

# A study The role of intellectual capital in achieving competitive advantage Applied to fisheries companies and fisheries departments in Egypt

Professor Dr. El-Sayed Mohamed Khater, Professor Dr. Abdel-Hakim Al-Minhawi , Eng.Bassam Yussry Mohamed Fayek.

**Abstract**— The study focused on examining the relationship between intellectual capital in its various dimensions and the competitive advantage in fisheries companies and fisheries departments in Egypt ; In an attempt by researchers to find a close link between the role of intellectual capital as one of the factors explaining the existing relationship and its good use to achieve competitive advantage and in what leads to achieving the company's goals of survival and growth; In order to stimulate interest in it and then develop it, and highlight the importance of intellectual capital, its importance and important role in developing, developing and raising the value of companies; For this reason, during this study, two main questions will be answered : [(What is the role of intellectual capital in achieving the competitive advantage of fisheries companies and fisheries departments in Egypt?) - (What is the impact of the personal and employment variables of the worker or employee on the study variables" Intellectual capital, competitive advantage"?)] ;To answer these two questions , we reviewed the concept of intellectual capital, its main components, its various dimensions and the extent of its contribution to achieving the competitive advantage; On the other hand, the study was exposed to the concept of competitive advantage, its elements, dimensions and factors affecting it. Certain conclusions were reached and some recommendations were proposed aimed at maximizing the use of intellectual capital in order to improve its role in achieving competitive advantage .

**Index Terms**— Competitive Advantage, Intellectual Capital, Personal and Functional Characteristics, Attracting Intellectual Capital, Creating Intellectual Capital, Energizing Intellectual Capital, Preserving Intellectual Capital , Interest in the intellectual capital of clients.

## 1 INTRODUCTION

The last two decades have witnessed the growth of states of intellectual capital in management literature, believing that economic growth based on knowledge has guided its path of intellectual assets that represent the engines of innovation in companies and organizations, and " intellectual capital has been considered a product of research and development in any company to make it a leader in its field of specialization "[1].

"The many changes and challenges in the business environment due to the phenomenon of mergers and strategic alliances and the pursuit of innovations and creations have made the fundamental characteristic of the business environment and its requirements is turmoil, distrust and many difficulties, which prompted management scientists to search for effective methods and methods and the ability to absorb the challenges with which the term "intellectual capital" appeared with it It focuses on the creative and creative energies that exist in the employees of the company or organization and how to discover, invest and preserve it because it is the highest resource and most valuable asset, and when the company employs the knowledge inherent in the minds of people and with its ability to attract competencies of ability and skill that exceed what competitors have, it outperforms them, whether it is at the level of product quality, services, costs, implementation times, or other excellence strategies to ensure access to competitive advantages, stability, and stay" . [2]

"Intellectual capital is exemplified in the distinct capabilities that exist among some workers, enabling them to present new ideas or develop old ideas that contribute to achieving a

competitive advantage for the company, where intellectual capital consists of human assets (human capital) and intellectual assets (associated with information in human capital and intellectual property from Patents, trademarks, etc.), as well as structural assets (associated with organizational structure, procedures, buildings, etc.), as well as relationship capital (which clarifies the company's relationships, allies, and customers) "[3].

"And with the change of the corporate managers 'thought of focusing on the organizational or material aspect that was losing the administrative process its human spirit or character and leading to workers frustration and consumers with discontent or boredom, to focus on the scientific concept of the human side of the administrative process and the elements of effective leadership and empowerment of workers and attention to a head Intellectual money represents the company's true wealth, as it is the source of innovation, innovation and competitive advantage, and it is considered as the weapon that companies adopt to face current global challenges and the basis for survival, success and excellence"[4] .

If the management system in the companies for developing fish wealth, fisheries departments and fishing ports (moorings) in Egypt can through its management of all crafts and simple and complex professions related to fishing and fish wealth (such as the fishing craft itself, the fish farming craft, the fishing nets industry, the fishing boats industry, the ice making profession and the profession Canning, packaging and salting of fish, the profession of foam industry and the manu-

facture of plastic packages ...) to achieve product quality or obtain consumer satisfaction, it has become obligatory for the administrative systems that manage these companies and departments to plan to take advantage of the minds of people with trades and related professions of different educational qualifications, which are often characterized by intermediate and intermediate qualifications or without holders of qualifications and represent the vast majority with regard to their practical experiences as a basis upon which those interested With intellectual capital so that these companies can experience the era of globalization and absorb the technologies that have imposed themselves on this craft sector and go through a process of comprehensive and radical change in form and content, the mere interest in this individual, the owner of the craft of fishing or fish farming is an investment in intellectual capital and makes this individual a source of excellence and increase production and excellence and achieve the company one of the most important competitive advantages in the local and global markets .

The topic of competitive advantage has received widespread attention in recent years in the world in light of rapid developments economically and technologically, so that it is difficult for any country to live in isolation from these developments. Therefore, developing countries have adopted reforms policies to prepare the economic environment to be supportive and appropriate to increase their competitiveness in an economy An open world, the professional and professional work environment is characterized by a permanent change and its great dependence on the human capabilities of people with trades and professions and the psychological and mental state of them, and puts the owners of fisheries companies and fisheries departments in front of a big and continuous challenge in adapting to developments in this environment, the matter is only in the event that these departments possess the qualified human frameworks and provide a new culture to select the minds of crafts and professions characterized by creativity and innovation as the main supplier of these companies and the basis of their success, which adds companies from their existing human resources with added value that achieves them a competitive advantage by helping energies

- Eng.Bassam Yussry Mohamed Fayek, PhD researcher in project management program College of Graduate Studies for Statistical Research, Cairo University, Egypt, PH-01224842868, E-mail: bassam.f22.1982@gmail.com.
- Professor Dr. El-Sayed Mohamed Khater, Professor of Biostatistics and Population, Dean of the College of Graduate Studies for Statistical Research, Cairo University, Egypt, PH-01005053670, E-mail: Dr.elsied.khater@gmail.com
- Professor Dr. Abdel-Hakim Al-Minhawi  
Professor of Operations Management and Statistics at the Arab Academy  
Advisor to the Technical Military College, Egypt, PH-01000922058,  
E-mail: dr\_hakim49@hotmail.com

Mankind to discover their skills.

