

Organizational Innovation Strategy Towards Small Medium Enterprise Performance in Malaysia

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ABSTRACT : *Small and Medium Enterprises (SME's) are known to have large potential to be expanding to a higher level through innovation. New policies and incentives were developed and variety of programs provided by Malaysian Government, yet there are factors such as financial problem hampering them from implementing innovation. New generations of SMEs have to take the risk in innovations to meet the demand of the technology driven innovation economy. This study was undertaken to evaluate the implementation of organizational innovativeness among the Malaysian SME's. The findings of this study indicate that different types of innovation have different impact towards organizational performance. Therefore willingness to embrace changes and having the right attitude at using knowledge and creativity to manipulate available information to develop the organizational strategies can assist SMEs in Malaysia to sustain and survive in the dynamic and challenging economy. In addition new generations of SMEs have to take the risk in innovations to meet the demand of the technology driven innovation economy.*

KEYWORDS : *Organizational Innovation, Organizational Performance, Small and Medium Enterprises*

I. Introduction

The main thrust contained in the Malaysia National Development Plan is to create more driven innovation companies that can help increase Malaysia's economic linkages, yet for the occurrence of an innovation it requires something more than just a vision and creative idea generation. In any case, the inventive idea must be put vigorously to have an undeniable effect, coming about, for instance in new or changed business forms inside the association, or changes in the items and administrations provided.

In the current economic environment, strategic planning and efficiency is important for the success of a business and besides that innovation has been recognized as a major factor contributing to the stability and the creation of wealth. The performance implications of innovation in small and medium-sized enterprises have pulled in extensive enthusiasm among scholastics and experts. Rosenbusch, et al. [1] study finds that factors such as age of the firm, the type of innovation, and the cultural context can influence the effect the innovation – performance relationship to a substantial degree.

Many studies such as Klomp and Van Leeuwen [2], Schilling [3], Salim and Sulaiman [4], Alegre, et al. [5] and Spithoven, et al. [6] have also confirmed on the importance of innovation to organizational performance which has increased significantly from day to day. This is due to the fact that efficiency alone is not enough to maintain the stability and growth of the business for the long term except by adopting innovations which will help provide additional value and expansion of basic employment [7, 8].

There is a rising of awareness on the importance of organizational innovation for industrial competitiveness and for the improvement of organizational performance and related surveys on organizational innovation have been made. Though there are many studies and literatures related to organizational innovation, but the term organizational innovation is still vague as prior approval is not yet available among researchers about the definition [9]. Distinctive ranges of studies are adding to their own particular ways to deal with the attempt and comprehension of the complex experience of organizational innovation [10].

1.1 Problem statement

There are many new policies and incentives were developed and varieties of programs have been provided by the Malaysian Government to assist the financing and to help in stimulating and attracting more SMEs in

Malaysia to become innovative entrepreneur. Yet, the findings from national survey by MOSTI point out that one of the major factor that hampering innovation activities or influencing the decision not to innovate is lack of appropriate source of finance[11].

As for the SMEs, due to their smaller size with limited managerial capabilities, as well as limited resources, they do confront a more challenging task in innovation when contrasted with bigger firms due to their deficiency in organizing innovation, low market force and shortage of assets keeping in order to gain benefit from these innovations[12, 13]. Thus, any deficiencies in innovation would have stopped SMEs in achieving their full potential.

Based on previous studies, different types of innovation and different combination of innovations may have varied results on the performance depending on the organization characteristics and performance measurement [14-17]. This differentiation in strategy through innovation was found to have a direct relationship with the performance and competitiveness of SMEs in moving forward and possess great potential in being the engine of economic growth[12, 18]. Therefore, this study aims to evaluate the implementation of organizational innovativeness among the Malaysian SME's and factors that are hampering or stopping them from innovating and try to look for possible solutions and suggestions that can provide information in solving the problems of SMEs in Malaysia so they can achieve their full potential and performance.

