MEDIATING ROLE OF OPERATIONAL CAPABILITIES BETWEEN INTELLECTUAL CAPITAL AND ORGANIZATIONAL PERFORMANCE: A PROPOSED THEORETICAL FRAMEWORK

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ABSTRACT

Intellectual capital has been widely studied with different organizational capabilities including dynamic, learning and innovation capabilities. However, its relation with operational capabilities is completely ignored. This study fills the gap in literature by developing a conceptual framework that links intellectual capital with operational capabilities as traits of these capabilities are distinct, create barrier to intimation and enable an organization to perform superior comparative to their competitors. Moreover, this study differentiates and highlights the importance of operational capabilities relative to other organizational capabilities. Proposed framework lead towards useful insight by proposing that intellectual capital and operational capabilities both are complementary to each other to enhance the performance of the firms.

Keywords: Strategic Management, Resource Based Theory, Organizational Performance, Intellectual Capital, Operational Capabilities.

INTRODUCTION

In strategic management research relationship between the resources and performance is of major concern (Andersen, 2011). Researchers of the comptemporary era are identifying the mechanism that how resources can enhance the performance of an organization (Chen, 2012). From theoretical perspective, resource based theory (RBT) provides predominant framework by positing that unique strategic resources like perfectly inimitable and immobile idiosyncratic knowledge assets and capabilities are required to obtain superior performance (Barney, 1991; Andersen, 2011). Knowledge is assumed to be main element in modern economy and according to knowledge based view (KBV) organizations need knowledge or Intellectual capital for their survival in intensive competition (Stewart, 1997).

Intellectual capital is intangible knowledge based resource which clearly overweighs the tangible corporate value (Edvinsson & Malone, 1997). Moreover, sustainable ability of an organization to compete in the modern era is derived from exploitation and utilization of its knowledge based resources i.e. intellectual capital (Teece et al., 1997; Ling, 2013; Inkinen, 2015; Dzenopoljac et al., 2017). This is the reason that this era employs more effort in understanding and managing intellectual capital framework (Lu, 2014). IC is the important knowledge based resource of the organization that enhances the performance of an organization particularly in the knowledge based economy (Farsani et al., 2012). A plethora of research studies argued that IC

has a significant positive effect on the organization performance (Tseng & James, 2005; Subramaniam & Youndt, 2005; Kalkan, Bozkurt & Arman, 2014). Similarly, many have linked IC with the radical innovation and learning capability (Karchegani, Sofian & Amin, 2013; Phusavat, Comepa, Sitko-Lutek & Ooi, 2011; Hsu & Fang, 2009). However, there are wide number of researchers who argued that intellectual capital relation with performance, radical innovation and organizational learning capability is complex (Mosavi, Nekoueizadeh & Ghaedi, 2012; Moghadam et al., 2013; Delgado-Verdeet et al., 2016).

On the other end, many researchers claim that only possession of resources does not mean that the organization will achieve superior performance. Major concern should be on allocation, effective utilization and management of resources (Tseng & James, 2005; Huang, Wu & Rahman, 2012). Resources itself do not provide superior performance without the ability/capability of the organization to transform them according to desired outcome (Huang, Wu & Rahman, 2012; Andersen, 2011). Moreover, organizations do not differ on the basis of resources but differ on the basis of their ability to utilize the resources (Richey et al., 2014; Andersen, 2011; Hunt, 2011). Veritably, resources lead towards capabilities and capabilities transform organizational resources into the performance outcomes (Wang, Dou, Zhu & Zhou, 2015; Dangol & Kos, 2014; Helfat & Winter, 2011; Wu, Melnyk & Flynn, 2010). For that reason, organizations required resources as well as adequate capabilities to attain superior performance and in order to allocate, deploy and coordinate organization resources in distinct and superior way operational capabilities are required (Cavusgil, Seggie & Talay, 2007). Operational capabilities are considered important for business performance as these are the secret ingredient for an organization to attain and maintain superior performance (Wu, Melnyk & Flynn, 2010; Helfat & Winter, 2011).

