

Exploring Logistics Strategy in Malaysian SMEs Performance

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Abstract— To strengthen the SMEs development, SMEs are measured as one of the essential elements to enhance country's economic performance, creating employment opportunities and transforming towards industrialized country by the year 2050. However, in order to sustain role of contributing to the mainstream economy, SMEs have to implement effective strategies in all of their business operations, inclusive of logistics. Therefore the objective of this study was to investigate the challenges encountered as well as the benefits realized by SMEs during the implementation of logistics strategies. The finding of the study reveal that, the lack of logistics management skills among the workforce were the most important challenges to SMEs. In this studies, quantitative approach method was conducted to gather data in the study to measure the descriptive statistics of all the constructs been measured in the survey. This paper will first discuss the literature review covering four areas that are important in this study. This will be followed by finding, recommendations as well as the conclusion of the studies.

Keywords— *SME (Small Medium Enterprise), transforming towards industrialized, logistics strategies & challenges.*

1. Introduction

SMEs are important for the Malaysian economic development [1] and the government started to pay attention for SMEs development since the early 1970s [2]. SMEs designate competitive by adopting the appropriate strategies so that they could become a potential engine for the country's economic growth [3]. Malaysian government and its agencies have taken necessary actions and steps to facilitate the SME's performance by developing various tasks in term of program assistance [4]. Yet, SMEs still facing stiff obstacles that indirectly discourage them from further business development. The important to discover a proper alignment for SMEs

performance to assist and help to improve the logistic strategy management skills performance.

However, this can only be realized if logistics strategies are carefully initiated, developed and implemented so that organizational efficiency performance can be enhanced [5]. Logistics has an important theoretical conceptual foundation where provide a range of disciplines such as marketing, management business strategy and supply-chain management (SCM) [6]. Management logistics strategic activity can have a critical impact on the operational and market performance in SMEs sectors [7].

2. Literature review

Most SMEs industrial fail because of insufficient capability to drive of customers need due to lack of logistics management skills and poor marketing network performance [8],[9]. As the marketplace becomes more intense with competitive pressure, high levels of turbulence and uncertainty, SMEs require logistical capabilities to provide superior value and to manage delay and disruption to operations as well as to ensure uninterrupted service to customers [10]. Therefore SMEs can exploit logistics strategies as a prevailing source of future value-creation and to strengthen capabilities for market developments. The optimization clear understanding of value logistics management style strategies in SMEs are often will create opportunities and appropriate solutions found and for the benefits of the SMEs organization. The benefit of these implication enhanced competitive advantage, increased sales and a reduction in operational costs [11], [12]. Therefore, the function of logistics has become known as an important instrument in contemporary business practice,

because it is available for manipulation in SMEs performance.

SMEs lacks of management competency [13],[14] and unable to develop appropriate skills and knowledge due to the non-financial constraints and insufficient training compared to larger firms by small firm especially among SMEs managers (Gupta and Cawthon, 1996). For example, SMEs having issues related to non-financial factors such as insufficient knowledge, expertise, technical skills, markets accessibility, information and communication technology (ICT), and infrastructure [15]. These challenges will create opportunities for current and appropriate solutions to be found and for the benefits associated with the optimization of logistics strategies to be realized. In this context, logistics creates additional value and brings capital into the organization to enhance the product life-cycle for continuous improvement and product development because the key for an organization's success is that more money as well as capital should flow into the organization than flows out [16].

However, this can only be realized if logistics strategies are carefully initiated, developed and

implemented [5]. It appears then, that organizational efficiency and performance can be enhanced if logistics strategy is considered as an important business approach in SMEs performance. Logistics strategy is among the major reasons for the existence of an enterprise, the thread that connects the enterprise and its customers and helps the organization to stay alert in order to survive in striving for business success in today's unpredictable operating environment [17]. Generally, logistics is regarded as a strategy to keep pace with competitors, market changes and supply-chain integration [18]. The drive for greater efficiencies and cost reductions has forced many organizations to specialize in a limited number of key areas, such that most logistics strategies have been outsourced by large organizations as a strategy to improve performance and reduce costs [19].

