

LINKING INTELLECTUAL CAPITAL AND KNOWLEDGE MANAGEMENT WITH ORGANIZATIONAL PERFORMANCE: A META-REVIEW ANALYSIS

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Abstract

The study examines meta-review analysis of knowledge resources (i.e. intellectual capital) and knowledge management literature aims to investigate research productivity for developing the link of intellectual capital (IC) and knowledge management (KM) with organizations performance. This study attempts to provide valuable insights with respect to context of the study particularly to investigate and explore the ontological intentions for the intellectual capital (IC) and knowledge management domain towards organizational performance which is a debate of contemporary thinking in the circle of IC and KM research. This meta-review analysis of study focuses on some leading peer reviewed journals in the area of IC and KM e.g. Journal of Intellectual Capital, Journal of Knowledge Management, Management decisions and International Journal of Learning and Intellectual Capital.

Keywords: IC, KM, Organizational Performance 1.

1. Introduction:

Over the period of 1959-1997 a diverse set of academic researchers and practitioners developed a new line of business strategies for knowledge base economies. The pioneer researchers in development of intellectual capital (IC) are (Itam 1980 “Mobilizing of Invisible Assets”; Hall 1981 “Research on Human Values”; Sveiby 1986 “The Know-How Company on Managing Intangible Assets”; Teece April 1986 “Extracting Value from Innovation”; Sveiby 1988 “The Annual Report” introducing “Knowledge Capital” Sveiby 1989 “The Invisible Balance Sheet”). The significance of Intellectual Capital (IC) and intangible assets for example structural capital (innovative processes), human capital (human capabilities) and

relational capital (relation with external stakeholders) has greatly increased in the last two decades.

IC is an enhance concept of corporate reporting and management tool which enables companies to use this new driver effectively. Companies like Skandia in Sweden used the concept of IC as a supplementary reporting in annual reports. Since January 01 2002 it has become part of disclosure in and accounting rules in Denmark. Since then it has become obligatory for firms to report and disclose IC if they have significant knowledge assets and auditor (s) has to certify such report. This is important for investors to better understand the potential hidden intellectual assets and value of future growth of business. The emergence of IC phenomena in the middle 1990s has formed a massive literature and considerable progress has been made to demonstrate this phenomenon during the last three decades. Itami, (1987) defines IC as a technology, corporate culture, human skills and experience, brand name, innovation and creation, relationship with stakeholders and acknowledges as valuable strategic asset for business competitiveness. Abrahamson & Fairchild (1999) stated that the significance of IC practices have increased in 1990s due to shifting of economies into knowledge driven systems. In knowledge based economies, the management of knowledge resources (e.g. intellectual capital) and knowledge related factors (e.g. knowledge management capabilities) are very important for proven growth of organizations (Boedker et al., 2005; Teece *et al.*, 1997). Knowledge based view (KBV) postulates that knowledge resources are very important for sustainable performance of organizations than tangible assets (Bogner and Bansal, 2007).

Knowledge based view (KBV) is the extension of resource based view (RBV), provides useful lens to apprehend the stock of knowledge in the firm and flow of knowledge into the firm (Decarolis and Deeds1999). The stock and flow of knowledge within and out of the organizations positively influence the performance outcomes in knowledge intensive industries whether these are manufacturing or services (Decarolis and Deeds, 1999). The KBV argues that organizational knowledge is multi-dimensional (heterogeneous) and aptitudes are major components of performance variation. In addition, organizations not only use different ways for the formation of knowledge but also access external knowledge. Organizations use KBV to know the main underlying principles of knowledge management with regard to knowledge creation, application and transfer of knowledge (Nonaka, 1994; Grant, 1996). KM literature reveals that KBV performs a strategic role to accelerate business performance. It suggests that for effective sharing of knowledge among organizational members, it is imperative to establish a sound KM capabilities and KM strategies for efficient working of knowledge resources. It not only supports the organization for resource structuring and capacity building but also helps to improve the performance of organization (Wang *et al.*, 2012). KM within the organization provides an exceptional way to deal with the intangible assets or resources (Mouritsen & Larsen, 2005; Bohn, 1994; Boisot, 1998). Therefore, this study attempts to identify meta-literature to link knowledge resources (IC) and KM initiatives with organizational performance.

