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A Critical Review of Empirical Studies in Intellectual Capital Literature

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Abstract
The intense review of literature shows that intellectual capital is considered as the basic fundamental strategic knowledge based resource for any kind of organization. The researchers argue that the knowledge based resources in organizations carry more than 75 % worth of any organization, as knowledge resources are the determinants of success in today's world. Intellectual capital is essential for the success and well performance of firms but still there is lack of studies in the context of developing countries and more specifically in the context of SMEs. Therefore this study attempts to gather the findings of empirical studies that where conducted in intellectual capital perspective. The findings of the studies encouraged to conduct empirical research in developing countries from intellectual capital and SMEs perspective.

Key Words: Intellectual Capital, Organizational Performance, Empirical Studies, Pakistan, Malaysia, SMEs.

1. Introduction

The role of knowledge in business development has got the attention of academia in the last decades. The general consensus of today is that organizational capabilities are based on the management of knowledge for the reason; it is the source of attaining competitive advantage and organizational sustainability. Different concepts are proposed in the academia and each try to capture a particular phenomenon given the intangible nature of knowledge. It is realized by successful companies that investing in knowledge is essential to their ability to create high value products and services. Identifying, valuing and managing intellectual assets is a very difficult task to business managers and among the different notions, intellectual capital (IC) has been an interesting expression. Since FORTUNE magazine first published Thomas Stewart's writing in 1991. It provides a vivid illustration of knowledge management which helps elucidate intangible resources and knowledge assets of organization (Chang & Hsieh, 2011).

A knowledge-driven economy is an economy in which the process of wealth creation takes place by generation and exploitation of knowledge and knowledge plays a predominant path. According to the World Development Report 1998, which was published by The World Bank (1998), the vital role played by knowledge has been highlighted in is quotation as It quotes: "For countries in the vanguard of the world economy, the balance between knowledge and resources has shifted so far towards the former that knowledge has become perhaps the most

important factor determining the standard of living . . . Today's most technologically advanced economies are truly knowledge-based" (Goh, 2005).

More recently, the physical assets, such as plant, equipment, and property, which are recognized on the balance sheet, have taken a second place to more intangible forms of capital, which are generally not found on the balance sheet and are known as intellectual capital (Isaac et al., 2010). The strategic impact of intellectual capital is never in question. From the capture, codification, and circulation of information, on to the re-engineering of business processes and through the acquisition of new competencies via training and development, present and future success in competition will be based more on the strategic management of knowledge and less on the strategic allocation of physical and financial resources (Bontis 1998).

IC is said to be knowledge about knowledge, from an epistemological perspective. An assessment of the language used in the application and definition is required for better understanding of intellectual capital (Jorgensen, 2006). The increasing recognition and utilization of intellectual capital around the world helps companies to be more productive, effective, efficient, and innovative (Goh & Lim, 2004). Intellectual capital appeared as the most critical success factor in knowledge-based economies for the success of organizations (Khalique et al., 2011).

Based on previous research the concept of intellectual capital has gained a significant attention at the beginning of the twenty first century in a knowledge-based economy (Khalique et al., 2011). Intellectual capital has become the key resource of value creation (Goh & Lim, 2004; & Bontis, 2001). The crux of sustainable competitive advantage is the knowledge assets. The rapidly growing field of intellectual capital is an existing area of interest for both the researchers and practitioners (Bontis, 2001). Regardless of the industry sector, intellectual capital has a substantive and significant relationship with business performance (Bontis et al., 2000). Production requires both physical and intellectual capitals. The physical capital refers to the traditional inputs of labor, land and capital; while the intellectual capital refers to knowledge, skills, creativity and corporate culture. Neoclassical economies emphasize utilization of physical capital. This is seen in mass production in the agricultural and industrial sectors. However, changes have taken place. Firms are now depending more on intellectual rather than physical capital (Goh, 2005). For successful competition in today's world economies it is absolutely necessary for organizations to understand and properly manage their intellectual capital if they want to succeed (Bhartesh & Bandyopadhyay, 2005). In modern economies for success and competitive advantage of organizations, intellectual capital is increasingly recognized as critical strategic asset (Khalique et al., 2013).

