

RESEARCH ARTICLE



The Impact of Intellectual Capital on Organizational Innovation: A Field Study

Fouad Thabet Daloua El-Gamal^{1*} | Abd El-Hamed Mostafa Abou Naem¹

¹Cairo University



Abstract

Intellectual capital can generate value for organizations and improve organizational innovation. This study aims to investigate the effects of intellectual capital on corporate innovation. Mixed research methodology approach has been used by combining both qualitative and quantitative analysis to explore and empirical examine the research model. The targeted population of interest is the licensed pharmaceutical manufactures, 90 organizations in the Egyptian pharmaceutical industry throughout its three main sectors (11 public, 70 local private and 9 MNCs). Statistical analyses are employed based on the questionnaires gathered from 39 pharmaceutical manufactures' companies (44% response rate). In addition, sixty-three "63" in depth interviews have been conducted with both top and middle managers. The research findings indicate that all dimensions of intellectual capital (human, structural, and relational capital) have positive significant effects on organizational innovation of pharmaceutical manufactures' companies. The study clarifies that the most dominant dimension is structural capital, which provides the largest and strongest support to pharmaceutical manufactures' companies. The deep realization of the importance intellectual capital and its impact on innovation helps leaders to adopt accurate system to run organizational innovation in a better way, which lead to sustainable competitive advantage for organizations.

Keywords: Intellectual Capital (IC), Human Capital (HC), Structural Capital (SC), Relational Capital (RC), Organizational innovation (OI), Input, Process, Outputs, Outcomes.

1 | INTRODUCTION

In the twenty-first century, corporations find themselves operating in a dynamic climate, known by severe competition, internationaliza-

tion, quick technology change, and short life cycles for the product Grant (1996) . Based on this fact, traditional management strategies and practices become ineffective and insufficient to outperform competitors and create more value Teece (2007) .

Thus, today's organizations have to ask themselves is what they can do to survive and thrive under such conditions?

Previously, it was believed that the most important asset in a company would be the physical/tangible assets such as machinery, equipment and building Soetanto and Liem (2019). However, nowadays, as the competition becomes increasingly complex, the organizations need to be unique. This uniqueness can be achieved by shifting the organization's focus to intangible resources that are recognized as a basis of innovation, competence, and later on, success. These invisible resources include qualifications, experience of its employees, information technology, databases, organizational culture, structure, and organization's relationships with its employees and external stakeholders Andriessen (2004).

Because of the ambiguous effect of IC on innovation, scholars have been looking for hidden relationships between IC and innovation. According to Bontis et al. (2005), "Despite the fact that the construct of IC has been categorized as the focal factor of the organization's success and competitiveness, yet literature falls short to measure the impact of different sides of Intellectual capital on organizational innovation." Besides, Subramaniam and Youndt (2005) assert "the impact of IC on innovation is accepted in a broad manner, but still there is a need of an in-depth exploration of this impact." Dost et al. (2016).

Pondering these issues, this study proposes valid questions such as; how to formulate the multifaceted and complicated phenomenon of IC? Which IC dimensions are essential for OI? How the IC dimensions do interrelated each other to impact OI?

LITERATURE REVIEW

INTELLECTUAL CAPITAL

Supplementary information The online version of this article (<https://doi.org/10.15520/jassh.v6i7.512>) contains supplementary material, which is available to authorized users.

Corresponding Author: Fouad Thabet Daloua El-Gamal

Fouad Thabet Daloua El-Gamal

Email: fthabet@mail2team.com

The significant involvement in the advancement of the intellectual capital principle is given by many researchers such as; Sullivan (1999) Sullivan (1999), and Kim et al. (2011). All the principles spin around the part of value creation in addition to intangibility. Edvinsson and Malone (1997) recognized that the Intellectual Capital as a package of Intangible Assets such as competencies, abilities, and effective operations which making greater organizational performance and besides results in value creation.

Nevertheless, creating monetary value for enterprises is very important, but it is not a magic way to guarantee of prosperity and continuity. However, we can say that if intellectual capital is managed precisely, it is predicted that leads to the emergence of the required benefit value in the market. Furthermore, Social value can be defined by the advantages returned by the organization to the community. Eventually, Sustainable value demonstrates an organization's capacity to fulfill the demands of the market and society requirements without affecting the ability to create value for the next time. Thus, intellectual capital functions an important part, as investing in intellectual capital in addition taking the advantages happen in another time, such as the behavior of R&D expenditure. With no doubts, anyone can agree that if intellectual capital of an organization constitutes economic, efficiency, sustainable, and social value, the organization's financial position and its performance of the market will definitely gain strength Dzenopoljac et al. (2017).