However, while studying the operational capabilities, dynamic capabilities are considered as its antecedent (Pavlou & El Sawy, 2011; Wilden & Gudergan, 2015). Conversely, if there is always a capability behind a capability then we face an infinite regress problem and it is impossible to identify the ultimate source of performance improvement (Collis, 1994; Cepeda & Vera, 2007). Therefore, performance is augmented through resources and operational capabilities (Eisenhardt & Martin, 2000; Pavlou & El Sawy, 2004). Without operational capabilities resources can lose its value over the period of time (Wu, Melnyk & Flynn, 2010). In addition, Lee & Choi (2003) stated that to refresh or create operational capabilities knowledge based resources i.e. Intellectual capital (Subramaniam & Youndt, 2005) is required. Consequently, both intellectual capital and operational capabilities are complement to each other. However, their relation is completely overlooked.

According to the best knowledge of authors of this study no previous study has highlighted the link of intellectual capital with operational capabilities. Therefore, this research fill the gap in existing literature by proposing a conceptual framework that links IC with the organizational performance through the mediating role of operational capabilities. In addition to this, present study also differentiates among different types of organizational capabilities. Therefore, this study is unique in sense that differentiates operational capabilities with other organizational capabilities and develops the relation of intellectual capital with operational capabilities.

In the following discussion, this paper reviews the theoretical background of variables under study. Further, in the light of RBV proposed conceptual framework is drawn. Reminder of paper includes conclusion and discussion followed by future recommendations.

THEORETICAL BACKGROUND AND CONCEPTUAL FRAMEWORK

Intellectual Capital

From past few decades, organization's endogenous factors are considered as key driver for creating value for an organization (Wernerfelt, 1984; Barney, 1986; Rumelt, 1991). Particularly, there is consent among RBV scholars that intangible resources based on knowledge are determinants of organization's sustainable performance (Newbert, 2008). However, intangible resources in other words knowledge or intellectual assets (Delgado-Verdeet et al., 2016) have proven to be problematic in term of their identification and measurement from RBV (Reed et al., 2006). To conquer these issues intellectual capital based view has emerged as suitable theoretical approach (Martínde Castro et al., 2013; Delgado-Verdeet et al., 2016). According to this perspective, both knowledge based assets and intellectual assets are considered to be equal and called intellectual capital (Subramaniam & Youndt, 2005).

IC has been defined in many ways. Research scholars presented the definition of IC in their own way. For instance, Steward (1997) defined the IC as the stock of collective knowledge, expertise, skills, information technologies, intellectual property, customer satisfaction and team management that contribute towards the wealth of the organization. In the similar context, Bontis et al. (2000) defined the IC as the knowledge submitted by the individual workers and organization to achieve the sustainable competitive advantage. More specifically, Cabrita (2009) stated that IC is the set of intangible resources which include skills and competencies that enable the firm to increased organizational performance. IC is accumulated through different levels within the organization, namely individual (human capital) organizational (structural capital) and inter-organizational (Relational capital) (Delgado-Verdeet et al., 2016).

Human capital is the cornerstone compared to the rest of the component of IC (Moon & Kym, 2006). It refers to the intelligence, knowledge, competencies, creativity, behavior, attitude, aptitude and education, leadership abilities, learning capacity, experience and skills of individuals in the organization. All these attributes originates from the knowledge and skills embedded in the employees. Human capital makes the organization's development possible therefore; they are required to carry out firm's activities (Sveiby, 1998; Bozbura, 2004; Youndt & Snell, 2004; Bollen & Schnieders, 2005; Tovstiga & Tulugurova, 2007; Huang & Hsueh, 2007; Cabrita & Bontis, 2008; F-Jardon & Martos, 2009; Hsu & Fang, 2009; Sharabati, Jawad & Bontis, 2010; Chien & Chao, 2011; Ling, 2013; Inkinen, 2015).