2. Review of Empirical Studies of Intellectual Capital from 1998 to 2014

The empirical researches on intellectual capital start from 1998. The main purpose of mentioning and reviewing these previous empirical studies here is to understand and confirm that intellectual capital is the fundamental and crucial asset for organizational success and survival and these studies have proved it. Secondly these studies also confirm that previously intellectual capital and strategic planning are not combined in one single empirical study and in which the intellectual capital mediates the relationship between strategic planning and

organizational performance. The review of previous researches and the finding of researchers are presented below.

2.1 Studies and their Findings from 1998 to 2005

The pilot study in a research conducted by Bontis (1998) showed that intellectual capital has a significant and substantive impact on performance. Nahapiet and Ghoshal (1998) presented that organizational advantage is fundamentally a social one. According to them the roots of intellectual capital deeply embedded in social relations and in the structure of these relations. Social capital is the combination of relationships inside the firm and with external entities and it helps organizations by absorbing knowledge to control and to gain access to resources. The study of Bontis (1999b) confirmed a positive relationship between knowledge stocks at all levels and business performance. Furthermore, the proposition that the misalignment of knowledge stocks and flows in an overall organizational learning system is negatively associated with business performance is also confirmed.

In Malaysia, with 107 respondents Bontis et al. (2000) presented their findings that intellectual capital has a significant and substantive relationship with business performance regardless of the industry sector. They presented that human capital is important regardless of the industry type and has greater influence on how a business should be structured in non service compared to service industries, customer capital has significant influence over structural capital irrespective of industry development of structural capital has a positive relationship with the business performance regardless of the industry.

Pena (2002) conducted a study in Basque region of Spain with data collected from 114 startup firms out of 364 and presented the results that human capital of the entrepreneur (i.e. education, business experience and level of motivation), organizational capital (i.e. firm capacity to adopt quickly to changes and the ability to implement successful strategies) and relational capital (i.e. development of productive business network and an immediate access to critical stakeholders) are important intangible assets and related positively to venture performance.

In South Africa, Firer and Williams (2003) with data drawn from a sample of 75 publicly traded firms purported the findings that associations between the efficiency of Value added (VA) by a firm's major resource bases and productivity, market valuation and profitability are generally limited and mixed. Their overall empirical findings suggested that physical capital remains the most significant underlying resource of corporate performance in South Africa despite the efforts to increase the nation's intellectual capital base. In another study with a complete sample consisted of 81 United States multinational firms, Belkaoui (2003) presented that US multinational firms were statistically significant in support of both the resource-based and stakeholder views.

Engstrom, Westnes and Westnes (2003) with data of 13 hotels of Radisson SAS Hotels and Resorts hotel chain in Norway concluded that it is possible to evaluate intellectual capital in a hotel chain. Their findings indicated that it is useful to evaluate a hotel's intellectual capital due to its potential relationship with business performance.

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The study of Mavridis (2004) in Japanese banks focused on the actual status of human capital (HC) and physical capital (CA) and its integrative, discriminative and predictive impact on the "intellectual" added value-based performance situation. They confirmed the existence of significant performance differences among the various groups of Japanese banks but also the differences between the Japanese and some European banks (i.e. Greece and Austria). Bueno, Salmador and Rodriguez (2004) conducted a study on top managers of Spanish companies and purported that in order to achieve distinctive competencies in knowledge economy the social intangibles become essential resources. They considered social capital as a nexus of both direct and indirect relationships between the firm, the environment and the social unity. They reported that firstly social capital puts the knowledge into action, improving the firm's ability to produce future benefits. Secondly the social capital provides consensus between firms and encourages the understanding with public administration, reducing transaction costs and finally, it is obvious that social intangibles encourage cooperation and the observance of the economic behavior laws.

Goh (2005) in Malaysia concluded in a study that as a whole, all banks have relatively higher human capital efficiency than structural and capital efficiencies. Domestic banks were generally less efficient compared to foreign banks. Hong Leong Bank, Public Bank and Southern Bank were the top three efficient domestic banks, while Scotia Bank was the most efficient foreign bank. Public Bank and EON Bank consistently showed improvement in efficiency in the three years. There were significant differences between rankings of banks according to the efficiency and traditional accounting measures. In view of their findings, seven out of ten domestic banks did not show improvement in efficiency following the consolidation exercise requires an urgent attention and remedial actions.

