

Entrepreneurial Orientation Effects on Market Orientation and SMEs Business Performance – A SEM Approach

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— *Review of* —
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ABSTRACT

This paper examines the relationships between entrepreneurial orientation, market orientation, and firm performance. There has been relatively little research that examines the relationship between strategic orientations, such as entrepreneurial orientation and market orientation and their consequences on firm performance in developing countries. This paper represents an attempt to do so from the Malaysian perspectives. A response from sample of 386 management of SMEs in Malaysia which were obtained by mail survey are tested on their Hypothesized relationship using SEM analysis method with SEM AMOS 18 and SPSS 17 applications. The findings show that the entrepreneurial orientation and market orientation exert a positive effect on firm business performance. The reported results in this paper present an important ground for SMEs management in formulating and implementing strategies to improve their business performance. This paper provides recommendations for entrepreneurs of how their entrepreneurial orientation and market orientation influenced their firm performance. Research's limitations and recommendations for future research were also discussed.

Keywords: Entrepreneur Orientation, Market Orientation, SME, Performance

1.0 INTRODUCTION

Small and medium sized enterprises (SMEs) has been recognised as a strategic thrust in Malaysian economy according to reports by various government agencies (SME Annual Report 2010, 2011; 9th Malaysia Plan, 2006; Third Industrial Master Plan (IMP3) 2006 – 2020, 2006). According to the SMEs Census 2011 report, a total of 645,136 SMEs were operating their businesses in Malaysia in 2011, representing 97.3 percent of total business establishments. Additionally, it provides employment for about 59 per cent of the total workforce, contributing about 32.5 per cent of the Gross Domestic Product (GDP), and 19 per cent of total export. According to data by Malaysian Institute of Economic Research (MIER), of all supply economic sectors that contribute to the Malaysian economy, the top three components are services, manufacturing, and agriculture sectors. In 2011, the largest contributor to real GDP was services with 58.6 per cent, which managed to maintain its year on year growth rate at 6.8 per cent in 2010. The next largest contributor to real GDP was manufacturing with 27.5 per cent share of GDP. Although SMEs contributes to the largest percentage of workforce and are the bulk of business enterprise in Malaysia, their contribution of 32 per cent to the nation GDP and 19 per cent of the total export was relatively insignificant (SME Annual Report, 2009/2010). Comparison with neighboring countries reveals that Malaysian

SMEs' contribution to the GDP is far lower. Particularly, Singaporean SMEs contributes to 49 per cent, while Thailand SMEs contributes 39 per cent of their GDP. A 2010/2011 diagnostic study by the World Bank on Malaysian SMEs in relation to SMEs in the regions and against more developed nations may explain the scenario.

The study revealed that productivity growth of Malaysian SMEs has slowed down significantly after the Asian crisis, that caused a decline in private investment, a shortage of skilled workers, and a lack of innovative activity (SME Master Plan, 2012-2020). Although SME accounts for about 97 per cent of the total business establishments in Malaysia, employs 59 per cent of the total workforce, and generates 19 per cent of the total export, its contribution to the nation GDP is only 32.5 per cent (SME Annual Report, 2009/2010). In contrast, SMEs' contribution to the GDP in other countries are way ahead compared to Malaysia, particularly 49 per cent in Germany, 49.4 per cent in South Korea, 55.3 per cent in Japan, and over 43 per cent in Singapore (Hamid, 2010). This illustrates that SMEs performance in Malaysia is far lower. SMEs in Malaysia used to focus on domestic market. However, with the elimination of trade sanctions, SMEs has been affected by globalization, and must find a way to compete globally and look for opportunities in the global marketplace (UNDP, 2007).

There is evidence that SMEs' performance is importance to the owner, managers, policy makers and society, however, there is lack of knowledge on which entrepreneurial factors influence SMEs performance and how they influence the performance (Awang et al., 2009). The objective of this study is to investigate the influence of entrepreneurial orientation on market orientation and business performance of SMEs in Malaysia. Hence, the objectives of this research are specifically formulated as in the following (i) To determine whether firm's entrepreneurial orientation has any influence on the firm's market orientation; (ii) To determine whether firm's entrepreneurial orientation has any influence on business performance; and (iii) To determine whether market orientation can improve firm's business performance.

