

Risks of Intellectual Capital and Its Effect on the Competitive Advantages – Applied Study

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Abstract

This study investigated the impact of intellectual capital risk on businesses and its effect on competitiveness as well as how organizations should handle these risks. Three main hypotheses were proposed in accordance with the dimensions and model of the study and their variants. For the purposes of data gathering, a questionnaire was designed which included (40) Question. Next, the study dimensions were identified. The questionnaire was distributed on a sample study of (100) people. After the data was collected the proper statistical analysis was applied. The result showed that the risk of intellectual capital is present in the organizations and is influential. The study also recommended a set of conclusions and recommendations that achieve the objective of this study.

Keywords: Intellectual capital ,

1. Introduction

Many researchers believe that the progress and organization superiority is due to a group of reasons such as competitiveness and sustainability. Other reasons include technology, increase in capital, Market availability and production processes .In reality, these factors are not the main reasons for intellectual capital impact in organizations which represents the assets of knowledge (Olariu,2011) has the ability to convert technical research to manufacturing success is distinct, making the organization superior to its competitors and achieve competitive advantage as well as to move towards success and achieving goals efficiently and effectively (Hormiga, 2010).Organizations long time ago focused on attracting intellectual capital and spent large sums of money to get the talent (Choong ,2008). Furthermore, organizations noticed that intellectual capital was a major reason behind creation competition and restructuring. This research comes, as a modest contribution in this area to determine the basic risks that could face intellectual capital and identify their sources as well as diagnoses their causes in order to determine the ways and processors required to address these risks (Hormiga,2010) . .

2 Research Methodology and Previous studies

2.1 Research Problems

Intellectual capital faces a lot of risks, for the purpose of this study, the researcher researched the contents of intellectual and found that businesses have different methodologies to maintain and preserve the intellectualcapital they have. The research answers the following questions:

- 1 – Are there any risks to intellectual capital in organizations?
- 2- What are the risks that could affect intellectual capital?
- 3- What is the impact of risks of intellectual capital on creating competitiveadvantage for the organization?

2.2 Research Objective

The research is aimed to achieve the following:

- A - Find the actual causes of the risk of intellectual capital.
- B - Diagnosing the main risks to intellectual capital.
- C - Determining the effect of the risk of intellectual capital on theorganization's competitive advantage.
- D - Clarifying that capital preservation intellectual necessity or choice for organizations business.

2.3Research Impact

We can determine the importance of research as the follows:-

- A - Shed light on the risks facing of intellectual capital
- B - Give a description of the impact of risks of intellectual capital to create a competitive advantage for the organization and its superiority over competition organizations.

2.4 Research Approach

The researcher has taken into analysis approach techniques in this research through analysing the theoretical references and sources and field studies to verify the research aims.

2.5Justification of selection of the Questionnaires sample

This study was conducted in the Jordanian Higher Education Sector because, this sector was very important for this research and the researcher chose as the research sample of (100) from the total members of the faculty at the Al-Zaytoonah University of Jordan (350).

2.6 Research Model and Hypotheses

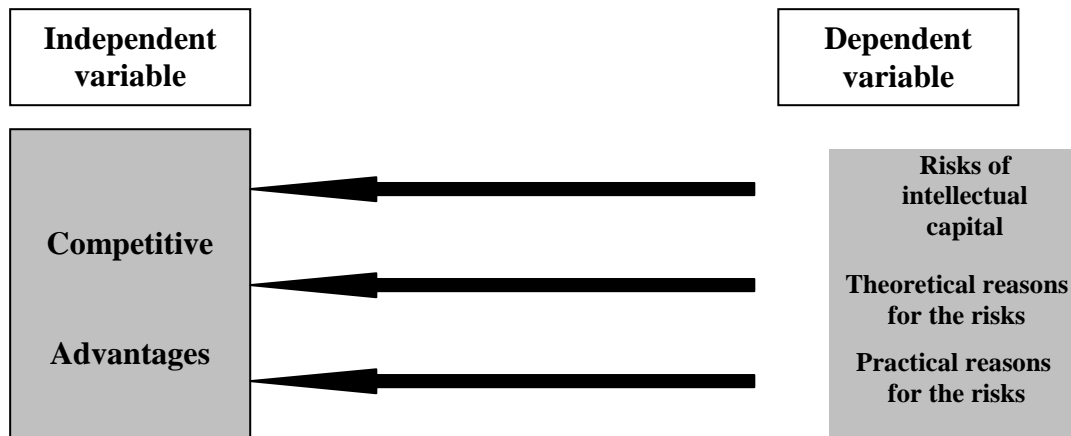


Figure 1. Model of The Study

For the purpose of achieving the objectives, three main hypotheses were set as follows:-

