THE EFFECT OF CORE COMPETENCE AND IT HUMAN RESOURCES TOWARD SUSTAINING COMPETITIVE ADVANTAGE OF MALAYSIAN SMALL AND MEDIUM ENTERPRISE

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ABSTRACT

In the current business competition, firms face strong challenges and further threats to the sustainability of its business. So, to remain in the turbulent markets and operate with the very short life cycle of products as well as the rapid changes of customers' needs and wants, firms need to possess crucial resources to establish and keep the competitive advantage for a long time among current and potential competitors. However, previous studies indicate that IT human resources play a significant role in sustaining competitive advantage of the firms especially in the dynamic environment and almost studies done within large firms and in developed countries. In addition, studies in the small and medium enterprise still very few if any especially in developing countries. Therefore, the aim of this paper is to fill the gap that discovered from previous studies where IT human resources, core competence and sustaining competitive advantage has been ignored. Hence, this study seeks to establish a theoretical framework and explore the relationship between IT human resources and core competence on the firm sustaining competitive advantage under resource-based view theory from developing country such as Malaysia.

Keywords: sustaining competitive advantage, IT human resource, core competence, resource-based view, SMEs

1.0 INTRODUCTION

Contemporary firms encounter a more dynamic environment than ever before. To deal with fluctuation changing customer demands, supply chain turbulence, and unanticipated customer's needs, firms should be responsible for adapting to such changing environments faster than competitors. IT human resources have been stressed as one effective strategy to be highly responsive (Ashrafi & Mueller, 2015). Actually, most of the researchers in resource-based view suggest that the interaction and integration of human resource with IT led to generate a sustainable competitive advantage (Ong & Ismail, 2008). Also, evidence indicate that IT human resource play a vital role in establishing a great value and sustain this value for a long time of period which a valuable IT human resource led to solve business problem and address business opportunities furthermore, they know about change management and technical matters; they possess high experience; understand business strategy and problems (Ashrafi & Mueller, 2015) thus, led to establish an effective organic system.

In line with the importance of IT human resources, studies on core competence have indicated that play a vital role in establishing a sustainable competitive advantage which technological competence is the major dimension that led to building strong interaction system of internal resources and capabilities then create synergy among internal units and then, forms new habits of learning and acquiring new knowledge (Latip, Salleh, Omar, & Yaakub, 2013). In addition, researchers such as Ong and Ismail (2008), indicate that market competence has a significant effect for attainments and sustaining competitive advantage of the firms. Hence, through getting data about market information which is the pivotal source of competition, firms are able to sense events and trends in its rapidly changing markets among its major competitors, and for that purpose, IT human resources have great effect in supporting internal firm process and external with respect data collection about its customers to know what they want, and to deliver the value they desire. In addition, integrative competence has a significant effect on generating successful SCA and then, no value for customers if technological competence and market competence are isolated. Thus, integrative competence is the link between the two competencies which in turn led to assist firms to combine capabilities, information and unique knowledge to create new value for customers' needs and desires (Wang & Lo, 2003).

However, in this study, we analysis the relationship between core competencies (technological competence, market competence, integrative competence) and IT human resource on sustaining competitive advantage which previous studies neglected to investigate this issue of the interaction between IT staff and core competence on firms SCA. The reason behind the importance of this study is that IT human resource has a great link with core competence on the successful establishing SCA of the firm so far, to our knowledge, no study investigates yet. Therefore, the research proposes a new theoretical model to explore the interrelationship between IT human resource, core competence, and SCA in the SMEs context.

2.0 PROBLEM STATEMENT

In Malaysia, business environment witnessed in recent years' huge competition among competitors on the resources and customers which in turn affect negatively businessman and thus, to survive became one of the main issues of Malaysian manufacturers and concern of

governments everywhere (Hazlina Ahmad, Ramayah, Wilson, & Kummerow, 2010). The existing evidence revealed that the failure rate of businesses in Malaysia are significant where more than 60% of business are failed during the first five years and only less than 13% are succeeding to grow (Ahmad & Seet, 2009) thus, the need to address this serious issue is because led to waste considerable resources and further create serious social issues such as unemployment, social lifestyle (inappropriate living conditions, inadequate health services, no insurance, unable to support child's school fees) and so on. Consequently, the need to perceive sustaining competitive advantage within manufacturers become more crucial because lead to ensure and keep nations wealth (Chittithaworn, Islam, Keawchana, & Yusuf, 2011).

