

# **MANAGEMENT & ACCOUNTING REVIEW**

Volume 17 No. 2  
August 2018

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# Exploring Business Performance in Micro Enterprises through Entrepreneurial Orientation, Knowledge Sharing and Innovation

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## ABSTRACT

*Micro enterprises form most of business establishments in Malaysia. They represent more than 90 percent of such establishments in the country. Interestingly, most studies have shown that entrepreneurial orientation (EO) is an important element of entrepreneurship for micro enterprises. Hence, in the era of robustness of technology and explosion of knowledge, the role of knowledge sharing and innovation should be incorporated in investigating the performance of micro enterprises. This paper aims to explore the business performance of selected micro enterprises in Malaysia. One hundred and six micro enterprise owners took part in a survey. Partial Least Square was used to analyze the data. The results show that while entrepreneurial orientation on its own has no direct impact on business performance, the practice of knowledge sharing and innovation practices does. Entrepreneurial orientation and knowledge sharing have shown a strong impact on innovation where innovation reflects the impact of all variables on business performance. The study has also shown that knowledge sharing and innovation are being practiced actively in micro enterprises, thus providing a good platform for future research.*

**Keywords:** *Entrepreneurial orientation, knowledge sharing, innovation, business performance, micro enterprises*

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### ARTICLE INFO

#### **Article History:**

*Received: 19 April 2018*

*Accepted: 27 June 2018*

*Available online: 29 August 2018*

## INTRODUCTION

Micro enterprises (MEs) are often neglected due to their small size and contribution to the national economy. While Small and Medium Enterprises (SMEs) are enjoying much attention and support from the government, micro enterprises are not given much support. It is estimated that about 78.7% of business establishments in Malaysia were dominated by MEs (SME Annual Report 2014). Therefore, they play an important role in maintaining a stable and sustainable business environment (Samujh, 2011). A study done by Jamak et al. (2011) on micro enterprises revealed that most micro enterprises failed due to lack of motivation, marketing approaches, management and marketing as well as competitive capabilities. MEs are considered risky as they lack a good business track record; therefore they fail to secure a business loan (Thaker & Mohamad, 2011). Moreover, MEs are also facing challenges in human resource scarcity as they can only hire employees with a low level of education and less skilled due to their financial constraints. Most MEs in Malaysia are involved in three main sectors, which are services (87.7%), agriculture (7.3%) and manufacturing (4.9%). The definition of micro enterprises or businesses is based on the annual sales turnover and the number of full-time employees as shown in Table 1. Even though numerous studies on entrepreneurial orientation (EO) have been carried out, very few have been done on MEs. Furthermore, according to Rauch et al. (2004), the dimensions of EO differ from one country to another, thus the strength of the relationship between EO and performance is still imprecise. On the other hand, Mohram and Brakel (2011) found that small enterprises' successes depend on how well they share their tacit and explicit knowledge thus helping them to gain their competitive advantage. In fact, due to their small size and close networking amongst employees and customers, small businesses are more capable of being innovative compared to large companies. The aim of this paper is to find out the impact of EO on business performance and to explore the role of knowledge sharing and innovation in MEs.

**Table 1: Definition of Micro Enterprises**

Sectors	i) Annual Sales Turnover	ii) No. of Full time
	or	Employees
Manufacturing, Manufacturing-Related	Less than RM250,000	Less than 5
Services, & Agro-based Industries	OR	
Services, Primary Agriculture, Information	Less than RM200,000	Less than 5
& Communication Technology (ICT)	OR	

## LITERATURE REVIEW

EO refers to the entrepreneurial level of the company (Schillo, 2011) in entering a market with new or existing products or services. One of the most popular definitions is from Lumpkin and Dess (1996) that highlighted that EO refers to the decision-making styles, practices, processes and behaviors of the company. Many studies have shown that EO has a positive and significant relationship to business performance (BP) (Arshad et al. 2014; Zhao et al. 2011; Altuntas & Donmez, 2010). EO comprises proactiveness, risk-taking and innovativeness (Lumpkin & Dess, 1996) However; it has evolved with the addition of two more components, which are competitiveness and aggressiveness (Schillo, 2011). Previous studies have shown that indeed the relationship between EO and performance is not a straightforward, positive one. Rather, there are likely mediators that will determine how EO affects performance. Thus, for this study, knowledge sharing and innovation were included as mediators.