1.2. Intellectual Capital (IC)

During last decades intellectual has gained the attentions of researchers, practitioners, authors and policy makers who have attributed different definitions of IC. It is a very important ingredient for business promotion and development. Therefore, Stewart (1997) and Itami (1987) illustrate that IC as knowledge, information and experience that can be found to generate wealth and profit for organization's survival and competitiveness.

IC regarded as an intangible or knowledge resource and this phenomena realized by many contemporary researchers that organization's sustainability is based on human know-hows, experiences and their skills (HC), innovation process and technology (SC) and relationship with external and internal stake holders (RC) since the beginning of its literature in 1980s (Itami 1987; Stewart 1997). IC is knowledge and knowledge oriented capabilities which play crucial role for sustainable performance of firms which leads to competitive advantage (Teece and Teece, 2000; Stewart and Ruckdeschel, 1998). Stewart, (1994) define the concept of IC as difference between book and market. However, Edvinsson and Malone, (1997) define it as knowledge resource or asset, used for value creation. IC as knowledge and information, experience and skill yield competitive advantage (Stewart and Ruckdeschel, 1998). Therefore, significant emphasize

devoted to recognize its importance for business success, survival and competitiveness because some of knowledge resources direct the business operations (Youndt et al., 2004). These are the key valuable resources for business success and survival. Nowadays, knowledge derives the economy (Bontis, 2000). Therefore, organizational knowledge, information, human skills and experience, intellectual property contribute to sustainable growth of business and provide competitive hedge in the market (Itami, 1987; Stewart, 1997; Bontis, 2000). Sharabati and Jawad (2010) viewed IC as competence of company's employees, their experience and expertise, innovation and creation, organization's systems and programs, its research and development, organization's intellectual property, strategic alliances and commitments, internal and external stakeholder relationship and customer knowledge that can be put to accelerate business performance and value creation. Organizations invest a substantial amount of capital for effective use and management of these valuable resources. However Pulic (2001) argued that most valuable resource out of company's IC is its employees, their knowledge, experience, abilities and skills. Therefore, organizations significantly are significantly investing on human capital (HC) for firm success and survival (Rehman et al., 2011). The organizational performance substantially attributed by well-being of IC efficiency and its effective performance. Organizations have extant of intellectual resources which help to transform the individual knowledge into firm's knowledge and wealth (Ross and Ross, 1997).

There are number of definitions of (IC) based on both knowledge and economic point of views. According to Organization for Economic Corporation and Development (OECD) many companies are investing in employees training, customer relations and (R&D) etc. and referred as IC (OECD, 2008). Stewart (1997) has divided IC into knowledge, information and know-how that can be put to use to create wealth. Intellectual assets make the difference to users via knowledge resources. The reason that why organizations are willing to invest more on physical assets that can be depicted by its IC which predicts the better future financial performance of these organizations. So, IC covers all knowledge and information which competent and skilled employees can use to create aggressive improvement for the organization through applying some artistic strategies and capabilities.

