

Investment in intellectual capital and achievement of the competitive advantage in hotel sector

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ABSTRACT

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The primary objective of the research paper is to provide some insights on the concepts of intellectual capital and its important dimensions alongside to investigate the possible association between intellectual capital and attainment of competitive advantage. This study focuses on Iraqi hotel industry which is an under-research area in the context of intellectual capital and its relationship with competitive advantage. An adapted questionnaire was utilized to collect the responses from top and middle level managers of four and five-star hotels in Iraq. The reliability and validity of data collection instrument were measured through Cronbach's alpha, Composite Reliability and Average Variance Extracted respectively. The competitive advantage was then regressed against Human, Relational and Structural capital by application of Partial Least Square methodology. Results of the study showed a positive and strong connotation among intellectual capital and attainment of competitive advantage. The human capital had the highest contribution for competitive advantage in hotel sector of Iraq. The top management of hotels should take interest to develop, maintain and retain human capital to attain competitive advantage over competitors.

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1. Introduction

The success and survival of originations in the current competitive environment and knowledge-based economy is largely dependable on creating, fortifying and preservation of competitive advantage. Mintzberg and Westley (1992) emphasis the fact that in order to accomplish and hold competitive advantage, originations need to offer superior quality products and services with greater value as compared with its competitors. In order to reach superior quality product and services, organizations have to maintain a superior information and knowledge along with the adaptation of best practices. Kong (2007), also proposed that knowledge owner (knowledge worker) through their intellectual capital are the sources of sustained competitive advantage. Some of unique features of intellectual capital proposed by Lin (2013, pp. 54-55) as a knowledge-based resource which is highly valuable are. "1) *Intellectual capital is valuable, rare, imperfectly imitable and non-substitutable*; 2) *Intellectual capital is communicable to others*; and 3) *Components of intellectual capital are both distinctive and comprehensive*"

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In the light of aforementioned unique characteristics, intellectual capital may be proposed as, one of the potential sources of achievement of competitive advantage for any organization. Kong and Prior (2008) highlighted that financial and physical assets are no longer the sources of attainment and sustainment of competitive advantage in the current global knowledge-based economy. In future, knowledge and application of knowledge can become of sources and foundation of competitive advantage due to emergence of globalization and Fourth Industrial Revolution. Porter (1998) described that Competitive advantage is a unique competitive position of any organization. In order to leverage competitive advantage, organizations require to differentiate themselves and make strategic moves ahead of the competing organizations to achieve the first mover advantage. Zimmer et al. (2005) proposed the role of human resource as the obtaining intellectual capital in imperative and essential. The competitive advantage is the combination of the factors that distinguishes any business from its competitors and provides a unique value proposition to consumer which is superior to the offerings of the competing players. If any organization wanted to achieve competitive advantage, the organization would have to either reduce the cost of production which could lead to low prices as compare to competitor or acquire some unique feature from the value chain that may result in offering differentiation in terms of products or services at a premium and justified price (Zimmerer et al., 2005).

Sofian et al. (2004) explained that intellectual capital is the professional knowledge, experience, skills, technological capacities and goad relationships, when they are coordinately applied towards the competitive advantage. Similarly, according to Schultz (1993), intellectual and human capital are one of the key assets of a company which helps to increase its productivity and supports in attaining competitive advantage.

The present study focuses on hotel industry of Iraq to dig out the role of intellectual capital for attaining competitive advantage. Traditionally Iraq is a tourism-based economy and the hotel industry has a central role in tourism development. The intense competition among hotels requires attaining competitive advantage to remain successful and profitable. Prior research has investigated the imperative pretended by intellectual capital in the Hospitality business. However, there are fewer studies which aimed at explaining the contribution of intellectual capital and its components in attaining competitive advantage (Bontis et al., 2002). The objective of the study is to explore the contribution of each component of intellectual capital for competitive advantage which ultimately improves the business performance. This will at that point enable us to distinguish the most basic components of intellectual capital for hotel industry. Further, we mean to investigate the significance of the intellectual capital for the hotel industry in Iraq to provide suggestions for executives and managers in hotel business with the goal that they can enhance their operations and pick up an advantage over competitors. This study is aimed to quantitatively explore and investigate the intellectual phenomenon in special circumstances of Iraqi hotel industry which is relatively unexplored industry. In this way this study will contribute to the existing knowledge by verifying the importance and the role of intellectual capital in a new geographical area which is neglected by researchers.

