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Realizing Innovation Barriers among Manufacturing Smes in Malaysia

Suhaila Omar[1], Hasliza Abdul Halim[2], Noor Hazlina Ahmad[3] & Marini Nurbanum[4]

[1234]*School of Management, Unviersiti Sains Malaysia, Minden, 11800 Penang, Malaysia*

Abstract

Innovation performance plays an important role in the growth of the firm, including small and medium entrepreneurs (SMEs). SMEs have become a very important sector and can be considered as a bone of economic development in Malaysia. Besides, SMEs can be one of the essential engines of the nation growth particularly in competitive global. However, the SMEs often face many pressures and challenges in order to increase their innovation performance. Therefore, this study was undertaken to identify some of internal barriers that will affect the innovation performance among Malaysian manufacturing SMEs. An examination of the relationship among internal barriers and innovation performance leads to a conceptual framework that can helps SMEs build their own strategies and structure their practices in order to keep them ranged with dynamic global market. A pilot study via interview was conducted with a sample of five manufacturing SMEs from Malaysia to review the outlook on internal barriers toward innovation performance.

Keywords: Internal barriers, Innovation performance, Small and Medium Enterprises (SMEs), Malaysia

1.0 INTRODUCTION

Small Medium Enterprises (SMEs) are private sectors that can be considered as vital entities that perform an important role in developing the Malaysian economy. Muhammad-Khalique et al. (2011) believed that SMEs serve as the backbone of a national economy. From statistic, SMEs compose of 99.2% of total business establishments in Malaysia or totalling 548,267 enterprises. Most of these SMEs (87%) are engaged in the services sector, while another 7% and 6% respectively are in the manufacturing and agriculture sectors. SMEs also contribute 32% of Gross Domestic Product (GDP), 59% of employment and 19% of exports (SME Masterplan, 2012). Therefore, SMEs are undeniably essential to the economy development of the country. Due to the significant contribution of SMEs towards the development of the economy Malaysian government has given a lot of attention on the development of SMEs.

In order to achieve vision 2020, SMEs are encouraged to keep abreast with the SME Development Framework in order to move towards innovation led economy. There is an indication that highly innovative SMEs escalate faster as compared to non-innovative SMEs (Bilton & Cummings, 2010). SMEs need to strengthen their performance and competitiveness to enhance their innovative capabilities. Despite the initiatives provided by the Malaysian Government, SMEs are not achieving superior performance as expected and this is evidenced by the SMEs contribution to GDP at only 32.7%. In reality, the nation's GDP is comparatively small when compared with other countries.

Subsequently, an important question raised is "why Malaysian SMEs are still lagging behind despite various support mechanism, programmes, plans and strategies to guide them to boost their capabilities to become competitive and innovative? As an emerging country, Malaysian SMEs faces with multidimensional challenges and during last few years researchers found that the decline Malaysian economy cause by low productivity (New Economic Model,2010). Muhammad et al., (2010) have identified from previous studies about the challenges facing SMEs in a globalized environment such as barrier from global sourcing, low productivity, lack of managerial capabilities and many more. To ensure that Malaysian entrepreneurs survive in a globalized environment particularly SMEs, they should focus on the way to overcome the challenges, which

include from global sourcing, low productivity, lack of managerial capabilities, lack of financing, difficulty in accessing management, technology, heavy regulatory burden and others (Muhammad Khalique, 2011)

In fact, the ability of SMEs to recognise their main hurdles in business operation are extremely vital because success or failure of their operation is depending on how their overcome or manage those challenges. In fact, prosper and become competitive, SMEs should identify the effective ways to improve the innovation performance. SMEs that fail to innovate are going to lose its competiveness due to several obstacles (Madrid-Guijarro et. al., 2009). In the line of this scenario, Malaysian SMEs was facing with various challenges that difficult to innovate. A number of studies showed firm experienced differences in term of barriers to innovation such costs, institutional constraints, human resources, flow of information and others (Mohen and Roller, 2005). Ultimately, many SMEs could not afford to provide excellent skill and training to their employees, difficult to invest in new technology or equipment and difficulty in winning new market (Yahya, Othman, Sanusi Rahman, & Moen, 2011). Besides, Madrid-Guijarro (2009) has posited that SMEs fail to reap innovation due to their internal barriers (lack of resources, financial, human resources, weak financial position and high cost).

