Investigation on Influence of Organizational Innovation and Export Market Performance: Evidence from a Developing Nation

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Abstract—Organizational innovation is seen as an important facet for strategic renewal and growth of an organization. Numerous research works on organizational innovation have been inconclusive, inconsistent, and characterized by low levels of explanation. This paper examined the relationship between organizational innovation and export market performance. The hypothesized relationships were empirically tested by distributing and collecting the 300 self-administrated survey questionnaires to manufacturers exporting to the Arab market selected from the 2011 Federation of Malaysian Manufacturers (FMM) directory. Self-administered survey was conducted with managers of Malaysian manufacturing companies exporting to Arab countries to obtain their insights of topic. Their experience and knowledge towards marketing strategies and orientation that influences the export market performance have been gained for further research purposes. The square multiple correlations between the exogenous constructs and endogenous construct was found to be 72%. This means that when there is one unit of increase in organizational innovation, there is 72% of increase in export market performance of the Malaysian manufacturing companies exporting to Arab countries. The result shows that organizational innovation positively affects export market performance.

Keywords—Organizational Innovation, Export Market Performance, Manufacturing companies

1. Introduction

Economic relation between Malaysia and Arab countries has been increasing in recent years. Arab countries have appeared to be the new trade destination for Malaysia’s trade and investment. Thus new approaches have been utilized for the international trade strategies by transferring from dependency on traditional export markets like US, Japan to Arab countries orientation [1]. The relationship between exports market orientation and organizational innovation has been tested by many researchers. Market information collection and treatment is a major function of an innovational organization. Successful innovation is a combination of market innovation culture and enterprise value [2]. The entire business, science and management sectors are manufacturing sector that are very highly influenced by the concept of innovation systems and its links [3, 4]. Malaysia has been persuading for the close relationship with the Arab region through a proposed Free Trade Agreement (FTA) which can serve as a milestone for Malaysia to capture Arab market. The Malaysian-Arab relationships on trade and business have been long established for mutual benefits. Malaysia is one of the rising stars in its fast economic and social developments since the country gained its independence, with the main trading partners for Malaysia were the Arab region, ASEAN and the developed world (amcc website).

Organization usually faces three types of problems to respond to the innovation gaps as said by [5]:

- Lack of a common understanding of what innovation is, how it happens, and what prevents it.
- Lack of innovative leaders.
- Lack of enabling organizational practices and cultures to reinforce innovation.

Many organizations inadvertently discourage innovation through their organizational practices (e.g. planning, budgeting, and rewards). In addition, many organizations have cultures that drive short-term results and risk avoidance. Without changing some organizational practices and building a culture of innovation, leaders will not close the innovation gap [5].
Empirical evaluation by Walker [6] reported that administrative innovation, product innovation and marketing innovation are strongly correlated. Organizational innovation has positive impact on marketing innovation [7]. There has been an increased focus on the relationship between market orientation and new product performance. Studies of this issue generally demonstrated that market orientation has a positive impact on new product performance [8, 9]. However, researches to determine how market orientation contributes to superior marketing performance are still lacking. Interest on market orientation research work has increased rapidly. Empirical evidence show that there is much emphasis on the importance of market orientation for better economic and commercial results [10]. A manager needs to develop a clear innovation strategy which have effect not only innovations in products, but also in processes, strategies and markets. An appropriate innovation strategy could make an attempt to improve internal performance indicators (e.g., employee quality and training), external performance indicators (e.g., customer loyalty and satisfaction) and the business result (e.g. sales and profit). That is why managers should include innovation in their strategic plans which establish clear objectives for achieving success [11].

This study adapts market orientation theory and resource based theory and provides a theoretical framework including export market orientation and organizational knowledge as exogenous constructs and organizational innovation and export market performance as endogenous constructs. Competitive environment was considered as moderating variables explain the relationship between organizational innovation and export market performance. The aim of the study is to therefore, empirically test the organizational innovation and export market performance and enhance the literature on marketing in manufacturing companies.