H1: There is a statistical significance of risk impacting intellectual capital on the competitive advantages of the organizations.

H2: There is a statistical significance of theoretical risks impacting intellectual capital on the competitive advantages of the organizations.

H3: There is a statistical significance of practical risks impacting intellectual capital on the competitive advantages of the organizations.

3. Previous studies

This section of the search some of the previous studies in the importance and necessity to maintain the intellectual capital and protect it from the risks, (Barney, 1991, 120) said that the organizations must work to maintain their competitive advantage which comes from maintaining its intellectual capital and prevent moving to their competitors, then (Stewart, 1999, 4) have put at the beginning of his study a set of questions which are Who are controls of the human resource in the organization, then answer his question the body of knowledge (intellectual capital) whom make that and which is supposed presence in the organization and maintain, protect and prevent constantly. (Also, Al-Kubaisi, 2005, 62) said that the organization have many mistake when it was did not maintain and protect their intellectual capital Through discussion of these previous studies on the basis of the intellectual analysis the researchers can identify the points as following:-

Most of the studies emphasized that the organizations working hard to get advanced skills and talents (intellectual capital and most of studies agreed that intellectual capital is the main supplier to achieve survival and competitive advantage, as well as, some studies demanded to the development of the intellectual capital and development in organizations through develop stronger methods to bring and training the intellectual capital, at the last, most of studies confirmed the need to preserve intellectual capital and prevention of risk through use different ways and methods.

4. Literature Review

4.1 Definition of the intellectual capital

Some researcher defined intellectual capital as follows:-

(Mafraji and Saleh, 2003: 18) said that the intellectual capital is part of the human capital of the organization is the elite of workers whom have a range of capabilities, and organizational knowledge, and these capabilities will enable them to produce new ideas or development of old ideas that enable the organization to expand its market share and maximize their strengths and make it be able to get opportunities, on the other side (Awad&Ghaziri, 2004: 415) said that the intellectual capital is a group of individuals who use their minds more than their use of their hands, because they have the experience, values, culture, capacity for innovation and creativity in order to find a solutionspecialist or create value. Then (Chen et al, 2005, 150) said that the intellectual capital at is a set of human capital Physical, structural, which if reached the level of efficiency will improve financial performance and thus make market value of the organization is greater than the carrying value. Also, (Anzi, 2006: 6) said that the intellectual capital is a part of employees whom have different Knowledge and Skills that can be used and

invested correctly for the organization, as well as their movement and reaction to reach the outstanding performance.

4.2 The importance of intellectual capital

Intellectual capital represented the owners minds who play important roles and distinct through their outstanding performance in organizations where they are bright stars in the skies and the most valuable assets in the twenty-first century, in a knowledge economy prevailing (Karp,2003) .In addition, the current labormarket and in the light of the current large variables such as globalization and other phenomena make the labor market is witnessing an increasing rise in demand for this type of human resources they represent a work force with high-level skills and which possess unique properties not owned by one other

(Rastogi,2003)It is another angle, the intellectual capital is one of the most important indicators that reflect the evolution of thought administrative organizations, which led to increased interest in him by organizations (Hormiga,2010) . In general and Arab organizations in particular may represent through an increase in the number of scientific conferences held to discuss this issue and so the intellectual capital has become a cornerstone upon which organizations achieve competitive advantage and makes its superior to its competitors in the various fields (Bontis,2002) .