In the light of the above, the study on internal barriers toward innovation performance warrants significant attention. It is expected that with the better understanding about internal barriers the excellent strategic can be created to enhance the innovative capability and influence SMEs innovative performance. The objective of this study is to conceptually examine the influence of internal barriers toward innovation performance among Malaysian manufacturing SMEs. In the line to obtain new views and concept of internal barriers and innovation performance, this study used preliminary interviews with selected manufacturing SMEs owners about the concept of internal barriers and innovation performance.

2.0 INNOVATION PERFORMANCE

Innovation are undeniably important to assist organization especially SMEs to generate their competitive advantage in terms of innovation and differentiation in market (Galia and Legros, 2004). In fact, innovation is extensively acknowledged as a key factor in the competitiveness of firms and nations. As such, SMEs need to be creative and innovative in order to handle the encountered crisis that occurred during the growth development. In other word, innovation can be assumed to be crucial for SMEs' growth and survival. Thereby, to ensure the smoothness of innovation process the question on "why Malaysian SMEs are still left behind in term of competitiveness and innovativeness" despite of various programmes, plans and excellent strategies provided by Malaysian Government as an incentive to guide them in enhancing their innovation need to be scrutinised. Even though there have many studies related to the factor that impact the innovation performance that can be used as a guideline for SMEs especially in Malaysia to increase their innovation performance but in reality Malaysian SMEs cannot handle the internal barriers. This happened because Malaysian SMEs unskilled in handling their source and capability to solve their huge issues related to internal problem. Halim et al., (2014) strengthen that to have a successful organization, innovative are needed along with efficiency and effectiveness of that idea. Therefore, innovative will lead to a desirable innovation performance.

3.0 INTERNAL BARRIERS

Innovation is considered as the backbone of every organization and for SMEs to venture into innovativeness is a critical undertaking. In the vein, SMEs are expected to face more obstacles to innovation than large organization due to constraint in resources of human capital, financial, technology, equipment and know-how. According to Oslo Manual, (2005) SMEs in OEDC countries have acknowledged a few important barriers to innovation such as lack of available finance, infrastructure, skilled knowledge workers and regulation. However, in the context of Malaysia, research that focus on studies related to internal control and external factors on small business is still at a primitive stage (Jaya Kumar Shanmugam, Mohd Hassan Che Haat, Azwadi Ali, 2012). In the emerging economies, mostly the studies on SMEs are intense in terms of focusing on how innovation support the SME performance (Rosenbusch, Brinckmann, & Bausch, 2011; Subrahmanya, Mathirajan, & Krishnaswamy, 2010). However there are very limited studies that discover the potential constraints on the innovation performance in Malaysia. This study will focus on three internal constraints, constraint in financing resources, technology and human resources.