INTELLECTUAL CAPITAL DIMENSIONS

In spite of the fact that; there is no agreement on the definition of intellectual capital, it is known that there is a wide agreement that intellectual capital has three main dimensions: human capital, structural capital, and relational capital. (It is important to note that the last two elements exist at the organizational but not in the individual level).

This study categorized the intellectual capital into three aspects as the following:

1. Human capital: Many researchers said that HC can be explained as the organizational knowledge that can be found through staff but does not keep in the organization when the employees leave the organization and go home. In addition, the literature

that were made on human capital, which emphasizes the positive impact of human capital on the various indicators concerning the performance of the company.

In brief, human capital is seen through the effectiveness of the organization in the optimal utilize of the efficiency and skill of its employees, as well as their experience, education and learning in creating economic value for the organization in which they work [Halim \(2010\)](#).

2. Structural capital: The concept of SC can be related to the organizational framework and infrastructure, which reinforce employees' output. Besides being vital element, it keeps in the organization even when employees leave the organization. We can say that structural capital can be known as the encouraging structures and facilities that contains systems, procedures and processes, which increase employees' ability to work [Roos et al. \(1997\)](#). Companies with good structural capital will have a favorable culture, which lets employees to do initiative ideas. Structural capital is the decisive factor through which intellectual capital can be measured at the level of the organization as a whole. This capital can be considered as the supportive substructure of HC including all resources that cannot be human of knowledge (databases, manuals, copyrights) in the organization [Bontis et al. \(2002\)](#).

3. Relational capital: RC is about the relationships that the company makes with both the internal and external stakeholders. Authors underscored that RC is the knowledge and awareness that can be acquired through communication with clients, providers or any other stakeholders which impact to company's existence and create value [Shipilov and Danis \(2006\)](#).

Looking at these three dimensions separately is insufficient to understand IC. It is important to note that IC does not consist of a stock of information, files or paper, and it is not just what individuals know or how they work [Grantham et al. \(1997\)](#). It is not even the sum of the previous items. HC, SC and RC can be useful for organizations only if they are linked through connectivity.

ORGANIZATIONAL INNOVATION

There is a common misunderstanding in using the term "innovation" among deferent types of people, which tend to confuse the term to mean something new or an invention. However, innovation is a process where creativity defines the traits individuals should have when they engaged in an innovation process to develop and produce new innovative concepts [Anderson et al. \(2014\)](#). The most commonly used classification of innovation distinguishes it as incremental or radical:

Incremental innovation

Incremental innovation tries to meet the needs of the current customers or markets at a rate consistent with the current technology. The strategic focus of incremental innovation is market-dominated growth with diversification by improving and expanding current products and services within a short time. Incremental innovation projects call for the ability to reinforce, recombine, and take advantage of existing knowledge resources [Subramaniam and Youndt \(2005\)](#).

Radical Innovation

On the other hand, radical innovation seeks to satisfy the needs of customers or markets. Moreover, the type of change in radical innovation is bigger than in incremental innovation. However, the success of a radical innovation project depends on the ability to make prevailing technologies obsolete by transforming the old knowledge into new knowledge, thereby producing fundamental changes in an organization. [Jansen et al. \(2006\)](#). It is important to note that although a radical project may results in a lower level of mean performance than an incremental project, which utilizes existing knowledge, the increased variance of performance implies the high likelihood of significant profits that small increments in current products or processes cannot generate. [Taylor and Greve \(2006\)](#).

RESEARCH METHODOLOGY

Research Problem and Objectives

According to a review of the literature and preliminary exploratory study, the research problem can be stated as: "there were conflicting results and models on intellectual capital and its impact of organizational innovation." This inconsistent results and

THE IMPACT OF INTELLECTUAL CAPITAL ON ORGANIZATIONAL INNOVATION: A FIELD STUDY

models could lead organizations to have difficulties in identifying and managing IC to increase OI to have a sustainable competitive advantage in order to survive in a world shaped by globalizations.

The main objectives of this study are:

1. Investigating the effect of intellectual capital on organizational innovation in pharmaceutical manufactures' companies sectors in Egypt.
2. Identifying which dimension of intellectual capital dimensions (human, structural and relational capital) has a greater / lesser effect on organizational innovation in pharmaceutical manufactures' companies sectors in Egypt.