The rest of the research paper is structured in various sections, next section is designated to literature review of the multiple aspects of intellectual capital followed a section on detailed discussion on the link among intellectual capital and attainment of competitive advantage. Section three provides information on the methodology used for the current study. Fourth part of this paper is regarding the results and discussion followed by a section describing some of the limitations and final section concludes the paper.

2. Literature review

A thorough literature is reviewed on intellectual capital and its various dimensions like human capital, structural capital relational/customer capital. Various research studies have been conducted in order to establish framework that intellectual capital can be cradled and enhanced and superior organizational performance can lead to the achievement of the competitive advantage.

Intellectual capital has been under discussed for more than a decade. Since then there has been no agreement on the definition of the term due to its emergence phase. There are various definitions proposed by the researchers, many researchers define intellectual capital in the special perspective of knowledge-based economy and the possible role of intellectual capital in the establishment of global knowledge based economy. Petty and Guthrie (2000) reported that the intellectual capital is gaining attentions both from practitioners and academic researchers. Khalique et al. (2013) proposed several dimensions of intellectual capital. Fig.1 shows numerous aspects of intellectual capital named as human capital/property, structural capital and customer/relational capital.

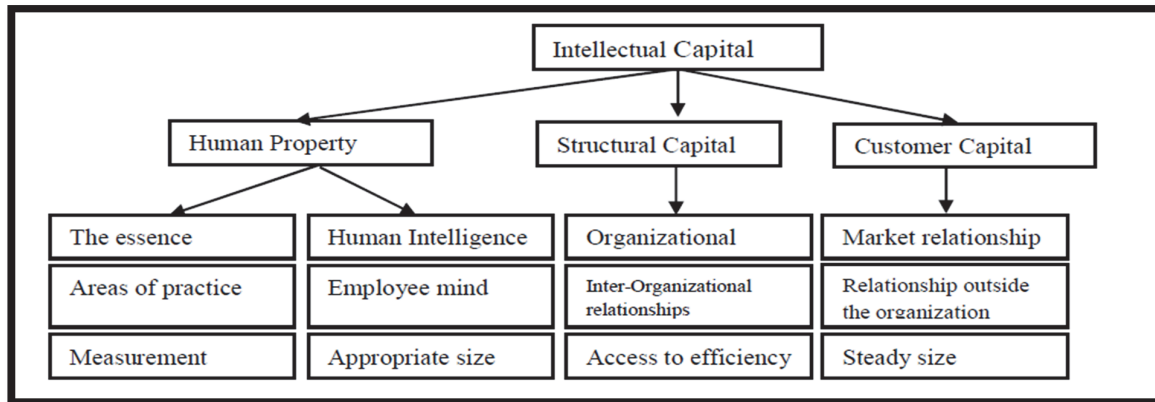


Fig. 1. The Multiple Dimensions of Intellectual Capital

Intellectual capital is therefore, includes the capabilities and resources that are uncommon valued, inimitable and not substitutable, which offer enduring competitive advantage and superior and enhanced performance (Barney, 1991). Intellectual capital is widely accepted to have three basic elements.

2.1 Human Capital

Human capital is very important element of intellectual capital (Sveiby, 1997). Human capital, is normally classified as the pivotal element and the driving force for the relational capital/customer capital and structural capital (Li and Chang, 2010). Furthermore, it includes the competencies and the capabilities of the employees which are vital to create value for company and customers. Specifically, they have tried equating the human capital with the combination skills, attitude, abilities and competencies of people which are contributing towards superior organizational productivity. The composition of the factors of production has changed the modern era where the knowledge has become one of the important factors of production (Sveiby, 1997). Therefore, superior quality of human capital ultimately produces high return by attaining competitive advantage (Bontis et al., 2002). Human capital can be described as how efficiently a company is using and exploiting the potential of human resources, learning skills, experience and education to obtain competitive advantage which leads to better profitability.

