

OPEN INNOVATION STRATEGY: HOW IT COULD ENHANCE THE COMPETITIVENESS OF SMEs IN KEDAH TO COMPETE IN THE GLOBAL MARKET?

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ABSTRACT

Most researchers conducted studies on Open Innovation Strategy in a large companies whereas Small and Medium Enterprises (SMEs) proven to be the key driver of country's performance, especially 97.3% of business establishments in Malaysia are the SMEs. The nature of this study is therefore exploratory where some of these theories transferred to all SMEs in Malaysia complement them. The aim of this study is to examine how open innovation strategy could enhance the competitiveness of Malaysia SMEs to compete in the global market. The Government policies regarding the development of local SMEs in the past and present examined. This study had used qualitative method consists of twelve questions for data collection. Besides primary data, secondary data also used to analyse firms' performance and the respective policies. There were three firms in Kedah, as a case study to show the status of the local SMEs. As identified in interviews with the respondents, the identified weaknesses include lack of capital and credit facilities, shortage of skilled labour, lack of knowledge and marketing constraints, limited application of new technology, and lack of collaboration in R&D to improve their products. This study argues that open innovation needed at both macro policy level and at the micro firm level in order to enhance the capabilities of local SMEs in Malaysia in order to compete in the world market.

Keywords: Open Innovation, Performance, Global Competition, Small Medium Enterprises.

INTRODUCTION

Governments all over the world realize that Small and Medium Enterprises (SMEs) play a very important role in economic growth processes. Hence, the governments in many parts of the world had spent billions of dollars to improve SMEs development in order to achieve rapid economic growth. Around 99 per cent of all enterprises in Europe and the USA employ fewer than 500 people and these enterprises accounted for 50 per cent of employment in the USA and over 70 per cent in Europe. For Asian countries, Small and Medium Enterprises also assume a greater role as engines of economic growth. The SMEs sector in Malaysia suggested to play an active role to achieve a high income and developed nation by 2020. This fact has put pressures on policymakers in the government to make some "policy changes" in favour of new SMEs strategy. According to Prime Minister Dato' Sri Najib Tun Razak, this country needs a "policy change" in order to stimulate innovation and promote long-term growth during the innovation-led growth period from 2004 to 2020. The Government would adopt a different and new approach to accelerate the growth of SMEs and innovation to create a strong SME sector and then to compete in the global markets (National SMEs Development Council, 2005).

Therefore, the National SMEs Development Council (NSDC) was established and started "policy changes", and more attention given to Malaysia SMEs sector. As a result, of policy changes, Malaysia's Growth Domestic Product (GDP) has increased from 4.9 per cent in 2010 to 6.8 per cent in 2011. However, Malaysia SMEs expected to face many challenges and must compete with several competitors in the global market in the future. The government needs more new proactive policies and strategies to improve Malaysia SMEs capabilities to compete in the global market (National SMEs Development Council, 2005).

The SMEs in Malaysia has developed in the same pattern as those in developed countries. There are many different types of SMEs developed in both developed and emerging economies (see Figure 1 below). There are three different types of SMEs firms have developed in Malaysia now. The firms divided according to the pyramidal structure of the type. However, most of the SMEs firms in Malaysia dominated by SMEs in traditional sectors with the other two types gradually increasing. Since 2005, the Malaysian government through National SMEs Development Council (NSDC) has given more attention in developing all types of SMEs in Malaysia in order to compete in the global markets. Many plans and strategies have proposed by the government to enhance the capabilities of local SMEs. Until now, majority of SMEs firms in Malaysia here yet to build their own technological capabilities to compete in the global markets. Most local SMEs is still operating in the traditional sectors as shown in Figure 1.

The new regulation imposed by World Trade Organization, which requires equal treatment between foreign companies investing in Malaysia and local companies, has sent a new signal to the government. This has put local SMEs firms in a very difficult position compared to foreign firms investing in Malaysia. Recent debates here also included how Malaysia will compete in the domestic, regional and global markets given their weak capabilities in innovation of local SMEs. The decision to join the Trans-Pacific Partnership Agreement (TPPA) is another challenge to local SMEs in Malaysia. This research attempts to understand the weaknesses of SMEs in Malaysia and propose a new strategy and policy to help them to compete and to enhance their competitiveness in the global markets.