4.0 A FRAMEWORK FOR UNDERSTANDING INNOVATION PERFORMANCE

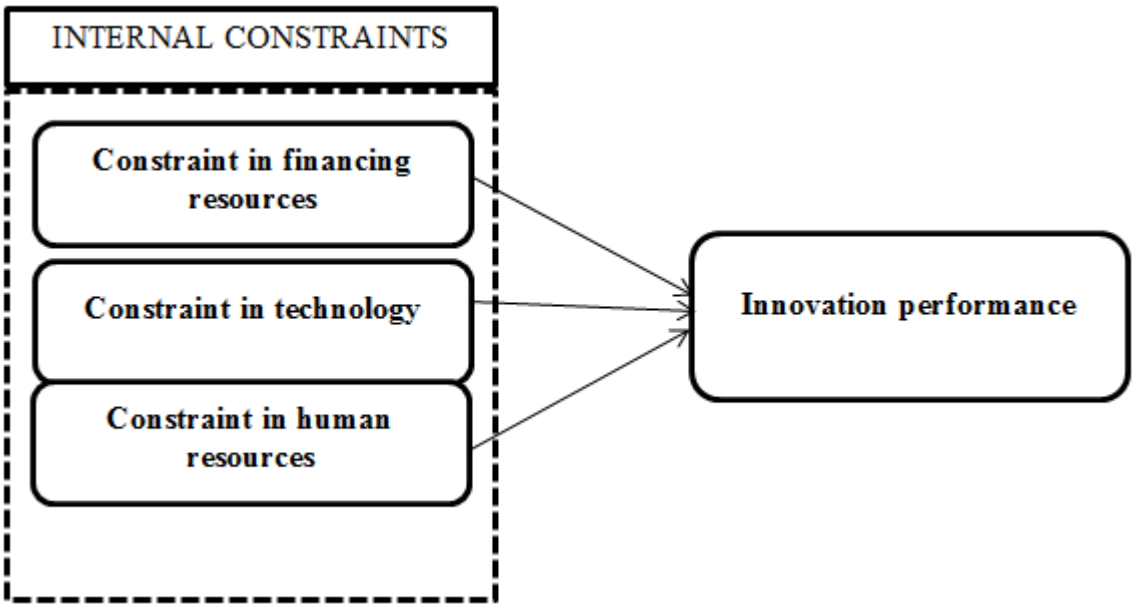


Figure 2: A framework for the relationship between internal constraint and innovation performance

Naturally, innovative firms especially SMEs are most possible to struggle from financial difficulties since their informational opaqueness, their little tangible assets to pledge as collateral, and the riskiness of their strategies, most potentially-innovative firms are credit-rationed and face relevant obstacles in financing their investments (Brancati, 2015). In the wake of the 2008 financial crisis, there has been bigger focus on access to finance for SMEs. Some evidence suggested that innovative firms are difficult to access finance (Lee, 2015). Brancati, (2015) has clarified that financing of innovative projects is a critical topic in the literature of finance and growth. Recently, Malaysia is ranked 18th for ease of doing business, and ranks 44th in enforcing contracts and rank 28th in getting credit out of 189 economies (World Bank Group, Doing Business, 2015). However, global financial crisis has affected financial institutions to be more vigilant and the credit procedures have become so difficult and complex. Implication from the global financial crisis, SMEs experience difficult situation to access the financial support. Based on the report from Organisation for Economic Co-operation and Development (EOCD), (2009) access to financing remains as the most significant challenges for SMEs to continue their existence, growth, and continue be innovative. According to Ferrando and Griesshaber (2011) and Artola and Genre (2011) also emphasis that SMEs are more likely to experience financial constraints compared to larger firms. In similar opinion Beck et al (2006) and Beck et al (2007) argue about the impact of financing conditions on firm development. Studies from (Chee, 1986; Abdullah et al., 2009; Kee-Luen et al., 2013; Azmi et al., 2014) believed that SME failures arise when they lack of working capital to over dependence on the domestic and global market. Recently, Savignac (2008), Hajivassiliou and Savignac (2011), and Blanchard et al (2013) have putting extra attention on the negative effect of financial obstacles on the innovative activity of French and European firms. Thus, increasing the SMEs' access to finance and finding solutions to unlock sources of capital is important to enable this potentially dynamic sector to smoothly develop and provide the needed to increase the innovation performance. Thus the following proposition is based on the above discussion,

Proposition 1: Constraint in financing resources may have an influence on the innovation performance of manufacturing SMEs in Malaysia

Technological obsolescence is a key problem worrying the SMEs sector in developing countries (Bala Subrahmanya, et. al., 2014) because technology has imperative effects on business activities. However, mostly entrepreneurs stated that they do not have any urgency to adopt technology plus the technology is quite expensive in relation to their sales point (Nawai & Shariff, 2011). Additionally, studied by Mazidah et. al. (2014), supported that numerous Malaysian SMEs inattention the significant role of innovation and technology toward their business performance. Hairuddin et. al., (2012) explained that technology has a powerfully influence the innovation, which carelessness to implement the technology may cause difficulty for SMEs to expect progressive innovation growth within the organization. Thus, SMEs is unbearable to enter the global

market because they cannot use the competitive advantage from technology (Zainol & Ayadurai, 2010). Besides, SMEs cases studied in Vietnam by Swerczek & Ha, (2003) also describe the conditional of local SMEs in that country was struggling with limitations of equipment and technology.