2.2 Relational capital/customer capital

Relational capital is also referred as customer capital which is related any organization with its external and internal stakeholders. The narrowed concepts of customer capital can be described as the relationship between the organization and its customer. Cabrita and Bontis (2008) articulated the relational capital as the knowledge and values embedded in the relationship with clients, corporate associations, suppliers, buyers or any other stakeholder that can influence the organization add value in the organization and can lead to better organizational performance. The organizations have to interact with the external stakeholders to exchange the knowledge and connect the external stakeholders with the organization (Kong & Thomson, 2009). Relation knowledge is crucial in a sense to develop the perception of an organization for external stakeholders. It is important to communicate and constantly improve the knowledge on cus-

tomers, government, society and distributors (Kong & Thomson, 2009). As an important part of intellectual capital, relational capital helps to obtain better relationship with customers, mutual understanding with suppliers and the overall perception of the organization which is very important ingredients of a competitive advantage (Bontis, 2004). Conclusively, relational capital helps to maintain and develop interpersonal relation with external stakeholders (Gogan et al., 2016). Moreover, customer loyalty which has central position in current competitive arena is maintained and developed by strong relational capital (Shehzad et al., 2014).

2.3. Structural capital

The concept of structural capital is regarded as the systems and configuration of the organization that are in place for the employees for better productivity. These systems and structure remains intact event after employees leave the company (Edvinsson & Malone, 1997). Structural capital can be seen as supportive and helps infrastructure which includes procedures, policies, and systems, which enable employees to perform up to their optimum potential and also help them enhance the capacity of any employee. The structural capital holds the ownership of the intellectual capital which is very important for an organization to develop human capital (Khanqah et al., 2012). In other words, structural capital is a way to add efficiency in human capital of an organization. The supportive environment is very important to exhaust human capital at its optimum level. Structural capital provides the supportive tools to human capital to endeavor new opportunities (Bontis, 1998). It is the systematic procedure and mechanism of an organization to run a business (Cuganesan, 2006). The specific culture of an organization is also the product of structural capital which helps human capital for manifestation while operating (Budiarti, 2017). It is the knowledge directory which is shared among the employees working in the organization and helps them exaggerate their capabilities at maximum level. The structural capital is the property of the organization and will remain with the organization when people leave. Therefore, it is the inimitable component of intellectual capital to create sustainable competitive advantage.

2.4. Intellectual capital and competitive advantage

The role and importance of intellectual capital, its impact on superior organizational performance which can lead to competitive advantage is discussed greatly in the existing research literature on the subject. Competitive advantage may only be achieved through the exploitation of resources which are scares, firm-specific assets and intangible in nature (Spender, 1996). Wang and Chang (2005) recognized intellectual capital as one of the fundamental determinants of organizational current and prospectus performance and competitiveness. Tovstiga and Tulugurova (2009) acknowledge that internal resources and most importantly its intellectual capital play a very pivotal role in the competitive outcome of small and medium size businesses. Additionally, they also noted that the attainment of competitive advantage was possible due to the mobility of the intellectual capital in the form of experience, knowledge, technical knowhow and strategic competencies. The existing research literature on the subject further confirms that the company's performance and competitive advantage is mainly influenced and determined by the application of intellectual capital (Barney, 1991; Tovstiga & Tulugurova 2009). Competitive advantage is considered as an output of which is achieved through valuable, rare and human resources, supportive systems and customer relationship management, all these factors will lead towards sustainable competitive advantage. Bontis et al. (2002) described and connected human capital with competitive advantage and proposed that sustainable competitive advantage can only be achieved when employees are adding value in the organization, the value should be with unique characteristics and rare in nature.

3. Research Framework

Presently, there is an agreement among the researchers on the area, that intellectual capital can be classified in three broad dimensions, Human capital, structural capital and customer/ relational capital (Mouritsen et al., 2005; Cuganesan, 2006; Kim & Kumar, 2009). Based on the existing literature the framework is proposed for the current study in Fig. 2 as follows.

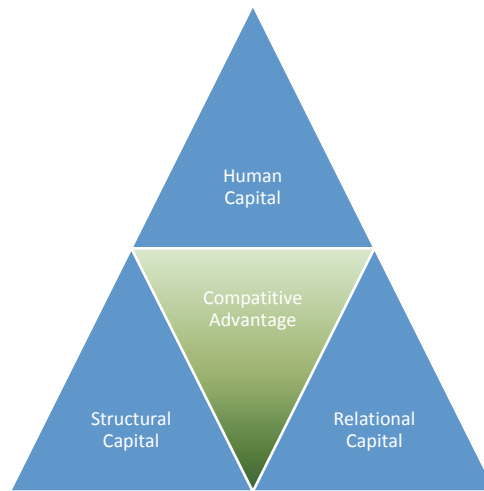


Fig. 2. Conceptual Model

As per the discussion and based on the previous research literature in the aforementioned deliberation and discussion the below mentioned hypotheses can be proposed for the present study.

Hsu and Fang (2009) proposed that high quality human resource is critical for the success and organizational performance.