## 2 STUDY CONCEPTS AND TERMINOLOGY :

### 2.1 The intellectual capital:

#### 2.1.1 Definition of intellectual capital

Despite the importance of intellectual capital and its effective

role in the continuity and success of companies in the modern era, there is no agreement on a specific and comprehensive definition of this concept, and given the multiplicity of concepts related to intellectual capital, we are exposed to the most important of these concepts trying to reach a comprehensive definition **as follows:**

The intellectual capital and its three elements (human capital, structural capital, and customer capital) represent the capabilities available to manage the organization related to the capabilities and competencies of workers, customer relations, and a chain organizational structure, whose uses are intertwined with other material resources and can achieve excellent performance. [2]

The intellectual capital is experiences, skills, competencies, creative ideas, creativity and accumulated and inherent knowledge in the mind of the human element, and the knowledge, technology and organizational structure of the organization, and it is also an intangible resource that makes a strategic contribution if it is used to optimize the creation of the added value of the organization and its development so that it can Competition with other organizations that share the same activity, and thus can achieve the strategic goal and achieve competitive advantage. [5]

Intellectual capital is all that the organization possesses of distinct capabilities represented by individuals with high mental capabilities, patents, modern production methods, technology, flexible organizational structures, information about customers and suppliers that make the organization able to achieve a competitive advantage over other competing organizations . [3]

Intellectual capital is the set of creative skills, experiences and capabilities possessed by workers in the organization that contribute to creating a competitive advantage that distinguishes it from other organizations. [6]

#### The researchers believe that the intellectual capital is :

The set of cognitive capabilities and personal characteristics of the human element at all administrative levels that cause mental, creative and creative production, whether in the form inherent in the mind and mind of the human element or in the form of the documenter and presented in the records, documents and databases, and the company can maintain this human element or attract it from competitors to achieve the competitive advantage of the company over its competitors..

### 2.1.2 The components of intellectual capital

#### 2.1.2.1 Human Capital [7]

It is represented by all the human resources with distinct capabilities and ability to occupy administrative and technical jobs, which have creative, innovative and superior capabilities, and these include the employees 'advanced knowledge, their accumulated experiences and life and scientific experiences, their technical and technical skills, as well as their satisfaction, morale and cohesion as an integrated work team ; Also, human capital has a specific feature, which is that it increases with use; The human factor increases and accumulates knowledge, experience and learning over time, Human capital is also defined as a mixture of elements of knowledge related to skills, accumulated experience, creativity, innovation and the ability of the enterprise personnel to perform its tasks, and human capital is considered non-ownership by the facility .

Through reviewing the previous definitions, the researchers

concluded the component dimensions of human capital as follows: (Knowledge, scientific experience, innovation, skills and abilities in addition to working in a team), Human capital in organizations is attributed to the accumulated knowledge, skills, and experience of workers that create leadership skills and the ability to solve problems, make rational decisions and deal with risks, and therefore it reflects the effectiveness of the organization in managing its tangible and intangible resources to obtain the experience, culture and knowledge necessary to achieve competitive advantage and create the value .

#### **2.1.2.2 Structured Capital [8]**

It represents the basic structures of human capital, including organizational capabilities to meet market requirements, it also includes the quality and accessibility of technical information systems, company insights, and databases, the concept and the organizational documentation, which represents the organizational structure of the company and its solid material, and its value depends on a range, Its ability to enable the company to move the use of human capital, it means the company's knowledge in serving its goals ; **It consists of subsystems that include the following :**

Patents and discovery, which take the form of a privilege obtained by the individual as a result of his initiative to invent something.

Copyright and authorship, which takes the form of a privilege obtained by an individual as a result of his creation, authorship and publication of an idea, research or book.

A trademark, which represents the organization's personality, value, and identity applied to its products or services.

The database and information systems, which are considered as a group of interconnected components (software, computers, systems, technologies) that interact with each other to obtain important outputs that serve the interest of the organization and its link with its customers.

#### **2.1.2.3 Social or Relationship Capital [9]**

<https://shamra.sy/academia/show/58396fd3a899d>

This term reflects the value of relationships that link the organization with its existing and potential clients, and includes the strength of the organization's relationship with these clients and the degree of their loyalty and satisfaction, and it is also known as the customer's loyalty to the organization and the degree of its association with it, it works to achieve value for the organization, which is the source of credibility, reputation, or quality, the services provided by the suppliers or from the loyalty and conviction of the clients and be complete in any part or part of the organization's external environment that contribute to creating added value for the organization, and here the organizations must at the present time put the requirements, needs and desires of the customers at the heart of their strategies, because it is of great importance to success The organization is in competition with other competing organizations .

#### **2.1.3 Dimensions of intellectual capital [10]**

<http://search.shamaa.org/FullRecord?ID=229109>

A concept that expresses the efforts and expenditures made by the company with the aim of developing and developing the intangible assets and the knowledge stock in them, by honing this knowledge, putting it into practice and making optimal use of it; **The dimensions of intellectual capital are as follows :**

##### **2.1.3.1 Attracting intellectual capital**

The efforts exerted by the company in searching and investigating individuals with high capabilities and skills, in proportion and the nature of its activities and operations .

##### **2.1.3.2 Creating intellectual capital**

It is the set of policies and practices the company takes to create its own intellectual capital, through follow a number of methodological procedures, such as programs, training courses, and programs for developing social relations between individuals within the company .

##### **2.1.3.3 Activating intellectual capital**

It is the set of policies and procedures adopted by the company and the means and methods it possesses for increasing and development of intellectual and cognitive capabilities that exist in its workers, so that they can keep abreast of changes and developments in the work environment through investing the forces of innovation and creativity they have .

##### **2.1.3.4 Preserving intellectual capital**

The overall policies and administrative procedures that the company takes to maintain its knowledge stock of skills, experiences and knowledge .

##### **2.1.3.5 Attention to clients' intellectual capital**

This dimension reflects the means and methods adopted by the company to increase and develop its capital of relationships, by caring for the opinions of customers (clients) and their aspirations and proposals and taking them into consideration.

## **2.2 competitive advantage**

### **2.2.1 Definition of competitive advantage**

The concept of competitive advantage occupies an important place and place in the field of management and depends on both the assets and skills held by the organization and the multiplicity of concepts, **including the following :**

It is the organization's possession of the resources, skills, and technologies that allow it to produce services and products distinct from those offered by competitors in the same field of activity [3] .

They are the various activities that the company undertakes and enables it to outperform other companies, whether it is related to reducing production or marketing costs, high quality, or high ability to respond to market fluctuations or rapid response to changes in product design or customer requests [11] .

It is the skill, technology, or distinct resource that allows the organization to produce more values and benefits for customers than what competitors offer them, and confirms its distinction and its difference from these competitors from the viewpoint of customers who accept this difference and excellence, as it achieves more benefits and values that are superior to what the competitors offer them the others [12] .

