

# **A Conceptual Framework of the Relationship between Organizational Resources, Capabilities, Systems, Competitive Advantage and Performance**

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## **Abstract**

Achieving a competitive advantage position relative to its business rival is what organization in particular should be aiming for. Despite the importance of attaining competitive advantage in organizations, there has been limited study on the relationship between organizational resources and the way firms are organized to achieve competitive advantage. The resource-based view (RBV) research presently has been focusing more on the attributes and characteristics of resources to build competitive advantage. This has created a gap in the body of knowledge and between the theoretical and practical aspect of managing organizations that is from the perspective of the RBV of the firm. Examining organizational competitive advantage from the resource-based view allows the organization to gauge the magnitude of importance placed upon its internal firm resources, capabilities and systems in their relationship with competitive advantage and performance.

**Keywords:** Competitive advantage, resource-based view (RBV), firm performance, resources, capabilities and systems

## **1.0. Introduction**

Achieving a competitive advantage position and enhancing firm performance relative to their competitors are the main objectives that business organizations in particular should strive to attain. International businesses and Multinational Corporations (MNCs) such as Sony, Toyota and Intel for a long period of time have achieved and sustained their competitive advantage via various strategic

management practices and approaches. Indeed, in the present era of globalization, industries and enterprises compete and confront each other on the global scale.

The issue in focus is that of competitive advantage. Businesses that compete by selling similar products or even substitutes to the same group of customers constitute an industry. A business that is more profitable than its rivals is exploiting some form of strategic advantage. In strategic management, sustainable competitive advantage is an advantage that one firm has relative to competing firms. The source of the advantage can be something the business does that is distinctive and difficult to replicate, also known as a core competency (Prahalad and Hamel, 1990; Grant, 1996b; Mascarenhas, Baveja and Jamil, 1998; Ma, 1999b; Colotla et al., 2003; King, 2007b).

A firm's core competencies are things that a firm can do well and that meet the following three conditions specified by Prahalad and Hamel (1990) i.e. first, it provides customer benefits; second, it is hard for competitors to imitate; and third, it can be leveraged widely unto many products and market. A core competency can take various forms, including technical and/or subject matter know-how, a reliable process, and close relationships with customers and suppliers (Mascarenhas et al., 1998). It may also include product development or culture such as employee dedication and determination. If a core competency yields a long term advantage to the business, it is said to be a sustainable competitive advantage (Dierickx and Cool, 1989; Barney, 1991, 1995; Ma, 2000).

Competitive advantage is a concept that remains as a major research area as far as strategic management is concerned. Competitive advantage is important as far as global and local businesses are concerned. In order to compete and sustain successfully, locally and globally, businesses must not only excel in their area but also persevere in the long run. Achieving such a "sustainable competitive advantage" status is not an easy task without a proper road map or strategy being outline and put into practice. Indeed, research in the strategic management field has generally been concerned with assessing the performance outcomes of organizations and their antecedents (Ma, 1999a; Falshaw, Glaister and Ekrem, 2006; Ainuddin et al., 2007). The overarching goal is generally expressed as a search for the factors that lead to a competitive advantage in the market for a firm (Ma, 1999a; Morgan et al., 2004; Flint and Van Fleet, 2005).

Competitive advantage is examined as resulting from and being associated with a long list of contributing factors. Such factors include operational efficiencies, mergers, acquisitions, levels of diversification, types of diversification, organizational structures, top management team composition and style, human resource management, manipulation of the political and/or social influences intruding upon the market, conformity to various interpretations of socially responsible behaviours, international or cross-cultural activities of expansion and adaptation, and various other organizational and/or industry level phenomena (Ma, 1999a, 1999b; Flint and Van Fleet, 2005; King, 2007b).