Hypothesis 1 – H1 Human capital is positively associated and linked with the performance of an organization, thus it's the source for competitive advantage in hotel sector of Iraq.

Subramaniam and Youndt (2005) described that competitive advantage could be achieved potentially through relational capital/customer capital, and the relational capital/customer should be embedded in the organizational network.

Hypothesis 2 – H2 Relational/customer capital is positively associated with competitive advantage of Iraqi hotels.

Kong and Prior (2008) proposed that structural capital is derived from the tacit knowledge of the employees of any company thus may be the possible source of achievement of competitive advantage.

Hypothesis 3 – H3 Structural capital is strongly and positively associated with the competitive advantage of hotels in Iraq.

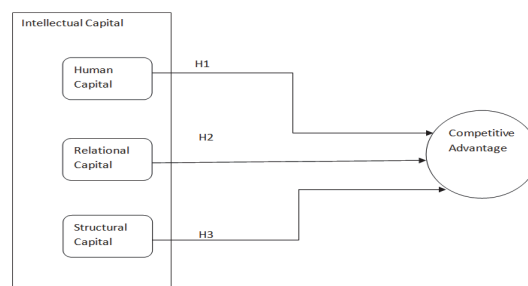


Fig. 3. Path Diagram

In this study, we select high class hotels to analyze the proposed model because the importance of intellectual capital in high cost hotel is more significant as compare with lower class hotels (Walsh et al., 2008). For this purpose, the hotels categorized into four stars and five stars were selected for this study. The data was collected through questionnaire and the questionnaire was adapted from past literature. Intellectual capital was subdivided into three dimensions; human capital, relational capital and structural

capital. The three dimensions of intellectual capital were measured by utilizing Cabrita and Bontis (2008) scale. The instrument to measure intellectual capital consists of 61 items whereas, 20 items are developed to measure human capital, 25 items were utilize to measure relational capital and finally 16 items are used to measure structural capital. While the competitive advantage was measured by adapting the scale developed by Chahal and Bakshi (2015). The responses were collected on 5-point Likert scale. The unit of analysis for the study was upper scale hotels in Iraq (Basrah Hotel, Basrah International Hotel, Ishtar Sheraton Hotel Baghdad, Erbil International Hotel, Babylon Warwick Hotel Baghdad, Al Mansour Melea Hotel, Royal Tulip Al Rasheed Hotel Baghdad, and International Palestine Hotel Baghdad) and data were collected from top level and mid-level hotel managers through self-administrated questionnaire. A purposive sampling technique was adopted to select managers the randomly from selected hotels. In total, 118 managers were contacted for the purpose of data collection and finally 93 questionnaires were completely filled and selected for further analysis. The response rate is 78.8% which is adequate to generalize the results of this study (Sekaran & Bougie, 2010).

4. Data analysis and results

The descriptive statistics is presented in Table 1. Mean, maximum and minimum values were calculated to give an overview of responses on variables. It is noted that human capital has the highest mean value among all the dimensions of intellectual capital. Moreover, Skewness and Kurtosis were calculated to examine the normality of data. All the variables are under the standardized values for skewness (3 to -3) and kurtosis (8 to $_{-8}$) (Kline, 1998).

Table 1
Descriptive Statistics

Variables	Mean	Skewness	Kurtosis
Human Capital	4.43	-1.837	-1.435
Relational Capital	4.01	-1.947	-0.947
Structural Capital	3.99	-1.355	-0.982
Competitive Advantage	4.65	-1.483	-0.752

The reliability analysis was applied to measure the internal consistency of responses. Cronbach's alpha was calculating for each variables. The values of Cronbach's alpha are presented in Table 2, which revealed that the value of alpha for all the variables were in acceptable range (above 0.7) (Fornell & Larcker, 1981; Nunnally, 1978).

Table 2
Reliability Analysis

Variables	Cronbach's Alpha	No. of Items
Human Capital	0.837	20
Relational Capital	0.873	25
Structural Capital	0.912	16
Competitive Advantage	0.823	12

The validity analysis was carried out to measure the convergent and construct validity of instrument. The loading value of each variable and average variance extracted values were calculated and analyzed. The loading value for each variable is under 0.7 and the squared loading value is grater then 0.5 as presented in Table 3 (Vinzi et al., 2010; Nunnally, 1978).