Represents the ability of the organization to meet the needs of the consumer, or the value that it wishes to obtain from the product, such as high quality and therefore an investment of a group of financial, human and technological assets with the aim of producing value for clients that meet their needs; This can be confirmed in a context where competitive advantage is seen as the set of skills, technologies and capabilities that management can coordinate and invest in order to produce higher values and benefits for customers than competitors achieve and confirm a state of distinction and difference between the organization and its competitors [13] .



And also can be defined as the ability of the institution to formulate and implement strategies that make it in a better position in relation to other institutions working in the same activity and that are achieved through the best exploitation of the capabilities and technical and material resources, organizational, in addition to the capabilities, competencies, knowledge and others that the institution has Which enables it to design and implement its competitive strategy [14].

The concept of competitiveness is embodied in the extent of the organization's ability to maintain it and increase its market share in the environment or the field of activity to which it belongs [15].

**The researchers believe that the competitive advantage is :** A process of continuous change and development of production factors through knowledge and technology to maximize the added value of the company by investing in it to achieve higher benefits for customers than what competitors achieve for them and confirm the state of excellence and difference between the company and its competitor ..

### **2.2.2 Elements of competitive advantage**

Natural Resources, The capital, Technology, Human Resources .

### **2.2.3 Dimensions of Competitive Advantage**

The cost, Quality, Flexibility

## **3 PREVIOUS STUDIES**

After reviewing many previous studies, which are one of the main pillars upon which the subject of the current study in the field of intellectual capital and its role in achieving a competitive advantage, the study will present some Arab and foreign studies that are believed to be relevant to the subject of the study, bearing in mind that it will be analyzed These studies are in terms of the most important goals, the most important results, the most important recommendations and comment on them through aspects of agreement and difference according to several axes (studies on intellectual capital - studies on competitive advantage - studies on the role of intellectual capital in achieving a competitive advantage) as follows :

### **3.1 First Axis Previous studies on intellectual capital**

#### **3.1.1 A study of Ayman Ibrahim Shafiq (2018) entitled (the role of intellectual capital in improving the level of services in public organizations) [2]**

##### **3.1.1.1 Objectives of the study**

Knowing the contribution of intellectual capital to improving the quality of services.

Test the relationship between the elements of intellectual capital (human capital, structural capital, and customer capital) and improve the quality of services.

##### **3.1.1.2 Results of the study**

Intellectual capital is represented by the mental ability of a certain class of human resources represented in the competencies capable of generating ideas related to the creative and strategic development of activities, operations and strategies in a way that guarantees the organization to improve the quality of service provided to clients.

Good use and management of intellectual capital with its components is the key and main success of organizations.

##### **3.1.1.3 Recommendations of the study**

Achieving value in intellectual capital is the responsibility of

the management of the organization that seeks to achieve a competitive advantage by improving the level of service to clients.

The need to strengthen the organization's knowledge and creativity capabilities and energies of the organization, and the commitment of senior management to how to take advantage of the intellectual capital it has in the organization and adapt it to its success and achieve a competitive advantage.

#### **3.1.2 Study of Mukhlis Ahmed Mohamed (2017) entitled (the role of intellectual capital in improving competitive advantage) [5]**

##### **3.1.2.1 Objectives of the study**

Knowing the level of application of intellectual capital in the banks under study.

Knowing the degree of attracting intellectual capital and its industry.

##### **3.1.2.2 Results of the study**

The most important source for achieving the competitive advantage of organizations in general and banks in particular is the knowledge, mental skills, and innovations that they have over the competitors.

##### **3.1.2.3 Recommendations of the study**

Increase efforts in the field of human development, training and development.

The need for banks to make intense efforts to satisfy customers' desires and work to win new.

#### **3.1.3 Ghada Haydar Ali Hussein (2017) study entitled (The Impact of Strategic Planning of Human Resources on Wishing Intellectual Capital to Achieve Competitive Advantage) [3]**

##### **3.1.3.1 Objectives of the study**

Helping universities to evaluate intellectual capital, which is a key component for achieving sustainable development that helps in achieving a competitive advantage.

The success of universities depends on the extent of keeping pace with the global trend of the knowledge economy represented by the control of market mechanisms to deal with educational institutions and their management, and what this imposes on the necessity of a qualitative transfer of the human resource because it represents the permanent capabilities of higher education institutions in achieving their goals.

##### **3.1.3.2 Results of the study**

An analysis of the available skills inventory is the basis of the internal labor supply analysis, because the skills inventory represents an integrated database that includes all the information related to workers.

The university works to reduce the time it takes between requesting the service and its provision, as well as to increase new customers.

##### **3.1.3.3 Recommendations of the study**

Development of the university's management system to achieve competitive advantage.

Keeping pace with technological development and changes in both the internal and external environment surrounding human resources at the university, in addition to supporting creativity and innovation .

#### **3.1.4 Study (Farhati Louisa 2016) entitled (The role of intellectual capital in achieving the competitive advantage of economic institutions in light of the**

knowledge economy) [16]

#### 3.1.4.1 Objectives of the study

Define the role of intellectual capital with its components (human, structural, customers) in achieving a competitive advantage for the organization in its dimensions (quality, efficiency, creativity, response).

Knowing the level of availability of the intellectual capital requirements of the company under study.

#### 3.1.4.2 Results of the study

The real capital that organizations possess is not physical capital but intellectual capital, which is primarily represented in knowledge that can be converted into added value through successful investment in human energies and competencies.

The difference between the nominal value and the book value of the organization is the role of intellectual capital.

#### 3.1.4.3 Recommendations of the study

The necessity of constantly developing the organizational structure and making it more flexible, in order to provide a supportive environment for the development of intellectual capital.

Creating space for individuals to express their opinions and suggestions on developing and improving business procedures creates an innovative environment and supports the intellectual capital industry.

**3.1.5 Study (Hussein Nashaat Hussein, 2016) entitled (the role of intellectual capital in improving the quality of academic performance) [17]**

#### 3.1.5.1 Objectives of the study

Knowing the extent of awareness of those responsible for managing Egyptian public universities of the importance of the intellectual capital in them.

Knowing the role of intellectual capital in improving the quality of performance of faculty members in Egyptian government universities.

#### 3.1.5.2 Results of the study

Weak infrastructure supportive of the intellectual capital of these universities (libraries, classrooms, laboratories, labor tools).

