Market Orientation and Innovation Ambidexterity: A Synthesized Model for Internationally Operated Herbal-based Small and Medium Enterprises (HbSMEs)

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Abstract

Given the adverse impacts of globalization together with technological advancement and rapidly changing customers' lifestyle, firms have no option but to give consideration and re-evaluate the way they do things to attain a competitive advantage. Dynamic capability in Herbal-based Small and Medium Enterprises (HbSMEs) is viewed as the strategic component in response to the changing landscape of international business environment. This study draws an attention on the linear effects of market orientation, including customer orientation and customer value creation on the establishment of ambidexterity capability. While many empirical studies focus on market orientation, the generalization of its impact on innovation ambidexterity is yet to be explored. Structured questionnaires have been received from 103 key informants of internationally operated HbSMEs in Malaysia. The data has been analyzed using partial least squares. The outcome of the study indicates that market orientation positively affects the establishment of technological and non-technological innovation ambidexterity in the context of internationally operated HbSMEs.

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Keywords: ambidexterity; market orientation; customer orientation; customer value creation; small and medium enterprises (SMEs)
1. Introduction

The internationalization of HbSMEs has been receiving great supports from the Malaysian government since the activity is forecasted to affect the long-term wealth of the nation (SME Masterplan, 2012) positively. To achieve the objective to internationalize the HbSMEs, the Malaysian government has directed the local herbal industry to step-up the production of finished herbal-based products that are more valuable for the export market (The Third Global Bio-Herbs Economic Forum, 2009).

A series of programs, including training, mentoring and funding have been highlighted in the Malaysian economic policies and development plans to support the internationalization of HbSMEs. However, despite these initiatives, the achievement of HbSMEs in international business activity is dismal. In spite of increasing export, Malaysia is still importing between 70 to 90 percent of domestic herbal products requirement (Rezai et al. 2013). This data shows that excessive dependence on government support may have reduced the HbSMEs internal capabilities to compete at the international level. Based on this scenario, enhancing the firm’s dynamic capability or specifically, the ambidexterity capability may be able to improve competitiveness of the HbSMEs that are involved in international business activity. Ambidextrous capability allows businesses to adapt accordingly to the changes in the market trend that is by exploiting its existing capability and simultaneously by exploring new capability so that firms can stay competitive in the international marketplace (Chang et al., 2011). On the other hand, businesses are suggested to put a great attention on market requirements, which can be done by responding to customers’ preferences and delivering superior value as customers nowadays are becoming more demanding, vigilant and knowledgeable (Aggrawal & Singh, 2004; Aldas-Manzano et al., 2005). Herbal-based entrepreneurs who opt to neglect market requirements may leave their firms in a competitively unstable business situation, while entrepreneurs who opt to respond to market voices may utilize the obtained information to increase their business competitiveness. Thus, the objective of this study is to examine the role of market orientation in determining the establishment of innovation ambidexterity in HbSMEs.

2. Literature review

The Resource-Based Model perceives firm as a unique bundle of resources and capabilities (Grant, 1996; Loane & Bell, 2006). This study views critical resource for internationally-operated HbSMEs consists of entrepreneur-related resource and firm-related resource. Based on Zahra et al. (2006), to ensure SMEs success, firms’ competencies must be upgraded, and new dynamic capabilities are to be built. As such, another issue emerges, “which capability serves as a source of competitive advantage for international operated SMEs?” In response to the issue, this study adopts the views of Prange and Verdier (2011), who outlined international ambidexterity as a critical element for business internationalization activity. On the other hand, as entrepreneurs have been highlighted as the key valuable resources in business firms (Crook et al., 2011), the resources embedded in the entrepreneurs must be utilized effectively and efficiently (Jantunen et al., 2005). Based on the foundation, this study views the efficient use of market orientation embedded in HbSMEs entrepreneurs as an antecedent to the establishment of firms’ internal capabilities, which this study refers to innovation ambidexterity.

