

IMPACTS OF INNOVATION TOWARDS SMALL MEDIUM ENTREPRISE
(SME) PERFORMANCE: A CASE STUDY OF MANUFACTURING SECTOR IN
MELAKA

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DECLARATION

I declare that this project is the result of my own research except as cited in the references. The research project has not been for any degree and is not concurrently submitted in candidature of any other degree

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Date :

DEDICATION

This research paper is dedicated to my parents, Encik Mohamad Ibrahim Bin Abdul Malik and Puan Maslina Binti Tasmin, who have been my constant source of inspiration, motivation and support with my studies. I am honored to have them as my parents. Thank you for letting me improves myself through all my walk of life. I am very thankful towards my whole family for allowing finishing my studies. Thank you very much.

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ABSTRACT

In this century, Small Medium Enterprise (SME) has make a significant impact in the economic growth of a country as SMEs contributed to the growth of Growth Domestic Product (GDP) in 2012. Recently, most of the research are focusing on large organization when it comes to innovation management. This article, however, identifies innovation activities and their performance implications towards manufacturing SMEs focusing in Melaka. The survey data is obtained from of 100 respondents from manufacturing SMEs in Melaka. It is found that innovation strategy, innovation culture and technological capabilities have positive impacts towards SMEs' performance while formal structure and customer and supplier relationship do not have a significant impact. This study therefore concludes that SMEs' performance is likely to have benefits both in growth and accounting returns from the practice of innovation strategy, innovation culture and technological capabilities in an organization. This research also recognize that formal structure does not brings impact towards the SMEs' performance as it is restricting creativity (Cosh, et al, 2012) while customer and supplier relationship also do not bring benefit towards SMEs' performance as there is a lack of ability for SME to apply Supply Chain Management (SCM) effectively (Bouncken, et al,.2016).

ABSTRAK

Pada abad ini, Perusahaan Kecil Sederhana (PKS) telah memberi impak yang ketara dalam pertumbuhan ekonomi sesebuah negara apabila PKS menyumbang kepada pertumbuhan Produk Domestik Pertumbuhan (KDNK) pada tahun 2012. Baru-baru ini, kebanyakan penyelidikan memberi tumpuan kepada organisasi besar apabila ia datang kepada pengurusan inovasi. Walau bagaimanapun, artikel ini mengenal pasti aktiviti inovasi dan implikasi prestasi mereka terhadap sector pembuatan PKS yang memberi tumpuan kepada Melaka. Data tinjauan diperoleh daripada 100 responden daripada sector pembuatan PKS di Melaka. Data menunjukkan bahawa strategi inovasi, budaya inovasi dan keupayaan teknologi mempunyai impak positif terhadap prestasi PKS sementara struktur formal dan hubungan pelanggan dan pembekal tidak mempunyai kesan yang ketara. Oleh itu kajian ini menyimpulkan bahawa prestasi PKS mempunyai manfaat baik dalam pertumbuhan dan perakaunan pulangan daripada amalan strategi inovasi, budaya inovasi dan keupayaan teknologi dalam sesebuah organisasi. Kajian ini juga menunjukkan bahawa struktur formal tidak membawa impak ke arah prestasi PKS kerana ia menyekat kreativiti (Cosh, et al, 2012) manakala hubungan pelanggan dan pembekal juga tidak memberi manfaat kepada prestasi PKS kerana terdapat kekurangan kemampuan untuk PKS melaksanakan Pengurusan Rantaian Bekalan (SCM) secara berkesan (Bouncken, et al, .2016).

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CHAPTER 1

INTRODUCTION

1.1 Background of Study

An innovation is a new or notably improved product (goods or service) delivered to the market or a new or notably improved process introduced inside an enterprise and an innovation is primarily based on the effects of new technological developments of existing technological know-how or the utilization of different information acquired by the company (Lee, C., & Chew-Ging, L., 2007). Innovation can also involve a wide range of specific kinds of change relying on the organization's resources, capabilities, strategies, and necessities which the common kinds of innovation relate to new products, materials, new processes, new services, and new organizational varieties (Baregheh, A., Rowley, J., & Sambrook, S., 2009).