The limited interest of university administrators in assessing distinguished and creative faculty members physically or morally.

#### 3.1.5.3 Recommendations of the study

Support creativity and innovation and retain human resources in light of distinct knowledge and creativity.

An interest in developing the infrastructure supporting the development of intellectual capital.

**3.1.6 Study (Al-Zahra Braibash, 2013) entitled (the role of intellectual capital in achieving a competitive advantage) [18]**

#### 3.1.6.1 Objectives of the study

Knowing the intellectual capital in its various components and the nature of the relationship between these components.

An aspect of the existing controversy has been exposed as a result of the multiplicity of concepts of intellectual capital and access to the most appropriate concept in line with the objective of the study.

#### 3.1.6.2 Results of the study

The intellectual capital is considered one of the elements that contribute to the success of the institution in addition to the physical capital.

Intellectual capital is one of the strategic resources that helps the organization succeed.

#### 3.1.6.3 Recommendations of the study

The necessity of dealing with intellectual capital as one of the resources owned by the institution and must be maintained and developed continuously, especially in light of the information revolution, open markets and intense competition.

**3.2 Second Axis : Previous studies on competitive advantage**

**3.2.1 Study (Ghada Haydar, 2017) entitled (The Impact of Strategic Planning of Human Resources on the Development of Intellectual Capital to Achieve a Competitive Advantage - Field Study on Egyptian Universities) [3]**

#### 3.2.1.1 Objectives of the study

Determine the relationship between strategic human resource planning and achieving a competitive advantage

Create a conceptual framework for the dimensions of management practices for strategic planning, intellectual capital and competitive advantage

#### 3.2.1.2 Results of the study

There are statistically significant differences between strategic planning between strategic human resource planning and the dimensions of competitive advantage (efficiency, quality, creativity, and responsiveness to customer needs)

The success of Egyptian universities in obtaining a competitive advantage depends on the efficiency of predicting future needs in human resources .

#### 3.2.1.3 Recommendations of the study

The necessity of involving workers after their training in strategic planning for human resources in Egyptian universities, in order to help the quality of the service provided and obtain a competitive advantage through it .

Universities must take into account the importance of job exchange, which affects the dimensions of competitive advantage, especially creativity, as a result of additional experiences gained by university workers.

**3.2.2 Study (Ahmed Ibrahim Saeed Hassan, October, 2017) entitled (The Impact of Total Quality Practices on Achieving Competitive Advantage) [19]**

#### 3.2.2.1 Objectives of the study

Providing ideas to decision makers on how to achieve a competitive advantage in pharmaceutical companies through the application of comprehensive quality practices.

Endeavoring to demonstrate the extent to which the dimensions of competitive advantage and its sensitivity are affected in light of intense competition in the pharmaceutical industry, by applying total quality .

#### 3.2.2.2 Results of the study

The competitive advantage is commensurate with the objectives of the company set to achieve the desired results.

The results of the level of the arithmetic mean for the items of competitive advantage paragraphs from the point of view of the analysis unit showed that they were medium, due to the pharmaceutical companies keenness to improve and improve their products in order to maximize their profits and market share and achieve competitive advantage.

#### 3.2.2.3 Recommendations of the study

The need for pharmaceutical companies to organize regular meetings between decision makers and employees because this greatly affects performance improvement.

Caring for the customer through providing high quality services that achieve a competitive advantage in the pharmaceutical sector.

### **3.2.3 A study (Mahmoud Sabry Mostafa Saleh, 2016) entitled (The effect of organizational culture on the competitive advantage applied to the common oil sector and the world in Egypt) [20]**

#### **3.2.3.1 Objectives of the study**

Knowing the relationship between the organizational culture of the organization and achieving competitive advantage.

Study the impact of the dimensions of competitive advantage (cost - quality - flexibility) on the success of organizations.

#### **3.2.3.2 Results of the study**

Knowing the relationship between the organizational culture of the organization and achieving competitive advantage.

Study the impact of the dimensions of competitive advantage (cost - quality - flexibility) on the success of organizations.

#### **3.2.3.3 Recommendations of the study**

The need to include the research and development function as a central function in the organizational structure of all economic institutions as the basis for technological innovation.

Developing the organizational culture of the institution in a way that helps to develop the existing competencies as a source to achieve a competitive advantage.

### **3.2.4 Study (Mohamed Rafrafi, 2015) entitled (The role of information technology in achieving competitive advantage in Algerian economic institutions) [21]**

#### **3.2.4.1 Objectives of the study**

Learn about the development in the sustainable competitive advantage in the economic institution.

Determine the importance of using information technology to achieve competitive advantage.

#### **3.2.4.2 Results of the study**

Competitive advantage is nothing but hard work and continuous research through which the institution can convert the capabilities available to it into an element or elements that distinguish it from its competitors in the market, and for this must be decision-makers in this area to pay attention to all aspects related to competitive advantage so that they can achieve the objectives planned in the term Near and far.

#### **3.2.4.3 Recommendations of the study**

The need for responsible managers to give increased attention to competitive advantages.

The necessity of establishing a system that integrates the elements of competitive advantage with information technology that takes it upon itself to keep pace with rapid technological developments.

### **3.3 Third Axis : Previous studies on the relationship of intellectual capital with competitive advantage**

#### **3.3.1 Study (Mukhlis Ahmed Muhammad Al-Gamsi, 2017) entitled (The Role of Intellectual Capital in Improving Competitive Advantage by Applying to Public Banks in Egypt) [5]**

##### **3.3.1.1 Objectives of the study**

Knowing the level of application of intellectual capital in the banks under study, and the degree of attracting intellectual capital, its industry, its activation, its preservation and caring for clients, and its relationship to improving the competitive advantage in the banks.

##### **3.3.1.2 Results of the study**

The most important source for achieving the competitive advantage of banks is the knowledge and mental skills that they possess, in order to outperform competitors.

The intellectual capital of its variables does not receive sufficient attention due to the occurrence of three of the five variables in the middle category, namely (polarization, activation, maintaining the intellectual capital), and the rest of the variables, ( Industry, customer care ) in the higher category, which is reflected in making the competitive advantage fall into the higher levels.

##### **3.3.1.3 Recommendations of the study**

Attention to research and studies related to intellectual capital so that organizations can learn more about how to invest them to achieve a competitive advantage.

The need to conduct a periodic knowledge assessment of bank employees and link the evaluation results to a system of incentives, rewards, and promotions that supports competitive advantage.

