

Enhancing the International Competitiveness of Malaysian Manufacturing Small and Medium Enterprises in the Context of E-commerce and Regional Trading Blocs

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Abstract

Original Research Article

Malaysian manufacturing small and medium enterprises (SMEs) are challenged by the competitive pressures emerging from trade liberalization and rapid technology advances. They have to emphasize on meeting the needs of Industry Revolution 4.0 (IR 4.0) and adopt appropriate competitive strategies to acquire sustainable competitive advantage. This paper examines the international competitiveness of Malaysian manufacturing SMEs in the context of E-commerce and regional trading blocs. **Methodology:** Combining inductive and deductive methodologies, the data collection tools were a literature review, personal interviews and a web survey involving 102 participants. A five-point Likert scale was adopted for attitude measurement. **Results:** Regional trading blocs are creating export opportunities for Malaysian manufacturing SMEs. This requires them to develop the competencies to identify new export markets, address competitive threats and participate in global supply chains. However, they face several challenges for successful internationalization including the adoption of IR4.0 practices and new business models to achieve competitive advantage in an increasingly competitive landscape. **Conclusion and Recommendations:** The findings revealed that in the digital economy has generated new electronic markets for manufactured goods, E-commerce is an effective strategic competitive weapon to address the intense competition. This requires Malaysian SMEs to effectively compete in a liberalized trading landscape. They also have to embrace IR 4.0, for competing with larger enterprises. It is recommended that manufacturing SMEs acquire democratized technologies, which include machine learning and cloud computing to develop their R&D capabilities for new product development and to lower their operating costs.

Keywords: Trading blocs, E-commerce, IR 4.0, Internationalization, Competitive strategies.

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INTRODUCTION

Small and Medium Enterprises (SMEs) are the drivers of national economic growth and the key to wealth creation [1]. The Malaysian Government's Eleventh Malaysian Plan (11MP) for the period 2016-2020 emphasizes the economic significance of SMEs and the pivotal roles they play in national economic development [2]. Free Trade Areas (FTAs) and regional trading blocs (RTBs) that include the ASEAN Economic Community (AEC) are liberalizing global trade and changing the international trade landscape [3]. These developments create opportunities for Malaysian manufacturing SMEs to penetrate international markets, as well as to attain economies of scale and increase participation in global value chains [4]. However, they have to be globally competitive [5] to overcome the barriers for internationalizing their operations [6]. The rapid growth of E-commerce and related digital technologies can benefit Malaysian SMEs in terms of

marketing new products to engage more closely with international firms through improved client's communication [7]. However, E-commerce adoption remains slow as highlighted in the SME Masterplan for the period 2012-2020 [8]. This paper focuses on the international competitiveness and preparedness of Malaysian manufacturing SMEs to successfully take advantage of the benefits emerging from regional trading blocs.

LITERATURE REVIEW

The reviewed literature related to i) the role of SMEs in the Malaysian economy, ii) the internationalization of Malaysian manufacturing SMEs, and iii) the challenges faced by Malaysian SMEs.

The Role of SMEs in the Malaysian Economy

Several developed and developing countries recognize the significance of SMEs in creating jobs,

poverty reduction and GDP growth [9]. In Malaysia, SMEs dominate the economy in terms of GDP, exports and employment. In 2014, they accounted for 97.3 % or 645,136 of all business establishments and they contributed 33.1% of the Malaysian GDP, 57.5% to employment and 19% towards exports [10]. The manufacturing SMEs, who are intermediary suppliers of Trans National Corporations (TNCs) accounted for 4.1% of Malaysia's GDP and 76% of Malaysia's total exports in 2014. The largest contributors were electrical and engineering (E&E) followed by chemical products, machinery parts, metal products and good products [10].

Recognizing the importance and potential of the SMEs, the Malaysian Government has policies to encourage them to increase their exports [6]. These are set out in SME Masterplan which covers the period 2012-2020 and its overall goal is to further accelerate the development of SMEs [8]. The targets are to raise the contribution of SMEs to the economy by 2020 in respect of GDP from 32% in 2010 to 41%, employment from 59% in 2010 to 62% and exports from 19% in 2010 to 25% by 2020. To achieve these targets, the Masterplan acknowledges that SMEs must upgrade and become the first-tier suppliers of the large enterprises with strong connections to the global supply chain [8]. This connection will require the SMEs to comply with environmentally- and socially-friendly practices of the global supply chain [11].