3. SMEs Defination in Malaysia

Table 1, shows the new definitions of SMEs for the manufacturing sector and service and other sectors using th size of total full-time staffs and yearly sale turnover. Basically, the definition as was formally been used since January 2014.

Table 1. Definitions by Size Operations

Category	Micro	Small	Medium
Manufacturing	Sales turnover of less than RM 300,000 OR Employee of less than 5	Sales turnover from than RM 300,000 to less than RM 15 million OR Full-time employees from 5 to less than 75	Sales turnover from RM 15 million to not exceeding RM 50 million OR full-time Employee from 75 to not exceeding 200
Service and other sectors	Sales turnover of less than RM 300,000 OR employee of less than 5	Sales turnover from than RM 300,000 to less than RM3 million OR Full-time employees from 5 to less than 30	Sales turnover from RM 3 million to not exceeding RM 20 million OR full-time Employees from 30 to not exceeding 75

Source: SMEs Corp. 2017

It revealed that microenterprise is a firm who has an annual sales turnover of less than RM300,000 or full-time employees of less than 5. Meanwhile, to be considered as small enterprises, the firm needs to have employees of between 5 to 75 and annual sales turnover between RM300,000 to RM15 million. However, if the enterprises have full-time employees between 75-200 and an annual sales

turnover of RM15 million to RM50 million, they are categorized as medium enterprises. These SME companies are involved in various economic sectors such as manufacturing, services, agriculture, mining and quarrying, and construction. In addition, as shown in Table 2, majority of Malaysian SMEs are in the services sector (89.2%; 809,126/907,065), manufacturing (5.3%; 47,698/907,065), construction, (4.3%;

39,158/907,065); agriculture (1.1%; 10,218/907,065); and mining and quarrying (0.1%; 865/907,065).

SMEs constituted nearly 97.30% percent of the total number of establishments in Malaysia alone. Manufacturing represents the chemical or physical transformation of components or materials into new products. Services and others indicate all firms that

provided services such as hotels and restaurants; business and trade; education; health services; professional and ICT services; entertainment; financial intermediation; and manufacturing-related services such as R&D, warehouse, etc. Furthermore, classify SMEs into three different levels of progress and their development as the time goes on or taking through the challenges.

Table 2. Breakdown of SMEs Sectors and Size

Various Sectors	No. of SMEs Establishment Percentage of Establishment						
	Sectors	Micro	Small	Medium	Total SMEs	% of SMEs	No. of Large Firms
Services	649,186	148,078	11,862	809,126	89.2	9,185	818,311
Manufacturing	22,083	23,096	2,519	47,698	5.3	1,403	49,101
Construction	17,321	17,008	4,829	39,158	4.3	1,400	40,558
Agriculture	4,863	4,143	1,212	10,218	1.1	1,410	11,628
Mining & Quarrying	217	458	190	865	0.1	161	1,026
Total	693,670	192,783	20,612	907,065	100,00	13,559	920,624

Source: Department of Statistics, Malaysia (2016)

- i. SMEs that are secured by the government from the globalization upshot [3] whom response more on the local needs, known as local responsiveness.
- ii. SMEs those are less adaptable to the globalization pressure but high local responsiveness, known as transnational strategy.
- iii. SMEs that are able to compete and liaise with internationally may gain the benefit from the globalization [20] known as global standardization strategy. Manufacturing SMEs sectors are involved in the three key subsectors, i.e. textiles and apparels, metal products, and food and beverages [21].

4. Challenges facing Malaysian SMEs in the global business environment

Previous studies highlight issues and challenges faced by SMEs from different dimensions and perspectives. But, lack of research on investigating further on how the firm could growth in more

progressive which eventually expedite the country's economic growth. Malaysian SMEs also face varies of problems, which may affect their profitability and development. For instance, SMEs experience challenges in their performance because supply chain integration is complex [22]. The implementation of logistics strategies within SMEs is often triggered by pressure from customers [23]. To be successful, SMEs must understand the importance of logistics strategy implementation, be observant and adjust to the needs of their customers to preserve their market shares and to assure their growth [24].