II. Literature Review

2.1 Innovation and Organization

Both innovation and invention generally refers to the introduction of something new. Nevertheless, the difference is invention creates an ability to introduce novel product, device, process, concept or service that is entirely new for the first time whereas innovation takes that ability to introduce newer and better solutions by improving or makes a significant contribution to an existing product, device, process, concept or service that meet new requirements or existing market needs.

In the organizational setting, the changes in proficiency, profit, quality, competitive positioning, market share, and so forth may be associated with innovation since innovation strengths can influence it both either in a positive or negative way. Consequently, running an organization normally involves risk and firms that do not efficiently repay for their innovative strengths may be crushed by those that do. Therefore the main test in managing an organization is to sustain the harmony between the current plan of action and with the business model.

In order to determine the definition of Organizational Innovation (OI), the study took into account a range of views and agreement of many researchers in related fields in order to combine Technical Innovation (TI) and Administrative Innovation (AI) into the definition of OI as both of TI and AI have synergistic effects on the adaptability of a firm. An organizational Innovation (OI) model and measurement indicators developed by Tsai, et al. [19]was mainly based on OI structure factors proposed by Daft [20], Kimberly and Evanisko [21], Amabile [22], Damanpour and Evan [23], Damanpour and Evan [24], Damanpour [14], Schumann, et al. [25], Wolfe [26], Tang [27], Djellal and Gallouj [28], Van der Aa and Elfring [29], Tidd and Hull [30]and Hipp and Grupp [31]which were adopted in this study.

2.2 Technical Innovation and Organizational Performance

Technical innovations are assumed to affect the "technical system" [32] and have always been considered as the leading edge in industrial progress; they create the capability for new products and production processes[33]. It is the implementation of a new idea which affects the technical system of an organization and, therefore, creates capability for changes in products, services, or ways of producing the products or rendering the services.

Davenport [34]stated that among the factors that led to the necessity of the process innovation are competitive pressures, customer demand and financial. High financial burden resulting organization must reduce the spending to boost profits by eliminating eliminate any unnecessary costs. According toHervas-Oliver, et al. [35], innovation process is closely linked to the innovation strategy of the organization in reducing costs and increasing flexibility in production. The execution of process innovation involves a major change in the organization and requires a long time and continuous quality improvement. However, this is not the main criteria that could determine the success of the process innovation[34].

While product innovation is a process that transforms business opportunities and ideas into tangible product[36]. The study by Andrew, et al. [37], shows that product innovation is the strategic priorities that are important to the future of the organization. However due to the short product life cycles, product innovation strategy should always be made in line with organizational goals and objectives[36, 38]. Previous studies have verified that firms that implement the product innovation system can diminish the undesirable impacts from indeterminate situations[39].

Although the performance of product innovation and overall success of the organization have a close relationship, product innovation however is fairly risky and requires a high cost to implement. Thus, the process of making decisions have to be managed as well as possible to avoid failure whereby product innovation is terminated in the middle of the development cycle[36]. Through the knowledge and understanding of the processes and factors that can support the process of product innovation, the failure rate can be reduced and employing the opportunities as well as possible by providing an innovation-friendly environment.

In brief, among the importance of technical innovation is for the expansion, development and enhancing the competitiveness of the organization and the industry and therefore technical innovation is regard as part of the important internal factors for the success of both organization and industry competitiveness during the turbulent times[4, 40]. Accordingly it is hypothesized that:

H1a: Firms with higher level of product innovation will have greater firm performance.

H1b: Firms with higher level of product innovation will have greater business performance.

H1c: Firms with higher level of process innovation will have greater firm performance.

H1d: Firms with higher level of process innovation will have greater business performance.

2.3 Administrative Innovation and Organizational Performance

Schulman [41] states that administrative innovation adoption can result a new structural form which probably a more important innovation than a major technical innovation. It is because administrative innovation is essential to both effective organizational performance and institutional problem solving by making changes in rules, mechanisms, procedures, and structures which are used to make the communication and exchange among people and between people and the environment possible belong to the social system of the organization[32]. A study by Chen and Lin [42] also found that administrative innovations have the predicting power on company sales and suggest that a framework wide devotion that was advanced through the administrative innovation implementation can be assumed as the main part in procuring definitive advantages of innovation adoption.