Therefore, technology barrier makes SMEs facing with the burden in controlling their production cost and this put them behind their competitor in global market. Hence, SMEs need to access the adequate technology to enhance productivity and to facilitate market access. Thus, technology can be a main major on determinant of a firm's survival and growth in business. Numerous firms which failed to deal with the changing of technology trends have gone out of business environment. Therefore, to cope with the dynamic technology trends, firm has to engage itself in technology development through innovation performance from time to time to become more competence. Since, technology strongly becomes the constraint for SMEs to gain the development in innovation; this study will focus on finding the level of relationship between constraints in technology toward innovation performance among Malaysia Manufacturing SMEs. Based on the above discussion, it can be proposed that:

Proposition 2: Constraint in technology may have an influence on the innovation performance of manufacturing SMEs in Malaysia

Formerly Human Resource (HR) is known as personnel, which as a critical component of employees' well-being in any business, no matter in small or large firm. Leading from Porter (1980) and Barney (1991) studies clarify that a number of theories of HRM has specified the importance of employees as an essential resource for the organizations because a company that lacks of human resources may struggle to develop and maintain a solid relationship with employees. Thus, inefficient human resource can be one of the barriers toward innovation activities within SMEs. Due to studies from Okpara and Kabongo, (2009) and Okpara, (2011) the issues related the lack of management experience is major barriers to SMEs development. Mostly, this problem was occurred because the owner, managers and employees, do not have better experience and adequate training and skills in conducting the business (Hessels and Parker 2013). According to Kamalian et. al., 2011 the lack of skilled personnel will hold down the forms growth in the innovation process. It supporting by Guijaro et. al., 2009 concluded that the weak human resources management commitment, which can be a signal that the innovation performance was worse because has been cited as the significant barriers to innovation among SMEs. Therefore, in the intensive market competition, SMEs' organizational efficiency and effectiveness is the most vital indicator for its sustainability in the SMEs future. The absence of support within the firm seriously inhibits innovation activities. While it can be argued that this can be improved and eventually changed with the efforts inside the firms, it is important to bear in mind that a firm cannot separate the innovation activities from the outside environment; therefore, human resources are important for innovation performance. In fact, understanding the internal barriers will lead to a desirable innovation performance and at the same time improve their flexibility and competitive level. Based on the above discussion, the study postulates the following propositions:

Proposition 3: Constraint in human resources may have an influence on the innovation performance of manufacturing SMEs in Malaysia

5.0 METHODOLOGY

This study will practically use the exploratory research in order to determine the nature of the problem. This types of approached is not intended to provide final evidence, but assistances researcher to have a better understanding of the problem. This study will utilize the mixed methods of exploratory sequential design. Suggested by Onwuegbuzie, Bustamante, and Nelson (2010) and Creswell and Plano Clark (2011) explain that the researcher first collects qualitative data and then quantitative data. The primary purpose of an exploratory sequential mixed methods design involves the procedure of first gathering qualitative data to discover the situation and then collecting quantitative data to clarify relationships found in the qualitative data.

Therefore, the research can be conducted through two phases. Firstly by an interview that will be carried out among Malaysian manufacturing SMEs to obtain a view of their understanding and opinion based on their experiences in managing their business and organization, particularly focusing on the factors that affecting their innovation activities. The qualitative approach is suitable approach if the purpose is to learn from the participant's base on their experience (Morse and Richards, 2002). The data obtain from the interview can helps to revise the framework on internal barriers as well as to refine or develop the survey instrument based on the data context.

Second phase, according to Clark and Creswell (2011) the quantitative study can be conducted as an approach to test and generalize the initial findings. In this phase, researcher will interpret the quantitative result

base on the initial qualitative results. The quantitative method will be collected by self-administered survey which will be distributed to Malaysian Manufacturing SMEs. Therefore, the respondent of this study is derived from the list manufacturing SME listed in Federation of Malaysian Manufactures (FMM) Directory 2016. Resulted from the following specification the inclusions are as follows:

1. The business must be a manufacturing company in Malaysia
2. The business must have less than 200 full-time employees
3. The business sales turnover not exceeding RM50 million

The first phase of data collection was conducted. The interview was conducted on initial stage in order to get the preliminary information on the research issues. The respondents were five manufacturing SMEs owners from northern of Malaysia. This step was useful to ensure the owner of SMEs understands the concept of internal constraints and innovation performance. The research was conducted individually and the respondent was asked to comment on various aspect of their way in managing their own business.