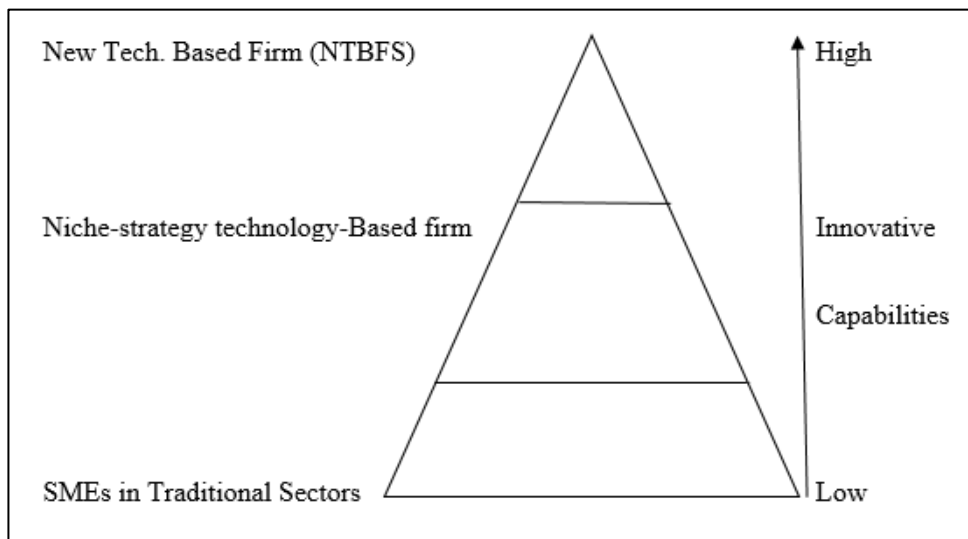
The Evolution of Malaysia SMEs

After the Malaysia past independence, the main purpose of the New Economic Policy (NEP) or DEB has been, create and establish new companies of “bumiputera”. It also tried to increase the number of “bumiputera” employment in the professional occupation and strengthened the management. In the 1980s, the focus of SMEs shifted to the development of SMEs in supporting industries; mainly pre-establish to create a Medium-Size Company. In this era, the government tried to linkage with foreign firm but the linkage was very limited because Malaysian technology was very low at that time. Therefore, it was very difficult for the government to operate effectively the Malaysian SMEs at that time.

The evolution of SME has shifted from New Economic Policy (1971-1990) to the National Development Policy (2001-2020). In this evolution, Malaysian government tries to strengthen SMEs during the 10-year Industrial Master Plan 2 (IMP2). During this period, the government tried to focus and give more attention to developing stronger SMEs. This required major changes in the manufacturing sector, as SMEs made up over 90 per cent of the country's manufacturing sector. The IMP2 programs designed to develop a resilient, broad based and internationally competitive manufacturing sector. These strategies can help manufacturers adapt to the changing global environment and to make these businesses more competitive in all aspects (Seventh Malaysia Plan 1996-2000, 1996).

When entering the millennium era, the Malaysia government tried to find good strategies and policies to help SMEs to compete in the global markets. Under the Eighth Malaysia five-year plan period, Malaysian Government introduced a wide range of assistance programs for SMEs, all aimed at making them stronger and more competitive. There are some programs introduced by the government to help SMEs to compete in the global markets. SMEs policy created to develop a competitive, innovative and technologically strong SMEs sector that is able to contribute to the domestic economy and compete globally. Strategies directed at acquiring technologies to propel SMEs up the value chain in the manufacturing, agriculture and services sectors. In these strategies, the government tries to combine the important main sectors in SMEs through (1) outsourcing, (2) inter-firm linkages, (3) entrepreneurship programs, and (4) knowledge skills.

