

## **Entrepreneurial Orientation and Business Performance of Women-Owned Small and Medium Enterprises in Malaysia: Competitive Advantage as a Mediator**

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### **Abstract**

*The aim of this research is to examine the mediating effect of competitive advantage on the relationship between entrepreneurial orientation and performance of women-owned SMEs in Malaysia. It proposed a quantitative analysis in which entrepreneurial orientation and sources of competitive advantage are key success factors of SMEs. To answer the research questions, two hypotheses were formulated; (a) There is significant relationship between entrepreneurial orientation and business performance, and (b) competitive advantage mediates the relationship between entrepreneurial orientation and performance. Data were collected by means of a mail survey questionnaire completed by women owner/managers randomly selected from a sampling frame of registered SMEs. The questionnaires developed from prior research were used to measure the entrepreneurial orientation and competitive advantage of the firm while performance measurement was based on subjective evaluation involving self-reported measures. The findings revealed that significant relationships exist between entrepreneurial orientation and performance, while competitive advantage was found to partially mediate the entrepreneurial orientation and performance relationships. These findings may be of help to the women owner/managers of SMEs to be more entrepreneurial oriented and developed competitive edge in order for them to survive the intensely competitive market environment.*

**Keywords:** Women-owned SMEs, entrepreneurial orientation, competitive advantage, business performance

### **1. Introduction**

Small and medium enterprises (SMEs) play an increasingly important role in the economic growth of most nations. SMEs have become important as a source of employment and maximize the efficiency of the resource allocation and distribution by mobilizing and utilizing local human and material resources (Cunningham & Rowley, 2007). SMEs also act as supplier of goods and service to large organizations. Most SMEs have been characterized as dynamic, innovative, efficient and their small size allows for flexibility, immediate feedback, short decision-making chain, better understanding and quicker response to customer needs (Singh, Garg & Deshmukh, 2008; Idar & Mahmood, 2011). In Malaysia, the last few decades also saw a tremendous increased in participation of SMEs which are seen to be playing a major role for the nation's economic development (Abd Aziz & Mahmood, 2011; Idar & Mahmood, 2011). In addition, a large number of these SMEs are owned and operated by women (Alam, Mohd Jani & Omar, 2011). However, research on women owned SMEs are still minimal especially on factors that affect their business success (Hanafi, 2012; Mahmood & Hanafi, 2012; Brush, Bruin, Gatewood & Henry, 2010; Ndemo & Maina, 2007). Women owned SMEs in Malaysia too face enormous pressures as the nation integrates more into the world economy. Influences, impacting as both external and internal factors, can be found in the business environment, such as globalization, technological innovation and demographic and social change, as well as the level of technology deployed, innovative ability, financial support and entrepreneurship (Mahmood & Hanafi, 2012). In order to be able to seize the opportunities that this dynamic environment opens up, women owned SMEs have to refigure their existing strategies.

These firms need dynamic capabilities that enable them to sense and seize new opportunities and renew the existing market base. It is proposed that entrepreneurial behavior constitutes a potential source of competitive advantage and key to success factors of women-owned SMEs.

The objective of this study, therefore, is to investigate the relationships between entrepreneurial orientation, competitive advantage and business performance of women-owned SMEs in Malaysia. Specifically, this study aims to (1) determine the significant relationship between entrepreneurial orientation and SME performance, and (2) determine the mediating effect of competitive advantage on the relationship between entrepreneurial orientation and SME performance.

## **2. Literature Review**

### **2.1 Entrepreneurial orientation and performance**

Entrepreneurial orientation (EO) is a significant contributor to a firm's success. The concept of entrepreneurial orientation was developed by Miller (1983) as comprising three dimensions; innovativeness, proactiveness and risk taking. Innovativeness is the firm's ability and willingness to support creativity, new ideas and experimentation which may result in new products/services (Lumpkin & Dess, 1996), while proactiveness is the pursuit of opportunities and competitive rivalry in anticipation of future demand to create change and shape the business environment (Lumpkin & Dess, 2001). Relating to risk-taking, it is the firm knowingly devoting resources to projects with chance of high returns but may also entail a possibility of high failure (Miller & Friesen, 1982; Lumpkin & Dess, 1996). However, risk-taking is also commonly associated with entrepreneurial behavior and that generally successful entrepreneurs are risk-takers (Kuratko & Hodgetts, 2001). Miller (1983) argued that these three components of EO comprised a basic unidimensional strategic orientation.