6.0 FINDINGS

Currently, innovation practice in Malaysia is still at initial stage of development. Therefore, in developing country especially in Malaysia SMEs frequently experience with various constraint such as high cost and risk associated with innovation, the lack of funding, the organisational rigidity, the lack of skilled human resources, the lack of market information and technology, the government regulation and the weak capacity to approach the client or consumer (Lim and Shyamala, 2007). However, resulted from the interview the respondents were agreed that the three internal barriers that have been listed in framework are the most challenging factor to be handle. The respondent pointed that the constraints have a possibility to effect the operating activities as well as innovation process due to their inability that arise from inside the company. The findings of this initial study highlighted the important barriers pertaining to innovation performance. This finding will offer valuable information of innovation performance that the developing countries confront.

Resulted from interviewed the most significant barriers to innovation performance are constraints in financial resources. 4 out of 5 SMEs pointed that difficulty in access the financial resources, limit their innovation activity as well as their business competitive strength. They agreed that insufficient financial resources not only limited the research and development (R&D), but it affect all the process inside the company and seriously impact innovation performance. Furthermore, all the respondents pointed out that internal barriers as a most important factor that affect innovation performance and they said they were be successful if they can overcome the internal barriers that has been arise inside their business, this means facing and dealing with the barriers will positively impact the innovation performance.

According to Porter (1980) and Barney (1991)s' their studies clarify that a number of theories of Human Resources Management has specified the importance of employees as an essential resource for the organizations because a company that lacks of human resources may struggle to develop and maintain a solid relationship with employees. Resulting from the interviewed 3 out of 5 respondents agreed that the constraints in human resources can impact directly on innovation performance. Therefore, the respondent assumed that human resources can be viewed as a vital source of today's firms. This aspect is important because firm need people or employees to uses other assets in organization to create competitiveness and realize the objectives. Thus, with the advance changes in current economy situation plus with technological advancements it naturally changes the nature of normal operating system. Due to this situation SMEs also has to wedge the changes of nature of work, employees and the expertise involved. While the SMEs owners do advancements in their operations activities but they do not realize that the critical role of effective human resource is the key for their success.

Nevertheless, the SMEs will face with the challenging to change their employees' to obey with a new descriptive job and to find a suitable skilled workforce certainly during periods of technological changes. In particular, SMEs have to undergo some change to develop along with the technologies changes and capable to compete with global companies.

Hairuddin et. al., (2012) explained that technology has a powerfully influence the innovation performance, which carelessness to implement the technology may cause difficulty for SMEs to expect progressive innovation development within the organization. Even though the technology has biggest impact toward innovation performance but only 2 out of 5 respondent agreed that technology constraint can impact directly on innovation performance. Even though, the technology has a powerfully influence toward innovation performance but only a small portion of SMEs took the challenge to implant technology advance in their business activities even though various initiatives have been applied by Malaysian government to encourage the use of new technology to SME. SMEs stated that they do not have any urgency to adopt technology plus the technology is quite expensive in relation to their sales point.

Based on the result showed that all the participants understand the meaning and the advantages of innovation performance because they agreed that being innovative is vital because the economic condition are shifting away from focusing on cost reduction and are directed towards innovation for long term success. Even they still have long way to go but the SMEs that participate in the interview said:

"Even we facing with various constraints to innovate but we still adapt with the incremental innovation such as on our operating process, packaging perhaps product extension".

The other comment that is interesting stated by the respondent is:

"Currently our business condition needs the entire firm to practices innovation in their business activities because the business environment is dynamic and changing extremely according to global changes, even we are lacking in various aspect and the internal resources but we will try to combine the resource or ability that we have in order to create an opportunity and overcome the barrier to stay innovate in this challenging environment"

Lastly, the three constraint listed in the framework would have a big possibility to affect the innovation and this statement supported by all the participants and they organized the internal barriers according their level of important.

7.0 DISCUSSION AND CONCLUSION

The results brought by this study revealed that the internal barriers to innovation performance faced by the participants can be viewed as serious issues. The purpose of the framework is to enhance innovation performance in Malaysian manufacturing SMEs. In this framework all the internal barriers have been tested to proven that the barriers have a positive impact on the innovation performance. All the barriers have been organized according to their level of important and the result posited that the constraint in financial resources was the main constraints follow by the constraint in human resources and constraint in technology. One of the most substantial findings to emerge from this study is that, capital is the most critical financial component among SMEs. Thus, to keep growing, SMEs need to find and inject more capital to accommodate the expansion and hiring suitable staff. Since innovation are important, learning and understand about the concept of innovation performance is useful knowledge among the SMEs. Having such a platform could enhance SMEs to create or practice a new method or approached for their business development. Therefore, SMEs may get benefits from the increasing of innovation performance in the competitive environment.