Second core dimension of IC is structural capital. SC is the structure and mechanism which support employees. Further, it is the routine of the organization which makes the individual assets into the organizational asset (Bollen & Schnieders, 2005; Sharabati, Jawad & Bontis, 2010; Kamukama, Ahiauzu & Ntayi, 2011). It is the knowledge that remains in organization when peoples depart. Additionally, it includes all those factors that support employee's productivity or mechanism of the organization which in turn resulted in individual performance as well as overall business performance (Edvinsson & Malone, 1997; Kamukama et al., 2011).

In addition to the human and structural capital, third main component of IC is relational capital. It represents the knowledge of the organization embedded in the external relationship. RC includes relationship of organization with its suppliers, customers, competitors, agents and shareholders, members of society, strategic partners and informal networks (Youndt & Snell, 2004; Bollen & Schnieders, 2005; Kamukama et al., 2011).

IC is seen as the sum of knowledge assets and knowledge assets have been identified as the important strategic resources (Andersen, 2011; Calantone et al., 2002) therefore, IC is the strategic resources of the organization. Strategic resources are considered to provide sustainable performance to an organization. Nevertheless, there are many scholar who argue that resources itself do not provide competitive advantage. Competitive advantage comes from the deployment of the resources (Hunt, 2000). Only possessing the valuable, rare, inimitable and non-substitutable resources is not enough to generate the superior performance. Resources can be strategic for the organization however, difference in the ability to utilize these resources indicate the significant relationship between the resources and performance (Tseng & James, 2005; Andersen, 2011; Huang, Wu & Rahman, 2012).

Organizational Capabilities

Organizational capability is the ability of the organization to deploy its resources to perform the activity or task that can enhance the performance (Teece et al., 1997; Amit & Schoemaker, 1993; Grant, 1991). Helfat & Peteraf (2003) argue that organizational capability is the organization's ability to carry out a coordinated set of tasks, utilizing organizational resources, for the purpose of achieving a particular end result. Organizational capabilities generate more value from resources in comparison to its competitors and enable it to achieve performance goals (Peteraf & Barney, 2003; Andersen, 2011). Organizational capabilities are divided into three parts. First, zero level capabilities which are known as operational capabilities, these capabilities allow the organization to earn a living in the present. Second, first-level capabilities or dynamic capabilities which change and modify zero-level capabilities. Third, higher order capabilities or regenerative dynamic capabilities that operate on the first level capabilities (Winter, 2003; Newey & Zahra, 2009; Ambrosini et al., 2009). Attributes of these three capabilities are different to each other; however, objective of all is to provide sustainable performance. Table 1 below depicts types of organizational capabilities by different authors.

Table 1
ORGANIZATIONAL CAPABILITIES BY DIFFERENT RESEARCHERS

Collis (1994)	Winter (2003)	Zahra et al. (2006)	Ambrosini et al. (2009)
First order capabilities	Zero level capabilities	Substantive/Operational Capabilities	Resource based capabilities
Second and third order capabilities	First order capabilities	Dynamic capabilities	Incremental dynamic capabilities and Renewing dynamic capabilities
Meta capabilities	Higher order capabilities	-	Regenerative dynamic capabilities

Current study focus is on operational capabilities; however, this study also discussed similarities and differences between operational and dynamic capabilities.

Operational Capabilities

First type of organizational capability is operational capability which is main concern of this study. This capability is defined as the ability of the organization to improve business process making it effective and efficient with minimum wastage of resources (Krasnikov & Jayachandran, 2008). Performance of the organization is improved through the distinctive way of allocation, coordination and utilization of resources and these attributes are derived from the operational capabilities (Winter, 2003; Cavusgil, Seggie & Talay, 2007; Newey & Zahra, 2009;

Helfat & Winter, 2011). Focus of operational capabilities is on the way by which resources are used (Cavusgil, Seggie & Talay, 2007). In addition, these capabilities are fundamental to firms` ability to solve effectively their organizational problems (Dosi et al., 2000). In addition, study of Winter (2003) defines an operational capability as 'a high-level routine (or collection of routines) that, together with its implementing input flows, confers upon an organization's management a set of decision options for producing significant outputs of a particular type.