Furthermore, SMEs also lack technical in research to development of business training education, which are factors that frequently many SMEs into a sustained negative trajectory [25]. As a key driver of economic growth, SMEs must develop themselves strategically to be more competitive to meet domestic, international and globalization challenges and to offer good product/service design and performance [26]. SMEs also face the challenge of using logistics strategies that play a key role in aligning business strategy such as delivery, ordering, productivity and responsiveness to customer needs [27]. As a result, SMEs are often unable to identify potential markets and are incapable of exploiting existing market opportunities that require large volumes, reliable quality and acceptably high standards, and to

ensure the regular supply of their products to their customers [28]. Because of limited resources, SMEs are often unable to benefit from the opportunities offered by global value chains because of their low connectivity to global transport networks and their weak productive capacity [29].

5. Methodology

To explore logistic performance within manufacturing SMEs, a questionnaire survey was conducted. The SMEs sectors was chosen because it is one of the most important sector that contributed significantly to the GDP of Malaysia. The quantitative nature of the study was also based in the need to quantify the data collected and to generalize the findings in terms of the impact of logistics strategies on SMEs performance in north region of Malaysia. In this study, Likert Five-point Scale used to rate a company's performance and the number indicates only relative positions in an ordered series and scale was assigned to a rank order values (1=strongly disagree to 5=strongly agree). Cronbach's Alpha for the study dependent variables and independent variables were above 0.70. Therefore data that were collected for this study were considered to be internally stable and consistent. There are 197,763 manufacturing SMEs (refer Table 3) operated in Northern Region (Malaysia Economic Census, 2016). Therefore, in this study, SME which is organization will be taken as the unit of analysis. Questionnaires were chosen to collect data, as they were deemed suitable for gathering collecting accurate information. A quantitative research method is suitable for measuring phenomena [30] and enables this study to generalize in identifying SMEs performance patterns.

Table 3. Number of SMEs Establishments by States

State	Total SMEs
Perak	75,140
Pulau Pinang	66,921
Kedah	48,894
Perlis	6,808
Total	197,763

Source: Economic Census, 2016

To address the poor response rate, a total of 500 questionnaires was distributed and it is larger compared to sample size recommended. According to [31] the response rate is moderately high (about

30 % to 50%) for self-delivered and collected questionnaire. With target to obtain at least 50% of response rate, the researched decided to use the sample size by 50% which results in 500 questionnaires to be sent.

6. Factors Affecting on SMEs Business Performance

Meanwhile, [32] suggested that SMEs experiencing management issues especially on management skills and competency that often being neglected by the SMEs. SMEs only focused on short-term management issues especially SMEs located in Asian countries. The findings of this study seem to suggest that most SMEs have realized this fact, sustainable competitive advantage from their logistics strategies [33]. [34] revealed that management issues would become a cost incurred and losses to the firm. Firms were managed by top management with (1) lack of contemporary knowledge and management skills, (2) poor accessibility to world markets, (3) lack of supportive and reliable information, and (4) office automation infrastructure [15].

SMEs are still unaware of the availability of management training programs [35]. Without proper guidance, SMEs did not know how to apply for the assistance; the basic requirement needed and have no confidence in their proposal preparation. In addition, [36] found that most of Malaysian SMEs unaware of the existing of government assistance and failed to fully utilize the services provided [37]. In the study, the lack of personnel who are adequately skilled to implement logistics strategies emerged as the second most important challenge.