In order to obtain support for the proposed framework, this study took an initial preliminary study by interviewing five SMEs owners from manufacturing sector. The result clearly showed that the innovation performance do effected from the listed internal barriers from the framework. By reviewing the resulted from the initial preliminary study, obviously it shows that a more detailed framework should be highlighted for SME challenges. The discussion of internal barriers for SME challenges should be a serious clarify the challenges and transform it into an opportunity to raise the potential. Even though, there have a lots of studies focusing on the positive factor that impact the innovation performance but only a few studies focusing on the negative side especially in the Malaysian case study. The limitations of this paper contain lack of data and more variables are needed to support the current barriers towards manufacturing SMEs. Above all, in order to enhance both theoretical and practical contribution, the future research should use qualitative and quantitative approach and other variates of research tools. The results from the initial preliminary study can provide fresh outlook that they need to embrace the important of understanding the innovation barriers to ensure that manufacturing SMEs in Malaysia can innovate excellently in their ways of doing business.

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REFERENCE

Abdullah, F., Hamali, J., Rahman Deen, A., Saban, G. and Zainoren Abg Abdurahman, A. (2009). Developing a framework of success of Bumiputera entrepreneurs. Journal of Enterprising Communities: People and Places in the Global Economy, 3(1), 8-24.

Azmi, A. S. M., Nawawi, A. H., Latif, S. N. F. A., & Ling, N. L. F. J. (2014). Investigating the Learning Process amongst Young Practising Property Valuers. Presented at the International Real Estate Research Symposium (IRERS2014), INSPEN, Kuala Lumpur.

Barney, J. (1991). Firm resources and sustained competitive advantage. Journal of management, 17(1), 99-120.

Bala Subrahmanya M.H, Zeeshan Hussain, Ashwin Chand M, (2014) External Technology Acquisition of SMEs in the Machinery Industry of Bangalore Asian Journal of Innovation and Policy (2014) 3.1: 050-071 DOI: http//dx.doi.org/10.7545/ajip.2014.3.1.05050

Bilton & Cummings, (2010). Creative strategy: reconnecting business and innovation

Brancati, (2015). Innovation financing and the role of relationship lending for SMEs. Small Business Economics February 2015, Volume 44, Issue 2, pp 449–473

Chee Peng Lim, (1986). Small industry in Malaysia. Kuala Lumpur: Berita Publishing.

Creswell, J.W. (2011). *Educational research.* New Delhi*: PHI Learning Private Limited.*

Galia, F., and D. Legros (2004). "Complementarities Between Obstacles to Innovation: Evidence from France," Research Policy 33, 1185–1199.

Hairuddin, H., Noor, N. L. M. and Ab Malik, A. M. (2012). Why do microenterprises refuse to use information technology: A case of batik microenterprises in Malaysia? Procedia-Social and Behavioral Sciences, 57, 494-502.

Halim, Hasliza, Noor Hazlina Ahmad, T Ramayah & Haniruzila Hanifah, (2014). The Growth of Innovative Performance among SMEs: Leveraging on Organisational Culture and Innovative Human Capital: Journal of Small Business and Entrepreneurship Development March 2014, Vol. 2, No. 1, pp. 107-125

Hessels, J., & Parker, S. (2013). Constraints, internationalization and growth: A cross-country analysis of European SMEs. Journal of World Business, 48(1), 137–148. http://dx.doi.org/10.1016/j.jwb.2012.06.014

Jaya Kumar: Shanmugam,; Mohd Hassan Che Haat; Azwadi Ali (2012). Internal Control, Risk Management And Fraud Prevention Measures On SMEs: Reliability And Validity Of Research Instrument

Kamalian, A., Rashki, M., & Arbabi, M. (2011). Barriers to Innovation among Iranian SMEs. Asian Journal of Business Management, 3(2), 79–90. http://dx.doi.org/10.1016/j.procs.2013.05.073

Kee-luen, W., Thiam-yong, K., & Seng-fook, O. (2013). Strategic Planning and Business Performance: A Study of SMEs in Malaysia Proceedings of 3rd Asia-Pacific Business Research Conference. 3rd Asia-Pacific Business Research Conference 25-26 February 2013, Kuala Lumpur, Malaysia.