Newey & Zahra (2009) argue that operating capabilities allow an organization to carry out its main operating activities. These capabilities facilitate the organization to carry out the activities on an ongoing basis by supporting the existing products and services to the customers. Operational capabilities enable the organization to improve its business process in term of cost reduction, speed and quality. Moreover, these capabilities are considered as important for improving the business performance (Helfat & Winter, 2011). Wu, Melnyk & Flynn (2010) argued that operational capabilities are the secret ingredient of organization that helps it to improve is efficiency. Continuous improvement is the routine of the operational capabilities. Improvement is defined as the capacity of the organization to increase the performance incrementally by using the existing available resources (Swink & Hegarty, 1998). While continuous improvement is organization wide process of focused and continuous incremental innovation (Bessant, Caffyn & Gallagher, 2001; Helfat & Winter, 2011). Thus, operational capability focus is on incremental innovation and continuous improvement.

Dimensions of Operational Capabilities

Multidimensional operational capability contains three core capabilities i.e. technical/technological, marketing and managerial capability (Nerkar & Roberts, 2004; Pavlou & El Sawy, 2011; Wilden & Gudergan, 2015). Technical or technological capability is related to the operational aspect of the organization and it enables the organization to become more efficient and effective in shape of reducing error and enhancement of quality of business process execution (Devaraj & Kohli, 2003). Furthermore, it enables the organization to deploy and move their technological resources along with other resources (Bharadwaj, 2000). Organizations that have well developed technological capability are high performing organizations, as mastering state of the art technologies allows them to pioneer in process innovations leading to competitive advantage through efficiency gains (Lavie, Kang & Rosenkopf, 2011).

Marketing capability is defined as the processes through which an organization select intended value propositions for their target customers and deploy organizational resources to deliver these value offerings in pursuit of desired goals (Day, 2011). Further, this capability is the ability of the organization to link and serve the particular group of customer by allowing the organization to use market knowledge to make advantageous relationship with the customers. (Wilden & Gudergan, 2015; Song et al., 2005; Spanos & Lioukas, 2001).

Managerial capability is the ability of the managers to actively participate in the business activities of the organization. Moreover, it is the ability of the managers to monitor the activities and performance of the organization (Sethi, Smith & Park, 2001). On the similar note, Chung, Wang, Huang & Yang (2016) argues that managerial capability is the skills of the managers to participate and resolve the issues related to business activities. Further, it ensures that employees' skills and efforts are directed toward achieving organizational goals, strategies, internal communication, decision making and conflict resolution (Lukas & Ferrell, 2000). An organization having high level of managerial capability is characterized as a strong inter-

functional coordination, collaboration and integration to meet organization's goals (Gatignon & Xuereb, 1997).

Dynamic Capabilities v/s Operational Capabilities

While studying the organizational capabilities majority of previous research studies have ignored that which type of organizational capability they are considering in their framework. Both operational and dynamic capabilities have few similarities and differences with each other. However, there is a blur line between the operational and dynamic capabilities. Therefore, while studying the organizational capabilities one must understand that which type of capability is incorporated in the study (Helfat & Winter, 2011).

Operational capabilities or zero order capabilities are the organization routines. These capabilities enable the firms to live in the present. These capabilities provide continuous improvement, business excellence by reducing cost, building strong customer base and improving quality. Moreover, these capabilities lead towards incremental innovation (Krasnikov & Jayachandran, 2008; Newey & Zahra, 2009; Wu, Melnyk & Flynn, 2010). Contrary to this, dynamic capabilities addresses to rapidly changes external environment. These are the ability of the organization to build, integrate and reconfigure resources of organizations to rapidly changing turbulent environment. Routine to develop dynamic capabilities are sensing, seizing, leveraging, transformation and reconfiguration. In short, dynamic capabilities deal with turbulent business environment (Teece, 2007; Katkalo et al., 2010).