Positive relationships between entrepreneurial orientation and performance have been noted by a number of researchers (Covin & Slevin, 1991; Lumpkin & Dess, 1996; Wiklund, 1999; Krieser, Marino & Weaver, 2002; Kraus et al., 2005; Al Swidi & Mahmood, 2011). EO is also connected to better export performance (Ibeh, 2003), and success in terms of firm size and economic growth (Tang et al., 2007). Studies have also found positive effect of EO on growth of small firms (Gurbuz & Aykol, 2009) and profitability of non-state firms in China (Chow, 2006). Based on these discussions, the following hypothesis is formulated:

H1: There is significant relationship between entrepreneurial orientation and women-owned SME performance.

### **2.2 Entrepreneurial orientation and competitive advantage with business performance**

Covin and Slevin (1989, 1991) built a model that links entrepreneurial posture to organizational performance. They found that entrepreneurial orientation was positively related to performance and that an entrepreneurial posture was most positively related to firm performance. Miller and Bromiley (1990) found that entrepreneurial orientation had an impact on overall firm performance, such as return on equity/assets/sales. Zahra (1991) reported a positive relationship between entrepreneurial orientation and firm profitability and growth. Research by Wiklund (1999) confirmed that there was a positive relationship between entrepreneurial orientation and performance.

Previous studies reported a positive and significant relationship between entrepreneurial orientation and firm performance (Al Swidi & Mahmood, 2011; Zahra & Covin, 1995). Krauss, Frese, Fredrick, and Unger (2005) found that entrepreneurial orientation is a valuable predictor for business. Hence, entrepreneurial orientation research accumulated a considerable body of evidence regarding the relationship between entrepreneurial orientation and outcomes or performance (Barringer & Bluedon, 1999; Covin & Slevin, 1989; Miller, 1983; Wiklund 1999; Wiklund & Shepherd, 2003; Zahra, 1991; Zahra & Covin, 1995).

Entrepreneurial orientation is also a resource and capability that present a lasting competitive advantage and superior performance to the firm. According to resource-based theory of the firm, competitive advantage only arises from the use of scarce, intangible and firm-specific assets (Spender, 1996). Tovstiga and Tulugurova (2009) affirmed that the firm's internal resource base is a determining factor of competitive advantage in small and medium firms. The literature further affirmed that the firm's competitive advantage and performance are largely influenced by the entrepreneurial behavior of the firm (Wiklund & Shepherd, 2003; Zahra & Covin, 1995).

However, there is still limited empirical research investigating the mediating effect of competitive advantage on the entrepreneurial orientation-business performance relationship. Based on this paucity, the following hypothesis is posited:

H2: Competitive advantage mediates the relationship between entrepreneurial orientation and business performance of women-owned SMEs.

### **3. Methodology**

#### **3.1 Sampling and data collection procedures**

Data were collected by means of a mail survey questionnaire completed by women owner/managers of SMEs systematically and randomly selected from a sampling frame of registered SMEs in Malaysia. The sampling frame represents a listing of all women owned SMEs and is highly representative of the industry as a whole. A women business owner is defined as women owning, controlling and operating at least 51 percent of the business. Although there are limitations in the use of questionnaire based research, the benefits arising from cost savings, convenience, anonymity, and reduced interview bias seem to outweigh the limitations. A total of 1040 women owner/managers from the sampling frame were sent with the questionnaires and 165 usable responses were returned giving a response rate of 15.86 percent. Given the nature of SMEs and the low response usually associated with mail surveys, this response rate was considered reasonably adequate.