2.0 LITERATURE REVIEW

2.1 Entrepreneurial Orientation and Market Orientation

Entrepreneurial and market orientation are organisational culture as well as organisation capabilities that are important to the firm business performance. A business can achieve market orientation's full potential when driven by an entrepreneurial orientation (Slater & Narver, 1995). Narver and Slater (1995) states that an organisation will adopt a market orientation culture when they are driven by entrepreneurial spirit. Morris et al., (2002) states that the essence of the ability to anticipate needs emerging consumer and proactively respond to these needs is an element of market orientation and entrepreneurial orientation elements. Matsuno et al. (2002) found that entrepreneurial orientation drives market orientation, that is the greater the level of entrepreneurial orientation, the greater is the level of market orientation. This can be explained in that entrepreneurial orientation facilitates organisation member's ability and willingness to recognise the need to reduce uncertainty, to commit to market learning activities and to take a more calculated risk. This consequently promotes market orientation. Therefore, the following hypothesis is proposed: H1: Entrepreneurial orientation is positively related to market orientation.

2.2 Entrepreneurial Orientation and Business Performance

Entrepreneurial orientation capabilities involve three main aspects i.e. proactive, risk taking and innovative. Resource based view theory suggested that resource possession

and resource utilisation via organisational capabilities can lead to superior business performance. Entrepreneurial orientation can be regarded as one of the organisational capabilities and such capability can differentiate a firm from its rivals and achieve superior business performance. Firms with entrepreneurial orientation have the capabilities to discover and exploit new market opportunities, respond to challenges and willing to take risk under uncertain circumstances. Entrepreneurial orientation is closely knitted to management capabilities as an entrepreneur and on how to make right decisions with various calculations and reasoning (Hassim, A.A., Asmat-Nizam, A.T., & Bakar, A.R., 2011). The importance of entrepreneurial orientation to the survival and performance of firms has been acknowledged in the entrepreneurship literature (Huang, Wang, Tseng & Wang, 2010). Researchers seem to agree conceptually that entrepreneurial orientation should contribute to a firm's superior performance. Empirical evidences also showed the positive influence of entrepreneurial orientation various performance measures such as financial performance, growth of the firm and overall business performance (Davis, Bell, Payne & Kreisler, 2010; Rauch, Wiklund, Lumpkin & Frese, 2009).

Previous studies also suggested that SME exhibiting high levels of entrepreneurial orientation will achieve superior performance compared to those possessing low levels of entrepreneurial orientation (Li et al., 2008; Keh et al, 2007). Awang et al. (2009) examined Malaysian Bumiputera SMEs and found that entrepreneurial orientation contributes in explaining their business performance. Fairoz et al. (2010) study of Sri Lankan SMEs noted positive correlations between entrepreneurial orientation and business performance. From the above argument, it is hypothesized that: H2: There is a positive impact of entrepreneurial orientation on business performance.

2.3 Market Orientation and Business Performance

Market orientation is an organisational culture that focuses on the understanding of the market condition in terms of customer and competitor. It is also one of the organisation capabilities that contribute to superior business performance via resource utilisation, as suggested by theory of resource based view. This capability is related to the ability to collect and utilise market information as well as coordinating the firm resources in implementing the market research activities. The importance of market orientation has received great attention in the literature over the past two decades (Johnson, Dibrell & Hansen, 2009). Empirical research on market orientation documents the positive effects of a firm's market orientation on financial performance as well as overall business performance (Milfelner, Gabrijan & Snoj, 2008). Market orientation also helps to improve performance of small and medium sized firm. Firms with a high degree of market orientation can enhance their performance by understanding and satisfying customer needs as well as understanding the market condition via gathering of information on competitor's action. This capability allows firms to respond to the market condition and competitive environment with sufficient market information that they possess. The study of Low et al (2007); Li et al. (2008); Laforet (2008) and Mokhtar et al. (2009) suggests that market orientation in small-medium sized business is positively correlated with performance. Accordingly, the following hypothesis is proposed: H4: Market orientation is positively related to business performance.

3.0 METHOD

This study is correlational in nature. The study is conducted with the intention to determine the relationship between entrepreneurial orientation and market orientation capabilities towards firm's business performance among SMEs in Malaysia. The basic

research design utilised for this study is a survey design. Survey method is one of the most widely used techniques in the social sciences (Creswell, 2009) and conducted on many respondents, which were asked the same questions about their characteristics, behaviours, and experiences. The unit of analysis for this study is the Small Medium Enterprise (SME) in Malaysia and this study deals with each SME manager response as an individual data source.