Chen, Cheng and Hwang (2005) with using data drawn from Taiwanese listed companies in Taiwan presented that the firms' intellectual capital has a positive impact on market value and financial performance and may be an indicator for future financial performance. In addition they found investors may place different value on the three components of value creation efficiency (human capital, physical capital, and structural capital). Finally, the evidence was presented that R&D expenditure may capture additional information on structural capital and has a positive effect on firm value and profitability.

In a longitudinal multiple informant study of 93 organizations in United States, Subramania and Youndt (2005) found that human, organizational and social capital and their interrelation ships selectively influenced radical and incremental innovative capabilities. They reported that organizational capital positively influenced incremental innovative capability whereas human capital interacted with social capital to positively influence radical innovative capability. However, human capital by itself was negatively associated with radical innovative capability. Interestingly, social capital played a significant role in both types of innovation, as it positively influenced incremental and radical innovative capabilities.

2.2 Studies and their Findings from 2005 to 2010

Analyzing a specific case within the OEU; the Autonomous University of Madrid (UAM) in Spain, Sanchez and Elena (2006) from a conceptual point of view found some similarities between intellectual capital approaches and the OEU, but a different terminology was identified.

Shiu (2006) conducted a study, based on the 2003 annual report from 80 Taiwan listed technologies firms and reported that the index of VAIC has a significantly positive correlation with profitability (ROA) and market valuation (MB) and a negative correlation with productivity (ATO). The findings suggested that technological industry in Taiwan is capable of transforming intangible assets such as intellectual capital to high value added products.

Cabrita and Vaz (2006) with data collected from a sample of 53 banks of Portuguese Bankers Association in Portuguese proved that intellectual capital is substantively and significantly related to the organizational performance in the Portuguese banking industry

Chen, Lin and Chang (2006) with 159 valid questionnaires received in Taiwan and purported that the three types of intellectual capital. i.e., human capital, structural capital and relational capital had a significantly positive relationship with new product development performance. Moreover their results also indicated that the higher the growth rate of an industry, the stronger were the positive relationships between three types of intellectual capital and new product development performance. Besides these the relational capital was the greatest among these three types of intellectual capital in Taiwanese manufacturing companies. Human capital was the next and structural capital was the least. The results showed that human capital and structural capital of Taiwan's SMEs was obviously less than those of large enterprises.

Appuhami (2007) with data collected from 33 banking, insurance, and finance companies in Thailand concluded that firms' intellectual capital has a significant positive relationship with its investors' capital gains on shares. The findings of this study enhanced the knowledge base of intellectual capital and develop a concept of intellectual capital in achieving competitive advantages in emerging economies such as the economy of Thailand.

Kamath (2007) in India studied all 98 scheduled commercial banks and purported that the overall top performers in HCE (Human Capital Efficiency) are clearly the foreign banks. However the top performers in CEE (Capital Employed Efficiency) were the public sector banks.

In Slovenia with 36 completed questionnaires received from hotel firms, Rudez and Mihalic (2007) concluded that the total IC has a significant impact on financial performance. Their study showed that only end-customer relationships have a strong direct impact on financial results.

Cohen and Kaimenakis (2007) in Greece on 52 Greek Services SMEs conducted a study and reported that the interaction of certain categories of intellectual assets in SMEs were in some aspects different from the pattern evidenced in other surveys that analyze large companies. They also reported that certain categories of intellectual capital positively contribute to corporate performance. The first important finding of their survey was that only human capital and organizational capital and human capital and customer capital directly interrelate in the context of SMEs studied. Their empirical evidence revealed that there was a difference between SMEs and large companies as documented in relevant studies in terms of the relationships between the IC sub-domains. More specifically they succeeded in revealing a positive relationship between intellectual assets and performance.

Cabrita, Vaz and Bontis (2007) in Portuguese banking context with 253 completed surveys received and reported that empirical findings of their study supported the proposition that intellectual capital is a driver of organizational value, but only in certain combinations. Whereas in another study conducted in Portuguese banking industry with 253 respondents from 53 organizations Cabrita and Bontis (2008) argued that the intellectual capital is a critical discipline

within the field of strategic management and an important area of research in the innovation era.