During the last two decades or so, economic activities have become increasingly global and MNCs have played a major role in this process of globalization (Kogut and Zander, 1993, 2003; Das, 1997; Pan and Chi, 1999; Svensson, 2006). From the literature review, most previous studies conducted on MNCs, particularly those related to manufacturers, are concerned with their strategy and performance (Kogut and Zander, 1993, 2003; Das, 1997; Pan and Chi, 1999; Werner, 2002; Colotla et al., 2003; Goerzen and Beamish, 2003; Ma, 2004; Falshaw et al., 2006; Svensson, 2006; Ainuddin et al., 2007). Indeed, the subject of MNCs and their organizational performance have been an area of studies that have been given attention to by previous researchers because of their (MNCs) potential global outreach and impact (Johanson and Vahlne, 1977; Prahalad and Lieberthal, 1998; Verbeke, 2003; Yu and Cannella Jr., 2007).

In Malaysia, studies that are concerned with strategy and performance of late have been focusing on the local business organizations, concentrating among others on the hotel industry (Salleh Mohd Radzi, 2004), Malaysian top 1000 corporations (Norziha Md. Zain, 2005), manufacturers (Hazril Izwar Ibrahim, 2007; Ruzita Jusoh, Daing Nasir Ibrahim and Yuserrie Zainuddin, 2008; Ruzita Jusoh and Parnell, 2008), public-listed companies (PLCs) (Rozhan Othman, 2007; Raja Suzana Raja Kasim, 2008), and including the small and medium-sized enterprises (SMEs) (Raduan Che Rose, Naresh

Kumar and Lim Li Yen, 2006; Mohd Khairuddin Hashim and Mustafa Zakaria, 2007). These particular respective studies, except the one by Salleh Mohd Radzi (2004), found inter alia an overall significant relationship between firms' strategy and performance, which signified the relative importance of having a sound strategy not only to improve but also measure organizational performance.

In order to generate a good and sound business strategy, inter alia, firms need to initially examine and understand their internal organizational strengths and/or weaknesses. As such, a different approach and perspective are needed to examine and understand the competitiveness of manufacturers via analyzing the magnitude of the relationship between their internal resources and capabilities, in particular for those manufacturers that operate in Malaysia. In light of this background, it is vital to understand the degree of the relationship between manufacturers' organizational resources, capabilities, systems and their competitive advantage and performance. This is because by knowing the significant attributes of firm resources and capabilities to generate competitive advantage and performance alone are not sufficient as far as the strategic management of organizations is concerned. We need to further assess the magnitude of the relationship between organizational resources, capabilities, systems and their competitive advantage and performance level to provide the management of organizations with the vital knowledge on the relative degree of importance among the related variables in order to guide them in formulating and implementing their firms' strategy. Indeed, by having information on the relative degree of importance among the related variables in focus will enable organizations to prioritize their strategy accordingly.

Interestingly, much of our understanding of the notion of competitive advantage has been drawn from the experience of Western firms (Peng, Lee and Tan, 2001; Ruzita Jusoh and Parnell, 2008). As such, this research will further enhance the significance of strategic management towards organizational practices and conduct by specifically contributing towards the strategic management literature that focuses towards competitive advantage of organization in non-Western settings. By focusing on competitive advantage from the resource-based view (RBV) (Barney, 1991), this study will try to fill the gap that critics and proponents of resource-based view (Barney, 2001a, 2001b; Priem and Butler, 2001a, 2001b; Wiklund and Shepherd, 2003; Ray, Barney and Muhanna, 2004; Sirmon, Hitt and Ireland, 2007) have highlighted, namely that the resource-based view research and studies have been focusing more on the attributes and characteristics of resources to build competitive advantage. Less attention has been given on the study of the relationship between firm-specific resources and the way firms are organized.

Further, following Oliver (1997), Barney, Wright and Ketchen Jr. (2001), Hitt, Ireland, Camp and Sexton (2001), Makadok (2001), Afuah (2002), Adner and Helfat (2003), Miller (2003) and Sapienza, Autio, George and Zahra (2006), while a lot of focus has been paid to those characteristics of capabilities that give rise to competitive advantage of firms, a lot less focus and attention have been provided to the deployment of capabilities and supporting empirical proof of these capabilities. In other words, although studies have found significant relationship between firms' knowledge and capabilities (Zander and Kogut, 1995; Grant, 1996a; Bruton, Dess and Janney, 2007), especially in areas such as firms' human resources (Collins and Smith, 2006), innovation (Govindarajan and Koppalle, 2006) and dynamic capabilities (Zollo and Winter, 2002), more studies are needed to examine the relative degree of interaction between these capabilities and the eventual competitive advantage and performance level that are subsequently generated.