2. Background

Malaysia’s trade in March 2013 has increased by 1.6% as compared to March 2012. Malaysia performed higher trade with countries like France with RM 1.52 billion, China with RM 1.04 billion, India with RM 693.5 million, United States of America with RM 580.4 million and Republic of Korea with RM 482.2 million that contribute to increase in Malaysian export trade (METS, 2013). Below is Malaysia’s top ten export destination for the year of March 2012 – 2013:

<table>
<thead>
<tr>
<th>Countries</th>
<th>Export Value (RM billion)</th>
<th>Share of total exports (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Singapore</td>
<td>24.77</td>
<td>14.60</td>
</tr>
<tr>
<td>Japan</td>
<td>20.36</td>
<td>12.10</td>
</tr>
<tr>
<td>PRC</td>
<td>20.38</td>
<td>12.09</td>
</tr>
<tr>
<td>USA</td>
<td>14.08</td>
<td>8.30</td>
</tr>
<tr>
<td>Thailand</td>
<td>10.38</td>
<td>6.10</td>
</tr>
<tr>
<td>Indonesia</td>
<td>8.21</td>
<td>4.80</td>
</tr>
<tr>
<td>ROK</td>
<td>6.76</td>
<td>4.09</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>6.36</td>
<td>3.80</td>
</tr>
<tr>
<td>Australia</td>
<td>6.17</td>
<td>3.60</td>
</tr>
<tr>
<td>India</td>
<td>5.98</td>
<td>3.50</td>
</tr>
</tbody>
</table>

Table 1.1 Malaysia’s Top export destinations
Source: (METS, 2013)

From the above table it can be noticed that Malaysia’s top traditional market partners targeted were ASEAN and EU countries including United States.

The economic relation between Malaysia and Arab countries has been positivistic and growing in recent years. Middle East countries have been potential emerging market for the Malaysian companies. For Malaysia, Arab countries play a significant role in enhancing their economic activities and is gate way for Middle East market [1]. Economic relationship between Malaysia and Arab nations has been growing in recent years. After independence, Malaysia has been an active country in its involvement in International trade. At present, Malaysia is one of the major trading nations in the world. Malaysian economy has been highly dependent on external trade. In view of the fact that Malaysia is in the process of setting up the Islamic Financial Hub and World Halal Hub, the Arab countries are highly attracted to this approach and are seen as a partner for trade exchange in both production and services. Apart from the religious affinity, Malaysia and Arab countries have significant relation economically and politically. Malaysia as a major trading nation, noticed that Trade plays an important role in the country’s economy and overall development.

3. Research Hypothesis

The purpose of this section is to explain the interaction of market, innovation and performance in the context of manufacturing companies. In addition, it is difficult to explain the interrelationship in the marketing model, thus a hypothesis development method was utilized. Specifically:

- which factors influences export market performance;
- and how increase in organizational innovation influences the export market performance

The impacts of market orientation on innovation have been studied by many literatures over the decades. Jaworski and Kohli [12], suggested that market...
orientation might be an antecedent to innovation and market-oriented organizations tend to be more innovative. Deeds et al. [13], quoted that to reduce new product development uncertainty and time dependence and improve their innovation results, organizations must establish cooperative relationships. Process innovation is highly focused on improving productivity [14]. Abrunhosa and Sá [15], argued that process innovation that enables organizations to produce fairly large amount of products or services using limited available resources of an organization. Shoham et al. [16], viewed innovation as a multi-dimensional organizational trait. Market orientation is considered as one of the main tool for organizational performance [17, 18]. There are two key factors that create innovation gap [5]. The first is knowledge. Many established organizations are not innovative because their leaders do not know how to make innovation systematic. The second is that some of the management systems that made organizations successful in the industrial economy are now major obstacles as they try to become more innovative in the knowledge economy.