Chen (2008) in Taiwan with 126 valid questionnaires received from the managers in manufacturing, marketing, R&D, or environmental protection departments and concluded that the three types of green intellectual capital; green human capital, green structural capital, and green relational capital had positive effects on competitive advantages of firms. Moreover, this study found that green relational capital was the most common among these three types of green intellectual capital, and the three types of green intellectual capital of small & medium enterprises (SMEs) were all significantly less than those of large enterprises in the information and electronics industry in Taiwan.

The study of Chan (2009b) in Hong Kong revealed no conclusive evidence to support a definitive association between IC, as measured by VAIC, and the four measures of financial performance in the sample companies surveyed in Hong Kong. At best, only a moderate association was recorded between IC and the profitability measures. The study further revealed that physical capital is highly regarded by the companies surveyed for enhancing market valuation, productivity and profitability.

Yau, Chun and Balaraman (2009) in Malaysia selected the top 30 and the bottom 30 companies from the list of top 100 largest public listed companies for a study and reported that the voluntary disclosure of IC information was generally not extensive among the public listed companies in Malaysia and narrative description of their IC attributes was the most often adopted format. Their findings suggested that the IC disclosure behavior of the sample companies may be explained based on both economic and non-economic rationale.

Using simple random sampling Ibrahim and Ngah (2009) in Malaysia reported that the intellectual capital of SMEs that contributed to product and process innovation and lead to higher performance in SMEs.

In another study with a sample of 125 publicly listed Australian firms Bruggen, Vergauwen and Dao (2009) reported that industry type played a key role as a determinant for the disclosure of intellectual property in annual reports. In addition the firms' size was another determinant for intellectual disclosure of firms. In contrast with earlier studies and theoretical predictions of voluntary disclosure, this study however does not find any relationship between the level of information asymmetry and intellectual capital disclosure.

In Malaysia with sample to 264 companies Saleh, Rahman and Hassan (2009) conducted a study and reported that family ownership appears to have a negative effect on IC performance. A high degree of family ownership implies a high probability of opportunistic behavior among families pursuing their objectives at the expense of value creation activities.

The study conducted by Ting and Lean (2009) in Malaysia revealed that VAIC and ROA were positively related among Malaysia's finance sector. Same in Malaysia Warn and Ratnam (2010) conducted another study and indicated that generally there was a relatively low extent of disclosure in respect of ICD (Intellectual Capital Disclosure) among companies in Malaysia. They also stated that ICD had been increasing over the period of observation done for this study. Over the mentioned 7-year period, among the three categories of IC (i.e. external structure, internal structure and employee competence) the external structure has the highest reporting recorded, followed by the employee competence and finally the internal structure.

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In Australia the study of Joshi, Cahill and Sidhu (2010) conducted with data collected from 11 Australian owned banks and revealed that VAIC has a significant relation with human costs and the value addition made by the Australian banks. All Australian owned banks showed relatively higher human capital efficiency than capital employed efficiency and structural capital efficiency. The size of the banks in terms of total assets, total number of employees and total shareholders' equity reported little or no impact on the IC performance of the Australian owned banks.

Yu, Ng, Wong, Chu and Chan (2010) conducted a study on Hong Kong companies and reported that no conclusive evidence was found to support the associations between VAIC and the four financial indicators in their study. However, components of VAIC were found to be able to predict a substantial variance in business performance. For example, Capital Employed Efficiency (CEE) was found to be the key factor in predicting business financial performance. In addition, the Structural Capital Efficiency (SCE) showed an effect on market valuation as measured by MB as well as profitability as measured by ROE. Interestingly, the negative correlations were observed between Human Capital Efficiency (HCE) and the financial indicators. Perhaps those were due to the existence of a gap between the traditional accounting perspective and value creation perspective which is central to the VAIC methodology in measuring IC.

Shih, Chang and Lin (2010) conducted a study with 194 received questionnaires in banking industry and reported that the performance of knowledge creation has significant influence on the accumulation of subsequent human capital. Cognitivists and connectivists were considered the main knowledge creators in the banking industry in their study. The performance of human capital showed significant influence on structural capital and customer capital. While the performance of customer capital exhibited significant impact on the formation of structural capital.