In order to achieve and succeed the sustaining competitive advantage, it is, consequently, necessary for the business to possess adequate capital, should develop linkages, adequate business skills and knowledge, also facilities and supporting day to day business operation, appropriate skilled workers, training and suitable infrastructure where all these factors are mentioned previously Khalique, Isa, Shaari, Abdul, and Ageel (2011); Yee-Loong Chong, Ooi, Bao, and Lin (2014), as the most influential factors of Malaysian manufacturers based on the evidence by Ali, Mansur, and Abdullah (2012), who stated the same obstacles that impede the manufacturers.

The reasons behind to investigate these two proposed factors toward sustaining competitive advantage of Malaysian SMEs operate in the furniture industry is that, first, SMEs is a most critical driver for economic development as recognised everywhere (Yeboah-Boateng & Essandoh, 2014). Second, the researcher selected to study the issue of sustaining competitive advantage in SMEs furniture industry is because this sector ranked third after palm and oil products industry in terms of exports earnings to Malaysian economy (B. K. Ng & Kanagasundaram, 2011). Thus, this sector has received little attention from both researchers and policymakers were they consider this sector as a low-tech industry so, they generate little value added to the economy (B.-K. Ng & Thiruchelvam, 2012). However, this study has significant contribution both theoretically and practically for researchers and Malaysian government and related stakeholders.

3.0 SIGNIFICANT OF THE STUDY

Malaysia was chosen to examine the study variables relationship in the wooden furniture industry since it provides a unique setting to test the relationship from an economic viewpoint.
Importantly, this study unquestionably strengthens the existing body of knowledge by providing and addressing the significant issue both practically and theoretically that discovered in the literature and so far, no study investigates yet the currently proposed issue in furniture industry context since this sector received little attention from researchers as a results they use simple resources, generate little value added, and also operate in less dynamic environment (B.-K. Ng & Thiruchelvam, 2012). More importantly, several researchers investigate the role of core competence on the development of small and medium firm's competitiveness through sustaining competitive advantage, but as a matter of fact, Mappigau (2012) indicate that previous studies have potential limitations which are lack connectedness between research and its real world understanding and practical use within small and medium industries. The study's finding can

provide helpful information for the decision maker about the benefits of core competence and IT human resource.

4.0 THE EFFECT OF CORE COMPETENCE ON THE SUSTAINING COMPETITIVE ADVANTAGE (SCA)

The concept of core competencies emerged from the resource- based view (RBV) of the firm which highlights the fact that competitive advantage rests on the firm's possession of unique difficult to imitate skills, knowledge, resources and competencies (Wernerfelt, 1984). Thus, to compete in international markets, core competence recognised as the major source of competitive advantage, which will produce a distinguished product (unique and difficult to imitate by competitors) (Matusik & Hill, 1998). Furthermore, Matusik and Hill (1998) suggested that if a firm seeks to possess a core competence, then it should possess tangible and intangible resources which are unique. Additionally, the competence needs to create value as well as the capabilities (skills) to exploit their source and a unique capability in manage resources to productive uses.

Core competence is the skills that empower firms to achieve the basics of customer benefits through the establish, improve, renovation and use of resources leading to sustainable competitive advantage (Williams, 1992). While another study indicated that there are at least three requirements that can be applied to identify core competence within the organization, which are: (a) capability to provides potential access to a variety of markets, (b) provide significant value to the end product and (c) unable imitation by competitors (Prahalad & Hamel, 1994). Similarly, J. B. Barney (1995) and J. B. Barney (2001) who claim that resources and capabilities are crucial for the firms when it is to possess value, rare and difficult to imitate. These four dimensions of competence are value added, rare, difficult to imitate, ability to exploit, which are critical indicators in determining whether a competitive advantage can be sustained or not.

More clearly, a central concept in the formulation of a technology strategy is a core competence. A firm's core competence could be in a technology, product, process, or the way it integrates its technological assets (Khalil, 2000). Technically, core competence is the production of a product or service with unique value to customers. Firms might have core competence in marketing with its capability to access and manage markets in a unique way. Operationally, core competence is a firm's infrastructure that allows managing operations in a uniquely efficient and effective way. Core competence may also be the human knowledge or skill of a firm's employees (Chumaidiyah, 2011).