Traditionally, innovation has been associated with product development, but the focus on business model and organizational innovation is still lacking and thereby makes it central to measure the company’s ability to innovate in these dimensions as well. In the same way, the measuring of innovation has been done through an ethic, or outside approach investigating company’s tangible innovation, like patents and products.

H0: Organizational innovation has no influence on export market performance in manufacturing companies.

H1: Organizational innovation has strong influence on export market performance in manufacturing companies.

Baker and Sinkula. [8], found that in marketing, many new products are unsuccessful. It is because it lacks customer need fulfillment or relative superiority over existing alternatives. Thus, in order for a firm to be successful in bringing innovations to the market, a thorough understanding of their potential customers and both the process and factors influencing potential customers’ decision to either adopt the innovation or not is of crucial importance [19]. A strong market orientation is required to focus an organization on those environmental events that are likely to influence their ability to increase customer satisfaction relative to competitors [8]. Kemelgor [20], addressed that environment leads to erosion of market share and quick failure of the firms. Thus, firm must be continually innovating to remain competitive. The main challenge for the organization is therefore to create and manage an organizational environment where multiple innovations can occur on a sustained basis.

4. Research Method

In order to test the above-mentioned hypothesis, 5 point Likert scale ranging from “strongly disagree” (1) to strongly agree (5). A research design refers to the selection and use of a variety of techniques and research methods that need to be scientifically verified [21]. Managers working in manufacturing organizations listed in Bursa Malaysia and engaged in exporting to Arab countries were the main respondents. A total of 280 managers from different companies were requested to complete the questionnaire that contained measures of concern. A total of 235 duly completed questionnaires were returned. This gives a response rate of 83.92% which was adequate for the study through regression analysis. After deletion of outliers, in total 223 questionnaires were finally used for analysis. This study adopts the quantitative method approach to determine the role of organizational knowledge and export market orientation influence on organizational innovation that can increase the export market performance in the manufacturing companies of Arab countries.

5. Data Analysis

5.1. Reliability Test

Data used to test this research model were collected from a sample of respondents. The 223 data collected were analyzed using SPSS version 19. For each of the item scale factor analysis was used to reduce the total number of items to a smaller number of underlying factors. The analyses show that all measures exhibited high reliabilities with coefficient alphas ranging from 0.787 to 0.845, exceeding or approaching the acceptable level of 0.6 (Hair et al., 2010; Tabachnick & Fidell, 2007). This means, all measurements possessed high factor loadings. Overall, the measurements performed well and all measurements are considered reliable and valid for hypothesis testing in the main study.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Dimensions</th>
<th>Cronbach Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational Innovation</td>
<td>Technical Innovation</td>
<td>0.787</td>
</tr>
<tr>
<td></td>
<td>Administrative Innovation</td>
<td>0.845</td>
</tr>
<tr>
<td></td>
<td>Market Innovation</td>
<td>0.827</td>
</tr>
<tr>
<td></td>
<td>Radical Innovation</td>
<td>0.798</td>
</tr>
<tr>
<td>Export market performance</td>
<td>Business results</td>
<td>0.870</td>
</tr>
</tbody>
</table>
5.2. Descriptive Statistics

Table 2 below shows the tests of normality and other descriptive statistics of the data collected. It shows mean, standard deviation, Skewness and Kurtosis. The values in the table provide for skewness are between -0.27 and 0.39, and the value of kurtosis was between 0.8 and 3.7 respectively. Based on the results of skewness and kurtosis test it is indicated that the data of the study is within the acceptable level of normality assumptions.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>Std. deviation</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical Innovation</td>
<td>2.60</td>
<td>0.68</td>
<td>-0.29</td>
<td>0.02</td>
</tr>
<tr>
<td>Administrative Innovation</td>
<td>2.45</td>
<td>0.80</td>
<td>-0.17</td>
<td>-0.32</td>
</tr>
<tr>
<td>Market Innovation</td>
<td>3.54</td>
<td>0.76</td>
<td>0.11</td>
<td>0.85</td>
</tr>
<tr>
<td>Radial Innovation</td>
<td>2.71</td>
<td>0.60</td>
<td>-0.41</td>
<td>0.65</td>
</tr>
<tr>
<td>Business Results</td>
<td>0.06</td>
<td>0.50</td>
<td>-0.83</td>
<td>0.35</td>
</tr>
</tbody>
</table>