There is also an issue of non response bias which is pertinent to a survey method of data collection. Non response bias exists when there are significant differences between the answers of those who have responded and those who do not respond. This study followed the convention of comparing the respondents of the first wave with those of the second wave (Armstrong & Overton, 1977). The early wave group consisted of 90 responses whereas the final wave group consisted of 75 responses. The t-tests performed on the responses of these two groups yielded no statistically significant differences on demographic characteristics. Thus, it can be concluded that there is no significant non-response bias in this study

#### **3.2 Measures**

##### **3.2.1 Entrepreneurial orientation**

The questionnaire developed by Covin and Slevin (1989) was used to measure the entrepreneurial orientation of the firm. Covin and Slevin (1989) developed this scale based on early work by Miller and Friesen (1982) and Khandwalla (1977). The response of this nine-item questionnaire used a five point Likert scale on which the owner/managers have to indicate the extent to which the items represent their firm's strategy. The EO questionnaire distinguished three sub-dimensions; innovativeness, pro-activeness and risk-taking.

##### **3.2.2 Competitive advantage**

The competitive advantage construct of Ramaswami, Bhargava and Srivastava (2004) was used for this study. It consists of differentiated products, market sensing, and market responsiveness (customers and competitors). The items of differentiated products and market sensing were measured on a five point scale, from 5 (strongly agree) to 1 (strongly disagree). The items of market responsiveness (customers and competitors) were measured on a five point scale and were coded on a scale of 5 (very good) to 1 (very poor).

##### **3.2.3 Performance**

There has been no agreement among researchers on an appropriate measure of performance. Previous studies, however, have suggested that performance measures include growth and financial performance (Wiklund, 1999). It has also been generally recognized that objective measures of performance are more appropriate than subjective evaluation of performance. However, collecting objective data is very difficult largely because owner/managers are generally unwilling to release firm's information to outsiders. In addition, they may provide biased evaluation of their firm's performance (Sapienza, Smith & Gannon, 1988). Therefore, subjective approach was adopted in this study where the performance of the firm was measured by the perception of the owner/managers providing responses to the survey. They were asked to state their firms' performance on criteria likely profitability and market share for the past three years. This variable was also gathered using 5-point Likert scale items.

## 4. Analysis and Findings

### 4.1 Reliability and validity

Special care was taken in this study to ensure reliability and validity. The instruments were developed from prior research and previously tested for reliability. Some of the questions used were slightly modified to make them more relevant to the purpose of the study. Thus, a reliability test was conducted to determine the internal consistency of the measures used. Table 1 shows EO and CA have Cronbach Alpha values of more than 0.7 which is higher than that recommended by Hair et al., (2006), while the value for performance was 0.661. However, Hair et al. (2006) also considered values of 0.6 to below 0.7 as moderate and acceptable for use in the research. Thus this indicates that the variables were internally consistent and the scales deemed reliable for further analyses.

Next, the variables in this study were validated using principal component analysis (PCA) with varimax rotation from exploratory factor analysis. Before performing the analysis, the suitability of the data was assessed through two tests; Kaiser-Meyer-Olkin measure of sampling adequacy (KMO) and Bartlett's Test of Sphericity. The KMO has to be more than 0.50 and Bartlett's Test of Sphericity has to be significant (Kaiser, 1974). From factor analyses, it was suggested that items that had factor loadings lower than 0.50 should be eliminated (Hair et al., 2006). The varimax rotated principle component factor analysis applied has resulted in single factor loading in each of the two variables; entrepreneurial orientation and competitive advantage that explained 55.21 percent and 68.82 percent of the variance, respectively (See Table 2). Only factors with a loading value of 0.50 and above were considered, and the one item from CA that did not meet the required loading was deleted.

### 4.2 Sample characteristics

The profile of the respondents is illustrated in Table 3. More than 40 percent of them were below the age of 30 (44.3 percent) and 49.1 percent were married. Majority of them had achieved a first degree or higher in terms of academic qualification. Most of the respondents were in the service sector, and 60 percent of the firms also have been operating for less than 5 years.

### 4.3 Testing of hypotheses

Regression analysis was used to test the relationship between Entrepreneurial Orientation (EO) and performance (H1). The regression analysis result in Table 4 indicates that EO is positively and significantly related to performance. The adjusted R-squared was obtained at 0.325 with a significant level  $p < 0.001$ . Therefore, this finding supports H1. This also concurs with most researchers who found positive relationship between entrepreneurial orientation and firm performance (Wiklund & Shepherd, 2003; Lumpkin & Dess, 1996; Covin & Slevin, 1991; Al Swidi & Mahmood, 2011).