Table 3
Convergent Validity Analysis

Variables	Composite Reliability (CR)	Average Variance Extracted (AVE)
Human Capital	0.911	0.724
Relational Capital	0.831	0.889
Structural Capital	0.954	0.793
Competitive Advantage	0.843	0.810

The construct validity of instrument has been analyzed by calculating the square root of average variance extracted. The value for square root of AVE was greater than the correlation among all variables in the scale (Table 4) which is accepted as mentioned by Chengalur-smith et al. (2012).

Table 4
Construct Validity

	Competitive Advantage	Human Capital	Relational Capital	Structural Capital
Square Root AVE	0.90	0.850	0.9428	0.890
AVE	0.810	0.724	0.889	0.793

The partial least square (PLS) method has also been applied to analyze the contribution of the intellectual capital for competitive advantage. Fig. 3 illustrates the path variables and corresponding coefficients. The statistics of structural model is presented in Table 5. The result shows the intellectual capital accounts for 0.538 or 53.8% variance in competitive advantage as represented by the value of R^2 . The beta coefficient of human capital has the highest contribution for competitive advantage (0.43). Similarly, relational capital has the second highest beta value in the model (0.31). While structural capital has the lowest beta value in the model (0.24). The Table 5 illustrates that all the results are statistically significant.

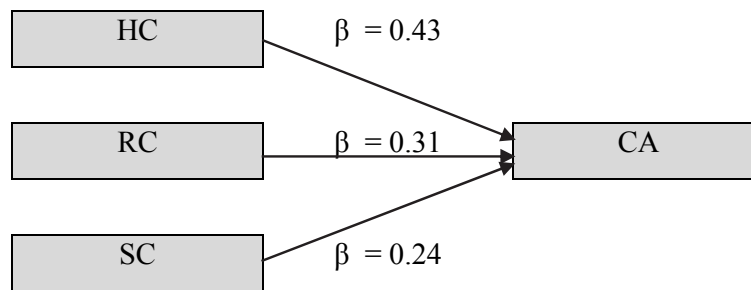


Fig. 4. Structure Diagram

Table 5
Regression Results for Intellectual Capital

Path	Coefficient	p-value
Human Capital → Competitive Advantage	0.431	0.00
Relational Capital → Competitive Advantage	0.317	0.034
Structural Capital → Competitive Advantage	0.244	0.012

5. Discussion

This study aimed to investigate the role of intellectual capital in attaining competitive advantage. Intellectual capital was measured through three dimensions as mentioned by Khalique et al. (2013). The results of this study evident that intellectual capital had a significant impact on competitive advantage in hotel sector of Iraq. The study revealed that firm's interest in human capital fundamentally influences its aggressive position in the market and industry. The findings of human capital impact on competitive advantage and they are consistent with the previous literature (Wang & Chang, 2005; Hsu & Fang, 2009). The paper suggests that the hotels should take interest in the activities to enhance to develop and enhance positive attitude in staff. Similarly, hotel management should invest in the training activities for employees to get competitive advantage in industry.

Furthermore, Relational capital has more clear effect on the company's upper hand than structural capital. Both relational capital and structural capital had positive relationship with competitive advantage. This study approves the findings of previous studies on relational capital and structural capital (Bontis, 1998; Wang & Chang, 2005; Mehralian et al., 2013). It is noted that as explained by the results, all the dimensions of intellectual capital had a strong and significantly positive influence on attaining competitive advantage in Iraqi hotel industry. This study analyzed the individual contribution of three dimensions of

intellectual capital for competitive advantage. The top management of hotels should understand the importance of human capital for competitive advantage. The relational and structural capital is also very important for achieving sustainable competitive advantage. The improvement in intellectual capital will help Iraqi hotels to get competitive advantage over the competitors and ultimately the business performance will improve.

6. Conclusion and Recommendations

The study aimed to analyze the role of intellectual capital components to attain competitive advantage in hotel industry of Iraq. The under study research phenomenon had lack of evidence in hotel industry; therefore, the reason for this investigation was to check the significance of intellectual capital in Iraqi setting. The examination has uncovered that intellectual capital had a fundamentally positive effect over competitive advantage. It was noticed that human capital strongly could influence on competitive advantage in hotel industry of Iraq, while structural capital had the lowest impact among three dimension of intellectual capital. Furthermore, the study was conducted in the Iraqi context which is a developing country. Therefore the results of this study need further verifications. It is expected that the different results could be revealed in different works and socio-economic settings. In addition, a longitudinal study is advised to record the dynamic impact of intellectual capital on competitive advantage over the period of time.

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