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Transition to the knowledge economy in the age of new media

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Abstract:

The new information and communication technologies have given humanity many advantages that have developed various areas of social, political and economic life . Perhaps the economic field is the most benefited from these new media of communication through what is known as the knowledge economy based on creativity and innovation and the employment of ideas, human resources and skills to advance development .

This is what we will try to shed light on through this research paper, which relied on a descriptive study of the reality of the knowledge economy in light of modern information and communication technologies and ways to move from classical economies to knowledge and information economies

Keywords: new information and communication technologies , new media , the knowledge economy , human resources , development .

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1. INTRODUCTION

It is well established that Information and communication networks have played a prominent role in the openness of peoples and cultures to each other, which allowed the transfer of knowledge and information exchange in addition to the provision of a new cultural, educational and scientific environment that led to the formation of the so-called "*knowledge society*". The latter is human and knowledge blocks and groups which are able to communicate, interacte, work and produce using knowledge and modern technologies.

On the same line of thought, this society is built upon information; in other words, "*knowledge*" is at the basis of its formation which enables it to use renewable knowledge as a means of creativity, innovation, production, marketing and competition at low prices for high-quality goods and equipment. This has allowed the enlargement of its economy, enhanced exports and improved levels of national income, thus building a "*knowledge economy*" which is a result of the concept of "*knowledge society*". It stands upon finding knowledge and its renewal as the main tool in creativity, innovation and production, improving the level of human development and enhancing national security through the participation of a group of workers in the "*knowledge industry*" in processing, analysing, presenting and providing information to support decision centres in society.

On this point, Peter Drucker says in his book "*Managing for the Future*": From now on the key is knowledge. The world is not turning into a place that badly needs labour and raw materials, it is turning into a place that badly needs knowledge. Remember that 80% of the value added to products and services comes from knowledge. It is a knowledge worker economy, the making of wealth moves from money and things to people; in which the greatest financial investment we make is what we invest in the knowledge factor.

Furthermore, knowledge development is a cultural issue that transforms the world from distant continents into a small village that has grown and extended on its edges and surrounds us on

all sides. Traditional industries have developed by relying on competitive advantage through creative industries, modernization of science, research and their applications in various fields of life, from medicine to agriculture, and in crystallising quality concepts and presenting most of them through networks, from e-government to e-learning to hospitalisation and management.

2. Conceptual Framework

2.1 Definition of media communication

It is well known that media or simply means of communication, is what the media message or the channel carrying the symbols contained in the message leads to, from the sender to the receiver. Moreover, any communication process consists of the sender who chooses a means to convey his/her message, either orally or by mass communication (audio, visual, audio-visual). However, "the medium is not only the machine or the device in itself, but rather, it is personalised in the whole structure of communication which means that the newspaper, for example, without a printing press and without a distributor is not a means of communication" (زاهر, 1997, p. 51).

Following that, the means of communication are also known as a technique or tool that connects two or more individuals by which they transmit language, symbols or movements that are understood by the two parties to the communication, the sender and the receiver. The means of communication are: the audio which encoumpasses spoken speech, sounds and music, the visual means that includes images, rigid and animated graphics, and text and digital means. nonetheless; if we move to the essential description of the new technology, and this is the decisive factor, we will find that this technology has a basic feature that has become in its essence, which is the possibility of positive interaction (send and reply), i.e. using communication materials present in the computer program, and accordingly, the specialised researchers believe that "the label *"multi-media*" is incapable of conveying the content because it contains an absence of the essential element" (حمدي, NY, p. 44)

2.2 Definition of new media and its means

Media is defined by the computer dictionary through two entries: (أبو الحمام, 2011, p. 47) The new media refers to a set of digital communication applications and electronic publishing applications on disks of various types, digital television and the Internet, and it indicates the use of personal and mobile computers as well as wireless applications of telecommunications and mobile devices.

New media applications are in the context of digital combinations such as audio and video that can be played in conjunction with word processing and telephony and other operations directly from any computer.

2.3Definition of modern information and communication technology

In the context of modern information and communication technology, the two tapper by combining the written and spoken word alongside static and moving images between wired and wireless terrestrial or satellite communications, then storing the data, analyzing its contents, and making it available in the desired form at the right time and the necessary speed. Fahmy Haidar defines it as "new information and communication technologies refer to all types of technology used in the operation, transmission and storage of information in electronic form, including computer technology, means of communication, checks, fax machines and other equipment that is heavily used in communication" (عبد الوهاب, 2005, p. 68).

3. Features of modern information and communication technology

3.1 Communication Technology

Communication is the exchange of ideas, information and opinions between two or more parties through different methods and means such as sign, speech, reading and writing, and therefore we mean by communication technology "any tool, device or means that helps to produce, distribute, store, receive or display data and retrieved, (بيلي وآخرون., 2009. p. 121).