The mediating effect of Competitive Advantage (CA) on the relationship between EO and performance was tested based on a regression procedure specified by Baron and Kenny (1986). According to this procedure, it must be demonstrated that EO (which is a predictor variable) is related independently to both CA (which is a mediator variable) and performance (which is the outcome variable). To prove the mediating effect, it must be demonstrated that the regression coefficient associated with the EO-performance relationship shrinks or goes to zero when CA as a mediator is added to the equation. If the effect goes to zero when the mediator is added than full mediation has taken place, however, if the effect only shrinks in the presence of the mediator, then partial mediating has occurred.

Figure 1 indicates that the conditions for mediation suggested by Baron and Kenny (1986) are met. First there is an effect to be mediated ( $\beta = 0.573, p < 0.01$ ). Second there is significant relationship between EO and the mediator ( $\beta = 0.248, p < 0.01$ ), and third, the coefficient of CA as mediator is significant with both EO and CA as predictors ( $\beta = 0.637, p < 0.01$ ). Finally, the absolute effect of EO on performance becomes less when CA as mediator was added in the regression (standardized Beta from 0.573 to 0.462). Thus, partial mediation was registered because the effect of EO on performance was reduced to a significant level. Thus H2 is partially supported.

## **5. Discussions and Conclusion**

This study makes contribution to the literature by investigating and testing the relationship between EO and women owned SME performance, and the mediating effect of CA on the relationship between EO and women-owned SME performance in Malaysia. To the best of our knowledge, these efforts have not been empirically investigated even though there were numerous studies on the relationships between EO and performance, and between CA and performance. The findings indicate that mediating effect of CA on the relationship between EO and performance satisfies the conditions as suggested by Baron and Kenny (1986). This is true because the EO that resides in an organization can put that organization in a better competitive position.

The findings of this study confirmed that entrepreneurial orientation has a positive effect towards business performance of women-owned SMEs. These reinforce previous studies that entrepreneurial oriented firms tend to be more willing to take risks, and appear to be more innovative and proactive that leads to increase performance (Ahl, 2006; Zimmerman & Brouthers, 2012). This suggests that the firms and the women owner/managers may benefit from efforts to increase their level of entrepreneurial orientation in order to survive the dynamic, fast-paced and complex business environment which is characterized by shorter life cycles, globalization, and continuous improvements in technology. Entrepreneurial orientation is thus a mechanism for the survival and success of women-owned SMEs.

Partial mediation effect of competitive advantage was also found on the relationship between entrepreneurial orientation and business performance. The findings illustrate the importance of sources of competitive advantage as a conduit in enhancing the relationship between entrepreneurial orientation and performance of women-owned SMEs. This links well with the resource based view (RBT) of the firm which postulates that resources within the firm are associated with the firm's competitive advantage (Barney, 1991). Competitive advantage is not dependent on natural resources, technology or economies of scale, but on the valuable, rare and hard to imitate resources that reside within the firm. The ability of the firm to develop and utilize these resources can equip it with the needed tools to most effectively direct the firm. In conclusion, this study has suggested that entrepreneurial orientation and competitive advantage play a fundamental role in enhancing firm performance. Entrepreneurial orientation represents a strategic orientation when combined with appropriate sources of competitive advantage. Their interaction yields an identifiable impact on firm performance, and thus this study helps to provide a clear agenda for enhancing competitive advantage and success of women-owned SMEs.

Notwithstanding, this study has several limitations that need to be addressed by future research. First, the relatively small sample size may not be representative of women-owned SMEs in Malaysia. As the response rate is low to the mail survey method employed, the generalisability of the findings is limited. Future research would benefit in the variability of methodological approach in the data collection. Another limitation is the study's cross-sectional design which can only provides a snapshot of one point in time. This design did not allow the determination of cause and effect or the impact of changes over time. A longitudinal investigation would allow the firms to be studied over time and provide further insights into the dynamic nature of the relationship between variables. This study also relied mainly on self reports for firm performance. Self-reported data tend to be more positive and may not always be completely truthful (Zikmund & Babin, 2007). Future research might use objective measures for firm performance to strengthen the research design. Finally, the study made use of the unidimensionality of the variables. Perhaps some of the variables were not meant to be unidimensional. Therefore, future studies should come out with multi-dimensional models which may provide a fuller picture and deeper understanding of those variables and their inter-relationships.