4.3 The main characteristics of intellectual capital

The intellectual capital is the main part and important in the organization for being characterized capabilities high in the production of new ideas and works to discover sophisticated methods lead to distinguish the organization from other terms of difficulty finding alternative to this important part because they star shiny and minds of influential and determined the main components in a number of species including the represents the human capital (Reed,2002) , They have the mental capacity, skills and experience which are necessary to provide appropriate scientific solutions to customers , also, it is the source of creativity and innovation in the organization and employees (Hormiga,2010) . As well as the structural capital which is the organization's capacity to meet the requirements of the market that help to participate in knowledge transfer through structural intellectual assets such as (information systems, patents, copyright , authorship, quality control standards, rules, regulations information)(Triant,2010) . The other part is the customers capital which is the value of the organization's relations with customers such as (customer satisfaction, customer loyalty, meet his wishes, participation and cooperation with them (Bontis, 2002).

4.4 The main components of intellectual capital are:-

The intellectual capital of cognitive competencies and significant regulatory enables the production of new ideas and contribute to the development of old ideas to enable the Organization to maximize its strengths and make them in a better position than its competitors, as well as the opportunities available to them in their environment. And intellectual capital is not associated with a specific organizational level and does not require the availability of academic certificates, called him the value of workers and skills consists of three main elements (Human capital which have the mental capacity, skills and experience which are necessary to provide appropriate scientific solutions to customers also, it is the source of creativity and innovation in the organization and employees. Structural capital which is the organization's capacity to meet the requirements of the market that help to participate in knowledge transfer through structural intellectual assets such as (information systems, patents, copyright, authorship, quality control standards, rules, regulations information) . And Customers Capital which is the value of the organization's relations with customers such as (customer satisfaction, customer loyalty, meet his wishes, participation and cooperation with them).

4.5 Causes of the Risk of Intellectual Capital

Some studies conducted by the institutes and global institutions of academic repute such as(K Center) and (Intellectual Capital Service) determine the main causes of the risks for the intellectual capital as:-

A - Increasing economic complexities:-

Which in turn lead to increased need for higher efficiencies can operate in different environments, and be able to use the modern techniques and mange independent branches

B- Increasing competition:-

Comes from the integration of the major markets or that led to the emergence the small and medium sized companies that are working continuously to attract individuals whom are seek behind the big companies and making great efforts to provide by great offers offered for them.

C - Mobility between companies:-

In the past the few workers made a change companies at one time or two times during the professional life, but now the workers are changing their work several times up to seven the next ten years.

D - Decrease in stocks of competencies: -

The number of managerial expertise go to decreasing as the number of people aged between (35 to 44), years for example in the United States, , will decrease (15%) between the common infected (2000 to 2015) , In the other side the demand will increase about 30% from the current ratio.

E- The continuous change in workflow: the nature of the work rapidly and continuously:-

The impact of modern technology where became the main item in the modern information age, which requires the presence of people, rely experience in their work and making their information and constantly abreast of developments because their work became morementally than manually.

F- The population explosion and the imbalance in the distribution of knowledge and capacity in the world:-

In the year 1960 the world's population of three Billion people and it will be become seven billion at the year (2013).

4.6 The Potential Risk of Intellectual Capital

There are many risks of intellectual capital as following:-

1 - The risk of obsolescent of intellectual capital .

A. Knowledge obsolescent:

This includes limitations of experience and managerial skills, technical and professional

B. Capacities obsolescent:-

It appears under the influence of aspects of personal self.

C. Cultural obsolescent:-

It includes the impact of values, beliefs and social customs.

2- The risk of intellectual capital upset:-

There are three directions for the risk of upset of intellectual capital which are: -

A. Psychological factors:-

It includes dissatisfaction, resentment, tension and anxiety, failure of compatibility and convergence and underwriting.

B. Physical factors:-

It includes aggression, personal intervention, sabotage devices and equipment.

C. Regulatory or organizational factors :-

It includes the high labour turnover, the high proportion of discontent, left the organization and weak sense of belonging and loyalty.

3- The risk of alienation of the intellectual capital :-

It is a psychological condition or social condition on individuals and makes them far from the ability to adapt to their environment; these risks take three trends which are: -

A-Culture alienation.

B- Social alienation.

C- Values alienation.