1.3. Intellectual Capital Practices:

Various scholars and practitioners have identified three main components of IC i.e. human capital, structural capital and rational capital practices (Tseng and Goo, 2005; Lev and Zarowin, 1999; Lev and Radhakrishnan, 2003)

1.3.1. Human Capital Practices:

Human capital (HC) has received a substantial attention of academicians and practitioners over the spheres. This increasing trend has focused the strategic deployment of HC which play a dynamic role in turbulent business environment. Therefore, it always requires substantial investment to upgrade the skill of HC due to valuable asset resource for future growth of business. HC provides a significant value or most probably dramatically positive shift to organization's growth and future prospect. Maximization of organizational returns and values is one of the most important strategic tasks of organizations. The Centre for Educational Research and Innovation defined the Human Capital (HC); "knowledge, skills, competences and other attributes embodied to economic activity" (CERI, 1998). It is recognized as professional expertise, knowledge, skill and abilities of employees to enhance organization's performance and gaining competitive advantage as argued by (Hayton, 2005; Martinez-Torres, 2006; Roos and Roos 1997). Employees are the most important strategic assets of organizations. Many MNC's are investing huge capital on employees in the shape of salary benefits and training of staff according to their skill and competencies. Competent employees and executives are the people who have to make crucial decisions to increase the earning of their organizations.

Companies that fail to invest on employees to increase their motivation, loyalty and competencies put at risk their success and even survival. Chen and Lin (2004) advocated that many companies are derived of competitive advantage from human cost whereas HC and knowledge are very important to create value creation and to maintain competitive position and similar findings are given by Cheng et al., (2010) human value added is the factor of competitive advantage which encourages the company performance. Similarly,

De Pablos (2003) emphasized that HC being an element of IC is one of important object to improve the efficiency and effectiveness of companies. Bontis et al. (2000) found that human capital efficiency (HCE) positively influences the organization's performance. These relations are also consistent with Bontis (1998) findings. Whereas Chen et al. (2005) concluded that organizations having better HCE means having better financial performance, human cost is one of the important factor of a company which has positive relation with corporate financial performance as argued by (Goh 2005; Tan et al. 2007; Ahangar 2011 ; Joshi et al. 2010; Kamath 2007 and 2008; Yalama and Coskun 2007).

1.3.2. Structural Capital Practices

Structural capital (SC) used interchangeable to organizational which refers to the supportive infrastructure processes and databases of the organization enable the human capital to function properly. It is non-human asset which is recognized as all procedures, organizational structures, database, systems, IPRs, technology etc. essential to achieve better firms' performance (Youndt *et al.*, 2004; Bontis, 1998; Zangouinezhad and Moshabaki, 2009). SC is important component of IC. With positive expansion of SC will reinforce the procedures of firms, improve capacity building in terms of production and product quality through solving problems which may leads to overall performance (Zangouinezhad and Moshabaki, 2009; dePablos, 2004). In this way, firms can significant improve the business strategies through creating, accumulating and transferring knowledge (Aramburu and Saenz, 2011). SC is a valuable tactical asset which brings out competitiveness and improved the overall performance of firms.

1.3.3. Relational Capital Practices

The relational capital (RC) refers to strategic alliances with internal and external stakeholders (e.g. employees, customers, suppliers) is almost inevitable who may influence the firms life (Hsu and Wang, 2012). Supportive RC enables the organization to underpin new issues and identify improved ways to overcome the problems by learning from others' Cheng et al (2010) argued that maintaining sustainable relations with stakeholders is a crucial factor to obtain competitive advantage which turns to increase the firms' performance (Dewhurst and Navarro, 2004). The effective marketing strategies help to strengthen customers' relations and customer relations build up relational or customer capital argued by Bontis (1998). Prahalad and Ramaswamy (2000) found that the customers are the source to increase the competency of organizations. Increase of organizational competency is based on customer's relations. In addition the external stake holders are also important source of relational capital. Furthermore, the relational capital is a marketing phenomenon. Now it is a well-known fact that organizations normally determine the cause and effects of relational capital based on marketing intensive strategies. Organizations are maintaining large budgets for relational capital in order to maintain positive image with stakeholders. In this way, a strong relational capital turns to improve the product quality, productivity and responsiveness which are important elements of firms' performance.