Innovation has been a dominant aspect in retaining global competitiveness which fuels organizational growth, drives future success, and is the engine that allows businesses to preserve their viability in a global economy (Carol Yeh Yun Lin, Mavis Yi Ching Chen, 2007). The ability of firms to advance and take advantage of their innovative capabilities is widely identified as an indispensable determinant of firm overall performance and competitive benefit (Artz, K. W., Norman, P. M., Hatfield, D. E., & Cardinal, L. B., 2010).

Research also shows that the impact of organizational learning on company performance is likely to be each direct and indirect because the creation of innovative tradition via learning approves company to attain a better competitive role and above-average performance (Salim, I. M., & Sulaiman, M., 2011). The term SMEs is a simple term for “small and medium scale enterprises” (Olusegun, A. I. ,2012). It is a convenient term for separating companies and other organizations that are someplace between the "small office-home office" (SOHO) size and the larger enterprise. The European Union has defined SME as a legally impartial corporation with less than 500 employees. Generally, SME quarter is classified into three: micro, small and medium organizations or businesses.

The Medium agencies as the title suggests are bigger than each micro and small organizations in terms of operations, manpower capability or range of employees, structure, capital investment and measurement (Olusegun, A. I. ,2012). The characteristics of Small Medium Enterprise (SME) has been described in a variety of meaning. Previous studies outline SMEs based on their own criteria, generally benchmarking against annual income turnover, range of full-time employees or shareholders' funds. In addition, present definitions focus in general on SMEs in the manufacturing sector (Malaysia, B. N., 2005). The European Commission, the executive body of the European Union, with a recommendation of May 2003 has standardized the definition of micro, small and medium companies (European Commission: 2003).

Small and medium organizations are named by way of adjectives indicating size, for that reason economists have a tendency to divide them into classes in accordance to some quantitative measurable symptoms (Berisha, G., & Shiroka Pula, J., 2015). Innovation in SME is considered important for the firm development. Previous study agrees that innovation contribute to the firm advantages. The capability of firms to improve and take advantage of their innovative capabilities is widely diagnosed as a fundamental determinant of firm performance and competitive gain (Artz, K. W., Norman, P. M., Hatfield, D. E., & Cardinal, L. B., 2010). Research also shows that the impact of organizational learning on firm performance is probably to be both direct and indirect due to the fact the advent of innovative culture via learning approves company to gain a higher competitive position and above-average overall

performance (Salim, I. M., & Sulaiman, M., 2011). For growing country, SME has a good position in financial landscape of the world. It is estimated 95% of businesses across the world are SME and they account about 60% of private sector employment (Quartey, P., Turkson, E., Abor, J. Y., & Iddrisu, A. M., 2017).

1.2 Problem Statement

Manufacturing SME are tried to survive in fast changing environment through innovation. Innovation is viewed to be one of the most necessary engines for a company growth, and successful innovation can propel an organization forward in its sector (Seo, Y. W., & Chae, S. W., 2016). Continuous change and accelerated business complexity pose special challenges to Small and Medium Enterprises (SMEs) to advance and preserve competitive benefit which are even more pronounced for SMEs in remoted regional areas, especially those that operate in the declining manufacturing industry (Evans, N., & Bosua, R., 2017). The difficulties faced by various firms is to make decision on whether or not to undergo innovation rather than improve the degree of novelty of their innovation in order to gain competitive advantage and make opportunities to enter a new market (Amara, N., Landry, R., Becheikh, N., & Ouimet, M., 2008).

Therefore, in this research, researcher would like to acknowledge the impact of innovation on SME performance which mainly focus on manufacturing sector in Malacca, Malaysia. This study's major contribution is the method used to identify the impacts of innovation practices on SME performance and how an innovation theory can be tested. It also contributes to the understanding of how innovation orientation are practices in manufacturing sector of SME.

1.3 Research Question

To pursue the research related to the impacts of innovation on SME performance: A case study of manufacturing sector in Melaka, this study needs to answer the following questions:

- I. What are the reasons for SME in Melaka to implement innovation?
- II. What are the relationship between innovation and manufacturing SME performance in Melaka?
- III. What are the impacts of SME business performance in manufacturing sector after practicing innovation in their business?

1.4 Research Objective

The objectives of this research are:

- I. To identify the reasons for SME in Melaka to implement innovation.
- II. To study the relationship between innovation and manufacturing SME performance in Melaka.
- III. To analyze the impact of SME business performance in manufacturing sector after practicing innovation in their business.