#### **3.3.2 Study (Al-Zahra Braibash, 2013) entitled (the role of intellectual capital in achieving a competitive advantage for the institution) [18]**

##### **3.3.2.1 Objectives of the study**

Knowing the nature of the relationship between the components of intellectual capital (human, structural, and relational) and its impact on achieving competitive advantage.

Attempting to build and test a hypothetical model to arrive at an image that reflects the relationship and role of intellectual capital in achieving a competitive advantage.

##### **3.3.2.2 Results of the study**

In order for human resources to turn into a competitive advantage, they must be characterized by scarcity, difficulty in imitation, non-substitution and high value.

Encouraging and developing the capabilities of creativity, participation among individuals and disseminating knowledge helps deepen their productivity in all fields.

##### **3.3.2.3 Recommendations of the study**

The institution shall ensure that workers carry out a variety of work for the sake of their scientific expertise, in a way that reflects the enhancement of human capital and contributes to achieving its competitive advantage.

The need for the institution to support and encourage the processes of creativity and innovation through experimenting with ideas and innovative solutions provided by workers and putting them into practice, which makes them feel the extent of their importance to the organization and turn from just a human resource to a competitive advantage for the institution in the market .

#### **3.3.3 Study (Mustafa Ragab Ali Shaaban, 2011) entitled (the role of intellectual capital and its role in achieving the competitive advantage of the Palestinian Cellular Communications Company, mobile) [22]**

##### **3.3.3.1 Objectives of the study**

The company drew the attention of the importance of intellectual capital as a strategic concept and try to confirm its role as a tool to achieve competitive advantage.

Knowing the extent of the influence of the components of intellectual capital in achieving the competitive advantage of the company.



### 3.3.3.2 Results of the study

The intellectual capital requirement meets 79.6% of the study capital requirement, and this contributes to the company having the ability to build a competitive advantage.

Human capital is the least influential field in achieving the company's competitive advantage.

Team work had the greatest correlation in achieving competitive advantage, and the field of knowledge came in the last order in order to achieve competitive advantage.

### 3.3.3.3 Recommendations of the study

The need for senior management to be aware of the position and role of knowledge in the company, and how the transmission and sharing of knowledge among workers contribute to the development and improvement of their performance, which is reflected in the company's possession of distinct human capital that contributes to achieving a competitive advantage.

The need for the company to encourage the building of work teams, which has an important role in the formation of distinguished human capital that contributes to achieving competitive advantage.

**3.3.4 Intervention [(Ashour Mazreq - Naima Qosheh), 2011] entitled (The Role of Intellectual Capital in Achieving the Competitive Advantage of Business Organizations) [23]**

[http://www.noorsa.net/files/file/9501\\_51.pdf](http://www.noorsa.net/files/file/9501_51.pdf)

### 3.3.4.1 Objectives of the study

Study the relationship between the pressures imposed by the intensity of competition and intellectual capital.

Study the effect of the dimensions of intellectual capital on achieving a competitive advantage.

Determine the most influential dimensions of intellectual capital in competitive advantage.

### 3.3.4.2 Results of the study

Intellectual capital is the basic pillar for building economic progress in general and the success of organizations in particular.

The decisions regarding intellectual capital are strategic decisions because they are a means of achieving the goals of the organization and a tool for obtaining a competitive advantage.

### 3.3.4.3 Recommendations of the study

The necessity of sustaining and invigorating the process of attracting and making intellectual capital because it achieves the qualitative superiority of the organization through competencies, creators and easy access to competitive advantage.

The necessity of planning the method of intellectual capital management within the strategic planning to achieve the goals of the organization.

**3.3.5 Intervention [(Zrukhi Firoz - Sukkar Kunza), 2011] entitled (the role of intellectual capital in achieving the competitive advantage of organizations) [24]**

[http://www.noorsa.net/files/file/5d3d\\_47.pdf](http://www.noorsa.net/files/file/5d3d_47.pdf)

### 3.3.5.1 Objectives of the study

Highlighting the role of intellectual capital in achieving the competitive advantage of the organization.

### 3.3.5.2 Results of the study

An organization that has a clear strategic vision can achieve a competitive advantage over other organizations that lack this vision, and this requires defining the roles each member plays in the intellectual capital of the organization, and also requires creative human competencies to achieve goals quickly and thus

the true capital of the organization is Intellectual capital.

### 3.3.5.3 Recommendations of the study

The need to motivate and encourage workers to create new ideas with material and moral rewards and promotions.

Providing the necessary conditions and capabilities to facilitate the learning process within the organization as a forum for knowledge on the Internet.

## 4 LITERATURE REVIEW

### 4.1 Commenting on previous studies

**4.1.1** The increasing relative importance of intellectual capital compared to physical capital in light of what is known as the economy of knowledge, developments and rapid successive changes in the business environment, and in that many studies, including the study (Ayman Ibrahim Shafiq 2018) and the study (Ghada Haidar 2017) and the intervention (Dr. / Ashour Merzaiq - Professor / Naima Kuwaideri Qosheh 2011) Also agreed with them (Dr. Kamal Ruzaq 2012) study on the critical importance of intellectual capital in achieving value for organizations.

**4.1.2** Most studies have unanimously agreed that intellectual capital consists of three main elements (human capital, structural capital and customer capital) and among the most important studies that support this classification a study (Abdullah Nakhilan Al-Mutairi 2018), (Mervat Nabeel Muhammad 2017) and (Muhammad Salem Al-Ghassini 2017) and (Farhati Louisa 2016) and there is a study that detailed the components of intellectual capital to human capital, structural capital, relationship capital, intellectual assets And intellectual property.

**4.1.3** Most studies confirm the existence of a relationship between intellectual capital and the performance of organizations, and there is almost agreement between studies on the difficulty of including intellectual capital in the financial statements of organizations.

### 4.2 Similarities between the previous studies and the current study

**4.2.1** The current study and some previous studies aim to highlight the role intellectual capital plays in achieving the competitive advantage of companies.

**4.2.2** The current study agrees with other studies that intellectual capital consists of three main elements ( human capital, structural capital and customer relationship capital), and that the dimensions of intellectual capital are (polarization, industry, activation, maintenance, and customer care).

### 4.3 The differences between the previous studies and the current study

**4.3.1** The current study deals with highlighting the role of intellectual capital in achieving the competitive advantage by applying to companies operating in the fish farming sector and developing fish wealth and fisheries departments and it is one of the fields based on crafts and professions related to fishing, which has not been studied before in any of the studies Previous.