Calisir, Gumussoy, Bayraktaroglu and Deniz (2010) conducted a study in Turkish ITC sector and concluded that all the companies as a whole have relatively higher human capital efficiency than structural and capital efficiencies. The results of the study also revealed that factors such as human capital efficiency, firm leverage and firm size predicted the profitability well. Among those the human capital efficiency had the highest impact. In addition, capital employed efficiency was found to be a significant predictor of both productivity and return on equity and the only determinant of market valuation was the firm size.

Diez, Ochoa, Prieto and Santidrian (2010) in Spain conducted a study and reported that the explanatory analysis of multiple lineal correlations and regressions confirmed the positive relation that exists between the use of human and structural capital indicators and value creation measured by sales growth. Simultaneously the higher levels of the VAIC in particular for the component that refers to the sum of the coefficient of human capital and structural capital were also related to improvements in competitiveness reflected through an increase in sales figures.

In another study using content analysis methods, the annual reports of 49 dual-listed companies in Mainland China, Yi and Davey (2010) reported that the level of IC disclosure by mainland Chinese companies was not high. Most of the reported IC attributes were expressed in discursive rather than numerical or monetary terms. However, the average number of items disclosed was high enough to suggest that there was a clear awareness of the significance of IC

disclosure. While the disclosure quality was not considered as strong, it suggested that the companies had a modest commitment in communicating their IC information to an external audience.

Ramirez (2010) conducted a review of the most important intellectual capital management initiatives at Spanish public organizations in a study in Spain and reported the importance of intellectual capital approaches as instruments to face the new challenges in public sector. The experience gained from the case studies provide a practical help to public organizations to develop means to identify, measure and manage their intangible assets.

In Belgian profit companies, Winne and Sels (2010) conducted a study by examining a sample of small start-ups firms and reported that both human capital (of owners/managers and employees) and HRM are important determinants of innovation in start-ups. Sharabati et al. (2010) conducted a study in Jordan with data collected from Jordanian association of pharmaceutical manufacturers and revealed strong and positive evidence that pharmaceutical firms in Jordan are managing intellectual capital effectively and that in turn is influencing business performance positively. Alpkan, Bulut, Gunday, Ulusoy and Kilic (2010) in 184 manufacturing firms in Turkey conducted a study and found that individual direct effects of the dimensions of organizational support, management support for idea development and tolerance for risk taking were to exert positive effects on innovative performance. Availability of a performance based reward system and free time showed no impact on innovativeness, while work discretion reported a negative one. As for the role of human capital (HC), it was found to be an important driver of innovative performance especially when the OS was limited. However, when the levels of both HC and OS were high, the innovative performance did not increase any further.

2.3 Studies and their Findings from 2011 to 2014

In Pakistan a study was conducted by Shaari, Khalique and Isa (2011) in banking sector. The data were obtained from the annual reports of commercial banks during the period of 2005-2009 and stated that the majority of the banks showed satisfactory intellectual performance. In addition, Khalique, Shaari, Isa and Ageel (2011) with data from 31 pharmaceutical manufacturing companies conducted a study and purported that the intellectual capital has positive relationship with organizational performance and a significant positive relationship between the components of intellectual capital, namely human capital, customer capital and structural capital with organizational performance of pharmaceutical companies emerged. They reported intellectual capital to have significant impact on the organizational performance of pharmaceutical companies in Pakistan. Another study conducted by Khalique, Shaari and Isa (2011) in banks in Islamabad, the capital city of Pakistan and reported that the component of intellectual capital, namely human capital, structural capital, and social capital showed positive relationship with organizational performance. Khalique, Shaari, Isa and Ageel (2011) conducted another study in two cities of “Golden Tri Angle” namely Gujrat and Gujranwala in Pakistan and purported that human capital, customer capital, and structural capital has positive relationship with organizational performance. Their results showed that customer capital has stronger relationship follows by structural capital

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Chu, Chan, Yu, Ng and Wong (2011) conducted a study in Hong Kong companies and reported no conclusive evidence was found to support the associations between VAIC as an aggregate measure and the four financial indicators in their study. Another study conducted in Hong Kong, Chu, Chan and Wu (2011a) reported that IC as measured by VAIC was positively associated with profitability of businesses. In particular, structural capital as a key component of IC played a notable part in enhancing corporate profitability and showed a growing trend in its significance. Empirical findings based on correlation and linear multiple regression analysis indicated that the components of VAIC were strong predictors of corporate financial performance, such as return on equity and profitability. The capital employed efficiency (CEE) also reported to be a significant predictor of all four corporate financial performance indicators.