Marketing is a function and also a process that allows organizations to create, communicate and deliver value to its customers [43] and organization needs to be aware and generate marketing strategies according to the changing environment through innovation[44]. This is because according to Andrews and Smith [45] through innovative marketing organization will be able to provide more value to their customers. Al-Askari and Shakir [46] in their study mentioned marketing strategy is always showing signs of change and vigorous since it relies on upon innovation and creativity in creating marketing activities, particularly in a business situation portrayed by serious change and rivalry. Therefore, as to focus in promoting entrepreneurial procedure that sits at the highest point of the competition and market leadership, both marketing and innovation are among the essential and imperative errands that are needed in the administration part.

Organization system innovation is a major revamp on the organizational practices that involve modifications to the mission, strategy, leadership and culture [47] based on the use of knowledge to solve problems every day[5]. Nowadays due to the uncertain economic conditions, it is crucial for organizations to respond suitably to changes in the external environment. Therefore, it is important for organizations to have the dynamic ability in order to be more flexible in the organization practices so that changes made to the organization can be adapted to the environment and not core rigidity[48, 49]. These dynamic capabilities require constant interaction with the practice of organizations that have been established to maintain the competitiveness of the organization[5].

While strategic innovation management is considered as an important matter given that the strategic innovation can contribute to the organization competitive advantage in the market [50, 51]. This strategic innovation can assist organizations in determining the appropriate approach to enhance and improve the innovative potential of the organization to achieve its goals and strengthen its position in the competition [52, 53]. Organizations that implement strategic innovation can have a positive impact on the quality, performance

and innovation performance better than organizations that do not have a strategic innovation because of the diminution in the critical internal and external contingencies[50, 54-56]. This is because strategic innovators will always find an opportunity and look beyond the boundaries of normal competition [57-59]. Due to that same reason also, many organizations are looking for new ways to improve competitiveness and an important determinant of organizational performance, success and long-term survival is through innovation and creativity in the workplace[60]. Through the process of generating creative new ideas, organizations can establish new and different vision directions of the unique approaches that are different from the traditional approach and this can give an organization a competitive advantage over their competitors [61, 62]. Hence organizations that able to use the full advantage of the creative energy that exists in the organization are capable to enhance their existing competitive advantages and innovative capacity[63].

As the general purpose of innovation is to contribute in improving the performance and effectiveness of the organization's strategy, yet organizational innovation is subject to the influence of the organization and the environment plus many studies have shown the importance of the organizational variables as determinants of innovation[21, 64, 65]. Šajeva and Jucevičius [66]has classify an innovative organization into four main characteristics which are the organization's ability to create and adopt new ideas, organizational learning, an environment that supports innovation processes within the organization and able to maintain a competitive advantage. For that reason, organizations that are implementing innovative strategies must be flexible, open-minded and have the ability to respond with changes in the environment by finding new opportunities and initiate in improving the capabilities and performance of the organization[67, 68].

In facing the current global situation with the increasing of environment uncertainty as well as to keep up with the accelerating changes of the technology, a firm ability to adopt the administrative innovation is important since it can lead to cost efficiency and greater business performance[69, 70]. Therefore the following hypotheses are developed:

- H2a: Firms with higher level of marketing innovation will have greater firm performance.
- H2b: Firms with higher level of organizational system innovation will have greater firm performance.
- H2c: Firms with higher level of strategic innovation will have greater firm performance.
- H2d: Firms with higher level of creative work environment will have greater firm performance.
- H2e: Firms with higher level of organizational characteristics will have greater firm performance.
- H2f: Firms with higher level of marketing innovation will have greater business performance.
- H2g: Firms with higher level of organizational system innovation will have greater business performance.
- H2h: Firms with higher level of strategic innovation will have greater business performance.
- H2i: Firms with higher level of creative work environment will have greater business performance.
- H2j: Firms with higher level of organizational characteristics innovation will have greater business performance.