Furthermore, SMEs also lack of understanding in running the company [38] especially in term of building up their networking concerning (1) promoting methods, (2) branding, (3) client trustworthiness and also (4) good contacts [2]. The importance of networking for the Malaysian SMEs who participate in import/export activities are the main barriers revolving around the lack of knowledge and information of overseas markets, business performance, competition, and foreign sales. [39] argue that the main difficulties for business growth could be lack access to the social and business networks due to their incapability. Therefore, Malaysian SMEs need to establish

networking among individuals or organizations for further understanding and predicting customers' demands and competitive business environment. Based on the discussion above, the researcher concludes that there are many issues that need a lot of improvement, initiatives and arrangements in order to develop the SMEs performance.

7. Finding

This result has agreement with [40] that logistics has also become more prominent as a critical success factor in competitive advantage, since it can be used to outperform competitors in providing the right product to the right place at the right time. The findings of this study seem to suggest that most SMEs have realized sustainable competitive advantage from their logistics strategies. Logistics is responsible for the distribution of products, which ensures that products are timely delivered to the marketplace, where they can be easily accessed by the customer [41]. This could be most opportune to SMEs, chiefly because sales are the major driver of profit in most businesses, both large and small [42]. Therefore, SMEs could employ logistics strategies as an instrument for enhancing their market share through accelerated sales.

8. Recommendations

Based on the findings of the study, several recommendations can be made. To address the challenges related to financial capitalization, SMEs could seek financial assistance from government department of trade and industry [43]. Further financial assistance could be accessed through collaborative efforts between the SMEs and their suppliers. As a remedy to the extensive skills shortages, SMEs could invest in sustained training and development programs aimed at enhancing the logistics-related skills of their workforce [44]. To deal with the complications associated with technology, SMEs could ensure that technology issues into strategic planning initiatives, such that they form part of the goals and vision of the enterprise [45]. However, this can only be attained when SMEs have managed to obtain adequate financial assistance, since the adoption of technology also depends on the availability of financial resources. If implemented, these strategies will effectively assist SMEs to proactively deal with nagging challenges encountered during the implementation of logistics strategies.

9. Conclusion

The purpose of the study was to investigate the challenges encountered as well as the benefits derived by SMEs from the implementation of logistics strategies. Although the findings of the study are not surprising. The study acknowledges the dominating influence and importance of the challenges namely management skills shortages among logistics practitioners faced by SMEs in implementing logistics strategies. As a remedy to the extensive skills shortages, SMEs could invest in sustained training and development programs aimed at enhancing the logistics-related skills of their workforce [44]. If implemented, these strategies will effectively assist SMEs to proactively deal with nagging challenges encountered during the implementation of logistics strategies.

References

- [1] Said, J., E. K. Ghani, and Z. Ibrahim. "Assessment of computerized management accounting system among small and medium size construction companies." *European Journal of Economics, Finance and Administrative Sciences*, Vol. 39, pp. 32-39, 2011.
- [2] Khalique, Muhammad, et al. "Challenges faced by the small and medium enterprises (SMEs) in Malaysia: An intellectual capital perspective." *International Journal of current research*, Vol. 3, No.6, pp. 398, 2011.
- [3] Samad, N. A. "Positioning Malaysian SMEs in the global". *Proceedings of Persidangan Kebangsaan IKS 2007*, Kota Kinabalu: Universiti Utara Malaysia.
- [4] Muhammad, Mohd Zulkifli, et al. "Small and medium enterprises (SMEs) competing in the global business environment: A case of Malaysia." *International Business Research* Vol. 3, No. 1, pp. 66, 2010..
- [5] Benjaafar, Saif, Yanzhi Li, and Mark Daskin. "Carbon footprint and the management of supply chains: Insights from simple models." *IEEE transactions on automation science and engineering*, Vol. 10, No.1, pp. 99-116, 2012.
- [6] Dekker, Rommert, Jacqueline Bloemhof, and Ioannis Mallidis. "Operations Research for green logistics—An overview of aspects, issues, contributions and challenges." *European journal of operational research*, Vol. 219, No.3, pp. 671-679, 2012.
- [7] Narasimhan, R. & Talluri, S. "Perspectives on risk management in supply chains". *Journal*