According to Newbert (2007), more studies on the RBV from the organizing approach are needed in order to enhance and extend our understanding to what degree organizational resources and capabilities in particular facilitate the attainment of a firm's competitive advantage and subsequent level of performance. Indeed, we need to examine further the ways and methods of deployment, exploitation and manipulation of resources and capabilities pertaining to organization by inserting systems as the influencing factor that will affect the relationship between those variables under probe. Thus, it is indeed crucial to examine the extent of the relationship between organizational resources, capabilities, systems, competitive advantage and performance of manufacturers. Hence, this paper

presents the conceptual framework of the relationship between organizational resources, capabilities, systems, competitive advantage and performance in organizations.

## **2.0. Resource Based View and Competitive Advantage**

Fahy (2000) has reasoned that through its insights into the nature of competitive advantage, the resource-based view of the firm has already made an important contribution to the field of strategic management. The RBV, which has benefited from the rigour of its economic origins, greatly enhances our understanding of the nature and determinants of sustainable competitive advantage (SCA). It helps to explain why some resources are more advantage-generating than others and also why resource asymmetries and consequent competitive advantages persist even in conditions of open competition.

However, as Fahy (2000) noted, the vast majority of contributions within the RBV have been of a conceptual rather than an empirical nature, with the result that many of its fundamental tenets still remain to be validated in the field. In addition, there were some debates regarding both the nature and the determinants of competitive advantage and the relevancy of the resource-based view. The most notable were the debates in *Academy of Management Review* (2001) between Barney (2001a) and Priem and Butler (2001a, 2001b) on the relevancy and validity of the resource-based view of sustainable competitive advantage, following and based on Barney's 1991 article, and also further dialogues from various scholars on the same issue as published by *Academy of Management Review* (2001 and 2002).

The resource-based view has been criticized for exhibiting circular reasoning in that one of its fundamental elements, namely, value, can only be assessed in terms of a particular context (Barney, 1991; Kay, 1993; cited in Fahy, 2000). Resources may lead to competitive advantage but this in turn defines relevant competitive structures, which in turn defines what is a valuable resource, and so on (Schendel, 1994; cited in Fahy, 2000). A way out of this circularity is to see the relationship between resources and advantage as a longitudinal process (Porter, 1991; cited in Fahy, 2000). However, much of the resource-based literature takes resource stocks as given and pays insufficient attention to the process of resource development. This is an important oversight, as the ways in which resources are accumulated within the firm are characterised by factors such as time compression diseconomies, interconnectedness, asset mass efficiencies and causal ambiguity (Dierickx and Cool, 1989; cited in Fahy, 2000). As such, greater understanding of the dynamics of resource development (Fahy, 2000) is indeed vital in furthering the resource-based perspective on competitive advantage. Without such comprehension, the problem of circular reasoning can never be solved.

RBV logic has been criticized as paradoxical, infused with contradictions and ambiguities. RBV logic, they argue, has produced seemingly incompatible implications for managerial scholarship and practice (Priem and Butler, 2001a). For example, RBV logic suggests that the ability to measure a resource means that this resource will be less likely to be a source of sustained competitive advantage. Also, this logic suggests that there cannot be "rules for riches", yet it can be used to generate managerial prescriptions concerning how firms can achieve strategic advantage through their resource deployments (Priem and Butler, 2001a; Lado et al., 2006). By focusing on competitive advantage from the resource-based view (Barney, 1991), this study will try to fill the gap that critics and proponents of resource-based view (Barney, 2001a, 2001b; Priem and Butler, 2001a, 2001b; Wiklund and Shepherd, 2003; Ray et al., 2004; Sirmon et al., 2007) have mentioned, namely resource-based view research has been focusing more on the characteristics of resources and capabilities to build competitive advantage. Less focus has been paid on the research on the relationship between firm resources and capabilities, and the way firms are organized. This has created a gap in the body of knowledge.