4- The risk of limited for organizational excellence: -

These risks linked with weak and limited organization in the search for excellence and lead to the killing of creativity and weaken the power of the organization , It take four trends which are :-

A- The risk of killing the new innovation.

B- The risk of weakling the suggestions.

C- The risk of encouraging the routine business more than the creativity business

D - Risk of poor confidence.

5-The risk of weakness of material and moral motivations:-

These risks linked to weak external influences exciting intellectual capital which leads to weakness rushes to perform the job due to satiate his physical and moral and social needs ,these risks take three trends which are: -

A – The material aspects :-

It includes wages and bonuses and participation in profits and creative incentives.

B - The moral aspects:-

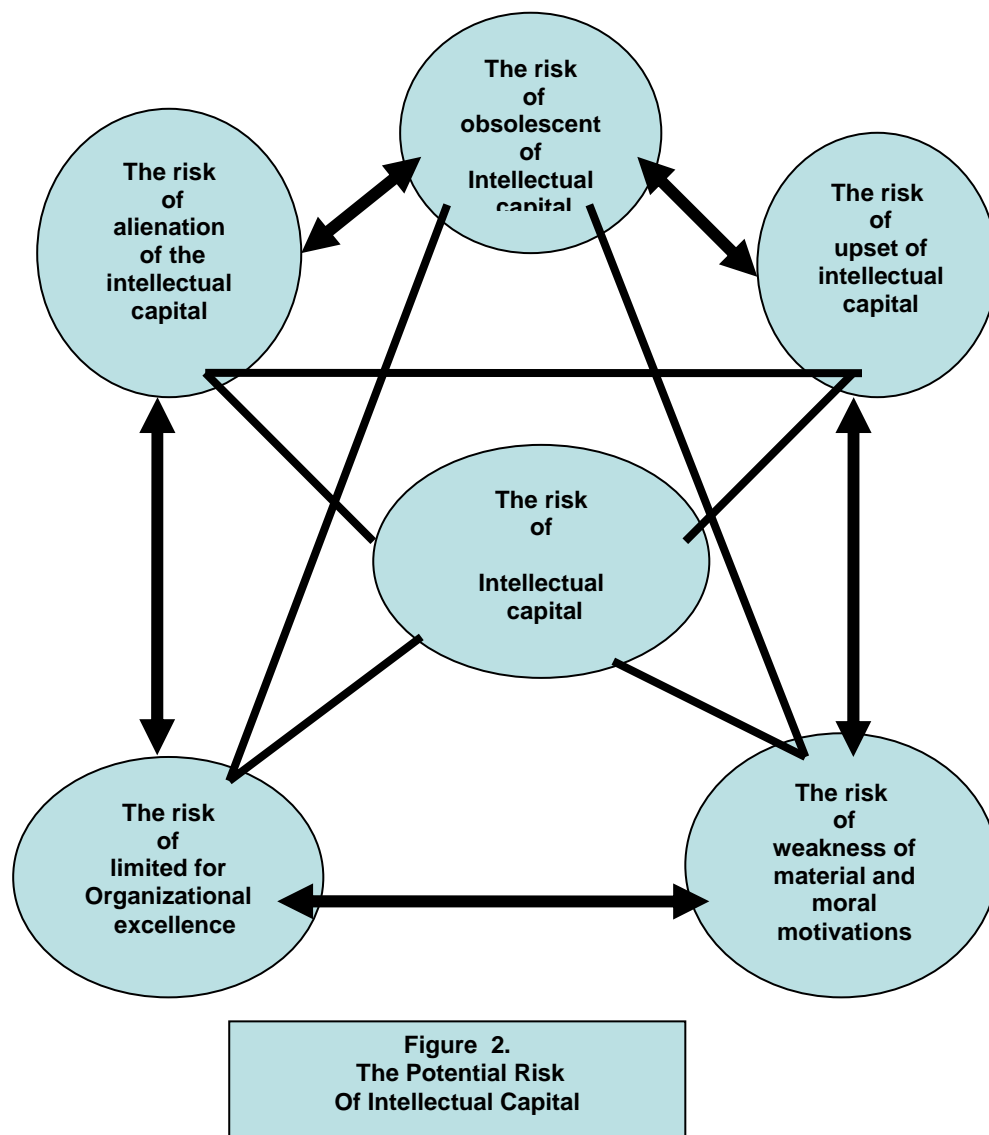
It includes the importance of intellectual capital through their involvement in the administration and gives those medals and badges.