Clarke, Seng and Whiting (2011) conducted a study in Australia and stated a direct relationship between VAIC and performance of Australian publicly listed firms. Particularly, with capital employed efficiency (CEE) and to a lesser extent with human capital efficiency (HCE). Positive relationship between HCE and structural capital efficiency (SCE) in the prior year and performance in the current year was also found. However the evidence also suggested the possibility of an alternative moderating relationship between the IC components of HCE and SCE with physical and financial capital (CEE) which impact on firm performance.

Jansen, Curseu, Vermeulen, Geurts and Geurts (2011) conducted a study with data gathered on 434 strategic decisions in service SMEs in Netherlands and stated that judgments (risk acceptance and confidence) explain the negative effects of social capital on decision effectiveness. Service delivery and dependency on tacit know-how account for differences between SMEs in different service sectors and serve as explanations for different effects of social capital as a decision aid.

Maditinos, Chatzoudes, Tsairidis and Theriou (2011) with data collected from 96 Greek companies listed in the Athens Stock Exchange (ASE) in Greek conducted a study and reported that results failed to support most of their hypotheses and only statistically significant relationship between human capital efficiency and financial performance appeared. The empirical investigation failed to support the hypothesis that investors place higher value on firms with greater IC (VAIC). Despite the fact that IC was increasingly recognize as an important strategic asset for sustainable corporate competitive advantage. Their results of the study gave rise to various arguments, criticism and further research directions on the subject. Calisir, Gumussoy, Cirit and Bayraktaroglu (2011) conducted a study in banking sector in Turkey and reported that generally there was a decreasing trend for all type of efficiencies and VAIC beginning mostly in 2003. This decreasing trend began to go slightly upward again in years 2005 and 2006.

Taliyang et al. (2011) conducted a study in Malaysia with data from a sample of 150 companies listed in Bursa Malaysia that consist of five industries: information technology, consumer product, industrial product, trading/services and finance and reported that about 72.6 percent of the companies selected disclosed intellectual capital in their annual reports. The data showed that their variables were determinants of intellectual age, size, director ownership and growth. Fatoki (2011) conducted a study in South African SMEs and reported that a significant positive relationship between human, social and financial capital and the performance of SMEs. Pierre and Audet (2011) conducted a study in Canadian and French manufacturing SMEs that

participated in a business diagnostic activity and stated that SMEs that adopt different strategies organize their intellectual capital in a particular and adapted way.

In 2012 Khalique (2012) conducted a comparative study on SMEs operating in Malaysia and Pakistan in intellectual capital perspective found that intellectual capital has significance impact on the performance of SMEs in both the countries. Alipour (2012) conducted a study in Iran with 39 insurance companies selected as the sample and revealed that value added intellectual capital and its components have a significant positive relationship with companies' profitability.
Using data from 106 organizations Acquahh (2012) conducted a study in Ghana and purported that family owned firms benefit more from networking relationships with bureaucratic officials than nonfamily firms. However, nonfamily firms benefit more from networking relationships with community leaders and firm-specific managerial experience than family owned firms. Networking relationships with politicians impede performance for nonfamily firms. Nonfamily firms were better able than family owned firms to use their firms' specific managerial experience to manage the resources and capabilities obtained from networking relationships with community leaders to create value. Moreover, firm specific managerial experience attenuated the detrimental effects of networking with politicians for both types of firms.
In India, Pal and Soriya (2012) conducted a study with data collected with a sample of 105 pharmaceutical companies and 102 textile companies and reported that profitability and intellectual capital were positively associated but no significant relationship was observed between intellectual capital with productivity and market valuation in both industries. In spite of the growing importance of intellectual capital, its reflection was not proportionally observed in the financial performance of the selected sample of companies.
Komnenic and Pokrajcic (2012) by using data from 37 multinational companies in Serbia reported that human capital is positively associated with all three corporate performance measures. The hypothesis regarding a positive association between structural capital and MNCs' profitability and productivity was confirmed only partially since the results indicated that the structural capital variable show a statistically significant and positive relationship only with the performance measure-return on equity.
Mani and Sharma (2012) with a dataset consisting of 22 private sector banks and 27 public sector banks in India conducted a study and reported that there is a reduction of 839.32 per cent in gap index of HCE between public and private banks. The "Annual Compounded Growth Rate" of public banks was more than the private banks which show that public banks have made great efforts to be competent with private banks. The private sector banks have outperformed than the public sector banks with regard to human capital efficiency. The gap between the human capital efficiency of both the public and private banks are reducing year by year.
Mondal and Ghosh (2012) conducted another study in Indian banking sector and concluded that the relationships between the performance of a bank's intellectual capital and financial performance indicators, namely profitability and productivity are varied. The study results suggested that banks' intellectual capital is vital for their competitive advantage.
Rezaian and Naeiji (2012) in study collected data from 322 managers in 129 small and medium firms and purported that the effect of intellectual capital on the organizational performance in SMEs is found positive.