2.4 Organizational Performance

Organizational performance can be defined as one of the most important constructs and also the ultimate dependent variable of interest in management research for evaluating organizations, their actions, and organization environments[71]. A study by Haber and Reichel [72]also agreed on the financial performance measures such as revenue, return of assets and so forth is used to assess firm performance. However Aggarwal and Gupta [73], Clark [74]and Murphy, et al. [75]argued that measuring only the financial performance is not sufficient to capture overall performance.

The combinations of financial, non-financial, internal and external measures are needed in order to have a more comprehensive evaluation on organizational performance [72, 74, 76]. In this study the construct to measure organizational performance consists of firm performance and business performance. The firm performance measurement for this study was adopted from Murphy, et al. [75]andLi, et al. [76]. The firm performance consists of three constructs which are efficiency, growth and profit. Meanwhile, the business performance measurement for this study was adopted from Hughes and Morgan [77]that consists of two dimensions which are customer performance and product performance.

III. Methodology

3.1. Population and sampling

For this study the population are limited to the SME from the central region and southern region of Malaysia namely as Selangor, Kuala Lumpur, Negeri Sembilan, Melaka and Johor. The lists of SME companies were

prepared by randomly selecting companies in the SME directory from the SME Corp based on sectors which are manufacturing, services and other sector sector in Selangor, Kuala Lumpur, Negeri Sembilan, Melaka and Johor. A total of 1500 questionnaires have been distributed to the respondents that were have been selected through stratified random sampling technique using random number generator software where each member of a sector population will have an equal opportunity to become part of the research sample and this is said to be the efficient sampling procedure[78]. The questionnaire was distributed by mail, e-mail and self-administered handing out by the assistant researchers and enumerators. From the 1,500 questionnaires distributed, 352 respondents returned the questionnaires back where out of that 315 are usable for analysis.

3.2. Instrumentation

In order to address the objectives of this study, a survey method was used for this study in order to investigate the feedbacks of the participants based on a certain topic. In line to efficiently use the survey method for this study, a questionnaire was developed. The questionnaire was designed to measure the innovativeness rate of the SME companies, to make the most of the information on factors affecting the innovation projects and also to understand the current organizational environment dimensions of the SME's in Malaysia. For this study, a six-point Likert Scale was used to measure the variables of entrepreneurial orientation, innovation and performance.

The main reason behind the usage of the six-point Likert Scale for this study is to have an even number of ratings in the scale as to have the respondents to commit to either the positive or negative part of the scale. By using the six-point Likert Scale also would imply that the extremeness component might play a more significant role in determining people responds towards attitude scales [79, 80].

The items used in measuring the organizational innovation (OI) was adopted from an OI hierarchical structure model developed by Tsai, et al. [19]that has been established by using a rigorous method based on OI structure factors proposed by Daft [20], Kimberly and Evanisko [21], Amabile [22], Damanpour and Evan [23], Damanpour and Evan [24], Damanpour [14], Schumann, et al. [25], Wolfe [26], Tang [27], Djellal and Gallouj [28], Van der Aa and Elfring [29], Tidd and Hull [30]and Hipp and Grupp [31]. While items used in measuring organizational performance which consists of firm performance and business performance was adopted from Murphy, et al. [75],Li, et al. [76]and Hughes and Morgan [77].

3.3. Data Analysis Procedures

The technique of structural equation modeling (SEM) as suggested by Hair, et al. [81] and Jöreskog [82] was utilized in this study which provides the ability to accommodate multiple interrelated dependent relationships in a single model[83]. This method consists of several phases where the first phase was the entire sample is calibrated into generated models then measured using the exploratory factor analysis (EFA) using SPSS software. Then the sample has to go through another phase in the confirmatory factor analysis (CFA) using SEM-AMOS 18. After achieving the model fit, a full model will be measured in CFA to provide evidence to confirm the model that has been developed. The last phase is where the hypotheses and relationships stated in this study was tested using the structural model.