Previous scholars Hamel and Heene (1994) and Wang and Lo (2003), have focused on three dimensions of core competence, they are technological competence, market competence, and integrative competence. Therefore, the study focuses on these three key dimensions of core competence. Technological competence is defined as a variety of knowledge either practically or theoretically know-how, methods, experience, procedure, and physical equipment's (Dosi, 1984). Market competence is defined as a firm process to apply and combine their collective knowledge, skills, resources to the targeted market and meet customer needs and desires, preferences, factors affecting them and competitors action and reaction (Kohli & Jaworski,

1990). Integrative competence it is the competence that empowers the organisation to integrate the variety of capabilities, knowledge, and skills that required to develop products or services in responses with customer preferences and needs (Grant, 1996).

4.1 Technological Competence

From the available literature, scholars have recognised technological competencies as one of the strategic resources that empowering firm to achieve and sustain competitive advantage over their competitors (Ortega, 2010). Technological competence significantly affects firms to obtain greater value and hence create SCA among their current and potential competitors. This is in line with the RBV assumption that firms compete on resources and capabilities J. B. Barney and Clark (2007), Wernerfelt (1984) and they might gain superior performance out of their competitive advantage so as to differentiate themselves from other competitors (Wang, Lo, Zhang, & Xue, 2006). More clearly, technological competence is the variety of both practical and theoretical knowledge know-how, procedures, methods, policies and physical equipment (Dosi, 1984).

4.2 Market Competence

Market competence is one crucial element of core competence and defined as the process in which firms can deploy collective knowledge, skills and firm resources in line with the market that they operate which in turn add value to its products and services and then, meet customer needs and wants. Thus, firms they are operating based on customers current and future needs, expectations and perceptions, preferences, competitors action and reactions (Kohli & Jaworski, 1990). Therefore, firms can response customer needs, enhance channel of communications, and hence act on market information in a timely which in turn lead to attainment and sustainability of competitive advantage (Wang & Lo, 2003).

Firms should possess access to their customers, therefore, market-driven competencies empower them to deploy and manage channels of distribution to better provide current customers' needs and to reach new customers (Stern, 1996). Organisations should have a deep knowledge regarding their competitor's force and weakness. Competitors provide a comprehensive image regarding customer's preferences and desires hence, increase sources of generating value added.

4.3 Integrative Competence

Integrative competence is the combine of two competencies (marketing competencies, technological competence) that lead to achieving the positive integration and interaction of the whole firm's elements. Thus, no value added for customers if two competencies is separated, it is crucial for the firms to integrate both competencies to respond customer demands and technological trends which in turn create new methods and technologies that establish new way of production and marketing capabilities as well as integrative competence enable firms to create new applications and assist firm problem solving (Grant, 1996).

5.0 THE EFFECT OF IT HUMAN RESOURCES ON THE SUSTAINING COMPETITIVE ADVANTAGE

In the current flexible and more dynamic business environment, firms are required to deploy and leverage advanced IT as a sufficient tool to obtain and sustain their competitive advantage (SCA)

(Jorfi, Nor, & Najjar, 2011). However, studies Bharadwaj (2000), Ravichandran, Lertwongsatien, and LERTWONGSATIEN (2005), showed that IT human resource (ITHR) is the major factor that leads to generate and sustain competitive advantage. The process through which firms create value from IT strongly depends on IT personnel, who analyse business requirements, educate end users, plan and organise which in turn lead to IT projects. IT human resources are a crucial intangible factor that influences IT-based capabilities and for that purpose, ITHR should possess strong technical, analytical, managerial and interpersonal skills (Huang, Ou, Chen, & Lin, 2006).

Clearly, quantifying IT resources within VRIO framework enables firms to discover whether or not IT resources are the source of SCA (Cao, Wiengarten, & Humphreys, 2011). Thus, which IT resources generate business value remain unclear. Due to the widespread diffusion of tangible IT resources, only Intangible IT resources (IITR) such as ITHR contribute significantly to firms SCA. IT human resources take a long time of training to accumulate experience and skills; they are not easy to replace and thus, satisfy the VRIO conditions of RBT which in turn easily and significantly contribute to firms SCA as evidenced through previous studies (Dehning & Stratopoulos, 2003).