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**Table 1: Reliability scores for variables**

Variable	No. of items	Alpha value
Entrepreneurial orientation	9	.813
Competitive advantage	12	.790
Performance	7	.661

**Table 2: Factor analysis of EO and CA**

Item	Factor loading
<i>Entrepreneurial orientation</i>	
For the last 3 years our firm has produced many new products/services	.688
In general, our firm is very often the first to introduce new products/services	.801
Facing competition, our firm normally engages aggressive actions over the competitors	.696
In general, our firm adopts a very competitive posture to beat the competitors	
In general, our firm has a strong emphasis on high risk projects with uncertain returns	.668
In order to achieve the firm's objectives, the impact of the business environment implies our firm to adopt strong and fearless measures	.614
In case of insecure decision-making situations, our firm adopts a fearless and aggressive position to increase the chance of exploiting potential opportunities	.778
Our firm put on strong emphasis on R&D and innovation instead of focusing on marketing of current products/services	.668
The changes in new product/services in our firm are quite dramatic	.570
Percentage of variance explained: 55.21%	
KMO = 0.807, Bartlett's Test of Sphericity Sig $p < 0.001$	.796
<i>Competitive Advantage</i>	
Our products are difficult for competitors to copy	.788
Our response to competitive moves in the marketplace is good	.755
Our ability to track changes in customer needs and wants is good	.752
We are quick to response to customer complaints	.709
Our collection of strategic information about customers and competitors for use with strategic planning is good	.688
Our speed of disseminating information in-house about competitors is good	.663
Our analysis of customer satisfactions with the products is good	
We make effort for product changes to overcome customer dissatisfaction with existing products	.658
Our products have a significant advantage over those of our competitors	.647
Our product designs are unique	.637
We are quick to response in meeting changes to customer needs and wants	
Percentage of variance explained: 68.82	.635
KMO = 0.764, Bartlett's Test of Sphericity Sig $p < 0.001$	.554



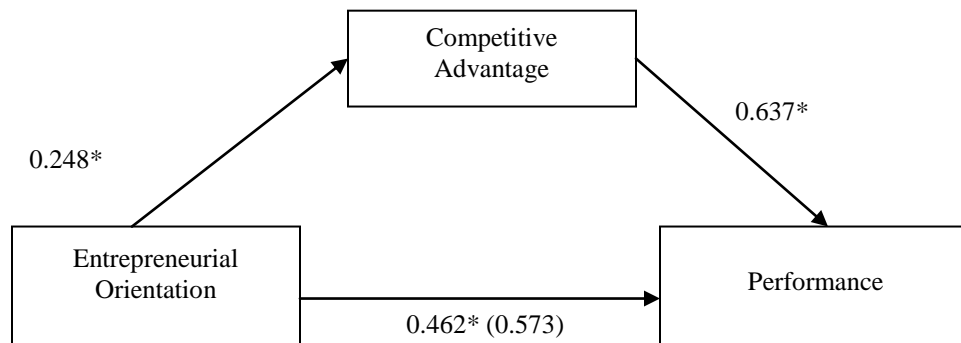
**Table 3: Profile of respondents**

Characteristics	Frequency	Percentage
<i>Age</i>		
Below 30	73	44.3
30 – 50	84	50.9
Above 50	8	4.8
<i>Education</i>		
Secondary	74	44.8
First Degree	80	48.5
Post Graduate	11	6.7
<i>Marital Status</i>		
Married	81	49.1
Single	84	50.9
<i>Types of industry</i>		
ICT services	45	27.3
Transportation	27	16.4
Food and beverages	63	38.2
Tourism	21	12.7
Others	9	5.4
<i>Years in operation</i>		
Below 5	100	60.6
5 - 10	41	24.8
11 – 15	5	3.0
16 – 20	12	7.3
Above 20	7	4.3

**Table 4: Regression of EO and Performance**

	Adjusted R-Square	B	Sig
EO	.325	0.573	.000*

Sig  $p < 0.001$



**Figure 1: Mediating effect of CA on EO and performance relationship**