On the same token, Dr. Zaher Ahmed defines the term technology in three basic concepts: (زاهر, 1997)

- A- Technology as a Process: It is the organized application of scientific content or information for the purpose of a specific performance that ultimately leads to the solution of a specific problem.
- B - Technology as a product: the outcome of the application of practical methods is in assisting in the production of machines and materials, as the film as a raw material and the projector itself are a product of the technological application of scientific concepts and methods.
- C- Technology as a mixture of method and product: From this it is clear that the process of invention is accompanied by a production process, and therefore technology as a method cannot be separated from it as a product. (عباس, 2008, p. 71)

Thus it can be said that communication technology is the sum of the various techniques, tools, means, or systems that are employed to process the content that is intended to be communicated through the process of mass, personal, organizational or collective communication, through which information and data are collected, audio or written, either Photographed, drawn, audio-visual, printed or digital through electronic computers, then storing and retrieving this data and information in a timely manner and finally publishing these communication materials, transferring them from one place to another and exchanging them. These technologies may be manual, automatic or electronic according to the stage of its historical development and the areas covered by this development.

4.the concept of knowledge and its characteristics

4.1 Defining knowledge

There are many and varied concepts related to knowledge, and we will try in the following to focus on the most important of them:

- 1: The Economic and Social Commission for Western Asia (ESCWA) defined knowledge as "a resource that can be tapped and used to create wealth and enhance the quality of life" (بيلي وآخرون, 2007, p. 8-9).
- 2- Knowledge means that it is: "a product of human interpretation, translation and analysis, and it is an intangible, intangible asset, but we have the ability to measure it, and it creates wealth for the organization" (Davenport and Prusak, 2000, p 03).
- 3- Knowledge is also defined as "a mixture of information, technology, experience, skills and wisdom that bear the characteristics of innovation, creativity, innovation and the individual's ability to store that information to the extent that he can benefit from it" (عليان, 2008).

Accordingly, we can say that: knowledge = stored information + ability to benefit from this information. Knowledge means awareness, understanding, and learning and is related to a specific situation, reality, aspect or problem, and based on the data and information available about it and related to it. Therefore, knowledge is directly related to the data and information.

- Characteristics of knowledge: If knowledge is considered an economic commodity, it is distinguished from other commodities by a number of characteristics, including: (خلف, 2007, p. 12)

- ➔ Knowledge is a non-material good.
- ➔ Knowledge is subject to continuous change, that is, it is not fixed and changes with the change of information.
- ➔ Knowledge is the product of knowledge, learning, and experience.
- ➔ Knowledge is described as cumulative and inexhaustible, meaning that it is renewed, increased and accumulated. That is, they do not perish using them.
- ➔ Knowledge that can lead to the generation of new knowledge based on previous knowledge that represents the basis for the generation of new knowledge.
- ➔ Knowledge as a cognitive ability can be interactive knowledge that is achieved through dialogue, and a mechanism through the use of techniques that allow knowledge based on electronic and automated knowledge bases.
- ➔ Knowledge has the ability to transcend distances and borders and evade tax and customs restrictions, especially if they are digital.
- ➔ Knowledge is continuous, i.e. indefinite and does not perish by transferring from one person to another, which means that it can exist an infinite number of times without the need to reproduce it again and without a financial consideration, as well as to benefit from it. its returns to the outskirts of society in general.
- ➔ The benefit of knowledge does not depend on its abstract content, but rather on the extent to which this content contributes to finding solutions to important issues in a particular society and at a specific time, and if knowledge is hoarded and not used well, its value becomes equal to zero.
- ➔ A large number of nations live today due to the strength of their knowledge economy, which has come to dominate all aspects of their political, social and cultural life. Unfortunately, when looking at the Arab nation and its peoples, we find that they suffer from a problem of lack of interest in investing their wealth in knowledge investment projects. Considering the situation of the Arab nation in mind, and under the microscope in terms of a realistic economic aspect, we note that it needs serious work and unremitting efforts to form a comprehensive awareness regarding support for human-based knowledge projects, development and investment in them to turn into a knowledge economy, and engineering this economy into sustainable development based On the knowledge-based economy in order to advance the political and economic condition of this nation (عبد الونيس أيوب, 2006, p. 21).

5.The implications of the knowledge economy

5.1 The concept of the knowledge economy

The term knowledge economy or knowledge-based economy refers either to a knowledge economy that focuses on the production and management of knowledge within the framework of economic constraints, or to a knowledge-based economy. The latter refers to the use of knowledge technologies (such as knowledge engineering and knowledge management) to produce economic benefit as well as to create jobs. The term gained popularity after it was coined by Peter F. Drucker in the title of the twelfth chapter in his book "*The Age of Discontinuity*", where he used the term knowledge economy and knowledge society. Multiple terms are often used to emphasize different aspects of the knowledge economy, including the information society, the economy, the digital economy, the network of the new economy or the knowledge economy and the information revolution.

Whereas land, labour, and capital were the three primary factors of production in the old economy, the important assets in the new economy are technical knowledge, creativity, intelligence, and information. Intelligence embodied in computer software and technology across a wide range of products has become more important than capital, materials, or labour (Drucker, 1969).