C- The social aspects:-

It include the problem in respect the intellectual capital whatever their strengthen position in society.

From all the types of the risks for the intellectual capital are interactive systems despite the autonomy of each risk for the other, so that check any risk might pull to check other risks entirely or in part.

We can explain this risk can be placed in figure:-



4. 7 Risk Management Of Intellectual Capital

There are many reasons making organization work on risk management of intellectual capital including achieving competitive advantage over other organizations, increasing organization's wealth, establishing a smarter organization and having a strategic resource to run the organization.

5. Competitive Advantage:-

Shermarhorn (2005) defined competitive advantage as "The ability of the organization to provide something with great value that the competition organizations can not replicate it or make the best of it". Also, it defined as "An advantage over competitors gained by offering consumers greater value .either by means of lower prices or by providing greater benefits and services that justifies higher prices.

(International school of management ,2012) .Studies indicate that the competitive advantage is a sustainable goal for organizations and organizations that work to create a competitive advantage and continued through the creation of the strengths of the various area of the work .The creation of competitive advantage come through an integrated system of different activities, Porter suggests that competition rules today is different from what it was in the past where the competitive advantage is becoming more complex (Barney,1991) .Hence it is required from organizations to work on the discovery of the risks which facing the intellectual capital and they are treated in order to reach to find a good intellectual capital with out any risks . It contributes to the creation of the

organization's competitive advantage and its superiority over its competitors. Also, we can determine the important of competitive advantage of the organization in the following: -

- 1 – To achieve the desired value to the buyer through differentiation in cost, quality, service and price.
- 2 – To achieve the desired value for the development and improvement of the organization's work.
- 3 - To achieve distinct characteristics of the organization different from other organizations.
- 4 - To contribute to the creation of distinct resources and in particular the creation of the intellectual capital.
- 5 – To find modern technology contributes to creating great products.
- 6 – To provision of production elements that contribute to the creation of excellence required for the organization.
- 7 - To find expertise and specialized knowledge, skills and abilities in their human resources, particularly in their intellectual capital.

Based on that competitive advantage is bounded in a deep understanding of the challenging and risks relationship between organization and its environments. it requires to do finding the solving for their risks through develop and improve their Intellectual capital in order to reach the desired competitive position .

As a result, the competitive advantage requires the following elements in order to achieve the desired objectives (Sermarhorn,2005) in the following : -

- 1-Good and Services.
- 2-Modern technology.
- 3 - Cost.
- 4 - Quality.
- 5 - Price.
- 6– Innovation and development.
- 7 – Reliability

6. Analysis and discussion the results

Table 1. Characteristics of The Study Sample

Variable	Group	Frequencies	Percentage
Sex	Male	68	68 %
	Female	32	32 %
Age	Less than 25 years	18	18 %
	25 to 40 years	57	57 %
	40 to 55 years	20	20 %
	55 and more years	5	5 %
Marital status	Single	35	35 %
	Married	65	65 %
Scientific Qualification	Master	22	22%
	Doctorate	78	78%
Experiences	Less than 5 years	17	17 %
	5 to 10 years	47	47 %
	11 to 15 years	27	27 %
	16 years and more	9	9 %

Risk of intellectual capital:-

Descriptive statistics were used to illustrate the frequency of the risk of intellectual capital of the samples towards them the reached results are shown in the following table:-

Table 2. Mean &Std. Deviation for
 Risk of Intellectual Capital

Risk of intellectual capital	Mean	Std. Deviation
Theoretical Risks	3.8093	0.65811
Practical Risks	4.1425	0.59382
All of Risks	3.8273	0.64250
Overall mean	4.0572	0.82764

Competitive Advantages

Descriptive statistics were used to illustrate the attitudes of the samples towards for the competitive advantages, the results are shown in the following table:-

Table 3. Mean &Std. Deviation for Competitive Advantages

Competitive Advantages	Mean	Std. Deviation
Cost	3.5142	0.65811
Quality	3.3985	0.59382
New Technological	3.4271	0.64250
Price	3.2657	0.82764
Overall mean	3.4137	0.82764

7. Testing of the Hypotheses:-

7.1. Hypotheses (1):-

There is a statistically impact for the risks of intellectual capital on the competitive advantages in organization.