Khalique, Hassan, I., Jamal,N.S., & Ageel ,A. (2011). Challenges faced by the small and medium enterprises (SMEs) in Malaysia: an intellectual capital perspective. International Journal of Current Research, 33(6), 398

Lee, Neil, Sameen, Hiba and Cowling, Marc (2015) Access to finance for innovative SMEs since the financial crisis. Research Policy, 44 (2). pp. 370-380. ISSN 0048-733

Lim, Ee Shiang and Nagaraj Shyamala (2007). Obstacles to innovation : evidence from Malaysian manufacturing firms: MPRA Paper No. 18077, posted 26. October 2009

Madrid-Guijarro; Domingo Garcia; Howard Van Auken, (2009). Barriers to innovation among Spanish Manufacturing SMEs

Mazidah, S. and Burairah, H. (2014). Profile of ICT innovativeness in Malaysian SMES from services sector based on Core ICT indicators. The Journal of Technology Management and Technopreneurship (JTMT), 2(1).

Mohen, P., and L. Roller (2005). "Complementarities in Innovation Policy," European Economic Review 49, 1431–1450.

Morse and Richards, 2002. "Read me first for a user's guide to qualitative research"

Muhammad, Mohd Zulkifli, Char, Abdul Kamal , Yasoa, Mohd Rushdan bin and Hassan Zakiah, 2010. Small and Medium Enterprises (SMEs) Competing in the Global Business Environment: A Case of Malaysia. International Business Research, Vol.3, No1

Nawai, N. (2011). The importance of micro financing to the microenterprises development in Malaysia's experience. Asian Social Science, 7(12), 226.

Okpara, J., & Kabongo, J. (2009). An Empirical Evaluation of Barriers Hindering the Growth of Small and Medium Sized Enterprises (SMEs) in a Developing Economy. African Journal of Business and Economic Research, 4(1), 7–21. http://dx.doi.org/10.1108/01409171111102786

Okpara, J. (2011). Factors constraining the growth and survival of SMEs in Nigeria Implications for poverty alleviation. Management Research Review, 34(2), 156–171.

Oslo Manual. (2005). Oslo manual: Guidelines for collecting and interpreting innovation data. Paris: OECD and Statistical Office of the European Communities.

Porter, M.E. (1980) Competitive Strategy: Techniques for Analyzing Industries and Competitors. New York: Free Press.

Rosenbusch, N., Brinckmann, J., & Bausch, A. (2011). Is innovation always beneficial? A meta-analysis of the relationship between innovation and performance in SMEs. Journal of Business Venturing, 26(4), 441-457.

Savignac F (2008) Impact of _nancial constraints on innovation: What can be learned from a direct measure? Economics of Innovation and New Technology 17:553{569, DOI 10.1080/10438590701538432

SME Masterplan 2012-2020. Catalysing Growth and Income. National SME Development Council http://www.smecorp.gov.my

Subrahmanya, M.H.B., Mathirajan, M., &Krishnaswamy, K. N. (2010). Importance of technological innovation for SME growth: Evidence from India. World Institute for Development Economics Research, 3.

Swierczek, F. W., & Ha, T. T. (2003). Entrepreneurial orientation, uncertainty avoidance and firm performance: an analysis of Thai and Vietnamese SMEs. International Journal of Entrepreneurship and Innovation, 4(1), 46-58.

World Bank Group, Doing Business, 2015 Retrived from: http://www.doingbusiness.org/rankings

Yahya, Ahmad Zahiruddin; Mohd Said Othman; Abdullah Sanusi Othman; Ishak Abdul Rahman; and Jumaat Abd Moen, 2011 World Journal of Management Process Innovation: A study of Malaysian Small Medium Enterprises (SMEs) Vol. 3. No. 1. March 2011 Pp.146- 156

Zainol, F. A. and Ayadurai, S. (2010). Cultural Background and Firm Performances of Indigenous ("Bumiputera") Malay Family Firms in Malaysia: The Role of Entrepreneurial Orientation as a Mediating Variable. Journal of Asia Entrepreneurship and Sustainability, 6(1), 3.