**4.3.2** The current study deals with the effect of the dimensions of intellectual capital (polarization, industry, activation, conservation, and customer care) in achieving the competitive advantage, which differed with the majority of previous studies that dealt with the impact of the components of intellectual capital (human capital, structural capital and capital Customer Relationship Money).

### 4.4 Benefits from the Previous Studies

**4.4.1** Formulating the theoretical framework for the study and reviewing recent experiences of these studies, paves the way for the current study to try to reach its goals.

**4.4.2** Help the researcher define the study problem and formulate hypotheses.

**4.4.3** The books and references section directed the researcher towards the sources of information related to the problem.

**4.4.4** Benefit from the results of studies and statistical analyzes in choosing the appropriate research methodology and refer to these results when discussing and analyzing the results that this study will produce for us, recommendations and proposals .

## 4 STUDY PROBLEM

The National Company of Fishery and Aquaculture under study is the first investment company of its kind in Egypt that implements national fish farming projects in multiple regions and manages many marine fisheries on Egypt's coasts to impose state control over this dangerous sector that is subject to the greed of the private sector and monopolize the fish farming craft And hunting for decades, using unhealthy and unprofessional methods that are not concerned with the health of citizens during the feeding and care of fish, which causes a decrease in the level of public health and an increase in health care costs, and the tendency of others to import frozen fish to cover market requirements, which raises the trade deficit , This imposed the necessity for the state to intervene by establishing (The National Company of Fishery and Aquaculture) under study to restore discipline in the fish farming and fishing sector and the development of fish wealth in cooperation with the General Authority for Fish Resources Development of the Ministry of Agriculture and to reduce dependence on imports and start producing high-quality fish and subject to high control on The quality of the product that preserves the general health of the Egyptians and helps reduce the trade balance deficit and provides hard currency, and with these requirements appeared an increase in production costs and increased selling prices in light of the company's pursuit of simple profit margins as it is basically an investment company which made it subject to intense competition in the internal market and obtaining a new competitive advantage for it has become the most important thing it seeks without increasing costs and with maintaining the level of product quality, which enables it to remain in the market and achieve profits, and succeed in bridging the food gap due to the high prices of meat and poultry and the dependence on a new type of nutrition that preserves public health It reduces the chances of infection with many diseases in the long term. The problem of the study is illustrated here on how to achieve the competitive advantage of (The National Company of Fishery and Aquaculture) under study in the market by developing its management method of its intellectual capital as it is an existing asset with the company through which innovation and creativity can be achieved and distinguish it from its competitors and increase customer confidence in it despite the relatively high prices of products from their counterparts, and through this problem the main question of the study can be formulated (what is the role of intellectual capital in its various dimensions in achieving the

competitive advantage In fisheries companies and fisheries departments in Egypt ? ) .

## 5 THE IMPORTANCE OF THE STUDY

The importance of the study stems from the discussion of one of the modern topics in contemporary administrative literature, and the extent of the impact of the role played by intellectual capital as the intangible resource that can contribute to increasing the opportunities of companies in achieving competitive advantage and maximizing the profits of companies, and the fish farming and fishing sector is one of the most important The sectors affecting economic and social development and national security, **The importance of the study can be divided as follows :**

### 5.1 The Practical Importance

**5.1.1** Learn about the ability of fish wealth companies and fisheries departments to benefit from their intellectual capital and the strengths and weaknesses of their management method.

**5.1.2** Presenting a proposed framework that attempts to come up with some recommendations that can assist fisheries companies and fisheries departments in developing their intellectual capital to achieve a competitive advantage.

**5.1.3** To highlight the obstacles that hinder the achievement of competitive advantage and the role of intellectual capital in removing these obstacles.

**5.1.4** The research deals with one of the most vital sectors for the development of society, which is the fisheries sector and fisheries departments.

### 5.2 The Scientific Importance

There are many studies and research in the field of intellectual capital and its role in achieving a competitive advantage, but there is a dearth of studies related to the craft and professional sectors, and then this study is the first of its kind in this sector, especially fisheries companies and fisheries departments to make a modest contribution to enriching Management literature.

## 6 STUDY OBJECTIVES

The study aims mainly to identify the availability of intellectual capital and the extent of interest in it in the company under study, and to identify its role in developing creative capabilities in these companies and then create an added value that achieves a competitive advantage that enables them to survive and expand and reap the profits despite the intense competition In the local market, **by dividing the main objective of this study into the following sub-goals**

**6.1** Attempt to clarify the difference in the concept of intellectual capital and competitive advantage, and to understand and understand the theoretical concepts included in the study framework, based on previous studies in this field .

**6.2** Knowing the level of interest in intellectual capital within the fisheries companies and fisheries departments under study.

**6.3** Description of the relationship between intellectual capital and competitive advantage in fisheries companies and fisheries departments under study.

**6.4** Determining the most influential dimensions of intellectual capital on the competitive advantage in fisheries compa-



nies and fisheries departments under study.

**6.5** Presenting a set of recommendations and proposals to increase the effectiveness and efficiency of the role of intellectual capital, with its dimensions, in achieving competitive advantage.

## 7 STUDY METHODOLOGY

### 7.1 Analytical Descriptive Approach

This approach is consistent with the nature of the research problem at hand and the purposes of the study; this is through analytical reviews and scientific references such as books, studies, researches, periodicals, scientific symposia, articles and websites of the International Information Network, whether in Arabic or English language, which are of interest to the subject of the study; And statistical data analysis..

### 7.2 The historical method

Tracks previous studies on the subject of the study and compare it to the current study and study the similarities, differences and uses of previous studies.

### 7.3 The case study method

We adopted the case study approach in the applied study, where we dropped the theoretical side of the company under study and analyzed the study statistically.

## 8 STUDY MODEL AND VARIABLES

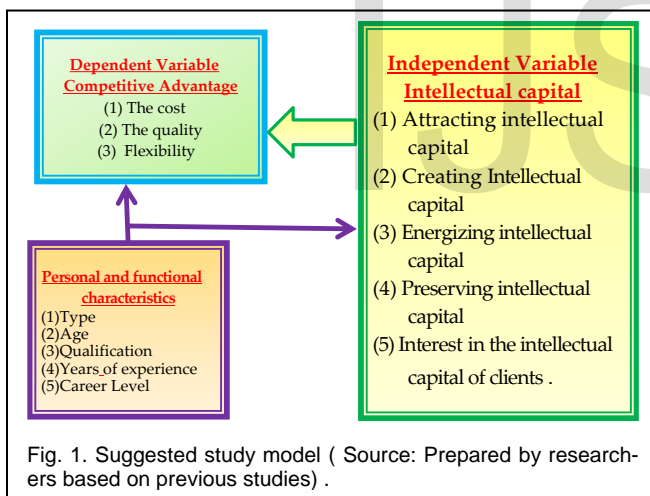


Fig. 1. Suggested study model ( Source: Prepared by researchers based on previous studies) .