The selection of the companies was derived by using the simple random sampling technique which ensures that each individual from a population has the exact same probability of being included in a sample. A quantitative mail survey instrument was used to collect the data. Entrepreneurial orientation was measured using six items originally devised by Khandwalla (1977). Market orientation was measured using Narver and Slater (1990) measurements. All the items were measured using seven-point Likert scale items with anchor points 1 = strongly disagree and 7 = strongly agree. For performance, this study adopted the survey instrument developed by Khandwalla (1977), based on the manager's assessment of the company's performance relative to its competitors. To ensure appropriate response rate is achieved, the questionnaire was pre-tested by 15 firms from Kuala Lumpur. This exercise is mainly to check on the ease of completion, identify difficulties in wording and any vague sentences. The questionnaire was then revised based on the feedback received from the pilot study.

Structural Equation Modeling (SEM) was used to test the hypotheses arising from the theoretical model. In order to perform the SEM analysis, the two-stage approach recommended by Anderson and Gerbing (1988) was adopted. In the first stage, the measurement model analysis was conducted by specifying the causal relationships between the observed variables and the underlying theoretical constructs. For this purpose, CFA using AMOS 18.0 was performed.

4.0 FINDINGS AND DISCUSSION

The sampling frame used for this study is the directory of SMEs published by SME Business Directory. The samples were randomly selected from this directory. Contacted individuals were asked to complete and return the questionnaire using an enclosed postage paid envelope. Of the 900 questionnaires mailed, only 398 responses were received resulting in a response rate of 44%. Firms from all eleven industries were represented in this study. This shows that the samples are diverse as it consists of representatives from the various sectors of the population. Then, the final 398 usable questionnaires were classified into three groups: 50 questionnaires that were received during the first three weeks after mailing were grouped into fast responder, 298 questionnaires received between three and six weeks after mailing were put into moderate responder, and 50 questionnaires that were received after more than six weeks after mailing were grouped into late responder. Then, chi-square test on the demographic characteristics of the respondents is conducted (Ary et al., 2006). The significant values of the analysis revealed no statistically significant difference between the two groups (significant $p > 0.05$). Thus, it can be concluded that non-response bias will not significantly affect the generalizability of the findings of this study. Initially, 398 cases were analyzed and screened, and 12 out of range data were detected during descriptive analysis and deleted. Finally, a total of 386 cases were used for further data analysis. Therefore, the analysis was carried out on 386 responses.

After the examination of the standardised residual covariance matrix and modification indices, few items were deleted to obtain a model that better represents the data. This deletion was conducted because those items have the highest absolute value of standardised residual covariance. This is an indication that a particular covariance is not well reproduced by the hypothesised model (Cunningham, 2008). As a result of the deletion, the new model does fit the data well as can be seen in Table 4.1 which reveals that the significant chi-square fit, $\chi^2(54) = 143.650$ and $\chi^2/54 = 2.660$ (less than 3), indicating that the model does fit the data well. It is also proven by other indices including RMSEA (0.066), NFI (0.968), TLI (0.971), CFI (0.980), GFI (0.948) and AIC (253.650) (large value), which meet the cut off point and acceptable.

Table 4.1
CFA Result for Model Fit After Dropped Items

Overall fit indices	Value
χ^2	143.650
χ^2/df	2.660
RMSEA	0.066
NFI	0.968
TLI	0.971
CFI	0.980
GFI	0.948
AIC	253.650

Since the model does fit the data well, no more re-specification of the measurement model is necessary. This result is supported by Holmes-Smith (2001), that deleting the items in CFA will increase the model parsimony. After CFA analysis was conducted on the research model and the results indicate that the model fit the validity of the measurement, there is a need to re-examine especially CFA involves a deletion process. This stage follows Hair et al. (2006, p.707), who suggest to examine the validity of constructs through convergent and discriminant validity tests. Accordingly, the Average Variance Extracted (AVE), reliability, and correlation matrix were conducted, and obtained results as detailed in Table 4.2 below.

Table 4.2
Result of Average Variance Extracted (AVE) and Reliability

Construct	Items	Average Variance Construct	Reliability
Entrepreneurial Orientation (EO)	EO1	0.896	0.882
	EO3		
Market Orientation (MO)	MO6	0.893	0.940
	MO8		
	MO9		
Business Performance (PERFORM)	PERFORM1 PERFORM3	0.799	0.741

Hair et al. (2006) and Fornell and Larcker (1981) suggest that an AVE should be 0.50 and above. With reference to the results in Table 4.24, the AVE values for all constructs are above 0.50. Next, the discriminant validity was conducted using Pearson Correlation

Matrix. As a threshold, the discriminant validity measurement should not be more than 0.90 (Campbell and Fiske, 1959). This correlation coefficient is assessed through the correlation among constructs. Details of the results are available in Table 4.3, which exhibit that the coefficient correlation is not highly correlated and most of them are significant.