- of Operations Management, Vol. 27, No. 2, pp. 114-118, 2009.
- [8] Zeithaml, Valerie A., Mary Jo Bitner, and Dwayne D. Gremler. "Services marketing: Integrating customer focus across the firm". McGraw-Hill Education, 2018.
- [9] Mbamba, U.O.L. (2009). "The Technology Challenges in Procurement Management". 24th Materials Management Professionals' Annual Conference, December 1st-3rd, 2009, Arusha, Tanzania.
- [10] Braunscheidel, Michael J., and Nallan C. Suresh. "The organizational antecedents of a firm's supply chain agility for risk mitigation and response." Journal of operations Management, Vol. 27, No. 2, pp. 119-140, 2009.
- [11] Escribá-Esteve, Alejandro, Luz Sánchez-Peinado, and Esther Sánchez-Peinado. "The influence of top management teams in the strategic orientation and performance of small and medium-sized enterprises." British Journal of Management, Vol 20, No. 4, pp. 581-597, 2009.
- [12] Polychronakis, Yiannis, and Xiang Li. "Barriers to international supply chain collaboration for small Chinese costume jewellery suppliers." The Cyprus Journal of Sciences, Vol. 6, pp. 181, 2008.
- [13] Snell, Robin, and Agnes Lau. "Exploring local competences salient for expanding small businesses." Journal of Management Development (1994).
- [14] Zainol, Noor Raihani, et al. "Examining the effectiveness of micro-enterprise development programs in Malaysia." Journal of International Studies, Vol. 10, No. 2, 2017.
- [15] Hassan, Nurbani Binti, et al. "Financial constraints and opportunities of micro enterprise entrepreneurs: A theoretical framework." International conference on business and economics research. Vol. 1. 2011.
- [16] Kruse, G. "Cash is king – and don't you forget it". Journal of Operations Management, Vol. 33, No. 6, pp. 13-17, 2007.
- [17] Chopra, S., and P. Meindl. "Supply chain management: Strategy, planning, and operation. Upper Saddle River, New Jersey: Pearson Education." 2010.
- [18] Meade, Laura, and Joseph Sarkis. "Strategic analysis of logistics and supply chain management systems using the analytical network process." Transportation Research Part E: Logistics and Transportation Review, Vol. 34, No. 3, pp. 201-215, 1998.
- [19] McIvor, Ronan. "How the transaction cost and resource-based theories of the firm inform outsourcing evaluation." Journal of Operations management, Vol. 27, No. 1 , pp. 45-63, 2009.
- [20] McMahon, Richard GP. "Business growth and performance and the financial reporting practices of Australian manufacturing SMEs." Journal of small Business management, Vol. 39, No. 2, pp. 152-164, 2001.
- [21] SME Corp. 2010. SME Annual Report 2009/10. Kuala Lumpur Sentral, Malaysia: Small and Medium Enterprise Malaysia (SME Corp. Malaysia).
- [22] Ebrahim, N. A., Ahmed, S. & Taha, Z. "R&D networking and value creation in SMEs". Department of Engineering Design and Manufacture, Faculty of Engineering, University of Malaya, Kuala Lumpur, 2008.
- [23] Gélinas, René, and Yvon Bigras. "The characteristics and features of SMEs: favorable or unfavorable to logistics integration?." Journal of Small Business Management, Vol. 42, No. 3, pp. 263-278, 2004.
- [24] Archer, Norman P., Paul Hong, and Jungsik Jeong. "Supply chain management practices of SMEs: from a business growth perspective." Journal of Enterprise Information Management, 2006.
- [25] Taticchi, Paolo, Paola Cocca, and Marco Alberti. "A framework to assess performance measurement systems in SMEs." International Journal of Productivity and Performance Management, 2010.
- [26] Raymond, Louis, and Anne-Marie Croteau. "Enabling the strategic development of SMEs through advanced manufacturing systems." Industrial Management & Data Systems, 2006.
- [27] Deros, Baba Md, Sha'ri Mohd Yusof, and Azhari Md Salleh. "A benchmarking implementation framework for automotive manufacturing SMEs." Benchmarking: An International Journal, Vol. 13, No. 4, pp. 396-430, 2006.
- [28] Udin, ZulkifliMohamed, Shahimi Mohtar, and AbdulAziz Othman. "Collaborative supply chain management: The hybrid knowledge-based development approach of suppliers-customers perspective." Operations and Supply Chain Management: An International Journal, Vol 1, No. 2, pp. 130-141, 2014.
- [29] Arvis, Jean-François, et al. *Connecting to Compete 2010: Trade Logistics in the Global Economy--The Logistics Performance Index and Its Indicators*. World Bank, 2010.
- [30] Hair, Joseph F., et al. "Multivariate data analysis . Uppersaddle River." 2006.
- [31] Saunders, Mark, Philip Lewis, and Adrian Thornhill. *Research methods for business students*. Pearson education, 2009.