IV. Results and discussion

4.1 Model modification

The results from EFA and CFA process indicates that the original model proposed earlier in this study should be modified as there are changes in the construct of organizational system innovation and strategic innovation. In the original model, organizational system innovation and strategic innovation were two different factors, but the results of the analysis in this study indicate that both constructs belong to the same factor. However, the adjustments to the theoretical model can only be made based on the theoretical support, as proposed byGarver and Mentzer [84]. Grounded by the theoretical discussions, this has led to the replacement of hypothesis H2b, H2c, H2g and H2h to a new hypothesis as follow:

H2k: Firms with higher level of organizational strategic innovation will have greater firm performance.

H2l: Firms with higher level of organizational strategic innovation will have greater business performance.

4.2 Hypotheses result

Briefly the findings of the analysis did not provide full support for the structural model where only three out of twelve hypotheses were found significant. The positive relationship between product innovation and process innovation and firm with both firm and business performance were not supported as it were predicted in Hypothesis 1a, 1b, 1c and 1d. Whereas marketing innovation also has a negative relationship with both firm performance and business performance which contradicted from Hypothesis 2a and 2f. Yet both organizational strategic innovation and creative work environment have a positive relationship on business performance just as predicted in Hypothesis 2l and 2i. Yet both organizational strategic innovation and creative work environment have a negative relationship with firm performance which contradicts with Hypothesis 2k and 2d. While organizational characteristic innovation has a positive relationship with firm performance just as predicted in Hypothesis 2e but a negative relationship with business performance which contradicted from Hypothesis 2j. The summarized hypotheses results are shown in TABLE 1.

Table 1: Hypotheses and results

Predictor variables	Criterion variables	β	t-value	p-value	Hypothesis	Results
Product Innovation	Firm Performance	.01	.09	.93	H1a	Not supported
Process Innovation	Firm Performance	.12	.87	.38	H1b	Not supported
Marketing Innovation	Firm Performance	-.10	-.88	.38	H2a	Not supported
Org. Strategic Innovation	Firm Performance	.22	1.67	.09	H2k	Not supported
Creative Work Environment	Firm Performance	.09	1.02	.31	H2d	Not supported
Org. Characteristic Innovation	Firm Performance	-.26	-1.91	.05*	H2e	Supported
Product Innovation	Business Performance	.05	-.46	.65	H1c	Not supported
Process Innovation	Business Performance	.10	.94	.35	H1d	Not supported
Marketing Innovation	Business Performance	.18	1.86	.06	H2f	Not supported
Org. Strategic Innovation	Business Performance	-.30	2.74	.01**	H2l	Supported
Creative Work Environment	Business Performance	.48	5.87	***	H2i	Supported
Org. Characteristic Innovation	Business Performance	.11	1.03	.30	H2j	Not supported

Note: * $p < .05$; ** $p < .01$; *** $p < .001$

V. Conclusion

Organizational innovation is put into practice as a reaction to changes and also as a competitive advantage. Although the approach may seem quite common since the financial measurement that is made to measure the organization's performance is not very accurate, but the views and opinions of the management of the SMEs for their involvement in innovation can help measure the impact of innovation on the performance of their organizations.

Despite many studies showing organization innovation positive impact, but there are many more SMEs are still hesitant to make innovation in their organizations because there is no guarantee that every attempt in adopting organizational innovation will be successful or run smoothly during the process of change in the organization [85]. This is because the implementation of innovation requires financial stability and also risky and being innovative which means that they need to understand on how to manage organizational innovation process [86]. Therefore it is necessary for organization to have the ability to acquire, absorb and exploit external knowledge effectively so that they can increase their innovative capability in a sustainable way [87, 88]. Although this study has covered part of the extent of Malaysian SMEs organizational innovativeness, there are still several other factors that need to be taken into consideration. As for an organization to implement organizational innovation and become successful, it requires a strong cultural commitment and high degree of organizational discipline, a process approach, a measurement orientation and a willingness to change [89, 90]. Along with all the facilities, incentives and programs provided by the government, SMEs in Malaysia must make use all the benefit and opportunities given to thrive and remain competitive.

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