Table 4.3
Discriminant Validity

Construct/Variable (Relationship)	Pearson Correlation
EO<--> MO	0.767**
EO <--> PERFORM	0.297**
EO <--> ENV	0.804**
MO<--> PERFORM	0.278**
MO<--> ENV	0.772**

Based on the results of the test, it has proven that the data are good in terms of convergent validity, construct reliability, and discriminant validity. In order to answer the research questions, to test the hypotheses and achieved the research's aims, a proposed framework model has been tested. Consequently, a specific model of the business performance within organisations that best fits the data generated earlier is used for testing. In structural model process, it will show the relationship between observed and unobserved variables. Having run the test, the SEM was obtained, and results of fit indices were shown in Table 4.4.

Table 4.4
Structural Model Fit

Overall fit indices	Value
χ^2	187.179
χ^2 / df	2.636
RMSEA	0.065
NFI	0.968
TLI	0.974
CFI	0.9982
GFI	0.937
AIC	293.179

Results in Table 4.4 dictate that the value of $\chi^2 (71) = 187.179$ and $\chi^2 / 71 = 2.636$, which is within the acceptable range between 1 and 3 (Carmines & McIver, 1981). The value of RMSEA is 0.065, which is considered satisfactory (less than 0.08) as suggested by Brown and Cudeck (1993) and Hu Bentler (1999). On top of that, the incremental fit, NFI, TLI, CFI, and GFI are above 0.90 (Bentler & Bonnet, 1980; Bagozzi & Yi, 1998). Besides, the AIC is 293.179, which is large enough. Based on the results, it can be concluded that the overall fit indices are satisfactory. The final specified model shows all paths in Table 4.5.

Table 4.5
Regression Weights Results

Latent to Latent	Variables	Estimation	S.E.	C.R.	P
Market Orientation	<--- Entrepreneurial Orientation	0.944	0.042	22.572	***
Performance	<--- Entrepreneurial Orientation	0.724	0.602	1.204	0.229
Performance	<--- Market Orientation	0.215	0.103	2.517	0.012

The new specified full model also indicates that there are varying explanations for the dependent variables. The square multiple correlations (R^2) of a variable is the proportion of its variance that is accounted for by its predictors (Arbuckle, 2005). They are detailed in Table 4.6 below

Table 4.6
Squared Multiple Correlations

Variables	Estimation
Market Orientation (MO)	0.797
Innovation Behaviour (INO)	0.594
Business Performance (PERFORM)	0.201
Interaction MO and ENV (MOIENV)	0.982

The values of R^2 indicate the variance accounted for by the variables in the model until a specific variable. Accordingly, the results in Table 4.28 could explain that:

- It is estimated that entrepreneurial orientation explain 79.7 per cent of the variance of market orientation (MO)
- It is estimated that Market Orientation explain 59.4 per cent of the variance of innovation behaviour (INO)
- It is estimated that predictors of business performance explain 20.1 per cent of its variance

Meanwhile, results for standardised regression weights for each variable are stated in Table 4.7. It is seen that the strength of regression weights of paths are from moderate until strong direction.

Table 4.7
Standardised Regression Weights

Latent to Latent Variabl	Estimation
Market Orientation <--- Entrepreneurial Orientation	0.893
Business Performance <--- Market Orientation	0.430
Business Performance <--- Entrepreneurial Orientation	1.370

To infer the hypotheses, the regression was conducted, which is tested in SEM simultaneously. However, before conducting the analysis to infer the hypotheses, the data were already tested for linearity, normality, homocedasticity and multi-collinearity. All these basic assumptions were acceptable and prove that the data meet the conditions of basic assumption in regression analysis (Hair et al., 1998)

4.1 Hypotheses 1

Based on the results of the hypothesis testing, this study found a positive and significant

relationship between entrepreneurial orientation and market orientation. The t-value of 22.572 (p-value = 0.000 < 0.05) evidences that the orientation of entrepreneurial influences the market orientation. Thus, it supports the literatures on the positive effect of entrepreneurial orientation on market among SMEs in Malaysia. Besides, the $\beta = 0.944$ means that when orientation of entrepreneurial increases by 1 unit, market orientation increases to 94.4%. With reference to the results in Table 4.28, the value of regression weights between entrepreneurial and market orientation is 0.893, which shows a strong path. This may suggest that the higher the level of entrepreneurial orientation within SMEs in developing performance, the greater the market orientation of performance measures. Therefore, hypothesis one (H1) is supported.