Knowledge sharing (KS) is considered important for firms to develop its knowledge resources for better business performance (Cunningham et al., 2016). There are many advantages in practicing KS, such as reducing uncertainty, transforming individual learning into business learning, creating shared understanding, solving problems, improving business performance and promoting business learning (Cross & Sproull, 2004).

Meanwhile, the most important reason for innovation (INV) in an organization is to make profits (Afuah, 2003). According to Lin and Chen

(2007), even though firms are not innovative in the same way, INV should be focussed on new products or services, new process relating to business nature. Product and process innovation are two most common innovations in SMEs (Ngah and Ibrahim, 2009). A few studies have shown that INV has a strong influence on business performance (Olughor, 2015). Additionally, a study by Civelek et al. (2016) has shown that university educated micro entrepreneurs are more innovative and autonomous than their lower educated counterparts.

Lee and Choi (2003) have highlighted that when internal resources are well executed through the regulation of knowledge and innovation, BP can be enhanced. Based on the literature review, this study focused on 4 hypotheses as shown below.

- H1: Entrepreneurial Orientation has a positive relationship to knowledge sharing
- H2: Knowledge sharing has a positive relationship to Innovation
- H3: Innovation has a positive relationship to business performance
- H4: Knowledge sharing and innovation mediate the relationship between entrepreneurial orientation and business performance

## **METHODOLOGY**

The research instrument was a survey carried out on one hundred and six owners of micro enterprises. Most of the micro enterprises were sole-proprietors (49.1%) while partnership represented about 26.4%. The majority of the companies had been in the business between 2 – 4 years. Meanwhile, about 54.7% of the companies recorded an annual sales turnover of less than RM200k. Meanwhile, the majority of the respondents were male (60.4%) where Malays formed the majority with 68.9% followed by Chinese at about 23.9%. The majority of the respondents were owners (54.7%) and partners (14.2%). A majority of the respondents were degree holders at 34%, and 31.1% were Diploma holders. Table 2 shows the profiles of the companies.

**Table 2: Company Profiles**

Variable	Category	Frequency	%
Company Status	Sole-Proprietor	52	49.1
	Family-owned	16	15.1
	Partnership	28	26.4
	Others	10	9.4
Business Establishment	< 2 years	23	21.7
	2 – 4 years	39	36.8
	5 – 8 years	22	20.8
	8 – 10 years	8	7.5
	10 years+	14	13.2
Annual Sales Turn-over	< RM200,000	58	54.7
	200,001 – 300,000	26	24.5
	300,001 – 500,000	9	8.5
	500,001 – 1 mil	6	5.7
	1.1 mil – 3 mil	1	0.9
	>3 mil	6	5.7

## Measures

The EO measurement was adopted from Lumpkin and Dess (1996), while the INV measurement was adopted from Calatone et al. (2002). KS and BP measurements were adopted from Choi and Lee (2003). Item statements in the variables sections were measured as subjective estimates using a five-point Likert scale (with 1 = strongly disagree and 5 = strongly agree).

## Data Analysis

In analyzing the data, the partial least square structural equation modeling (PLS-SEM) method was chosen for several reasons. Firstly, PLS-SEM is a power method of analysis despite its minimal demands on sample size and multivariate normality of data as the covariance-based structural equation modeling (CB-SEM) and PLS-SEM results are highly similar (Hair et al., 2014). Secondly, PLS-SEM is more suitable to the nature of this study as it provides a better prediction capability (Hair, Sarstedt, Ringle & Mena, 2017). In this study, data analysis was carried out using the PLS 3.0 software. The results were presented in three steps. Firstly, the Harman

single factor test was performed to test the existence of common method bias. Secondly, the results of the measurement model were assessed and discussed. Lastly, the results of the hypotheses formulated in this study were assessed through an examination of the structural model.