1.2.1 Intellectual Capital as source of Competitive Advantage in Knowledge Base Economy:

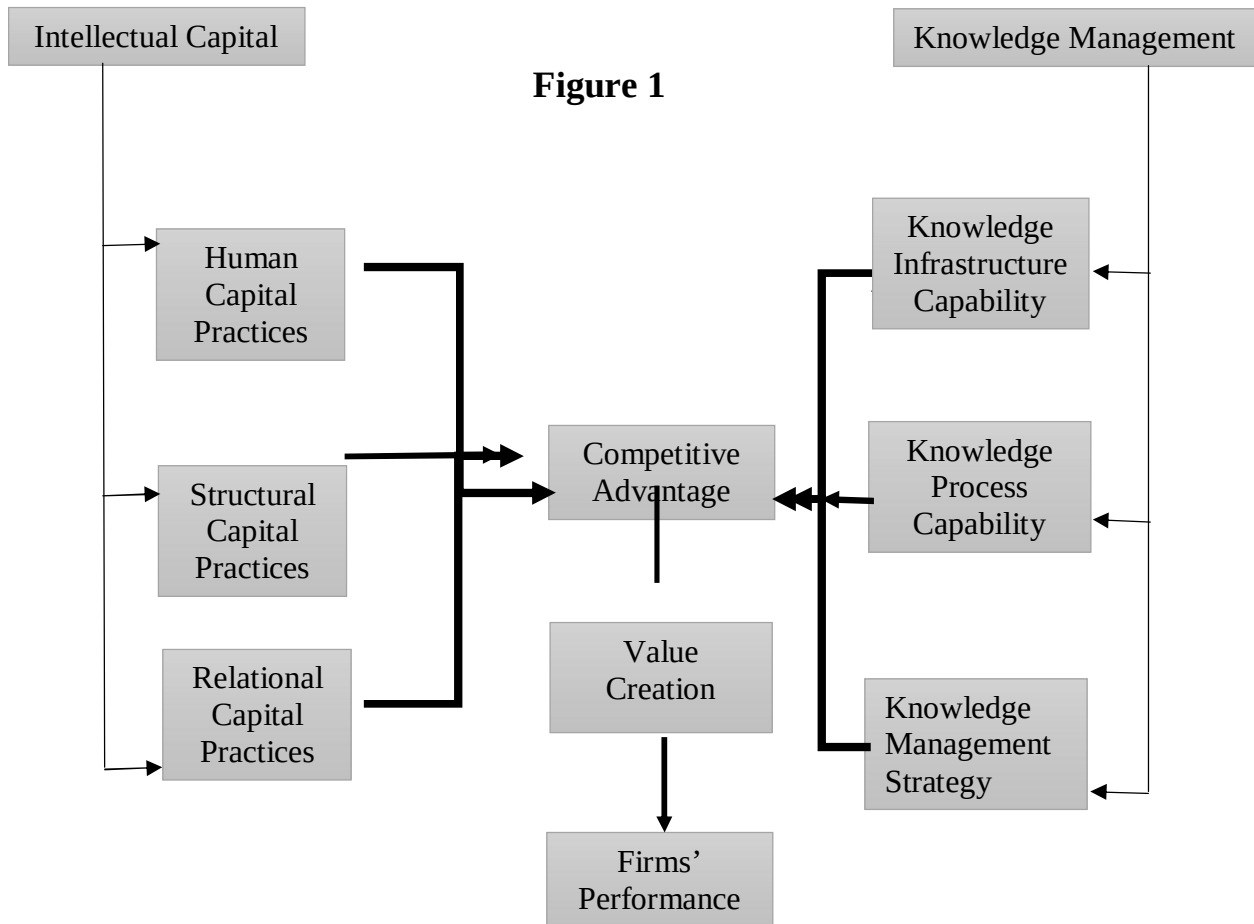
Bontis (2000) defines IC as organizational and worker's knowledge that enhance company competitive advantage. It is a knowledge based resource which is used for creating knowledge, experience and information (Stewart 1997). Sullivan (2000) argued that IC is the knowledge which can be transformed into profit. IC referred to knowledge, information, intellectual assets and skill which can be used to create wealth for the organization (Martinez and Garcia-Meca 2005). Porter (1999) argued the success of any organization in competitive environment is the employment of resources. IC is being used as a driver for organizational growth. The growing literature on knowledge resources emphasized world's attention from production to knowledge based economies. The prevalent recognition of IC is used as competitive advantage being a measurement tool whereas conventional financial methods are not able to cover all the aspects (Nazari and Herremans, 2007). So, IC referred as managerial technology, customer relationship, and professional experience etc. that provides competitive advantage to a firm (Edvinsson, 1997).