Research Model and Measurement

According to the literature gap analysis and research objectives, an empirical research model has been developed proposing a positive relationship between the three intellectual capital dimensions and organizational innovation process (Figure 1).

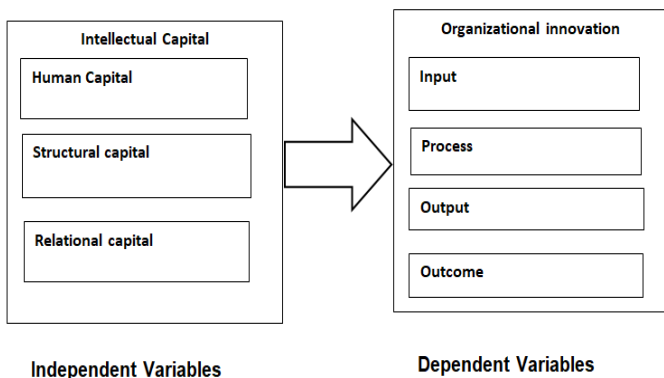


FIGURE 1: Proposed research model

Research Hypothesis

H1. It is expected that IC has a positive effect on organizational innovation.

H2. It is expected that HC has a positive effect on organizational innovation.

H3. It is expected that SC has a positive effect on organizational innovation.

H4. It is expected that RC has a positive effect on organizational innovation.

This study is considered exploratory-descriptive and applied mixed-method research [Creswell \(2003\)](#) .

For collecting the data, quantitative and qualitative methods are used to develop a rich insight and deep understanding of the research phenomena. A critical feature of mixed-method research is the sequential collection of quantitative and qualitative methods (such as data collection, data analysis, and presentation) within the study. Besides, it can compensate the weak sides of each kind of research through two different types of methods that can neutralize the weakness of each kind of research [Cooper and Schindler \(2008\)](#) .

The research-targeted population of interest is the licensed pharmaceutical manufacturers in Egypt for human medication, which are divided into three main sectors (public, local private, and multinational). This screening criterion is established on the basis that pharmaceutical sector is a Knowledge-based industry and organization's intellectual capital is regarded as a crucial resource to innovate to keep it agile in this turbulent environment. The targeted population of interest is the licensed pharmaceutical manufactures 90 organizations in the Egyptian pharmaceutical industry throughout its three main sectors (11 public, 70 local private, 9 MNCs), the questionnaires have been collected from 39 companies (i.e. 43% response rate). In addition, sixty three (63) In-depth interviews have been conducted with top and middle managers.

RESULTS AND DISCUSSION

Qualitative data analysis results

An analytical overview for the depth interviews that has been conducted with the top and middle managers among the three pharmaceutical sectors and exploring the challenges and opportunities faced by each sector. Besides, explore how the three pharmaceutical sectors see both of intellectual capital and organizational innovation. The results support that there are quite distinguishable differences among three sectors public, local private and multinational on the intellectual capital level and organizational innovation accordingly and how far MNCs are advanced in IC's dimensions (HC, SC, and RC) followed by local private and public sectors.

Quantitative data analysis results

- Descriptive analysis

Statistical analysis was performed with SPSS version 25. The following steps were performed to process the data collected. **Firstly**, Analysis of variance (ANOVA) and independent t-test to study effect of socio-demographic variables in all dimensions (independent and dependent variables) of this study. Also effect size is estimate using eta square (η^2) index from main effects. Eta square is defined as the proportion of variance in the dependent variable that is explained by study independent variable. The results were expressed as the mean \pm standard deviation (SD). **Secondly**, estimate the direction and strength of relation between all dimensions using simple linear correlation and statistical significance were tested. **Thirdly**, Stepwise regression analysis.

The following linear regression model done for forecasting dependent variables by using the three independent variables, according to Steel and Torrie (1980) for a sample was given as:

$$Y(\text{Predicted variable}) = a + b_1X_1 + b_2X_2 + b_3X_3 + \dots + b_kX_k + \epsilon_i.$$

Where:

y : is the expected value or mean of population of Y's for a specified set of values of X's, a: represents the Y intercept, b's represents slopes of Y and X that measures the increase or decrease in Y per increase or decrease unit of X and ϵ_i : is a deviation of the observation from the regression line, or a residual. Stepwise regression was used for testing the relative importance of intellectual capital and its dimensions (human, structural, and relational capital) contributors in total variation of the dependent variables (predicted variables) Organization innovation (input, process, output and outcome). Based on that, construct the best fitted equation which can use to predict and forecasting dependent variables using independent variables.