Mean and standard deviation is included to know the validity of the data. Standard deviation as explained by Robert Niles (2008) is considered as mean of the mean. Skewness and Kurtosis is used to know whether the result is normally distributed or not. Skewness is considered as a measure of symmetry or more precisely. If the data looks same to the left and right of the center point, then it is considered as the data is symmetric. Kurtosis is a measure of whether the data are peaked or flat related to the normal distribution. The skewness for the normal distribution is zero, any data that is closer to zero is considered as a normally distributed. The kurtosis for a standard normal distribution is 3. If the kurtosis value is near to zero means the data are normally distributed.

5.3. Regression analysis

The results of one step hierarchical linear regression analyzing the impact of organizational innovation and export market performance was undertaken to test the hypothesis of this study as tabulated in table 3. The $R^2$ for the variables was found to be 0.539 i.e. 53.9% of the variable export market performance was able to explain by the independent variable organizational innovation. The significant F statistics ($p<.10$) suggests that the proposed model is adequate. It was also known from the proposed model that beta standardized of 73.4% of influence found by organizational innovation explaining export market performance.

The results of regression analysis in assessing the validity or the empirical relationship, the dimensions of organizational innovation were found to have significant influence to export market performance. From the results of factor and reliability analysis, the research model and hypothesis is revised accordingly.

5.4. Confirmatory Factor Analysis

The measurement model of organizational innovation and export market performance is tested using CFA in order to determine the uni-dimensionality of each factor. As for the four dimensions of organizational innovation and export market performance as endogenous construct, the proposed hypothesis was examined using the structural equation modeling technique. The finding implies that technological innovation influences heavily towards the export market performance. Firms will be better improving on the level of organizational innovation through a more systematic approach. This result was consistent with the finding of Shoham et al. [16], in which the author found innovation as a multiple approach for organizational performance. In summary, when organizational innovation dimensions are presented in the manufacturing firms, the performance will prompt, proper and innovative, thus enhancing the orientation of organizations towards the customers.

![Figure 1 Structural Relationship between dimensions of organizational innovation and export market performance](image)

6. Research Implications
The findings of this study should help managers better understand how to identify and manage the strategies of market orientation in order to improve organizational and product innovation. This study has four managerial implications for managers and practitioners. First, the new scale developed in this study may help managers diagnose the existence and level of innovation and export market performance strategies. Second, it is dangerous for firms to be only customer-oriented. It is important to be competitor-oriented and be responsive and intelligence coordinate in order to have a high level of product value. Third, managers should be aware that different types of orientation strategies may have different effects on organizational innovation.

7. Conclusions

This study used the data from federation of Malaysian manufacturers and in total 223 marketing and export managers in Malaysia was targeted for the final study. Principal Factor Analysis, Reliability tests, linear regression analysis and structural equation modeling were used for data analysis. The study of Tidd and Bessant [23] stated that there is a strong relationship between market orientation and firm performance. Similarly, [24, 25] also found that market orientation is very crucial attribute for increasing organizational performance. The factor that leads to the adoption of strategic innovation and market orientation were determined to be the increased export performance due to innovativeness and market orientation. Moreover, the data showed that a firm’s organizational innovation is positively associated to export market performance of Malaysian manufacturing companies exporting to Arab countries. This study makes significant contributions to the marketing and the management literatures and practices. The major contribution of this study is the first step toward conceptualizing and developing scales for market orientation and organizational innovation. Although the notion of innovation was suggested by the management literature more than a decade ago, the concept remains undevolved.

References