1.5 Scope, Limitation and Key Assumption

1.5.1 Scope

The scope of this study focuses on manufacturing SMEs where the aim is to assess the innovation in SME. This study is to identify the impacts of innovation towards SME performance. Specifically, this study is conducted for SME from manufacturing sector in the area of Melaka. The questionnaire is distributed to 150 employees from SME in manufacturing sector area Melaka to obtain adequate and comprehensive information. Lastly, the researcher focused on the criteria of business performance affected by innovation practices in SME of manufacturing sector in Melaka.

1.5.2 Limitation and Key assumptions

There are some limitations of this research. Firstly, the researcher has to assume that the respondents has adequate knowledge to be part of the primary data collection. This is because the primary data is collected from the questionnaires distributed. Next, the researcher has to assume that the respondent will provide an honest answer without any influences except from their own experience and knowledge. The next limitation is the study only covers the impact innovation practices in SME without looking at other aspects such as barriers and drivers. Moreover, the study also covers only manufacturing industry of SME.

1.6 Importance of the study

The importance of the study is to gain information and understanding on the impact of innovation towards SME performance in manufacturing sector in Melaka. From these study, the researcher is able to determine innovation practices in SME as well as suggesting them to other sector of SME businesses. This will contribute to the benefit of SME in creating competitive advantage and help in increasing economic performance of the country. The future research also can learn from the impact of innovation in SME and develop another related research.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction to Innovation

According to (Lee, C., & Chew-Ging, L., 2007), innovation can be defined as a new or significantly improved product (goods or service) introduced to the market or a new or significantly improved process introduced within a company. There are different meanings of innovation among individual. Acosta, B., Acosta, M., & Espinoza, B. (2016) stated that the usage of the term “innovation” is different among academia, business and government, which tend to confuse the term to mean something new, a novelty, an invention, technology or improvement, among others. Lee, C., & Chew-Ging, L. (2007) has categorized innovation into new product, improved product, product innovation and process innovation.

2.1.1 Types of innovation (Lee, C., & Chew-Ging, L., 2007)

New product – an output with different technological attributes or features from those predecessors.

Improved product – an already existed product but has been significantly improved or upgraded in performance. The improvement is considered

innovation even it is only new in the company but not a new to the market. The innovation is not necessarily developed by own company but also from other enterprise.

Product innovation – a product innovation is a new or significant improvement for good or service with the attributes of the fundamental trait, technical specifications, incorporated software or other immaterial components, intended uses or user-friendliness.

Process innovation – process innovation includes a new or significant improvement over the production technology and improved ways of delivering products. The innovation is either to be establish by the own company or other company and it can be new to the company and not obligatory to be the initial introduction in the process technology.

2.2 Reasons for innovation

Nowadays, many companies pursue innovation in their operation to maximize profit and competitive advantage. According to Webster, E. (2004), innovations can reduce manufacturing cost, amplify the quality of products, capture or create new product markets and limit the firm's reliance upon unreliable or capricious elements of production. Innovation can emerge as a main competitive differentiator turning in benefits in three distinct dimensions which were exciting clients (new features, offerings, experiences, and services), leading opponents with innovative responses which include proprietary technologies, expanding, enriching, and diversifying the product portfolio to gain different growth trajectories (Bowonder, B., Dambal, A., Kumar, S., & Shirodkar, A., 2010). This has made several companies compete in improving their product in terms of innovation strategies to catch up with the contemporary innovation trend.

Eiriz, V., Faria, A., & Barbosa, N. (2013) stated that innovation techniques are classified in terms of the type of innovation (product and process) and its degree of novelty (incremental and radical) which in their research highlighted four innovation techniques develop over the firm's increase tiers (start-up, expansion, maturity, diversification, and exit). In order to determine the innovation in a firm, previous researcher had highlighted some of the measurement for an innovative company. Ecuru, J., Lating, P. O., & Trojer, L. (2014) in their research decide a company innovation through its improvements to products or the introduction of new products (product innovation), or adjustments in administration system (organizational innovation) and changes in techniques of manufacturing, delivering inputs, packaging and distributing products (process innovation).