Studies concerning resource-based view have indeed concentrated on the attributes of resources to attain competitive advantage, covering areas such as inter alia the resource substitution effects (Yoo and Choi, 2005), complementary innovation-producing resources (King, Covin and Hegarty, 2003) and consumer value perspective (Priem, 2007). More efforts are needed to extend the RBV from merely

examining the resource attributes (Peteraf and Barney, 2003; Rodriguez and Rodriguez, 2005) to analyzing the extent of the relationship between these resources and other related variables towards achieving competitive advantage level (Armstrong and Shimizu, 2007). By moving towards this direction, such a study will not only improve the rigour of the RBV but also sustain the continued relevance of the RBV of competitive advantage in strategic management (Meyer, 2006; Hambrick and Chen, 2008).

Furthermore, based on the studies by Oliver (1997), Barney et al. (2001), Hitt et al. (2001), Makadok (2001), Afuah (2002), Adner and Helfat (2003), Miller (2003) and Sapienza et al. (2006), while a lot of attention has been paid to those attributes of capabilities that lead to competitive advantage of firms, a lot less attention has been given to the deployment of capabilities and supporting empirical evidence of these capabilities. As such, as far as resources, capabilities, competitive advantage and performance of organization are concerned, by introducing systems into the relationship equation, it is expected that the study will be able to fill in the gap that currently exists in the literature as mentioned by critics of the resource-based view.

Indeed, we need to examine further the approaches and techniques of exploitation and manipulation of resources and capabilities pertaining to organization by including systems as the influencing factor that will affect the relationship between those variables under probe. Thus, it is indeed critical to examine the relative extent of the relationship between organizational resources, capabilities, systems, competitive advantage and performance in aggregate. This will extend support to the RBV of competitive advantage.

Organizational performance has been examined from various approaches, namely, inter alia, the transaction cost perspective (Hennart, 1991; Carter and Hodgson, 2006; King, 2007a), the theory of constraints perspective (Watson, Blackstone and Gardiner, 2007), and also the resource-based view perspective (Leiblein, 2003). This study is a firm-level research from the resource-based view perspective since we are concerned with answering the research question concerning the relationship between organizational resources, capabilities and systems. The findings from such a research will be an important input to the knowledge gap, especially to organizations when they intend to formulate and implement strategic decision concerning the organizational competitive advantage and performance level.

## **2.1. Relationship between Organizational Resources and Capabilities**

Studies have shown that there is a significant relationship between organizational resources and capabilities (Barney, 1991, 2001a, 2001b; Priem and Butler, 2001a, 2001b; Morgan et al., 2004; Ainuddin et al., 2007; King, 2007b; Sirmon et al., 2007). Research findings have indeed shown that organizational resources and capabilities are significantly related to each other (Morgan et al., 2004; Ainuddin et al., 2007). Prahalad and Hamel (1990), Grant (1996b) and Hunger and Wheelen (2009) have also conceptualized that there exist a significant relationship between organizational resources and capabilities. Based on these concepts, the hypothesis forwarded is as follows:

*H1: There is a significant positive relationship between organizational resources and capabilities.*

## **2.2. Relationship between Organizational Resources and Systems**

Studies have shown that there is a significant relationship between organizational resources and systems (Wernerfelt, 1984; Porter and Millar, 1985; Barney, 1991, 2001a, 2001b; Chaharbaghi and Lynch, 1999; Priem and Butler, 2001a, 2001b; Miller and Ross, 2003). Research results have indeed illustrated empirically that organizational resources help to significantly explain the variance in organizational systems (Gimenez and Ventura, 2002; Colotla et al., 2003). Other researchers have also put forward the conceptual notion of the significant relationship between resources and systems

especially towards improving firms' performance (Mascarenhas et al., 1998; Ma, 1999b; Wiklund and Shepherd, 2003). Hence, the hypothesis forwarded is as follows:

*H2: There is a significant positive relationship between organizational resources and systems.*

### **2.3. Relationship between Organizational Capabilities and Systems**

Studies have shown that there is a significant relationship between organizational capabilities and systems (Prahalad and Hamel, 1990; Mascarenhas et al., 1998; Winter, 2003; Ray et al., 2004; Voss, 2005; Perez-Freije and Enkel, 2007). Other empirical studies previously carried out (Colotla et al., 2003; Ray et al., 2004) have indeed shown results of the significant relationship between organizational capabilities and systems. The effectiveness of organizational capabilities will be improved by the application of proper organizational systems. Based on these concepts, the hypothesis forwarded is as follows:

*H3: There is a significant positive relationship between organizational capabilities and systems.*

### **2.4. Relationship between Organizational Resources, Capabilities, Systems and Competitive Advantage**

#### **Advantage**

Studies have shown that there is a significant relationship between organizational resources, capabilities, systems and competitive advantage (Wernerfelt, 1984; Dierickx and Cool, 1989; Ma, 1999a, 1999b; Wiklund and Shepherd, 2003; Morgan et al., 2004). Empirical studies carried out have also found significant results in such particular relationships (Morgan et al., 2004; Santhapparaj et al., 2006; Phusavat and Kanchana, 2007). Other past studies (Barney, 1991, 2001a, 2001b, 2007; Priem and Butler, 2001a, 2001b; King, 2007b; Sirmon et al., 2007) have also put forward the idea of the significant positive relationship between organizational resources, capabilities, systems and competitive advantage. In addition, capabilities are a vital cog in the relationship between resources, competitive advantage and firm performance because capabilities enhance the resource elements towards attaining competitive advantage position. As such, organizational resources, capabilities, systems have been conceptualized as to be able to significantly predict level of competitive advantage. Based on these concepts, the hypotheses forwarded are as follows:

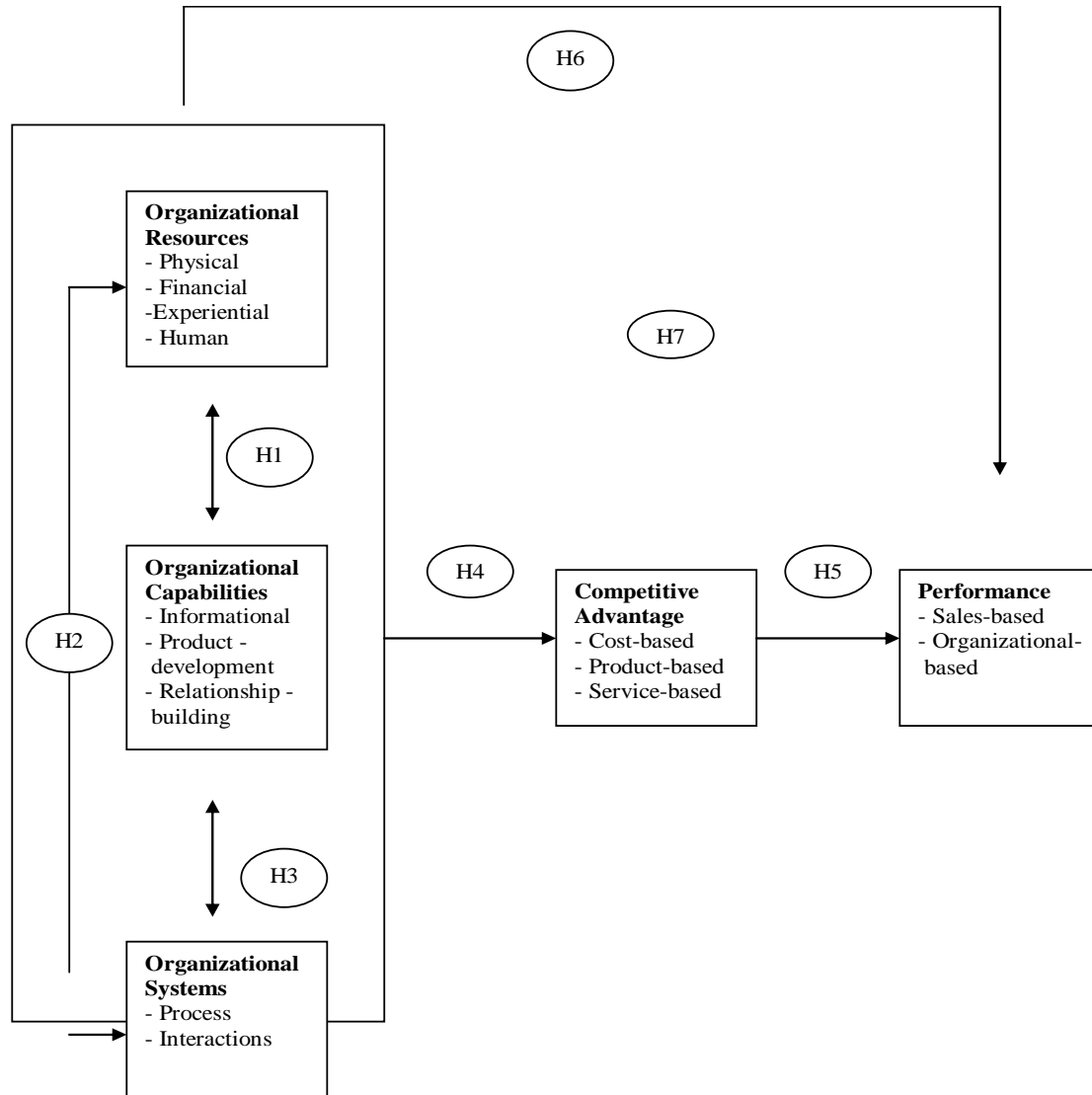
*H4: There is a significant positive relationship between organizational resources, capabilities, systems and competitive advantage.*

*H4a: There is a significant positive relationship between organizational resources and competitive advantage.*

*H4b: There is a significant positive relationship between organizational capabilities and competitive advantage.*

*H4c: There is a significant positive relationship between organizational systems and competitive advantage.*

**Figure 1.1: Conceptual Framework**



## 2.5. Relationship between Competitive Advantage and Performance

Studies have shown that there is a significant relationship between competitive advantage and performance (Ma, 2000; Fahy, 2000; Wang and Lo, 2003; Wiklund and Shepherd, 2003; Morgan et al., 2004; Franco-Santos et al., 2007). Barney (1991, 2007) has also conceptualized competitive advantage and performance to be significantly related. As illustrated by the empirical studies by Gimenez and Ventura (2002) and Morgan et al. (2004), competitive advantage was shown to be able to significantly predict the variance in firm performance. Based on these concepts, the hypothesis forwarded is as follows:

*H5: There is a significant positive relationship between competitive advantage and performance.*

## 2.6. Relationship between Organizational Resources, Capabilities, Systems and Performance

Studies have shown that there is a significant relationship between organizational resources, capabilities, systems and performance (Barney, 1991; Fahy, 2000; Gimenez and Ventura, 2002; Wiklund and Shepherd, 2003; Bowen and Ostroff, 2004; Morgan et al., 2004; Sirmon et al., 2007). Empirical studies by Schroeder et al. (2002) and Ketokivi and Schroeder (2004) have indeed found

significant level of performance able to be predicted by organizational resources, capabilities and systems. Indeed, organizational resources, capabilities and systems are regarded as good predicting variables for the variance in firm performance. Hence, the forwarded are as follows:

- H6: There is a significant positive relationship between organizational resources, capabilities, systems and performance.*
- H6a: There is a significant positive relationship between organizational resources and performance.*
- H6b: There is a significant positive relationship between organizational capabilities and performance.*
- H6c: There is a significant positive relationship between organizational systems and performance.*