Mehralian, Rajabzadeh, Sadeh and Rasekh (2012) conducted a study in pharma companies listed in the Iranian Stock Exchange (ISE) over the six-year period of 2004 to 2009 and concluded that the relationships between the performances of a company's IC and conventional performance indicators are varied. The findings suggested that the performance of a company's IC can explain profitability but not productivity and market valuation in Iran. Also their empirical analysis found that physical capital (VACA) was the one which was seen to have the major impact on the profitability of the firms over the period of study.

In Australian financial sector companies Joshi, Cahill, Sidhu and Kansal (2013) conducted a study and stated that the value creation capability of financial sector in Australia was highly influenced by human capital. About two thirds of the sample companies had very low levels of intellectual capital efficiency. The performance of various components of VAIC and overall VAIC were different across all subsectors in the financial sector. Investment companies showed high value VAIC due to higher level of human capital efficiencies whereas the insurance companies reported focus on physical capital rather than human and structural capital leading to lower VAIC.

Janosevic and Dzenopoljac (2012) conducted a study in 300 Serbian top performing companies in terms of export and reported that majority of similar studies have shown so far that IC has a significant impact on financial performance. However, in the case of top Serbian exporters, the significant impact of IC on financial performance was not determined.

Kehelwalatenna and Premaratne (2012) carried out a study by using data drawn from (NYSE) New York Stock Exchange listed banking sector firms in the US over the financial years 2000 to 2010 and reported that the findings of significantly positive associations of IC with firm performance and implied important empirical validations on the role of IC as a strategic asset.

Khan, Khan and Khan (2012) with data collected from financial statements from 2007 to 2010 of the five banks of Pakistan conducted a study and purported that the banks intellectual capital has significant impact on the financial performance.

Dadashinasab, Sofian, Asgari and Abbasi (2012) conducted a study with data drawn from automotive industry and spare parts sector companies that were listed in Tehran Stock Exchange (TSE) in Iran and reported that firms' intellectual capital had positive impact on financial performance and the components of VAIC (VACA, VAHU, and STVA) were positively and significantly influenced on ROA, ROE and GR.

Kehelwalatenna and Premaratne (2013) with 191 listed banking sector firms in the New York Stock Exchange (NYSE) conducted a study and demonstrated that the IC level of firms has declined over the years with a substantial decrease in 2001, 2002, 2007 and 2008, during the financial turbulent situation in the economy. Moreover, the statistical evidence showed a negative relationship between IC and productivity except for 2009 and 2010. It was also noted that the relationship between IC and profitability measured from the managers' perspective was negative since 2006. However, the association between IC and profitability from the owners' point of view was positive throughout. In addition, the empirical results did not support a positive association between IC and investor response towards organizations. Based on these findings, the study argued on the appropriateness of IC as a strategic asset in the process of value creation.

Salteh, Nahandi and Koushali (2013) in Iran conducted a study with data related to 40 companies in Tehran Stock Exchange during the years between 2006 and 2010 and

demonstrated that a negative relationship between governmental ownership and intellectual capital performance and a positive relationship between governmental ownership and value added to structural capital coefficient. Also this study not presented any relationship between governmental ownership and value added to utilized capital coefficient and value added to human capital coefficient.