## 9 STUDY HYPOTHESES

The researcher formulated (2) main hypotheses and (10) sub hypotheses as follows

### 9.1 The first main hypothesis

"There is a significant correlation of intellectual capital with its dimensions in achieving the competitive advantage of The National Company of Fishery and Aquaculture" and **the following sub-assumptions emerge from it**

**9.1.1** There is a significant correlation relationship to attract intellectual capital in achieving the competitive advantage of The National Company of Fishery and Aquaculture.

**9.1.2** There is a significant correlation relationship for the intellectual capital industry in achieving the competitive ad-

vantage of The National Company of Fishery and Aquaculture.

**9.1.3** There is a significant correlation relationship to stimulate intellectual capital in achieving the competitive advantage of The National Company of Fishery and Aquaculture.

**9.1.4** There is a significant correlation relationship to maintain intellectual capital in achieving the competitive advantage of The National Company of Fishery and Aquaculture.

**9.1.5** There is a significant correlation relationship for the interest in clients' intellectual capital in achieving the competitive advantage of The National Company of Fishery and Aquaculture.

### 9.2 The second main hypothesis

" There are significant differences for the perceived values of workers for the study variables according to personal and functional characteristics (Type - Age - Qualification - Years of Experience - Career Level) of The National Company of Fishery and Aquaculture " , **and the following sub-assumptions emerge from it :**

**9.2.1** There are significant differences for the perceived values of workers for the study variables according to the type of The National Company of Fishery and Aquaculture.

**9.2.2** There are significant differences for the perceived values of workers for the study variables according to the age of The National Company of Fishery and Aquaculture.

**9.2.3** There are significant differences for the perceived values of workers for the study variables according to the scientific qualification of The National Company of Fishery and Aquaculture.

**9.2.4** There are significant differences for the perceived values of workers for the study variables according to the years of experience of The National Company of Fishery and Aquaculture.

**9.2.5** There are significant differences for the perceived values of workers for the study variables according to the job level of The National Company of Fishery and Aquaculture.

## 10 DATA COLLECTION SOURCES

### 10.1 Secondary sources

**10.1.1** Arabic and foreign books and references.

**10.1.2** Periodicals, bulletins and articles

**10.1.3** Research published and unpublished

### 10.2 Primary sources

**10.2.1** The questionnaire to obtain the necessary data for this study.

**10.2.2** Personal interviews to inquire and obtain some information about the study.

## 11 SOCIETY AND STUDY SAMPLE

### 11.1 Study Population

#### 11.1.1 For workers

The size of the study population includes approximately 241 individuals for workers at different administrative levels (senior management - middle management) at the headquarters of the National Fish and Aquatic Resources Company, and a number of approximately 458 individual executive management (marketing, fisheries departments on different coasts) with a total number of (699) Single.

#### 11.1.2 For clients

The size of the study population includes (567,897) indi-

vidual clients of the National Fish Resources Company in Egypt in the neighborhoods and cities that fall within the scope of the company's product distribution and fisheries departments according to feasibility studies.

## 11.2 Study sample

### 11.2.1 For workers

A total sample will be studied with a total of (250) individuals for workers at different administrative levels at the company's headquarters.

### 11.2.2 For clients

A sample will be studied with a total of (385) individual clients

## 14 RESULTS & RECOMMENDATIONS

### 14.1 RESULTS

**14.1.1** Attention to intellectual capital supports efforts to take advantage of the company's tangible assets that encourage creativity and promote existing knowledge as a basis for new ideas that are used in producing innovations and achieving the company's competitive advantage.

**14.1.2** There is a significant impact for each dimension of intellectual capital on the total degree of competitive advantage.

**14.1.3** There is an impact of personal and functional variables on each of the intellectual capital in its various dimensions and achieving competitive advantage.

**14.1.4** Optimal use of the company's internal intellectual resources by relying on intellectual capital management is the main source for achieving competitive advantage.

**14.1.5** The company's competitive advantage arises through its possession of distinct resources and capabilities that are difficult for competitors to own.

**14.1.6** The real capital that organizations possess is not physical capital but intellectual capital, which is primarily represented in knowledge that can be converted into added value through successful investment in human energies and competencies.

**14.1.7** The difference between the nominal value of the organization and its book value is the intellectual capital it possesses, which is the source of competitive advantage and competitive advantage for it.

### 14.2 RECOMMENDATIONS

**14.2.1** There is a need for a revolution in human resource policies and organizational structures, and the importance of focusing on the worker as the governing component of the company.

**14.2.2** The necessity of building a solid intellectual base to raise the value and efficiency of the company **through the following :**

A - Setting high standards for the employees of the company and working to develop them by comparing the current situation of the company with the goal that you seek to reach.

B - To develop the competencies and capabilities of workers by assigning them to new and difficult tasks.

C - Attracting members of the Board of Directors who possess various intellectual talents.

**14.2.3** The necessity of paying attention to the intellectual capital industry of any joint-stock company by giving way to the employees and employees of it to express their opinions and proposals regarding the development of the company's work; While encouraging direct dialogue between the management of the

company and between them with a view to ripening creative ideas, this is done in friendly meetings that enable employees to launch their ideas and the ultimate outcome of this is to raise the value of the company.

**14.2.4** Because of the characteristics of intellectual capital in terms of its scarcity, high value and lack of imitation; It can be considered a strategic asset for the company, which requires the top management to focus its efforts in its development and investment and maximize its returns to achieve competitive advantage and increase the value of the company in light of the changing competitive environment to achieve its strategic goals of survival, growth and increasing market share.

**14.2.5** Giving great importance to the dimensions of intellectual capital, especially attention to the customer's intellectual capital (for clients) by improving relations with customers and giving great importance to satisfying their needs and speed of response to them and trying to seek to achieve their loyalty and satisfaction and maintain them and establish strong relationships with them and improve them constantly; And the intellectual capital industry through training and continuing education, and stimulating and attracting intellectual capital through modernizing organizational structures and attracting talents to the higher departments of the company.

**14.2.6** The company must increase its efforts to support creativity and innovation processes and retain human resources with distinct cognitive capabilities, by eliminating restrictions and constraints that limit the ability of individuals to innovate, as they relate to them with a special type of interest and encouragement rewards, and make room for them for creativity at work .