Figure 1: Innovation in SME Firms



OPEN INNOVATION STRATEGY

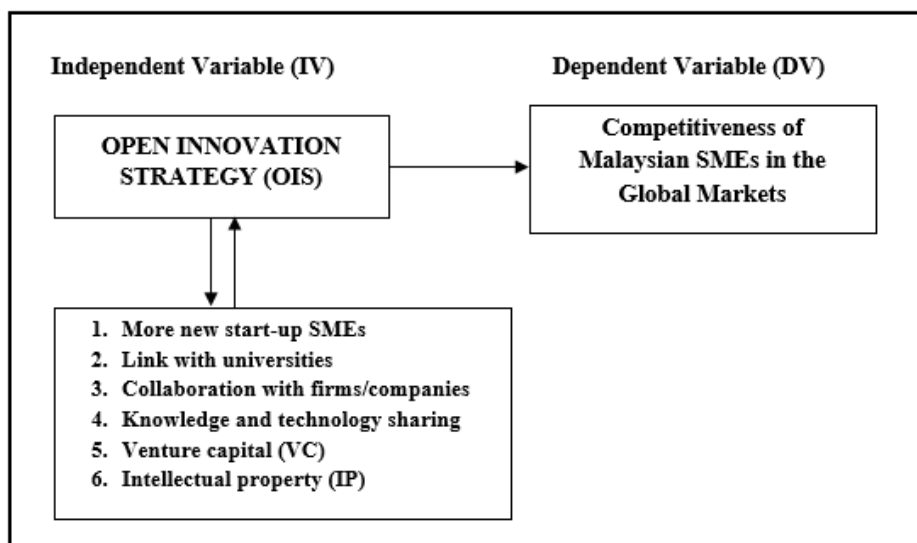
According to Chesbrough (2003), to compete in the global markets, SMEs should shift their operation from old paradigm to new paradigm to get more market and collaboration with a large firm in the global. Triple Helix is very important for the growth of SMEs. It is a process of collaboration between public, universities and private sectors in many activities. By using this Triple Helix, it will help government; private sector and the public sector achieve their goals and objectives in the fastest way and shorter periods.

The approach said to be one of the key strategies to solve this problem. According to Chesbrough, (2003), by collaborating with internal and external partners such as universities, competitors, suppliers, other networks and customers, the Malaysia's SMEs would be able to enhance their technological capabilities to compete in the global market (Vanhaverbeke, 2006).

According to Chesbrough (2006), Open Innovation Strategy defined as “the use of purposive inflows and outflows of knowledge to accelerate internal innovation, and expand the markets for external use of innovation, respectively.” In this research, how SMEs use external and internal knowledge to develop new products and services will be investigate, and become competitive in the global market. There is much evidence, which identifies Open Innovation as the main driving force to long-term growth and sustainability (Chesbrough, 2003). Companies of today have to share these ideas to find new combinations of external and internal sources. When the companies are collaborating with external sources like universities, suppliers, competitors and

customers, they will be able to find faster ways in bringing new products in the markets than companies, which practice closed innovation process (Chesbrough and Garman, 2009).

THEORETICAL FRAMEWORK



The framework shows the influencing degree that the Open Innovation Strategy (IV) has over the Malaysia SMEs competitiveness in the global markets (DV). Six items used as an instrument to answer the main research questions. All information and outcomes from these items has been analysed using traditional descriptive analysis to find out the current weaknesses of SMEs policies in Malaysia. Also able to explain whether Open Innovation Strategy can improve SMEs as engines of growth and can compete in the global markets.

METHODOLOGY

When researcher conducting a case study, the most important source of information is interview. The specific interview guide developed to assist data collection (refer Appendix I). The Secondary data in the form of articles, presentations from company websites, press releases and literature collected with the purpose of compiling earlier research within the field of Open Innovation Strategy. Furthermore, secondary data used to confirm and in some cases elaborate the information provided given by primary sources (Bryman & Bell, 2005). In addition, all of the data has been collected from company's profile, data from SMEs Corporation, company's website and article related to SMEs in Malaysia.

Data collection and analysis

The choice of using a qualitative approach motivated by its openness to new information. Open Innovation Strategy (conducted in large organizations) suggested theories was used; seek to create an increased understanding of these theories by exploring their transferability to SMEs in Malaysia. Comparing and analysing empirical findings done to point out the differences, similarities and weaknesses of SMEs, which finally presented a holistic view on how Open Innovation Strategy managed in the investigated cases. The researcher has chosen to conduct a case study with PERNIAGAAN MUDIM ZAKARIA, ZUZA FOODS and SURIA ISKANDAR SDN BHD firms in Kedah. The choice of how many cases to investigate based on the amount of rival theories in the field (Yin, 2009).

ANALYSIS RESULTS

1. The result from interviews with SMEs firms used to analyse about the past and present policies of SMEs. Based on the result, SMEs in Malaysia still facing financial problems and access of credits from the bank.
2. The SMEs Master Plan 2010-2020 is one of the current government policies to improve and to sustain the SMEs in Malaysia. The SMEs business plan introduced by the government implemented in collaboration with the private sector through the public-private partnerships.
3. As identified in interviews with three SMEs firms in Kedah and previous studies, the current identified weaknesses of SMEs in Malaysia include lack of capital and credits facilities, shortage of skilled labour, lack of knowledge and marketing constraints, limited application of new technology, lack of collaboration in R&D to improve their product.