4.2 Hypotheses 2

The second hypothesis (H2) that is, “There is a positive impact of entrepreneurial orientation on business performance” represents the relationship between entrepreneurial orientation as exogenous variable and business performance as an endogenous variable. It was hypothesised that there is no significant influence between entrepreneurial orientation and (towards) business performance. Having tested the data, result in shows that t-statistics is 1.204 and p-value is 0.229 (greater than 0.05). Hence, hypothesis two (H2) is rejected and there is no relationship between both variables. In other words, in term of regression weight, the entrepreneurial oriented is not impacting positively to the business performance of SMEs.

4.3 Hypotheses 3

In testing the third hypothesis (H3) that is “Market orientation is positively related to business performance”, it is hypothesized that there is a positive and significant relationship between market orientation and business performance. Having tested the data, the t-value is found 2.517 (p-value = 0.012 < 0.05). This evidences that the market orientation influences the business performance. This supports the literatures on the positive effect of market orientation on business performance within SMEs in Malaysia. On top of that, the β value is 0.215, which means when changes in market increases by 1, the performance of SMEs increases by 21.5%. With reference to the results in Table 4.28 the value of regression weights between market orientation and business performance is 0.430, which shows a moderate path. This may suggest that the higher the level of market orientation within SMEs in developing performance, the higher business performance is. Therefore, hypothesis four (H4) is supported.

5.0 CONCLUSION

One of the major findings in this research is on the effect of entrepreneurial orientation on market orientation. The results show that entrepreneurial orientation is positively related to market orientation. The results also indicate that entrepreneurial orientation has a large explanatory power to predict market orientation. Hence, this study deduces that entrepreneurial orientation explains a large per cent of the variation in market orientation. This confirms the findings by Matsuno et al. (2002), that entrepreneurial orientation drives market orientation, which is the greater the level of entrepreneurial orientation, the greater is the level of market orientation. The explanation is that entrepreneurial orientation facilitates organisation member’s ability and willingness to recognise the needs to reduce uncertainty, to commit to market learning activities, and to take a more calculated risk. This study also examines the influences of entrepreneurial orientation on business performance. From the results, it is observed that entrepreneurial orientation does not significantly influence the business performance among SME in Malaysia.

Since positive relationship is expected, the non-significance of the relationship between entrepreneurial orientation and business performance is somewhat surprising, considering the fact that entrepreneurial orientation has been suggested as an integral part of higher business performance and essential attribute of high performing firms (Covin & Slevin, 1989; Lumpkin & Dess, 1996; Dess, Lumpkin & Covin, 1997; Lee & Peterson, 2000). The model shows a very weak relationship between the entrepreneurial orientation construct of innovative risk taking and business performance, which suggests that the entrepreneurial orientation dimension of innovative risk taking contributes very little to business performance, and has only a very small influence on the innovation capability dimensions shown in this model.

The positive effect of market orientation on business performance means that adoption of market orientation culture does help in achieving superior business performance. It is evidenced that SME would perform well if market orientation is improved and practiced formally through the results. Then, better performance can be achieved as the findings show that if customers are put first, where customer's satisfaction are seen as priority and if customer information is shared between management and employees, these can make inputs on how best customers can be served to improve service quality. Thus, it is important for small business owners to serve customers where they have competitive advantage and also attend regularly to customer complaints.

The positive relationship between market orientation and firm performance also indicates that SME would achieve superior performance if the operations of competitors in terms of their strengths and weakness are critically considered as matters of importance. To improve the business performance, SME firms are encouraged to take creative and innovative actions, constantly search for new opportunities and benefit from existing opportunities and they should also be highly committed to undertake the risks being considered (Norita et al., 2007). Although this study did not find that risk taking has influences towards business performance, Coulthard (2007) suggests that risk-taking elements should be included in the decision making aspect of a firm, because proper risk-taking and well-managed risk could provide positive benefits to the success of the SME performance. Besides, the government and its agencies should also provide necessary assistance and consultative service to SME firms to prepare them with the necessary elements highlighted in this paragraph and the previous. They need to direct more resources and energy to promote, and encourage entrepreneurial culture towards enhancing the entrepreneurial orientation of SMEs managerial implications.

6.0 REFERENCES

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