According to the research problem, quantitative research objectives and hypothesis, which propose the positive impact of intellectual capital on organizational innovation. The results of quantitative analysis has been summarized using comparative approach among the three sectors starting by descriptive analysis focusing on analyzing and clarifying the differences among three sectors then testing the research hypothesis in relation to the research proposed model

and hypothesis.

Describe the Pharmaceutical companies' characteristics

TABLE 1: Table 1 Distribution of Socio-demographic characteristics of pharmaceutical companies

		Count	Column %	Pie chart
qq1*	Public sector	30	24.6%	
	Private sector	57	46.7%	
	Multinational sector	35	28.7%	
	Other	0	0.0%	
qq2**	No	40	32.8%	
	Yes	82	67.2%	
qq3***	No	70	57.4%	
	Yes	52	42.6%	
qq4****	1-10	1	0.8%	
	11-20	0	0.0%	
	21-30	0	0.0%	
	More than 30	121	99.2%	

*Type of the company
 **Does the company have more than one branch within Egypt?
 *** Does the company have branches outside Egypt?
 **** Number of employees

The socio-demographic characteristics of pharmaceutical companies are presented in Table 1 (n=122). The Type of the company distribution of sample in the study revealed that, most of the companies were private companies which represented (46.72%) following by multinational companies (28.69%) and finally public sector (24.59%). More than two-third (67.21%) of pharmaceutical companies have branches within Egypt and the rest of pharmaceutical companies (32.79%) does not have branches within Egypt. and (57.38%) of pharmaceutical companies have branches outside Egypt while (42.62%) of them does not have. Finally, (99.18%) of pharmaceutical companies have number of employees more than 30 and (0.82%) of them have less than 10 employees.

CONCLUSION AND RECOMMENDATIONS

Research results

THE IMPACT OF INTELLECTUAL CAPITAL ON ORGANIZATIONAL INNOVATION: A FIELD STUDY

Based on the discoveries from the analyses of data, there was a positive relationship and influence between intellectual capital and organizational innovation. This finding is aligned with the study of Garcia and Calantone (2002), who have confirmed the more uncommon competence of the organization is, the more organizational innovation execution can be achieved. This finding is more relevant to the results of previous studies Stoeckicht and Soares (2012); Ghorbani et al. (2012) who have demonstrated an essential link between intellectual capital and organizational innovation.

The results regarding the four hypotheses are ranked in table 2. With regard to the results coefficient of determination R^2 , Beta coefficient β , Sig. (p-value) and Accepted / Rejected (A/R).

TABLE 2: The results belonging to hypothesis

Hypothesis	R^2 %	β	Sig. (p-value)	A/R
<i>IC has a positive effect on OI</i>	92.50	1.037	0.0001	A
<i>HC has a positive effect on OI</i>	74.30	1.089	0.0001	A
<i>SC has a positive effect on OI</i>	89.80	0.778	0.0001	A
<i>RC has a positive effect on OI</i>	86.50	0.989	0.0001	A

According to the results of the study, all hypotheses are accepted. Thus, the dimensions of intellectual capital are proper resources in reinforcement organizational innovation. Moreover, the results confirmed that pharmaceutical companies that have unique elements of intellectual capital reveal a higher level of organizational innovation. The pharmaceutical industry closely connected with these results where pharmaceutical competition focuses mainly on organizational innovation rather than cost reduction, which thus becomes one of the most appropriate engines of continuity and success.

This study revealed that Structural Capital has the greatest effect, followed by Relational Capital, then Human Capital ($R^2= 89.80\%$, $R^2= 86.50\%$, $R^2=74.30\%$ respectively).

Recommendations for leaders of pharmaceutical companies in the public sector:

-Screening & recruitment: Pharmaceutical companies need to have a second evaluation of their strategy of employment and selection of the staff to reduce the costs throughout the expected severe competition.

-Training & development: The development and management of Intellectual Capital require many skills such as the ability to handle problems, applying logical judgment, and decision-making. Pharmaceutical companies need to work on techniques that support their staff to gain more skills.

-Performance assessment: A strategy is needed to be used for the development and management of Intellectual Capital. Pharmaceutical companies need to implement a system for appraisal of the performance, which is supported by the indicators consistent with the strategy of the company.

-Collaboration: motivating collaboration among the 11 Holdipharma companies through active regular meetings for the purpose of exchanging knowledge and experiences. In addition, working together provides every company with equal opportunities to participate and communicate their ideas.