In Malaysia, Khalique, Shaari and Isa (2013a) conducted a study in electronic enterprises and concluded that all 4/four components. i.e.; human, customer, technological and spiritual capital have strong positive correlation with performance. In addition, Khalique, M., Isa, A. H. b. M., & Shaari, J. A. N. b. (2013a); Khalique, M., Isa, A. H. b. M., & Shaari, J. A. N. b. (2013b); Khalique, M., Shaari, J. A. N. b., Isa, A. H. M., & Samad, N. B. (2013) conducted studies and concluded that intellectual capital has major role to enhance the performance of the organization.

Leaniz and Bosque (2013) conducted a study in Spain with a sample of 400 Spanish consumers and concluded that economic, social and environmental domains of sustainability have a positive direct effect on corporate reputation. Additionally, this study showed that economic sustainability is considered to be the most important dimension to enhance corporate reputation.

Corcoles (2013) conducted a study in European Universities and reported that experience gained from the case studies provide a basis to understand how European universities are measuring and managing their intellectual capital. Intellectual capital analysis is critical for the improvement of internal management and for facilitating benchmarking analysis in European Universities. Lueg (2013) conducted a study in mid-size listed multinational Danish manufacturers of retail equipment and shop solutions and illustrated the use of IC as a competitive tool for companies that face pressure from low-cost competition. Increments in IC will affect SHOP INC's BM in the areas of culture, organizational form, technical administration and inclusion of strategic partnerships as well as the cost structure and higher profitability.

The study of Razafindrambinina and Santoso (2013) conducted in Indonesia with data used from publicly listed non-financial institutions on the Jakarta Stock Exchange found no significant relationship between intellectual capital and its components with brokers' investment recommendations, however it reinforced that brokers' recommendations are almost invariably based on financial performances. The results revealed that the Indonesian capital market has not capitalized on how intellectual capital might enhance a company's potential and that could be attributed to the low awareness of the importance of intellectual capital by both brokers and investors at large.

Jasour, Shagagi and Rezazadeh (2013) with data from 22 pharmaceutical companies in Iran conducted a study and reported that companies' efficiency and optimal use of material and intellectual resources affects their profitability index. Also, efficiency has a negative effect on the productivity of human capital and productivity of structural capital has a positive impact on equity. Finally, no evidence was found about the hypothesis that the market value changes of companies can be attributed to the performance of intellectual capital and it seems that Iranian pharmaceutical market still continues to be sensitive to material capital more than intellectual capital. To explain this negative relationship, it should be said that paying attention to human capital efficiency results in reducing productivity and waste of cost in pharmaceutical companies, which mean that the companies that are looking to increase productivity through the deployment of physical and tangible assets normally do not spend a lot of effort to

efficiently use the of human resource capabilities. On the other hand, companies that emphasized the abilities and knowledge of human resources might pay little attention to efficient use of tangible and physical assets.

Hamehkhani, Boochani and Barani (2014) in Iran conducted another study with data in the time period from 2007 till 2010 and sample of 12 companies and reported a significant relationship between intellectual capital with market value and the financial performance of active companies within the steel industry.

Khalique and Isa (2014) conducted a study in SMEs in boutique sector of Kuching, Malaysia with a returned sample of 400 from intellectual capital perspective and found that intellectual capital has a significant impact on the performance of boutique sector of SMEs. The study of Khalique, Shaari and Isa (2014) conducted in banking sector of Kelantan, Malaysia also found the significant impact of intellectual capital on organizational performance.

Conclusion

This paper has presented the review of empirical studies conducted from intellectual and organizational performance perspective. The in-depth review of literature in this context shows that intellectual capital plays an important and fundamental role in the organizational performance and it is considered as the basic fundamental strategic knowledge based resource for any kind of organization. Thought the review of this literature proves that intellectual capital have significant positive impact on organizational performance but a wide literature is present in the context of large organizations and is in western context, and thus this review also shows that there is lack of studies in the context of intellectual capital from developing countries context and more specifically in small and medium enterprises (SMEs) context. Therefore the empirical studies should be encouraged in developing countries as Pakistan and Malaysia from intellectual capital and SMEs performance perspective.

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