Strategic ambidexterity is defined as simultaneous actions undertaken by firms to address two heterogeneous things at the same time (O’Reilly & Tushman, 2013). It allows firms to exploit its existing capabilities, while at the same time not to neglect the effort undertaken in developing new capabilities (Lubatkin et al., 2006). Scholars argue that an exclusive concentration on any of these approaches may create detrimental effects on businesses (Prange & Verdier, 2011; Scott, 2014). Innovation ambidexterity is the key components of strategic ambidexterity (Yu et al., 2014; Scott, 2014). The adoption of innovation ambidexterity is more significant for internationally operated firms as these firms have greater customer base with multiple demographic profiles. Innovation according to O’cass and Weerawardena (2009) can be divided into technological and non-technological innovation. While technological innovation is related to process and product development, non-technological innovation refers to managerial and marketing approaches. Stettner and Lavie (2013) explain product that is designed based on the established knowledge and competencies used in developing firm’s existing product indicate exploitation action, while product innovation in terms of exploration is related to the development of new product, technologies and product capabilities that is meaningfully distinct from firm’s existing product (Voss & Voss, 2013). Exploitative innovation
according to Li et al. (2008) is necessary to meet the needs of existing customers or market, whereas explorative innovation intentionally to grasp the latent needs of customers or markets. Henceforth, from the context of this study, innovation ambidexterity is referred to as exploitation of the existing technological and non-technological innovation, while simultaneously or subsequently explores new technological and non-technological innovation in response to the changing international business environment.

Customer orientation is defined as entrepreneurs’ determinations to respond to customers’ specific requirements by offering product that meets those requirements (Hillebrand et al., 2011). This orientation is the key element of market orientation (Guenzi et al., 2011). It facilitates firms to better understand and satisfy its customers (Brady & Cronin, 2001). Customer-focused firm indicates the presence of interpersonal relationship between firms and customers (Homburg et al., 2011). The activity enables firms to obtain updated market information (Jaramillo & Grisaffe, 2009), which can be used to address current needs and to anticipate a future trends of the market (Hillebrand et al., 2011). Studies in common are more interested to investigate the impact of customer orientation in big organizations (Blocker et al., 2011). Such situation occurs because SMEs have a smaller number of customers (Dauda & Akingbade, 2010) and limitation in resources (Appiah-Adu & Singh, 1998). Given the constraints, customer orientation could be regarded as one of the competitive weapons where HbSMEs can maintain close and more personal contact with customers in order to understand and satisfy them better since SMEs depend only on a limited range of customers. Although it may prolong the decision-making process as they must acquire specific information from the market, it allows HbSMEs entrepreneurs to respond appropriately to customers' current and future needs. Henceforth, customer orientation is a critical tool for internationally-operated HbSMEs as this orientation may facilitate the firms to respond appropriately to the changing trend in the market.

Customer value creation is defined as entrepreneurs’ determination in offering product that is characterized as a product with greater benefits (what the customer gets) than what they need to sacrifice in their purchase (what does customer give) (Christopher, 1996; Guenzi & Troilo, 2007). In the traditional approach, customers have limited role in determining values that should be embedded in the products offered to the market (Prahalad & Ramaswamy, 2004). Nowadays, educated and sophisticated customers are more aware about their increasing role in determining what is of value from their perspectives (Prahalad & Ramaswamy, 2004). In that particular situation, firms must respond appropriately in delivering value embedded in the offerings (Christopher, 1996). By value, it can be associated with specific benefits that customers enjoy and sacrifices that customers need to bear in possessing that something of value (Guenzi & Troilo, 2007). Value creation activity promotes co-value creation between firms and customers (Prahalad & Ramaswamy, 2004). Apparently, firms can only create value if they continuously respond to its customers. In the current approach, the role of firms as the sole decision makers in determining what value should be offered to the market has been stalled. Indeed, firms are recommended to maintain good relationship with customers in gathering information that could be used in value creation activity.