In 2016, the SME Corporation presented the SME Integrated Plan of Action (SME IPA) for SMEs to accelerate productivity through automation, human capital development, intensifying innovation and encouraging internationalization. Recognizing the traditional form of financing may no longer be sufficient, the SME IPA emphasizes on SMEs being able to secure financing through non-banking avenues and financing platforms such as venturing financing, Angel investors and crowd funding. These are expected to reduce the cost and the time taken by SMEs to gain access to the financing they need [12].

Increasingly, manufacturing SMEs are taking advantage of Government policies to move up the value chain. They are upgrading and becoming first-year suppliers of the large global enterprises with strong connections to the global supply chain [8]. They are also developing competencies for developing their own brands by increasing their investments in hardware, software, employee education and innovation (11 MP).

The internationalization of Malaysian manufacturing SMEs

Malaysia is one of the most open economies in the world, with a trade to GDP ratio of 148% over the period from 2010-2014 as compared to 58% in the developing countries in East Asia and Pacific. Malaysia is an active member of the AEC comprising Brunei,

Indonesia, Malaysia, Philippines, Singapore, Thailand, Vietnam, Laos, Myanmar and Cambodia is the outcome of the AFTA in 1992 [13]. In 2010, ASEAN and China established the CAFTA. The bilateral trade between China-ASEAN has grown from US\$9 billion in 1991 to US\$346 billion in 2015 [4]. CAFTA creates new business export opportunities for Malaysian manufacturing SMEs, since it can assist SMEs to attain economies of scale and increase their participation in the global value chain. Another significant development is the Belt Road Initiative (BRI) as Malaysia can benefit from resulting infrastructure that would serve to promote stronger trading relationships [14].

While trade liberalization creates new export opportunities, it also permits the entry of foreign rival firms into the Malaysian markets which generates intense competition. In view of Malaysia's relatively small population of only 33 million, this limits the size of the domestic market. Malaysian firms including SMEs therefore have to penetrate foreign markets to generate export earnings for maintaining business growth and achieving corporate sustainability [2]. The international market is characterized by intense competition and it is therefore necessary for Malaysian manufacturing SMEs to overcome the competition from their rivals by having a strategic vision, strategic objective, and achieve them through strategic intent. A strategic intent can enable entrepreneurs to become the industry leader, deliver the best service and produce products that match market demands [15]. These also have to be part of the strategic plan which lays out the firm's future direction performance, targets and strategies [16].

Several Malaysian SMEs now play an increasingly active role in foreign markets and rapidly expanding their business to international markets. They are largely SMEs manufacturing food and beverages, wood and wood products, and E&E [6]. While the vast majority of SMEs are in the "start-up" and "growth" stages, an increasing number are moving into the "expansion" stage. They are emphasizing on technology adoption and enhancing their international competitiveness by investing in brand development, strengthening their management capabilities and improving their distribution channels. They are also giving more attention to innovation to develop new export orientated products and penetrating new global markets [8]. While the entry mode into foreign markets varies the majority commence with the "exporting" mode followed by the "licensing" mode. The entry modes of "franchising", "joint venture" and "wholly owned subsidiary" are still in the infancy stage [17].

Challenges faced by the Malaysian manufacturing SMEs

The forces of globalization, as reflected by the FTAs and RTBs, are reducing tariff and non-tariff barriers and creates opportunities for Malaysian SMEs

to venture abroad [18] in order to reduce their dependence on the very competitive and saturated traditional domestic markets [6]. However, they have to address several challenging internationally competitive [19], as well as address the challenges posed by the new foreign markets entrants into the domestic market that are able to offer quality products at reduced prices [20]. They have to benefit from increased productivity [21] and enhance their competencies for branding, customer loyalty [22], and identifying new market opportunities [23]. Other challenges are the access to finance, strengthening management skills [24], expanding the product range and increasing service quality [25].