-Leadership and leaders selection: As the pharmaceutical sector is undergoing a critical phase of continuous change, companies should develop leadership programs to emphasize the importance of agile leaders who can adapt fast decisions according to the situation. Besides, their ability to use a company's resources to the maximum advantage, agile leaders can help guide their organizations into the future and can move in the right direction.

-Research and development activities: R &D is the central pillar of the innovation process. Investing in R&D activities is considered a crucial role in promoting exports over the medium and long-term. Thus, it will reduce dependency on imports for raw materials thus lowering manufacturing costs, giving rooms for economies of scale, and increasing the outcome.

-Changing organizational culture: conducting up meetings and events for changing the Egyptian organizational culture towards "innovation culture" by identifying and effectively manage their intellectual capital in a world shaped by global competition.

Recommendations for leaders of pharmaceutical companies in local private sector:

-The optimal procedure for pharmaceutical companies in the local private sector is focusing on managing all the components of IC effectively. Thus, make sure the organization succeeds in the fast-moving economy and increase their OI accordingly.

-Focusing on research and development in order to increase productivity regarding time proficiency and innovation. it is a worthy time to redefine the model of success in pharmaceutical R&D

-Leadership development and training programs for pharmaceutical companies in local private sector needs to highlight the issue of measuring and managing IC beside the need for IC as the greatest approach for pharmaceutical companies operating in knowledge-based industries.

-Decision-makers, particularly those involved in such knowledge-intensive sectors, should concern with intellectual capital's importance as a focal element that affects the company's capacity for sustainable competitive edge locally and globally.

-Due to the poor legal framework set for protecting intellectual rights, along with a lack of a true competition and the lack of company's exporting capabilities, the firms are not willing to do more investment in research and to improve their technologies. This fact should be taken into consideration for future planning in the Egyptian pharmaceutical context in order to keep their market share against imported medicines.

Recommendations for leaders of pharmaceutical companies in MNCs sector:

-Building collaborative relationships are most critical for success in pharmaceutical organizations. It grows through encouraging and fostering a "learning from experience" organizational culture.

-Volunteer to facilitate meetings and programs for managers, where conflicts with competitors need to be resolved.

-Giving more attention for sharing examples and study organizations that have successfully embraced change and made it a competitive advantage

Guidelines for the public and private sectors to follow the patterns of multinational companies

Aligned to MNCs, this study provides the following recommendations for leaders in Public and local private pharmaceutical companies in Egypt in trying to remain competitive:

-Establishing strategy for growth required a clear vision, that enables predicting and carefully preparing for the fast changing market, and a precise mission, that directs efforts towards achieving the fundamental goals.

-Focusing on investment in research and development activities for manufacturing companies is a critical stage in drug development in the pharmaceutical industry as it is considered the main pillar for success of the manufacturing companies and contributes to sustainable competitive edge which is in no doubt not easy for any organization in any industry to achieve.

-Building capacity, through investment in staff training and required skills, is critical to prepare and build worldwide employee competencies that will improve skills and drive continuous innovation.

-Focusing on continuous, professional, suitable and specialized training programs, to both managers and employees, which designed with latest techniques, knowledge and expertise that inspire and motivate to achieve goals to be able to face continuous global challenges of pharmaceutical industry development by raising awareness and building capacity for all the organization. -It is essential for pharmaceutical companies to develop a particular department within the company to measure and manage the IC dimensions as hidden resources that add value to the company and effect OI.

-One of priorities for the pharmaceutical companies is to establish a system to motivate employees to share their ideas and to be initiative that helps to strengthen IC and thus improve organization innovation accordingly.

-Conducting continuous events and conferences are needed for pharmaceutical companies for sharing knowledge and exchanging different experiences to create a healthy and balanced ethical environment that encourage them and keep the mutual respect towards each other.