- [32] Salikin, Norasikin, Norailis Ab Wahab, and Izlawanie Muhammad. "Strengths and weaknesses among Malaysian SMEs: Financial management perspectives." *Procedia-Social and Behavioral Sciences*, Vol. 129, pp. 334-340, 2014.
- [33] Uden, Lorna. "How to promote competitive advantages for SMEs: issues, ideas and innovation." *Journal of Law and Governance*, Vol. 2, No. 2, 2007.
- [34] Mohd Thas Thaker, Mohamed Asmy, and Mustafa Omar Mohamed. "The challenges of micro enterprises in Malaysia and the prospect for integrated cash waqf micro enterprise investment (ICWME-I) model." IIUM Press, pp. 203-222, 2015.
- [35] Hashim, M. K., S. Ahmad, and R. Hassan. "An evaluation of SMEs management training programs." *SMEs development in Malaysia: programs and evaluation*, pp. 49-67, 2007.
- [36] Hashim, Mohd Khairuddin. "Small and medium-sized enterprises development in Malaysia: Programs and evaluation". Universiti Utara Malaysia Press, 2007.
- [37] Foziah, I., L. Aziz, and H. Sudin. "Entrepreneurs' awareness of bank borrowing offered by government agencies and commercial bank in Malaysia."
- [38] Yusoff, MNH, Yaacob, MR, and Ibrahim, MD (2010). *Business Advisory: A Study on Selected Micro-Sized SMEs in Kelantan, Malaysia*. *International Journal of Marketing Studies*, Vol. 2, No.2, pp. 245-257, 2006.
- [39] Hashim, Mohd Khairuddin, and Syed Azizi Wafa. "Small & medium-sized enterprises in Malaysia: development issues". Pearson Malaysia, 2002.
- [40] Teoh, Wendy Ming-Yen, and Siong-Choy Chong. "Improving women entrepreneurs in small and medium enterprises in Malaysia: policy recommendations." *Communications of the IBIMA*, Vol. 2, No. 5, pp. 31-38, 2008.
- [41] Quayle, Michael. "A study of supply chain management practice in UK industrial SMEs." *Supply Chain Management: An International Journal*, 2003.
- [42] Roslin, Rosmimah Mohd, and Noraini Ismail. "Assessing competitive advantage of SMEs through effective supply chain management." *Paradigm*, Vol. 12, No. 2, pp. 130-141, 2008.
- [43] Kotler, P., & Armstrong, G. "Principles of marketing". Pearson education, 2010.
- [44] Department of Trade and Industry (the DTI). *Black business supplier development programme*, 2012.
- [45] Brum, Scott. "What impact does training have on employee commitment and employee turnover?." 2007.
- [46] Gagnon, Y., and Jocelyne Dragon. "The impact of technology on organizational performance." *Optimum*, Vol, 28. pp. 19-31, 1998.
- [47] Lau, Patricia Yin Yin, et al. "Ethical work climate, employee commitment and proactive customer service performance: Test of the mediating effects of organizational politics." *Journal of Retailing and Consumer Services*, Vol. 35, pp. 20-26, 2017.