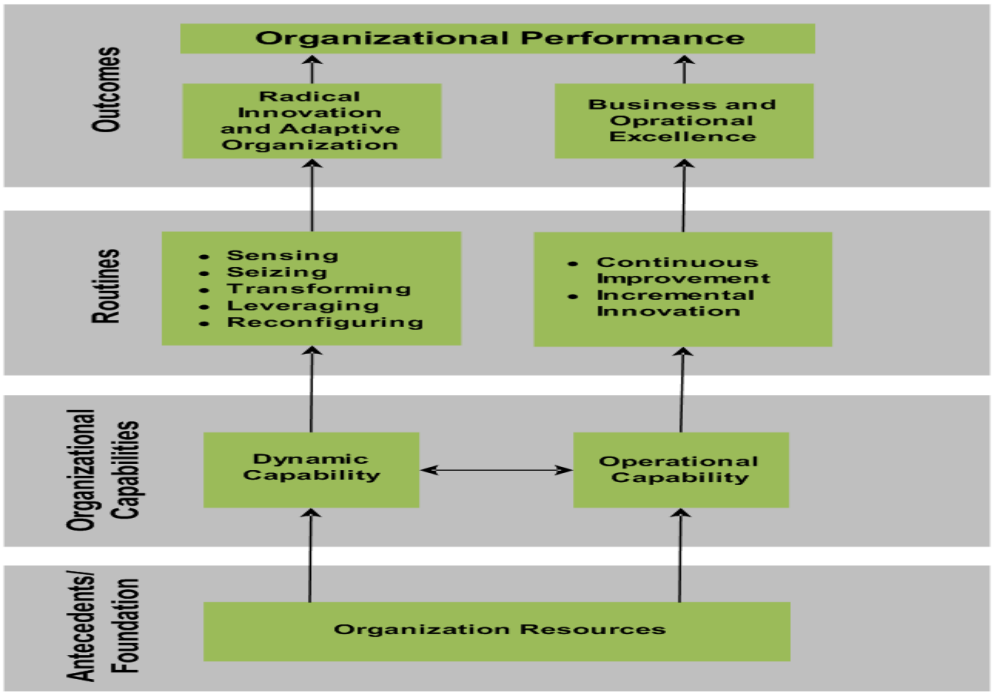

Figure 1
DYNAMIC CAPABILITIES V/S OPERATIONAL CAPABILITIES

Outcome and purpose of both operational and dynamic capabilities is different however, both deals with performance enhancement. There is no certain line between both capabilities as change is a continuous process and it always occurs up to some extent. Therefore, it cannot be

distinguished on the basis of both capabilities that whether they support what is as radical versus non-radical change, or new versus existing businesses. In addition there are some capabilities that are used for both operational and dynamic capabilities (Helfat & Winter, 2011; Inan & Bititci, 2015). Further, both are the type of organizational capabilities and input to organization capabilities are resource therefore, for both required resources (Andersen, 2011).

Above mentioned Figure 1 is self-explanatory while studying the similarities and differences among operational and dynamic capabilities. Both capabilities input are organizational resources and their ultimate outcome is organizational performance. However, both capabilities routines are different from each other.

Mediating Role of Operational Capabilities

According to the RBV the organization performance comes from the two aspects: one is resources and second is the capabilities (Kaleka, 2002). Resources are the input to the capabilities and capabilities utilize resources to have desired outcomes. Operational capabilities are the subset of organizational capabilities (Wu et al., 2010; Newey & Zahra, 2009; Winter, 2003) and similar to the organizational capabilities input to operational capabilities are the resources of the organization (Inan & Bititci, 2015; Wilden & Gudergan, 2015; Wu et al., 2012). Moreover, resources required operational capabilities to generate significance for an organization and both reinforce each other to create more value (Devinney & Stewart, 1988; Collis & Montgomery, 1995; Wu, Melnyk & Flynn, 2010; Coltman & Devinney, 2013). Considering this, operational capabilities can create additional value by interacting with the organization's existing resource base through creating complementarities. (Schmidt & Keli, 2013).