Additionally, a study by Dehning and Stratopoulos (2003), have found a strong correlation between IT managerial skills and firm SCA. Hence, the literature illustrates that suitable training IT human resources and especially managerial IT skills contribute significantly to business value and SCA.

6.0 RESOURCE-BASED VIEW

Before the emergence of RBV, Penrose (1959) was the first scholar who recognises the crucial role of resources to firm’s competitive advantage. In 1959, she debates that a firm's growth depends on the extent of how can such resources are deployed where resulted in growth internally and externally. She starts her debates that firms possess a variety of productive resources and thus, advocates that these resources led to generate competitive advantage through the extent that they are exploited their potential valuable services. Regardless of the seminal work of Penrose (1959), Rubin (1973) is argued to be one of the rare scholars to conceptualise firms as a collection of resources before becoming the formal origins of the resource-based view (Wernerfelt, 1984). Similar Penrose, Rubin (1973) acknowledged that resources themselves were not of much utilise by themselves. Rather than only acquiring resources, Rubin (1973) debated that firms should manage raw resources to become useful.

Based on the advance that made by Penrose and Rubin, Wernerfelt argued that for an organisation, products and resources are two fronts the same coin. In short, a firm's performance is driven directly via its outcomes (products), it is also indirectly (and basically) driven through the resources that are used for their production, a point that was further explained by J. B. Barney (1986) two years later. Based on the logic discussion above, Wernerfelt (1984) suggested that firms earn more value, depend on the extent of obtaining, selecting, and identifying resources that are essential to the progress of demanded products.

Referring to the early work in the emergence of RBV (Rubin, 1973; Teece, 1982; Wernerfelt, 1984), J. Barney (1991) shaped a comprehensive theoretical framework from the resources based perspective. According to Barney (1991), firms can be considered as packages of resources (and capabilities) that are heterogeneously allocated among firms and are not fully movable. Over time, the variations in the available resources across firms, let them for a resource-based competitive advantage.

Due to the complexities in assessing competitive advantage Ketchen, Hult, and Slater (2007), many empirical studies tested the link between firm performance and strategic resources utilise the term competitive advantage interchangeably with firm performance (Crook, Ketchen, Combs, & Todd, 2008). Competitive advantage is mostly used to explain the relative performance of rivals in an available market environment (Peteraf & Barney, 2003). Hence, the assumption is if strategic resources are associated with superior performance, then a competitive advantage must be generated.

The RBV focused on the implications of available resources on firms performance (Hunt & Morgan, 1995; Peteraf, 1993). However, not all resources are strategically significant for competitive advantage (Barney 1991), also, he stated that in order to generate and sustaining competitive advantage, firm resources are critical and then must possess four attributes (valuable, rare, inimitable, and no substitutable). These resources should valuable which in turn empower firm internally and externally for successful implementation of efficient strategies. If resources are rare, the firm able to implement a unique strategy among its current and potential competitors that led to generate value added. Besides, competitors should can't replicate, imitate, or substitute these resources for maintaining the advantages gained in the value- creating strategies. Finally, imperfect mobility indicates that certain resources are unable to move from firm to another and should have such barriers, which in turn lead to the sustainability of these advantages (J. Barney, 1991; Mahoney, 1995). In addition, several studies indicate same attributes of strategic resources (Amit & Schoemaker, 1993; Grant, 1991; Schoemaker & Amit, 1993).

Lippman and Rumelt (1982), proposed the concept of causal ambiguity or the lack of transparency of firm resources that is crucial for creating competitive advantage. Causal ambiguity causes the link between resources and competitive advantage not clear, and thus effectively restricts the capability of competitors to imitate and/or to employ substitutes. The complexity and unique resources create causal ambiguity (Dierickx & Cool, 1989). Importantly, the key to impeding competitor’s capability to get or duplicate the competitive advantage exists in the characteristics of organisational resources, namely valuable, rare, imperfectly imitable and causal ambiguous.