## RESULTS OF MEASUREMENT MODEL

Common method bias in this study was assessed using the Harman's single factor test. Common method bias occurs if one principal factor accounts for the majority of the variance explained or an emergence of a single factor (Podsakoff et al. 2003). This study found that four distinct factors emerged with the first factor capturing 42.8% of the variance in the data. Thus, it can be concluded that common method bias is negligible in this study. The objective of evaluating the measurement model is to ascertain the validity and reliability of the measurement items.. Firstly, the loadings for each item were examined where items with loadings below 0.5 were deleted as suggested by Hair et al., 2013. The loadings of the measurement items are shown in Table 3. Next, this study proceeded to evaluate the convergent validity of the measurement items. As suggested by Hair et al. (2013), convergent validity is ascertained when the value of the average variance extracted (AVE) exceeds 0.5 as this indicates that on average, the construct explains more than half of the variance of its indicator. Table 4 indicates that the AVE in this study was in the range of 0.528 - 0.721. Hence convergent validity was established. The reliability of the constructs was also established where the composite reliability (CR) values exceeded the threshold value of 0.7 as recommended in Hair et al., (2014) as shown in Table 3. Next, the discriminant validity of the measurement items was tested through the criteria suggested by Fornell and Larcker (1981). Table 4 depicts the discriminant validity of this study showing that all square roots of AVE as shown in the elements in the matrix diagonals are higher in all cases in the off-diagonal elements in their corresponding rows and columns, hence establishing discriminant validity.



**Table 3: Results of the Measurement Model**

<b>Variables</b>	<b>Items</b>	<b>Loadings</b>	<b>CR</b>	<b>AVE</b>
EO	5	0.566 – 0.849	0.883	0.606
KS	Individual (3)	0.891 – 0.954	0.863	0.528
	Group (2)	0.837 – 0.920		
INV	Product (8)	0.790 – 0.870	0.962	0.699
	Process (3)	0.882 – 0.936		
BP	5	0.824 -0.899	0/928	0.721

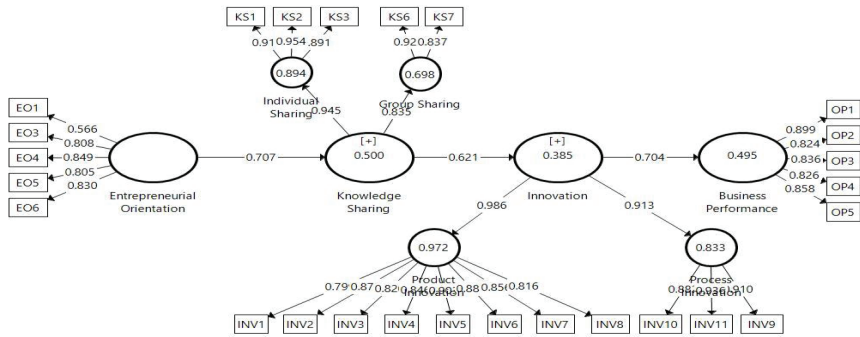
**Table 4: Results of Discriminant Analysis**

<b>Construct</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
EO	<b>0.779</b>			
KS	0.707	<b>0.881</b>		
INV	0.704	0.621	<b>0.836</b>	
BP	0.647	0.513	0.704	<b>0.849</b>

Diagonals (in bold) represent the average variance extracted while the other entries represent the squared correlations

## RESULTS OF THE STRUCTURAL MODEL

The central criterion for the assessment of the structural model (Henseler et al., 2012), namely the coefficient of determination  $R^2$ , had a moderate value of 0.495 for the key target construct (BP) in this study’s. The  $R^2$  value substantiates the model’s predictive validity (Hair et al., 2013). This finding is also supported by the  $Q^2$  value (Geisser, 1974; Stone, 1974) of the predictive relevance. After running the blindfolding procedure (Henseler et al., 2009) with an omission distance  $D = 7$ , the  $Q^2$  value of BP (0.312), which is well above zero, indicated the predictive relevance of the PLS path model. Total effect through bootstrapping was used to test the mediation analysis that fulfils the Hair et al. (2014) criteria for assessing the mediation effect, and the VAF calculation (99%) proved the mediation effect exists through KS and INV between EO and BP. Figure 1 shows all structural relationships and their significance levels. The hypotheses tested are shown in Table 5.