2.1 Hypotheses

Customer-oriented entrepreneurs are strongly believed to influence the establishment of HbSMEs capability. The assumption is made based on Hortinha et al. (2011) as they claim customer orientation can only affect firms’ performance through the establishment of exploitative and explorative innovation capability. Customer-oriented entrepreneurs allow HbSMEs to identify which existing products, process and marketing approach that can be exploited and simultaneously or subsequently influence HbSMEs to explore new product, process and marketing approach in meeting customers’ specific needs in the foreign market. Therefore, customer orientation is outlined as an important aspect for the establishment of innovation ambidexterity in the internationally operated HbSMEs.

H1: Customer orientation is positively related to technological innovation ambidexterity of HbSMEs.

H2: Customer orientation is positively related to non-technological innovation ambidexterity of HbSMEs.

Customer value creation embedded within HbSMEs entrepreneurs is highlighted as an important predictor in developing organizational capabilities. This is based on Jantunen et al. (2005) who explain entrepreneur-related resources create more effects when the resources are managed and exploited to create new organizational
capabilities. Customer value creation assists entrepreneurs to determine which process, product and marketing approach can be exploited and simultaneously or subsequently to decide which component can be explored in meeting the demand from a different group of customers. In this case, it is proposed that customer value creation is critical for innovation ambidexterity of internationally operated HbSMEs.

H3: Customer value creation is positively related to technological innovation ambidexterity of HbSMEs.

H4: Customer value creation is positively related to non-technological innovation ambidexterity of HbSMEs.

3. Methodology

The response rate from personal administered exercise was 33.2 percent. A majority of them were owners and export managers of internationally-operated HbSMEs. Three subsectors of herbal-based, namely drinks and foods, medicinal and supplements products as well as cosmetics represented majority of the respondents. Most HbSMEs exported their products to the neighbouring countries within South-East Asia. Others concentrated in the Asian region. There were also HbSMEs exported to Middle East, Europe and North America. PLS-SEM was used as the key procedure in analyzing the data. The software used was SmartPLS 2.0 (beta) established by Ringle et al. (2005). The two-step model of SEM was conducted as suggested by Anderson and Gerbing (1988). However, it was only conducted after this study managed to classify the constructs into reflective or formative construct, as the identification is crucial to estimate the measurement model.

3.1 Assessment of the Measurement (Outer) Model

Innovation ambidexterity was modeled as a single item measure where validity and reliability assessment were not required to be conducted. For construct validity of customer orientation and customer value creation, all items met the minimum cutoff value of 0.5 as recommended by Hair et al. (2010; 2014) where the loadings for all items were ranged from 0.712 to 0.837. As for convergent validity, composite reliability were 0.899 and 0.905 for customer orientation and customer value creation respectively, which exceeded the recommended value of 0.7 (Hair et al., 2010; 2014) and the AVE for both constructs were 0.642 for customer orientation and 0.577 for customer value creation, which exceeded the recommended value of 0.5 (Henseler et al., 2009; Mayfield & Mayfield, 2012). Next, the analysis indicated that the discriminant validity for both customer orientation and customer value creation had fulfilled Fornell-Lacker criterion in which, the square root of the AVE for each construct was higher than the cross correlation between that particular construct and other constructs. Despite, the cross loading of each item indicated higher loadings than the loadings of that particular construct with other constructs. On the other hand, the composite reliability of customer orientation and customer value creation exceeded the cut-off value of value of 0.7, as proposed by Hair et al. (2012), showing the measurements items for the constructs were reliable and consistent.