The RBV has emerged as one of the largest universally accepted theoretical perspectives and most of the studies applying RBV which in turn diffused and discovered within strategy literature (Crook et al., 2008; Priem & Butler, 2001). Scholars have started to examine and analyse the accumulative results for confirming the applicability of RBV. Logically the three most prominent evaluations are J. B. Barney and Arikan (2001), Newbert (2007) and Crook et al. (2008)

The first study by J. B. Barney and Arikan (2001) evaluated the studies adopting RBV utilising a qualitative method and he concludes that the overall results are compatible with resource-based anticipations. The second study, through measuring the percentage of significance tests that support the assumption that strategic resources create the performance, Newbert (2007) has received less support. This method has some critical limitations (Crook et al. 2008), including not recognising statistical artefacts and a significant level of the supporting effects. To avoid these limitations, Crook et al. (2008) utilised meta-analysis to study 125 RBV-related research and discovered RBV's empirical base provides strong support for the affirmation that firm performance is improved to the extent that they acquire strategic resources.

7.0 THEORETICAL FRAMEWORK

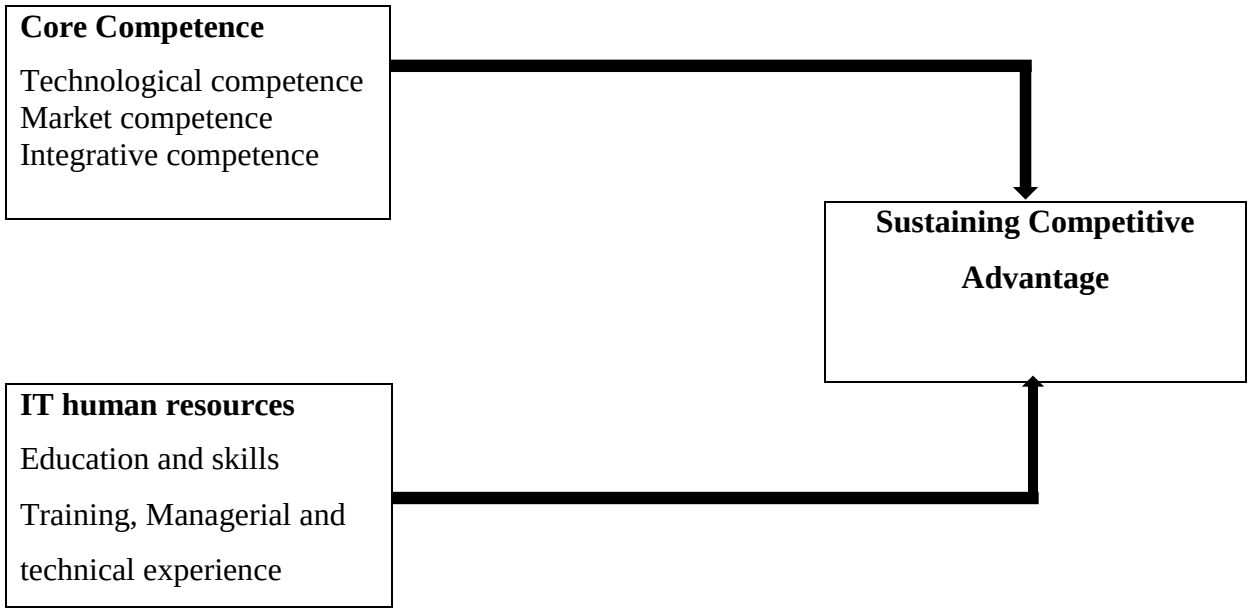

Figure 1
The Proposed Research Model

8.0 CONCLUSION

Applying resource-based view theory and from the available literature review, the current study proposed and developed research model of how IT human resources and core competence impacts firms to generate and sustaining competitive advantage. The research model above explains and address significant gap appeared in literature which ignored in the previous studies. To fill this gap, it is argued that sustainable competitive advantage influenced by three dimensions of core competence and IT human resources. Thus, this research proposes the relationship between IT human resources, core competence (technological competence, market competence, and integrative competence), and sustainable competitive advantage. In addition, understanding whether and how intangible IT resources support firms to generate a sustainable value is an ongoing debate among both scholars and professionals. However, almost studies targeted large organisations and with less attention paid to SMEs. We attempt to better

understand this understudied link between intangible IT resources and SCA within the SMEs context.

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