**Figure 1: Structural Model**

Next, this study proceeded with the structural model assessment to test the generated hypotheses. Results indicated that EO was positively related ( $\beta = 0.707, p < 0.00$ ) to KS, thus H1 is supported. KS was positively related ( $\beta = 0.621, p < 0.00, f^2 (0.231)$ ) to INV thus H2 is supported. Next, INV was positively related ( $\beta = 0.704, p < 0.00, f^2 (0.242)$ ) BP, thus H3 is supported. Finally, EO through KS and INV has an indirect relationship to BP ( $\beta = 0.309, p < 0.00, f^2 (0.312)$ ). The  $R^2$  value of BP indicates that 49.5% of the variance in BP can be explained by EO, KS and INV.

**Table 5: Path Coefficients and Hypotheses Testing**

Hypotheses	Relationship	Coefficient	t-value	Remarks
H1	EO -> KS	0.707	12.060	Supported
H2	KS -> INV	0.621	9.029	Supported
H3	INV -> BP	0.704	14.345	Supported
H4	EO->KS->INV ->BP	0.309	4.731	Supported

## DISCUSSION

The research model was adapted from Lee and Choi (2003) where knowledge sharing, and innovation are treated as mediating factors simultaneously. The study aimed to investigate how entrepreneurial orientation influenced the performance of micro enterprises and if knowledge sharing and innovativeness play any significant role in the relationship. Unlike findings of previous studies on small and medium enterprises, this study found that

EO had an indirect impact on the performance of MEs through KS and INV. Hence it suggests that EO alone is not sufficient to influence the performance of a micro business. Entrepreneurs of MEs need to realize the importance of encouraging a KS culture in their companies in order to enhance BP. As also suggested by previous findings, KS within the company would facilitate better understanding of business objectives; therefore, tasks could be done better, and result in better BP (O'Dell & Hubert, 2011; Amir & Parvar, 2014; Wing et al., 2014; Kraus et al., 2012). Hence, the competency of micro business entrepreneurs to manage knowledge and create a KS culture within their companies should be addressed. Besides competency, issues such as building trust amongst management and staff of SMEs to facilitate the sharing of knowledge need to be looked into (Mohsam & Brakel, 2011). The critical role of innovativeness for a company to achieve their competitive edge and performance has been well discussed in the literature. Mel et al., (2009) explored the determinants of innovation for micro, small and medium enterprises and concluded that the ability of the entrepreneurs and their personality traits were found to have a substantial impact on the likelihood of the business to be innovative. Prajogo et al., (2013) for example, observed that the exploitation of innovation has stronger effects on the performance of small businesses compared with medium-sized companies. Similarly, in this study the role of KS and INV has proven to strengthen the impact of EO towards BP of MEs.

## CONCLUSION

The study has drawn an intriguing result which shows that entrepreneurial orientation on its own has no direct impact on business performance. The impact is seen only when there are elements of knowledge sharing and innovation present. It is therefore important that micro enterprises have access to knowledge sharing and innovation as entrepreneurial orientation alone would not help these businesses to perform. It is important for business owners to get support from community-based networks (Samujh, 2011) as these networks can be the basis for knowledge sharing and innovation. As also suggested by previous findings, knowledge sharing within the company would facilitate a better understanding of business objectives; therefore, tasks could be done better, resulting in better business performance (O'Dell & Hubert, 2011; Amir & Parvar, 2014; Wing et al., 2014). Finally,

entrepreneurs of micro enterprises need to realize the importance of encouraging a knowledge sharing culture in their companies in order to enhance business performance. This small study is not without limitations. Future research should focus on a bigger number of micro-enterprises. Furthermore, research elements like networking, open innovation, growth and entrepreneurial strategies should be considered.

## ACKNOWLEDGEMENT

The authors would like to thank the Malaysian Academy of SME and Entrepreneurship Development of Universiti Teknologi MARA for supporting this work.

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