3.2 Assessment of the Structural (Inner) Model

The path analysis was conducted to test the four hypotheses outlined in this study. The $R^2$ for non-technological innovation ambidexterity was 0.409 indicating that 40.9% of the variance in the extent of the variable can be explained by customer orientation and customer value creation. Further examination showed customer orientation ($\beta=0.236$, t-value = 2.229, $p < 0.01$), customer value creation ($\beta=0.447$, t-value = 4.647, $p < 0.01$) were found to positively affect non-technological innovation ambidexterity. Thus, H2, and H4 were supported. The $R^2$ for technological innovation ambidexterity was 0.413 indicating that 41.3% of the variance in technological innovation ambidexterity can be explained by customer orientation and customer value creation. A close investigation indicated that customer orientation ($\beta = 0.347$, t-value = 3.153, $p < 0.01$) and customer value creation ($\beta = 0.344$, t-value = 3.371, $p < 0.01$) were positively related to technological innovation ambidexterity. Therefore, H1 and H3 were supported.
4. Discussion

Customer-oriented entrepreneurs have shown that they were capable of providing positive contribution in developing HbSMEs non-technological innovation ambidexterity. Our finding is consistent with that of Hortinha et al. (2011). In their study, customer orientation has been shown to have a significant role in the establishment of exploitative and explorative innovation capability of exporting firms. Entrepreneurs’ tendency in creating value for their customers has also been found to significantly explain non-technological innovation ambidexterity of internationally operated HbSMEs. The finding is similar with that of Hillebrand et al. (2011), where they reported the important role of market orientation in establishing organizational capability. The purchasing pattern of herbal-based products in the global market has grown at the fastest rates from 2005 to 2010 (Euromonitor International, 2011). This change has motivated HbSMEs entrepreneurs to exploit and simultaneously explore appropriate marketing method as part of the internationalization activity. As a result, we can conclude that market orientation positively affects non-technological innovation ambidexterity of internationally-operated HbSMEs.

Results of the study also revealed the role of customer value creation as the predecessor for technological innovation ambidexterity in internationally operated HbSMEs. The positive and significant impact of customer orientation and customer value creation on the establishment of business capability has also been proven in previous studies (Qureshi & Mian, 2010; Hillebrand et al. 2011). Recently, the world has witnessed an increasing trend in consuming herbal-based products since the industry experiences competitive pressure from consumers who seek for “safer and natural” alternatives (Euromonitor International, 2011). In Malaysia, the government program known as Economic Transformational Program (2011) has aimed herbal-based sector as the potential industry to be promoted for internationalization activity. In realizing this goal, the R&D program, pre-clinical and clinical tests have been conducted to ensure that the home-grown herbal-based products were in compliance with the international health standards and certificate (ETP, 2012). This trend has driven HbSMEs to offer herbal-based products that can go well with the market. As a result, market orientation has stimulated technological innovation ambidexterity in HbSMEs.

5. Limitation and future research

As this study is restricted in a specific national herbal industry, it hinders generalization and validation of the findings in other sectors. It is important to note therefore, the result of this study is limited to the home-grown HbSMEs with operation in the foreign market. Secondly, this study is a cross-sectional study, which only considers the current state of internationally operated HbSMEs. Longitudinal studies in this area would allow studies to examine the link between HbSMEs entrepreneur-related resource and firm-related resource over time. Finally, this study depends on the information provided by the key personnel of HbSMEs. This has restricted the study from analyzing the actual innovation ambidexterity of internationally-operated HbSMEs. Hence, future study should consider the use of secondary data which may be able to offer more accurate and objective information about internationally-operated HbSMEs.

6. Conclusion

The possession of competitively firm-related resources has emerged as an enviable quality among internationally-operated HbSMEs. The firms have to make the most of its limited resources to establish their dynamic capability. Based on the study, market orientation has a significant impact on the establishment of technological and non-technological innovation ambidexterity. Hence, it is important for HbSMEs entrepreneurs to consider market orientation when formulating ways and methods in establishing HbSMEs innovation ambidexterity. This capability, if managed efficiently, will be able to create ambidextrous HbSMEs that can survive in the highly competitive international business environment.

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