However, among different resources knowledge based resource (intellectual capital) is considered as key to the capabilities (Metcalfe & James, 2000). Operational capabilities are linked with organizational knowledge based resources to provide superior performance (Benner & Tushman, 2003). The mechanism by which these resources influence operational capabilities is that, first they are converted into operational capabilities before it can impact on performance (Jordan, 2012). These resources improve the existing operational capabilities make them inimitable and lead towards sustainable performance (Lee & Choi, 2003; Jordan, 2012). In similar manner, Wu et al. (2012) argues that firm specific skills like unique technical knowledge coupled with human capital enable the operational capabilities to grow. Operational capabilities by integrating with the organization's existing knowledge based resources create additional value for firm (Schmidt & Keli, 2013). To sum up, knowledge based resources i.e. intellectual capital enable the firm to develop unique operational capabilities and then these capabilities provide superior performance (Tanriverdi, 2005; Tan, 2007).

Based on aforementioned discussed literature and theoretical support this study proposes a conceptual framework by linking the intellectual capital with organizational performance through the mediating role of operational capabilities. Figure 2 mentioned about the conceptual framework of the literature.

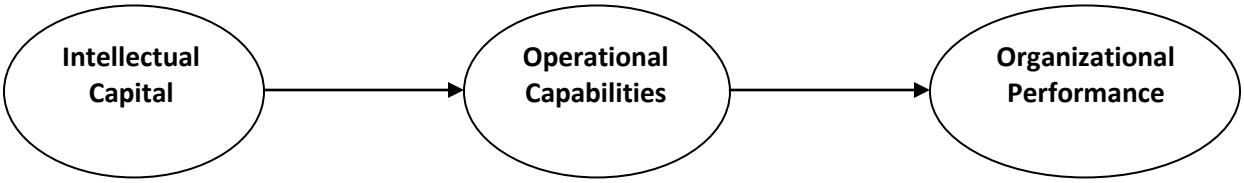

Figure 2
Conceptual Framework

Research Prepositions

Based on the above discussed literature this study proposed the following research preposition.

RP_1: There is a significant positive relationship between the intellectual capital and operational capabilities.

RP_2: There is a significant positive relationship between operational capabilities and organizational performance.

RP_3: Operational capabilities mediate the relationship between intellectual capital and organizational performance.

DISCUSSION AND CONCLUSION

Based on the above argument, this study response to the main objective of the study, which was to develop an understanding between intellectual capital and organizational performance with mediation of operational capabilities. This study highlighted the missing link between IC and organizational performance. Moreover, study also distinguish between different organizational capabilities and highlighted the importance of operational capabilities in improving performance. This study responds to the gap in the existing literature by proposing that intellectual capital can be an antecedent of operational capability and it can have a significant relationship with operational capabilities. Intellectual capital influence operational capabilities which in turn impact on organizational performance. Intellectual capital components i.e. human, structural and relational capital can be the significant input to refresh the operational capabilities, making them a potential source of increased performance. Further, in the light of RBV which argues that resources and capabilities both are essential for the organization to survive in the competitive environment, this framework draw attention towards the operational capabilities importance, how these can be shaped, created or refreshed through intellectual capital to achieve superior performance. Moreover, it also emphasizes that in order to have significant improvement in performance both intellectual capital and operational capabilities are compulsory and they are complementary to each other. Together, they can have a synergic effect on the organizational performance.

FUTURE RECOMMENDATION

Present study proposed the significant framework by developing a relation between intellectual capital and organization performance through mediating role of operational capability. This framework should be empirically tested in order to generalize it across different

industries and different countries. Moreover, this framework should specifically be tested on those industries whose performance is decreasing, stagnant or in growth trap. Moreover, under the domain of RBV future research should be conducted to identify new resources like information technological resources, knowledge creation or knowledge integration mechanism (through which new knowledge is imparted into existing knowledge base of organization) as the antecedents of operational capabilities. Particularly, the role of human resources along with other organizational resources likes IT and knowledge integration mechanism should be examined as these resources can mould the operational capabilities according to the changing business environment.

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