E-commerce and mobile and digital technologies are generating new electronic markets for manufactured goods [8]. The changed situation requires Malaysian manufacturing SMEs to embrace IR4.0 and to use new technologies and development capabilities for competing with larger companies. They also have to emphasize on innovation [26]. However, they have limited innovative capacity due to financial and human resources constraints, talent management, access to technology and access to markets [24].

Pertinent Prior Research

Much prior research has been conducted on the competitiveness of Malaysian manufacturing SMEs in the international and domestic markets as well as the challenges that they face from many directions [27, 1, 28, 29, 24, 20, 5, 30]. Abdullah and Zain [6] found that advances in internet communication technology (ICT) gave SMEs the opportunity to expand into foreign markets. However, the lowering of trade barriers between countries and the similarity of SME products are creating competitive pressures which require them to be internationally competitive [19]. Salikin, Wahah and Muhammad [21] found that SMEs are challenged by financial constraints as well as non-financial constraints which include management skills and the marketing of SMEs, products and services. The finding of the study by Ahmad and Seet [31] revealed there is a high failure rate for Malaysian SMEs due to poor management skills, prior research also found that SMEs are challenged by lack of access to capital and credit, poor product quality, lack of knowledge about marketing channels and inability to internationalize their operations by establishing marketing networks to export their products [29, 24]. Tambunan [32] assessed the readiness of Malaysian SMEs to compete in regional markets while remaining competitiveness in domestic markets against imported growth. However, there was limited recent research on the international competitiveness of Malaysian manufacturing SMEs to take advantage of the export opportunities emerging from the FTAs and the RTVs.

RESEARCH METHODOLOGY

Inductive and deductive research approaches have strengths as well as weaknesses. Combining both

approaches permits the strength of each approach to counteract and offset the weaknesses of the other [33]. Guided by this, this study combined quantitative and qualitative approaches. The data collection tools for the qualitative stage were a literature review and personal interviews, involving 12 participants. Four propositions base on the research issues identified by the literature were tested through a web survey involving 102 participants [34].

SALIENT FINDINGS

Content analysis was conducted to identify themes and findings from the secondary data collected from the literature review and the personal interviews. Descriptive statistics were used to analyze the survey data. The salient findings are outlined and these relate to the implications of trade liberalization, the barriers faced by Malaysian SMEs for venturing into overseas markets and the adequacy of Government support programs for enhancing the international competitiveness of SMEs.

The implications of trade liberalization

The literature revealed that the FTAs and RTBs are liberalizing global trade and changing the international trade landscape. The reduced trade barriers create opportunities for Malaysian manufacturing SMEs to move into international markets. The pull factors are reduced transaction costs, economy of scale and increase revenues. The push factors are domestic market saturation, excess capacity and intense competition following the entry of foreign rivals in the Malaysian domestic market. The interview participants concurred that Malaysia's active participation in FTAs and RTBs generate a wide range of export opportunities for Malaysian manufacturing SMEs. The FTAs and RTBs are fostering global integration and these require the Malaysian SMEs to increase their competitive positioning through learning, adoption and innovation. The results from the web survey revealed that trade liberalization is extending the global and regional reach of Malaysian SMEs. However, the lowering of Malaysia's tariff barriers because of the country's participation in FTAs and RTVs also permits the entry of low cost production regional rivals who pose competitive threats. This suggests that the Malaysian SMEs have to produce high quality products at a lower cost to withstand the competition. This requires productivity increases, R& D capabilities for new product development and a greater reliance on democratized technologies, including machine learning and cloud computing which are the driving forces for IR 4.0.

