Market oriented behavior: comparing service with product exporters. European Journal of Marketing, 36, 1076-1102.
- 14. Cavusgil, S.T. & Zou, S. (1994). Marketing strategyperformance relationship: an investigation of the empirical link in export market ventures. Journal of Marketing Research, 18, 114-119.
- Chi, T., Kilduff, P.P. & Gargeya, V.B. (2009). Alignment between business environment characteristics, competitive priorities, chain structures, and firm business performance. International Journal of Productivity and Performance Management, 58(7), 645-669.
- Campbell-Hunt, C. (2000). What have we learned about generic competitive strategy? A metaanalysis. Strategic Management Journal, 21(2), 127-154.
- 17. Cleveland, G., Schroeder, R.G. & Anderson, J.C. (1989). A theory of production competence. Decision Sciences, 20, 655-668.
- Da Silvera, G.J. & Sousa, R.S. (2010). Paradigms of choice in manufacturing strategy: exploring performance relationships of fit, best practices and

- capability-based approaches. International Journal of Operations and Production Management, 30(12), 1219-1245.
- 19. Day, G.S. (1994). The capabilities of market driven organizations. Journal of Marketing, 58(4), 37.
- 20. Day, G.S. & Wensley, R. (1988). Assessing advantage; a framework for diagnosing competitive superiority. Journal of Marketing, 52, 1-20
- Dess, G.G. & Robinson, R.B. (1984). Measuring organizational performance in the absence of objective measures: the case of privately-held firm and conglomerate business unit. Strategic Management Journal, 5, 265-273.
- 22. Dean, J.W. & Evans, J.R. (1994). Total quality: management, organization and strategy. St. Paul: West Publishing.
- 23. Ebben, J.J. & Johnson, A.C. (2005). Efficiency, flexibility or both? Evidence linking strategy to performance in small firms. Strategic Management Journal, 26, 1249-1259.
- Flynn, B.B., Schroeder, R.G. & Sakakibara, S. (1994). A framework for quality management research and an associated measurement instrument. Journal of Operations Management, 11, 339-366.
- 25. Hair, J. F., Celsi, M. W., Money, A. H., Samouel, P., & Page, M. J. (2011). Essentials of business research methods: Chichester: John Wiley.
- 26. Hayes, R.H. & Wheelwright, S.C. (1984). Matching process technology with product/market requirements: Restoring our competitive edge. New York: John Wiley.
- 27. Hill, T. (2000). Manufacturing strategy: text and cases. Boston: McGraw Hill.
- 28. Hitt, M.A., Ireland, R.D. & Hoskisson, R.E. (2004). Strategic management competitiveness and globalization. US: Thomson.
- 29. Julien, P. & Ramagalahy, C. (2003). A competitive strategy and performance of exporting SMEs: an empirical investigation of the impact of their export information search and competencies. Entrepreneurship Theory and Practice, 27(3), 227-236.
- 30. Kim, J.S. & Arnold, P. (1992). Manufacturing competence and business performance: a framework and empirical analysis. Operations and Production Management, 13(10), 4-25.
- 31. Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. Educational and Psychological Measurement, 30, 607-610.
- 32. Leong, G.K., Snyder, D. & Ward, P.T. (1990). Research in the process and content of manufacturing strategy. Omega, 18, 109-122.
- 33. Mandy, M.K. (2010). The relationship between distinctive capabilities, strategy types, environment and the export performance of SMEs in the manufacturing sector. Management, 4(3), 205-223.

- 34. Miller, D. (1988). Relating Porter's business strategies to environment and structure: analysis and performance implications. Academy of Management Journal, 31(2), 280-308.
- 35. Miltenburg, J. (2008). Setting manufacturing strategy for a factory within a factory. International Journal of Production Economics, 113(1), 307-323.
- 36. Mintzberg, H. (1988). Generic strategies: toward a comprehensive framework. Advances in Strategic Management, 5(1), 1-67.
- 37. Namiki, N. (1989). The impact of competitive strategy on export sales performance: an exploratory study. The Mid-Atlantic Journal of Business, 25(6), 21-37.
- 38. Okpara, J.O. (2010). Strategic export orientation and internationalization barriers: evidence from SMEs in a developing economy. Journal of International Business and Cultural Studies, 4, 1-10.
- 39. Penrose, E.T. (1959). The theory of the growth of the firm. London: Basil Blackwell.
- 40. Peteraf, M.A. (1993). The cornerstones of competitive advantage: a resource based view. Strategic Management Journal, 14, 179-191.
- 41. Popovska, D.I & Boer, H. (2008). Manufacturing strategy configurations, contingencies and performance. Paper presented at the 15th International Annual EurOMA Conference, Groningen, Netherlands, June 15-18.
- 42. Porter, M.E. (1985). Competitive advantage: creating and sustaining superior performance. New York: Free Press.
- 43. Raymond, L. & Croteau, A.M. (2009). Manufacturing strategy and business strategy in medium sized enterprises: performance effects of strategic alignment. IEEE-Transactions on Engineering Management, 56(2), 192-202.
- 44. Salavou, H.E& Halikias, J. (2009). Strategy types of exporting firms: a view on the basis of competitive advantage. European Business Review, 21/2, 144-158.
- 45. Singh, H. (2013). Influence of competitive strategy, manufacturing strategy, export market orientation and external environment on export performance of manufacturing SMEs. Unpublished PhD thesis, Universiti Utara Malaysia, Kedah, Malaysia.
- 46. Singh, H. & Mahmood, R. (2013). Determining the effect of market orientation on export performance on SMEs in Malaysia: an exploratory study. Advances in Management & Applied Economics, 3(6), 223-232.
- 47. St. John, C.H. & Harrison, J.S. (1999). Manufacturing based relatedness, synergy, and coordination. Strategic Management Journal, 20, 129-145.
- 48. Styles, C., Patterson, P. & Ahmed, F. (2008). A relational model of export performance. Journal of International Business Studies, 39(5), 880-900.

- Swamidass, P.M. & Newell, W.T. (1987). Manufacturing strategy, environmental uncertainty and performance: a path analytic model. Management Science, 33(4), 509-524.
- 50. Tracey, M., Vonderembse, M.A. & Lim, J.S. (1999). Manufacturing technology and strategy formulation: keys to enhancing competitiveness and improving performance. Journal of Operations Management, 17(4), 411-428.
- 51. Vickery, S.K., Droge, C. & Markland, R.E. (1993). Production competence and business strategy: do they affect business performance? Decision Sciences, 24, 435-455.
- 52. Ward, P.T. & Duray, R. (2000). Manufacturing strategy in context: environment, competitive strategy and manufacturing strategy. Journal of Operations Management, 18(2), 123-138.
- 53. Wernerfelt, B. (1984). A resource-based view of the firm. Strategic Management Journal, 5(2), 171-180.
- 54. Williams, F.P., D'Souza, D.E., Rosenfeldt, M.E. & Kassaee, M. (1995). Manufacturing strategy, business strategy and firm performance in a mature industry. Journal of Operations Management, 13(1), 19-33.
- 55. Young, R.B. (2005). Factors influencing export market orientation and export performance: an empirical investigation. Unpublished DBA dissertation, Cleveland state University, US.
- 56. Zhang, C., Cavusgil, T. & Roath, A. (2003). Manufacturer governance of foreign distributor relationships: do relational norms enhance competitiveness in the export market? Journal of International Business Studies, 34(6), 550-566.