## **2.7. Relationship between Organizational Resources, Capabilities, Systems and Performance**

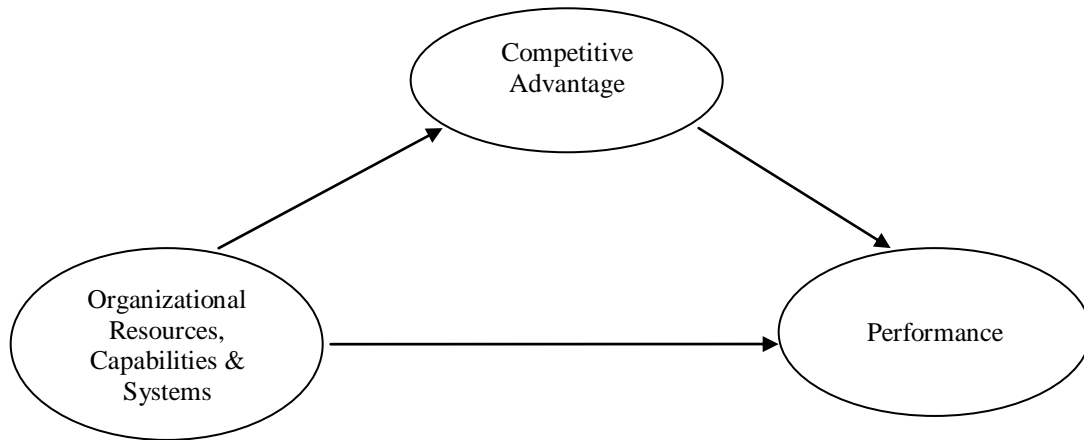
### **Mediated by Competitive Advantage**

Competitive advantage plays a significant mediating role in the relationship between organizational resources, capabilities, systems and performance (Prahalad and Hamel, 1990; Barney, 1991; Mascarenhas et al., 1998; Fahy, 2000; Ma, 2000; Gimenez and Ventura, 2002; Morgan et al., 2004; Sirmon et al., 2007). Most of these studies have been conceptual in nature, apart from those by Gimenez and Ventura (2002) which empirically concentrated on systems and Morgan et al. (2004) which focused on resources and capabilities. As such, more empirical studies are needed to ascertain the mediating role for CA in such a relationship between organizational resources, capabilities, systems and performance.

The hypothesized relationship (H7) can also further be illustrated by a SEM (Structural equation modeling) path diagram (Baron and Kenny, 1986; Shrout and Bolger, 2002) as per Figure 1.2 below. Indeed, the SEM approach has been applied in strategic management studies to examine firm performance (Shook, Ketchen Jr., Hult and Kacmar, 2004). Based on these conceptual and empirical studies and findings, the hypotheses forwarded are as follows:

- H7: The relationship between organizational resources, capabilities, systems and performance is mediated by competitive advantage.*
- H7a: The relationship between organizational resources and performance is mediated by competitive advantage.*
- H7b: The relationship between organizational capabilities and performance is mediated by competitive advantage.*
- H7c: The relationship between organizational systems and performance is mediated by competitive advantage.*

**Figure 1.2:** SEM Path Diagram of Hypothesis 7



### 3.0. Conclusion

Competitive advantage is a relative notion. It can be viewed from various perspectives. Nonetheless, examining organizational competitive advantage from the resource-based view is indeed crucial as it can be used as a conceptual framework for business organization in particular to enhance their competitive advantage position and performance via application and manipulation of identified organizational resources, capabilities and systems. Such a research can contribute to the body of knowledge by lending empirical support and further extending the resource-based view (RBV) of competitive advantage by examining the relative magnitude of importance placed upon organizational internal attributes towards attaining competitive advantage and enhancing firm performance. As such, the research will attempt to examine the relevancy and applicability of those related theories and concepts in current condition by testing the hypotheses. From the research, it is hoped that a model can be developed to examine and depict the relationship between organizational resources, capabilities, systems, competitive advantage and performance.

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