REFERENCES

- Anderson N, Potocnik K, Zhou J (2014) Innovation and creativity in organizations: A state-of-the-science review, prospective commentary, and guiding framework. *Journal of management* 40(5):1297–1333
- Andriessen, D. 2004. *Making sense of intellectual capital*. Routledge.
- Bontis N, Crossan MM, Hulland J (2002) Managing An Organizational Learning System By Aligning Stocks and Flows. *Journal of Management Studies* 39(4):437–469, DOI 10.1111/1467-6486.t01-1-00299, URL <https://dx.doi.org/10.1111/1467-6486.t01-1-00299>
- Bontis N, Wu S, Wang WY, Chang C (2005) Intellectual capital and performance in causal models: evidence from the information technology industry in Taiwan". *Journal of Intellectual Capital* 6(2):222–236
- Cooper DR, Schindler PS (2008) *Business research methods*. McGraw-Hill Irwin, New York
- Creswell, J.W., 2003. *Research design: qualitative, quantitative, and mixed methods approaches, 2nd ed*, Sage Publications.
- Dost M, Badir YF, Ali Z, Tariq A (2016) The impact of intellectual capital on innovation generation and adoption. *Journal of Intellectual Capital* 17(4):675–695, DOI 10.1108/jic-04-2016-0047, URL <https://dx.doi.org/10.1108/jic-04-2016-0047>
- Dzenopoljac V, Yaacoub C, Elkanj N, Bontis N (2017) Impact of intellectual capital on corporate performance: evidence from the Arab region. *Journal of Intellectual Capital* 18(4):884–903, DOI 10.1108/jic-01-2017-0014, URL <https://dx.doi.org/10.1108/jic-01-2017-0014>
- Edvinsson, L. and Malone, M., 1997. Realizing your company's true value by finding its hidden brain power. *Intellectual Capital*.
- Garcia, R. and Calantone, R., 2002. A critical look at technological innovation typology and innovativeness terminology: a literature review. *Journal of Product Innovation Management: An International Publication of the Product Development & Management Association*, 19(2), pp.110-132.
- Ghorbani M, Mofareidi B, Bashiriyan S (2012) Study of the relationship between intellectual capital management and organizational innovation in the banks. *African Journal of Business Management* 6(15):5208–5208
- Grant RM (1996) Prospering in dynamically competitive environments: Organizational capability as knowledge integration. *Organization science* 7(4):375–387
- Grantham CE, Nichols LD, Schonberger M (1997) A framework for the management of intellectual capital in the health care industry. *Journal of health care finance* 23(3):1–19
- Halim S (2010) Statistical analysis on the intellectual capital statement. *Journal of Intellectual Capital* 11(1):61–73
- Jansen JJP, Bosch FAJVD, Volberda HW (2006) Exploratory Innovation, Exploitative Innovation, and Performance: Effects of Organizational Antecedents and Environmental Moderators. *Management Science* 52(11):1661–1674, DOI 10.1287/mnsc.1060.0576, URL <https://dx.doi.org/10.1287/mnsc.1060.0576>
- Kim T, Yoo JJE, Lee G (2011) The HOINCAP scale: measuring intellectual capital in the hotel industry. *The Service Industries Journal* 31(13):2243–2272
- Roos, J., Edvinsson, L. and Dragonetti, N.C., 1997. *Intellectual capital: Navigating the new business landscape*. Springer.
- Shipilov A, Danis W (2006) TMG Social Capital, Strategic Choice and Firm Performance. *Euro-pean Management Journal* 24(1):16–27, DOI 10.1016/j.emj.2005.12.004, URL <https://dx.doi.org/10.1016/j.emj.2005.12.004>
- Soetanto T, Liem PF (2019) Intellectual capital in Indonesia: dynamic panel approach. *Journal of Asia Business Studies* 13(2):240–262, DOI 10.1108/jabs-02-2018-0059, URL <https://dx.doi.org/10.1108/jabs-02-2018-0059>
- Stoekicht IP, Soares CAP (2012) The importance of strategically managing intellectual capital to develop innovative capacity in Brazilian companies. *International Journal of Engineering Research and Innovation* 4(1):21–29

Subramaniam, M. and Youndt, M.A., 2005. The influence of intellectual capital on the types of innovative capabilities. *Academy of Management journal*, 48(3), pp.450-463.

Sullivan, P.H., 1999. Profiting from intellectual capital. *Journal of Knowledge Management*, 3(2), pp.132-143.

Taylor A, Greve HR (2006) Superman or the Fantastic Four? knowledge combination And experience in Innovative Teams. *Academy of Management Journal* 49(4):723–740, DOI 10.5465/amj.2006.22083029, URL <https://dx.doi.org/10.5465/amj.2006.22083029>

Teece, D.J., 2007. Explicating dynamic capabilities: the nature and microfoundations of (sustainable) enterprise performance. *Strategic management journal*, 28(13), pp.1319-1350.

How to cite this article: El-Gamal F.T.D., Naem A.E.H.M.A. **The Impact of Intellectual Capital on Organizational Innovation: A Field Study.** *Journal of Advances in Social Science and Humanities*. 2020;1257–1265. <https://doi.org/10.15520/jassh.v6i7.512>