1.2.2. Intellectual Capital and Value Creation:

Ting and Lean (2009) argued that IC being a strategic asset can be used in value creation and firm's profitability and same findings is released by (Maditinos et al. 2011). Mavridis and Kyrmizoglou (2005) stated IC or intangible assets have potential to generate the value for the organization. Intellectual Capital (IC) being a value creation and an innovative way has become an important object for researchers, managers, investors and business institutions as there are many studies released in academic and professional environments. All employees and their abilities that engage in value creation are recognized as IC Pulic (2001). Ordonez de Pablos (2004) suggests that IC is a key determinant for proven growth of business. Its theoretical mechanism describes human capital, structural capital and relational capital as key variables for business performance. Therefore, the current study is an attempt based on argument that "if you cannot measure it, you cannot manage it" (Ordonez de Pablos, 2004, p. 643).

1.4. Knowledge Management (KM) and organizational Performance

Knowledge based view (KBV) is the extension of resource based view (RBV). It postulate that intangible assets played significant role to achieve the proven growth of business (Lee and Sukoco, 2007). Literature on KM highlighted that effective deployment of knowledge resources improve the competence of organization, through value creation that leads to better firms' performance (Gold et al., 2001; Zack et al., 2009; Lee and Sukoco, 2007). This could only be possible due to the better implementation of KM capabilities and KM strategy that facilitate in terms of effective management and flow of knowledge within the organization. Different components make up the KM capabilities e.g. technology, organizational culture and structure, knowledge acquisition, protection, dissemination and application) and KM strategies e.g. human and system oriented strategies (Gold et al., 2001; Zack et al., 2009; Lee and Sukoco, 2007). KBV is composite in nature and different firms possess various levels of resources to make KM capabilities and KM strategies more effective to obtain competitive advantage and growth of organizations (Smith and Mills, 2011; Gold et al., 2001). Zaim et al., (2007) argued that KM capabilities improved organizational performance. Basically KM capabilities are combination of knowledge infrastructure and knowledge process capabilities which enable the employee for share and smooth flow of knowledge (Smith and Mills, 2010; Gold et al., 2001).



Conclusion:

This meta-review analysis highlights the role of knowledge resources (IC) and KM capabilities (i.e. knowledge infrastructure and knowledge process capabilities) for sustainable performance of firms (Gold et al., 2001; Teece *et al.*, 1997). Effective deployment of knowledge resources and capabilities are crucial for knowledge sharing practices within the organization which leads to superior performance of firms. It postulates that resources and capabilities provide useful lens for understanding the underlying relationship. Organization possesses different resources at firms' level which collectively contribute to sustainable performance of firms (Wernerfelt, 1984). These resources provide direct access to production processes while capabilities represent the combination of resources to execute the task more effectively. RBV argues that organizations possess various resources but it is not necessary that all the resources contribute to organizational performance. Therefore, organizations need to identify those knowledge resources and capabilities which contribute to organizational performance. These are KM capabilities, KM strategies and knowledge resources (IC practices) which bring out competitive advantage and leads to superior firms performance. Much of research devoted towards investment on KM initiatives, but still there is need to invest on KM strategies, particularly human or system oriented strategies which may leads to better firms 'performance. +

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