The barriers faced by Malaysian SMEs for venturing into overseas markets

The removal and or the reduction of tariff and non-tariff barriers have resulted in foreign firms and SMEs entering the Malaysian market. This has generated intense competition for Malaysian SMEs who

now have to compete with the rivals from foreign SMEs, in particular other members of the AEC and China who are able to offer quality products at reduced prices. The market situation makes it necessary for Malaysian SMEs to venture abroad for growth and corporate sustainability. This was highlighted in the literature as well as by the interview participants and the web survey respondents. However, the findings from the web survey suggest that Malaysian SMEs are generally not well positioned to internationalize their operations. They are constrained by the lack of financial and management resources, the limited product range, poor marketing skills and the absence of global mind-sets to take advantage of emerging opportunities in overseas markets. They also lag behind on technology management, knowledge acquisition and R&D capabilities for new products developments. Furthermore, only a small number of Malaysian SMEs have adopted sustainable practices for the final products, the material used for packing and logistical solutions that comply with the environmentally standards for participating in global supply chains. The results underline the needs for Malaysian SMEs to adopt appropriate competitive strategies for participating in global supply chain. The strategies should be oriented to increase the E-commerce adoption rate due to behavioural and organizational barriers which include the lack of an ICT adoption culture and organizational resistance.

Adequacy of the Government's support policies for Malaysian SMEs

The literature revealed that the Malaysian Government has a comprehensive policy framework which is aimed at strengthening the performance of SMEs and to encourage them to internationalize their operations populations. The policies largely relate to financial accessibility, advisory services, marketing, and information and communications technology. The findings of the web survey suggest that the Government should implement additional measures to enable SMEs to gain better access to financing. There should also be policy support for training SMEs to better understand different cultures and legal systems in order to gain an international orientation. The personal interview participants proposed that Government assistance be targeted at the exporting and export ready manufacturing SMEs for enhancing their international competitiveness.

CONCLUSION AND RECOMMENDATIONS

This paper examined the international competitiveness of Malaysian manufacturing SMEs in the context of E-commerce and regional trading blocs. The findings revealed that while the FTAs and RTBs create internationalization opportunities for Malaysia manufacturing SMEs. They have to overcome several barriers for successfully venturing into foreign markets. They have to address the competitive pressures posed by foreign SMEs and move up the supply chain by

emphasizing on technical innovation, ICT adoption, and embracing IR 4.0.

The Government's support programs are centered on capacity building for improving the competitiveness of Malaysian SMEs. However, more policy support is required, including incentives for them to develop their R&D capabilities. On their part, Malaysian SMEs have to adopt and implement appropriate strategies to compete in regional markets as well as to remain competitive in the domestic market. For this purpose, they have to analyze the external environments and realign their business models and products to achieve sustainable competitive advantage.

REFERENCES

1. Razak RA. Entrepreneurial Orientation as a Universal Remedy for the Receding Productivity in Malaysian Small and Medium Enterprises: A Theoretical Perspective. *International Journal of Business and Social Science*. 2011 Oct 1;2(19).
2. Economic Planning Unit. *The Eleventh Malaysia Plan, 2016- 2020*. Kuala Lumpur: Prime Ministers Department. 2016.
3. Wang N. The relationship between regional trading blocs and globalization. *International Journal of Economics and Finance*. 2010 Feb;2(1):171-3.
4. Biswas R. *China's OBOR initiative gives trillion-dollar boost to Asian infrastructure*. 2017. The Malaysian Reserve, 17 May 2017.
5. Hashim H. *New force awakens with TPP: SMEs need to be agile and grow stronger to reap benefits of free market*. 2016. The New Straits Times, February 1, 2016.
6. Abdullah NA, Zain SN. The internationalization theory and Malaysian small medium enterprises (SMEs). *International Journal of Trade, Economics and Finance*. 2011 Aug 1;2(4):318.
7. Hunaiti Z, Masa'deh R, Mansour M, Al-Nawafleh A. Electronic commerce adoption barriers in small and medium-sized enterprises (SMEs) in developing countries: the case of Libya. *IBIMA Business Review*. 2009;2(5):37-45.
8. SME Corporation Malaysia. *SME Master Plan 2012 – 2020, Kuala Lumpur*. 2012.
9. Schröder E, Schmitt-Rodermund E. Crystallizing enterprising interests among adolescents through a career development program: The role of personality and family background. *Journal of Vocational Behavior*. 2006 Dec 1;69(3):494-509.
10. Hafsa H. SME Development Framework: The Malaysian Case. In SME Corporation Malaysia, presented in Cairo AMC-CBE-WBG SME Conference 2015 Jan (pp. 14-15).
11. Andersen M, Skjoett-Larsen T. Corporate social responsibility in global supply chains. *Supply chain management: an international journal*. 2009 Mar 13;14(2):75-86.
12. SME Integrated Plan of Action. *SME Integrated Plan of Action*. SMEIPA 2016. Kuala