Innovativeness refers to a firm's potential to engage in innovation; that is introduction of new products, new processes, or new marketing or organizational strategies (Golgeci and Ponomarov, 2015; OECD, 2005; Hult, Hurley and Knight, 2004; and Alegre, J., & Pasamar, S., 2017). According to Zheng, C., & Wang, B. X. (2012) an innovative firm ought to introduce something 'new'. Next is to explain the implementation of innovation practices in SME industry.

2.3 SME and innovation

Small and Medium Enterprise (SME) has been a very important sector that contribute considerably towards economy and Gross Domestic Product (GDP) of a country. This situation also applied in Malaysia. According to (Musa, H., & Chinniah, M., 2016), SMEs in Malaysia are on track to contribute 41% to the country's GDP by 2020 compared to 32% in 2012, and the local SMEs are now suppliers for multi-national companies (MNCs) in the world chain. SMEs recorded a robust increase of 6.0 per cent, while GDP grew at 5.6 per cent in 2012 which the top movers for SMEs had been the services, manufacturing and construction and these sectors underpinned the growth of GDP in 2012 (Musa et al., 2016).

The biggest concentration, by using number, of SMEs in Malaysia is in the fabric and garb sector, food and beverages, metals and metals products and wood and timber products (Saleh, A. S., & Ndubisi, N. O., 2006). This monetary contribution of SME also comes from the innovation activities within the firms. Some researchers found that innovation practices are conducted in SME company. For example, Evans, N., & Bosua, R. (2017) mentioned that a few outer regional SMEs attributed their innovation to the adoption, integration and use of information technology (IT) to promote learning and assist social networking activities. SMEs also regard suppliers or product representatives as necessary business partners who inform them what is occurring in the industry and spawn new thoughts towards innovation (Evans et al, 2017).

SMEs innovativeness involves their active response to the adoption of new ways of doing things (such as improvements in processes) via their major competitors, their willingness to attempt new ways of performing and looking for unusual, novel options and their encouraging employees to think and behave in original and novel methods (Wang, 2008; Saunders, M. N., Gray, D. E., & Goregaokar, H, 2014). Small- and medium-sized firms (SME) can gain even greater if they develop, communicate, and include an innovation orientation (Saunila, M., 2014).

Innovation happen in different sector of SME industry. Baregheh, A., Rowley, J., Sambrook, S., & Davies, D. (2012) in their research findings mentioned that most of the incremental innovation rather than radical innovation were happening in food sector of SMEs and rather than packaging, function and paradigm innovation, they are also more involved in product and process innovation. In addition, cultivating innovative workers and commitment to develop new ideas are the most important factor that affect the innovation orientation in terms of innovation characteristics of SMEs (Baregheh, A. et al, 2012).

In manufacturing sector, the innovation activities also show up in there. Laforet, S., & Tann, J. (2006) has found that SMEs in the manufacturing industry are similar to SMEs in other industries. The drivers of SME innovativeness were: market anticipation, customer focus and dedication of CEO/owners in New Product Development (NPD), tactics and new methods of working (Laforet, S., et al, 2006).

Abdullah Al Mamun, (2017) established that, in Malaysian manufacturing SMEs, the degree of persuasion (compatibility, relative advantages, trialability, observability and complexity), strategic orientation (market, entrepreneurship and consumer) and firm antecedents (prior condition, risk orientation and knowledge) have considerable effects on the innovation (product, service and process) adoption and overall performance of SMEs. Based on the statement from previous research, this paper would like to study how innovativeness bring impacts on the performance of SME in Malaysia focusing on manufacturing sector.

2.4 Innovations in manufacturing SME

This research would like to take the theory of research paper proposed by Terziovski, M. (2010) as the framework of this study. Terziovski, M. (2010) used independent variable of formal structure, innovation strategy, innovation culture, customer and supplier relationships, and technological capabilities, and how these relate to SME performance as the dependent variable, leading to the construction of the research hypotheses. Terziovski, M. (2010) then discusses how those variables may likely to have potential impact to the SME performance.

The reason for the researcher to take the framework from Terziovski, M. (2010) is because of the similarity in the topic and research field. Moreover, Terziovski, M. (2010) research was cited with 494 citation which indicate that the research paper has high quality of study. This paper will test those frameworks towards SMEs performance of manufacturing sector in Malacca, Malaysia.