Table 4. Testing of Hypotheses (1)

R	R2	B	F	Sig.
0.56	0.31	0.80	43.31	0.000

By using the Regression test the value of the (F calculated = 43.31) and the significant value is (0.000) , by this result the hypotheses is accepted .

7.2. Hypotheses (2):-

There is a statistically impact for the theoretical risks of intellectual capital on the competitive advantages in organization.

Table 5. Testing of Hypotheses (2)

R	R2	B.	T.	Sig.
0.58	0.33	0.53	16.536	0.000

By using the Regression test the value of the (T. calculated =16.536) and the significant value is (0.000), by this result the hypotheses is accepted.

7.3 Hypotheses (3):-

There is a statistically impact for the practical risks of intellectual capital on the competitive advantages in organization

Table 6. Testing of Hypotheses (3) .

R	R2	B.	T.	Sig.
0.52	0.27	0.58	14.325	0.000

By using the Regression test the value of the (T. calculated =14.325) and the significant value is (0.000), by this result the hypotheses is accepted.

8. Conclusions and Recommendations

In the light of intellectual data and logical analysis research found:-

The risk determine of intellectual capital is a necessity, not an option for organizations Business, this necessity come from determine a range of causes that produce the risk to Intellectual capital which related with the economic and competitive aspects, and that the organizations do not have control over those causes . Also, determined a set of risks surrounding the intellectual capital led to loose his abilities and skills and creations, which will reflect negatively on their competitive and environment. As well as the study found there are a set of risks paying organizations strongly towards to administration the risks of intellectual capital and number of techniques to administration the risks of intellectual capital which contribute to confront these risks to and activate his administration. Finally, the most factors which maintain the intellectual capital are (17) factor, and there is relative importance of each factor and the best five factors are: -

- 1- 67% Activation the physical motivation.
- 2- 43% To face the organizational obsolescent.
- 3- 43% To face the organizational thwart (upset).
- 4- 40% decrease the chances of alienation.
- 5- 37% promote organizational excellence.

Based on the study finding, the author makes the following recommendations:-

1- Working to identify the risks which facing the intellectual capital and selection of appropriate methods to deal with these risks and understanding and recognizing the importance of the intellectual capital by the management of organizations, because the intellectual capital has a large value for the organization and contribute to improve and develop the efficiency and performance and achieve a competitive advantage for it. Also, to building the training programs according to scientific methodology which diagnosed the intellectual capital needs and identify appropriate. Training methods to them

2- On the other side the study found that the organization must working to selecting and diversification of training methods and ways which lead to develop the intellectual capital in organization. and establishment the electronic repositories which contributes to maintaining the intellectual capital in order to Setting the advanced standards for the performance of employees in organizations and contribute to the development of the capacity of their human resources and create the intellectual and practical talents that contribute to the creation of the organization's competitive advantage.

Also, the organization must take by the factors which maintain the intellectual capital which are:-

- 1- Activation the physical motivation.
- 2- To face the organizational obsolescent.
- 3- To face the organizational thwart (upset).
- 4- Decrease the chances of alienation
- 5- Promote organizational excellence.

3 - Building the training programs according to scientific methodology which diagnosed the intellectual capital needs and identify appropriate training methods to them.

4 – Selecting and diversification of training methods and ways which lead to develop the intellectual capital in organization.

5 - Establishment the Electronic Repository which contributes to maintaining the intellectual capital.

6 - Setting the advanced standards for the performance of employees in organizations and contribute to the development of the capacity of their human resources and create the intellectual and practical talents that contribute to the creation of the organization's competitive advantage.

The organization must take by the factors which maintain the intellectual capital which are: -

- 1-Activation the physical motivation.
- 2- To face the organizational obsolescent.
- 3- To face the organizational thwart (upset).
- 4- Decrease the chances of alienation.
- 5- Promote organizational excellence.

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