- Lumpur secretariat national SME development council. 2016; (NSDC) 2016
13. Hahn CH, Narjoko D. Causes and Consequences of Globalization in East Asia: What do the Micro Data Analyses Show. Causes and consequences of globalization in east asia: what do the micro data analyses show?. 2010 Mar:1.
 14. Lin SY. *World Economy on the Recovery*. Reported in the Star. 2017; 27th May, 2017.
 15. Hamel G & Prahalad CK. *Competing for the future*. Boston: Harvard Business School Press. 1994.
 16. Thompson A, Strickland A & Gamble J. *Crafting and executing strategy*, McGraw Hill, New York. 2007.
 17. Abdullah N, Rosli NF. An Evaluation on Determinants of Smes Performance in Malaysia. South East Asia Journal of Contemporary Business, Economics and Law. 2015;7(2):16-23.
 18. Liew MS, Eik LH, Zawawi NA. Towards a sustainable collaboration between the oil and gas industry and university. QScience Proceedings. 2015 Aug 28:52.
 19. Kunday Ö, Şengüler EP. A study on factors affecting the internationalization process of small and medium enterprises (SMEs). Procedia-Social and Behavioral Sciences. 2015 Jul 3;195:972-81.
 20. Rahman NA, Yaacob Z, Radzi RM. The challenges among Malaysian SME: A theoretical perspective. World. 2016 Sep;6(3):124-32.
 21. Salikin N, Ab Wahab N, Muhammad I. Strengths and weaknesses among Malaysian SMEs: Financial management perspectives. Procedia-Social and Behavioral Sciences. 2014 May 15;129:334-40.
 22. Afzal H, Khan MA, ur Rehman K, Ali I, Wajahat S. Consumer's trust in the brand: Can it be built through brand reputation, brand competence and brand predictability. International Business Research. 2010 Jan 1;3(1):43.
 23. Agyei-Mensah BK. Financial management practices of small firms in Ghana: An empirical study. 2010.
 24. Beh B. Why small businesses bite the dust. 2013.
 25. Arasti Z, Zandi F, Bahmani N. Business failure factors in Iranian SMEs: Do successful and unsuccessful entrepreneurs have different viewpoints?. Journal of Global Entrepreneurship Research. 2014 Dec;4(1):10.
 26. The Edge. 2017. *Malaysia Lags in Productivity*. June 5th, 2017.
 27. Zainal A M. *Malaysia: The potential effects of FTA on the role of domestic consensus*. Kuala Lumpur: Institute of International and Strategic Studies. 2005.
 28. Scheers LV. SMEs marketing skills challenges in South Africa. *African Journal of Business Management*. 2011; 5 (13), 5048-5056.
 29. Hassan NB, Chin ST, Yeow JA, Rom NM. Financial constraints and opportunities of micro enterprise entrepreneurs: A theoretical framework. In International Conference on Business and Economics Research 2011 (Vol. 1, p. 2010).
 30. Sulaiman N, Ismail R & Mohd Saukani MN. Globalization and total factor productivity: The case of the manufacturing sector in Malaysia. *International Business Management*. 2017; 11(2), 334-341.
 31. Ahmad NH & Seet P. Dissecting behaviors associated with business failure: A qualitative study of SME owners in Malaysia and Australia. *Journal of Asian Social Science*. 2009; 5 (9), 98-104.
 32. Tambunan T. The likely impact of the implementation of ASEAN Economic Community 2015 on local Small and Medium Enterprises. *International Journal of Small and Medium Enterprises and Business Sustainability*. 2015; 1(1), 1-23.
 33. Creswell JW & Plano Clark VL. *Designing and conducting mixed methods research*. Sage, Thousand Oaks, CA. 2007.
 34. Zikmund WG & Babin BJ. *Essentials of Marketing Research* (5th ed.). USA: Cengage Learning. 2012.