4. The appropriate policy strategies, Open Innovation Strategy, can give a positive impact to the performance of SMEs when they are collaborating with different partners like universities or research institutions, competitors, supplier and users.

CONCLUSION

This research shows how Open Innovation Strategy can help SMEs in Malaysia to compete in the global markets. The empirical findings of this study compared and analysed based on the interviews with SMEs firms in Kedah, secondary data to support the argument and previous research to suggest Open Innovation Strategy to help SMEs at Malaysian. The new findings aspect of this research is about comparable to large corporations, implementing Open Innovation Strategy to gain financial recourses in order to develop or to produce and commercialize their innovation. Through this analysis, the researcher found the implication to suggest theory of the three core process of Open Innovation by Gassman & Enkel (2010) needs to be extended in order to increase the transferability to SMEs in Malaysia. Based on the findings, the researcher has been able to identify and distinguish the three different types or stages in the process of attracting collaboration partners. The empirical results of this study said, according to the suggested theory, not fully transferable to SMEs. The researcher argues that companies manage the challenges of Open Innovation through pooled R&D of product development or spinouts. The researcher has been able to conclude that SMEs manages the organizational challenges of Open Innovation by emphasizing continuity in the innovation process, consistent meetings among the three SMEs firms at Kedah, a differing degree of trust versus control of the management mechanisms and IP rights.

By engaging in Open Innovation, the further collaboration arises through previous research and the range of possible application of the innovation could increase depending on collaboration partner. Finally, engage in Open Innovation can help SMEs with experiences in adopting Open Innovation Strategy by appropriate IP protection, and right collaboration partners can increase the numbers competence of SMEs to gain more benefits and also help SMEs in Malaysia compete in the global markets.

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Appendix I – Interview Guideline

Part A

Presented below are the main questions that based our interviews on UUM Lecture and people involve in SMEs firm. Since the interviews were conducted under semi-structured conditions, we adapted the follow-up questions depending on the answers we were given. All this questions created to answer the main research question and try to get knowledge and idea to create a good research proposal when we conducted the real research.

The Main Research Questions in Research Proposal

- i. The first question is to know the current status of SMEs in Malaysia.
- ii. The second question is to analysis and examines what the past and present SMEs policies?
- iii. How can Open Innovation Strategy help Malaysia SMEs to compete in the global market?

Questions related to the first research question

- i. How long has the company been established?
- ii. How the company has expanded their business?
- iii. What are the key important factors that contribute to the success of your company?

Questions related to the second research question

- i. What a current status of Malaysia SMEs?
- ii. What a current issue of Malaysia SMEs after establish National SMEs Development Council in 2004?
- iii. What is your suggestion and opinion to improve Malaysia SMEs in the global market?

Questions a related to the third research question (Open Innovation)

1) To create more product and services, your organization only used smart people in your company or you will bring knowledge and expertise outside from company?

- C1
- C2
- C3

2) To profit from R&D or develop we must discover ourselves or we need external R&D?

- C1
- C2
- C3

3) If we discover some ideas or knowledge, we will get it to market first, or we do not need original idea, or just bring knowledge from external?

- C1
- C2
- C3

4) Are we needing better business model to run the business or just commercialize product we has?

- C1
- C2
- C3

5) Are you ready to share internal and external idea with competitors?

- C1
- C2
- C3

6) Are you control your intellectual property (IP) from competitors or you just buy others IP whenever it advances our own business model?

- C1
- C2
- C3

How can Open Innovation Strategy help Malaysia SMEs to compete in the global market?

Please indicate the co-operation with the following partners in R&D project?

Partners in R&D	HERBagus Sdn Bhd	Only One Zuza	Era Edar Marketing
Customer			
Supplier			
Competitors			
University/College			

Please indicate the intensity of the following activities to acquire technologies and knowledge in R&D project?

Partners in R&D	HERBagus Sdn Bhd	Only One Zuza	Era Edar Marketing
Buy licensing			
Buy Patent			
Joint Venture			
Participation other			

Part B

- 1) Company (C1,C2,C3)
- 2) New product development (NPD)
- 3) National SMEs Development Council (NSDC)
- 4) Open Innovation (OI)
- 5) Research and Development (R&D)
- 6) Small and Medium-Sized firms (SMEs)
- 7) SMIDEC (Small and Medium Industry Development Corporation)

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