**14.2.7** The company must enhance the element of strategic alliances, rely on them and benefit from their expertise in its field of work .

## REFERENCES

- [1] Abdullah Mohammed Nakhilan Al-Mutairi, October 2018, PhD thesis (A suggested framework for the role of intellectual capital in organizational development), Faculty of Commerce, Ain Shams University, page 3.
- [2] Ayman Ibrahim Shafiq, January 2018, PhD thesis (The role of intellectual capital in improving the level of services in public organizations), Faculty of Administrative Sciences / Sadat Academy, page (2, 38, 73, 74, 162) .
- [3] Ghada Haydar Ali Hussein, December 2017, Master Thesis ( The Impact of Strategic Human Resources Planning on Developing Intellectual Capital to Achieve a Competitive Advantage ), College of Administrative Sciences / Sadat Academy, page (1, 58, 68, 84, 116, 123) .
- [4] Mohammed bin Salem Al-Ghassini, March 2011, MA Thesis (The Role of the Ministry of Education in the Sultanate of Oman in the Management of Intellectual Capital), Performance Magazine - Sultanate of Oman - the scientific peer summary, issue No. 148, p. 149.
- [5] Mukhlis Ahmed Muhammad Al-Gamsi, November 2017, PhD thesis in Public Administration (The role of intellectual capital in achieving competitive advantage by applying to public banks in Egypt), College of Administrative Sciences / Sadat Academy, unpublished letter, page (20, 30, 104, 118, 127) .
- [6] Mervat Nabil Mohamed, May 2017, PhD thesis, (The Impact of Intellectual Capital Management on Organizational Excellence), Faculty of Administrative Sciences / Sadat Academy, page 10.
- [7] Dr. Kamal Rozaqi, January 2012, Journal of Economics and Human Development, International Scientific Journal, PhD thesis on Intellect-

- tual Capital and the Problem of Creating Value (Competitive Advantage), University of Blida / Algeria, page (61-75).
- [8] Imad Dawood Al-Zeer, PhD thesis in Business Administration (The role of intellectual capital in achieving creativity among workers in Palestinian universities), College of Graduate Studies / Jinan University, Tripoli, Lebanon, page (50-63) .
- [9] Dr. Muhammad Ali Al-Rousan, Dr. Mahmoud Muhammad Al-Ajlouni, a field study published on the Internet (the impact of intellectual capital on creativity in Jordanian banks), Jordan Wall University, published in the Journal of the University of Damascus for Economic and Legal Sciences, volume 26, number two, 2010, page (37 -57) .
- [10] Maysoun Ali Abd al-Hadi, 2017, MA thesis published on the Internet in Leadership and Management (Intellectual Capital and its Role in Quality of Institutional Performance), Academy of Management and Policy for Graduate Studies / Al-Aqsa University, Gaza, Palestine, page (26-36) .
- [11] Mahmoud Sabry Mostafa, 2016, Unpublished Master Thesis on the Internet (The Impact of Organizational Culture on Competitive Advantage), Faculty of Administrative Sciences / Sadat Academy for Administrative Sciences, page 35.
- [12] Dr. Ali Al-Salami, Unpublished book on the Internet (Strategic Human Resources Management), Gharib Publishing and Printing House, 2001, Cairo, Egypt, second edition, second part, page 93.
- [13] Dr. Khalil Nabil Morsi, (Competitive Advantage in Business), Alexandria Book Center, Unpublished report on the Internet, 1998, Bibliotheca Alexandrina, page (82-83).
- [14] Abu Bakr Mustafa Mahmoud, (Human Resources: An Introduction to Achieving Competitive Advantage), 2006, an unpublished book on the Internet, University House for Printing and Publishing, Alexandria, Egypt, page (17-19).
- [15] Moayed Saeed Al-Salem, "Human Resources Management: An Integrated Strategic Approach", 2009, Enrichment House for Publishing and Distribution, Amman, Jordan, page (24-26).
- [16] Farhati Louisa, March 2016, (The Role of Intellectual Capital in Achieving the Competitive Advantage of Economic Institutions in the Shadow of Knowledge Economy), Faculty of Economic, Commercial and Management Sciences / University of Mohamed Khidr / Algeria, page ( H , 300 , 302 ) .
- [17] Hussein Nashaat Hussein, 2016, Master Thesis (The Role of Intellectual Capital in Improving the Role of Academic Performance), College of Administrative Sciences / Sadat Academy for Administrative Sciences, page ( 38 , 47 ) .
- [18] Zahraa Braibach, 2013, MA Thesis (The Role of Intellectual Capital in Achieving a Competitive Advantage for the Corporation), Faculty of Economic, Commercial and Management Sciences / University of Mohamed Khader / Algeria, page ( 5 , 102 , 103 , 104 ,105 ) .
- [19] Ahmed Ibrahim Saeed Hassan, October 2017, MA Thesis (The Impact of Total Quality Practices on Achieving Competitive Advantage: A Field Study in Jordanian Pharmaceutical Companies), College of Business / Middle East University / Jordan, page ( 3 , 84 , 87 , 88 ) .
- [20] Mahmoud Sabry Mostafa, 2016, Unpublished Master Thesis on the Internet (The Impact of Organizational Culture on Competitive Advantage), Department of Graduate Studies, College of Administrative Sciences / Sadat Academy for Administrative Sciences, page ( 4 , 114 , 117 ) .
- [21] (Mohamed Rafafi, 2015), MA Thesis (The Role of Information Technology in Achieving Competitive Advantage in Algerian Economic Institutions), Faculty of Economics, Business and Management Sciences / University of Mohamed Khader (Algeria), page ( C , 90 , 125 ) .
- [22] Mostafa Ragab Ali Shaaban, 2011, MA Thesis (Intellectual Capital and its Role in Achieving the Competitive Advantage of the Palestine Communications Company), Faculty of Commerce / Islamic University - Gaza , page ( 11 , 89 , 108 ) .
- [23] (Dr. Ashour Marzaiq - Professor / Naima Koueidri Qosheh), 2011, an intervention entitled The role of intellectual capital in achieving a competitive advantage for workers' organizations, Faculty of Economic and Management Sciences / Algeria research published online (pp. 3, 15, 16).
- [24] Zrukhi Fayrouz - Sugar Kenza, 2011, research intervention, scientific forum published on the Internet (the role of intellectual capital in achieving competitive advantage), international forum on business organizations, page ( C , 300-301 , 303 ) .