Abdul Rahman Al-Hajj defines the knowledge economy as "the economy in which knowledge achieves the greatest part of the added value, and this means that knowledge in this economy constitutes an essential component in the production process as well as in marketing, and that growth increases with the increase of this component based on information technology." And communication, as the basic platform from which it is launched, meaning that information is the only element in the production process, information is the only product in this economy, and information and its technologies are what constitute or determine production methods and marketing opportunities and fields, whether information is just Data, or scientific research, experiences and skills, both of which are correct, and this is what has been termed the post-industrial economy (قاسم, 2011).

Whereas the United Nations Development Program (UNDP) in 2003 defined the knowledge economy as: the dissemination, production and employment of knowledge sufficiently in all areas of economic community activity, civil society, politics and private life, in order to steadily upgrade the human condition, that is, to establish human development. (بن الشيخ, 2015, p. 6)

Based on the foregoing, the knowledge economy basically means that knowledge is the main driver of economic growth. Knowledge economies depend on the availability of information and communication technologies and the use of innovation and digitization. In contrast to a production-based economy, where knowledge plays a lesser role, and where growth is driven by traditional factors of production, qualified and highly skilled human resources, or human capital, are the most valuable assets in the new, knowledge-based economy. In a knowledge-based economy, the relative contribution of knowledge-based or enabling industries, mostly medium and high-tech industries, such as financial and business services, is high.

In short, the knowledge economy is intended to use technological technologies in addition to the process of employing them in order to seek to reach an advanced life in all fields and activities by making use of technology with its services and types of the Internet and information technology applications, and the reason for the growth of the economy in the world and production is knowledge, and that In several ways caused by knowledge, which is either we extract and prepare goods and services using information or by using technology in old goods and services, i.e. developing and building on them.

According to United Nations estimates, the knowledge economy controls 7% of the world's gross domestic product, and this economy is experiencing an annual growth rate ranging between 10% - 50% of the total product of the member states of the European Union; Because of the interest of these countries in the use of communications and information technology (طعان, NY, p. 8)

5.2 The difference between the traditional economy and the knowledge-based economy

Based on the comparison of the old traditional economy with the knowledge-based economy, we find some distinguishing features of the knowledge-based economy, which we summarize as follows: (الابراهيم, 2004, pp. 102-103)

- ➔ The knowledge economy is characterized by the ability to generate and use knowledge, or in other words, the ability to continuously innovate, as it is not only the main source of wealth, but is the basis of the comparative advantage gained in the new economy.

- ➔ Opportunities to choose between different goods and services, whether for consumers or producers.
- ➔ Distances are not an obstacle regardless of their dimensions, to the process of economic development, communication, education, project success, or full integration into society in general.
- ➔ Knowledge is increasingly available to all individuals and is provided in a manner consistent with individual and social needs, enabling each individual to make decisions more wisely in all areas of life.
- ➔ Every individual in society is not only a consumer of information, but also a creator or creator of it.
- ➔ The transition of economic activity from the production and manufacture of goods to the production and manufacture of knowledge services.
- ➔ Activating research and development processes as an engine for change and development.
- ➔ The higher the income for the knowledge makers, the higher their qualifications and the diversification of their competencies and experiences.
- ➔ It is a flexible economy that is very fast and changing, evolving to meet changing needs, and is characterized by openness and global competition; there are no barriers to entering the knowledge economy, rather it is a completely open economy.
- ➔ He has the ability to innovate, find and generate new intellectual and knowledge products that the markets did not know before.
- ➔ Its connection with intelligence, innovative ability and imagination, and with the perceptual awareness of the importance of invention, creation, and self and collective initiative to achieve what is better, and activating all of this for greater production in quantity, more in quality of performance, and better in achieving satiation.
- ➔ The knowledge economy is open to the world, because no economy can create and monopolize knowledge without sharing or importing new knowledge from others, and the economic climate at the macro level in a knowledge-based economy must be conducive to investment in knowledge, information and the ability to innovate , which is very important, because ensuring the sustainability of the knowledge-based economy requires the need to encourage investment in the future, which rates of return may be low or limited, and therefore such areas need to support economic policy in countries that seek to achieve a knowledge-based economy (الابراهيم, 2004, pp. 102-103).

6.Information technology and the knowledge economy:

6.1 Indicators of knowledge economy and information technology

There are numerous indicators that point out the world's gradual trend towards knowledge, and confirm the growing role of information in economic and social development. As we follow the transformations in today's world, We can enumerate the most important of these indicators in the following points: (Shapro, 2000, p. 41)

- ➔ The dependence of the economy on qualified and specialized labour since the most important characteristic of the new economic situation is the high demand for highly qualified and specialized labour in the field of knowledge, and the decrease in activities that depend on the less sufficient labour.
- ➔ The transition of the organization of the economy from the production of goods to the production of services, as there is an escalating transition of economic activity from focusing on goods to the service industry in all its forms. For example, we note in North American countries

that more than 70% of the workforce works in the field of services, and these percentages Annually by about 2.3%, while a decrease of 0.2% per year is known in the commodity sector. Perhaps one of the most important factors explaining this transformation is the high demand for services on the part of production units and consumers alike. The demand and use of production units is evidenced by their reliance on information programs along the production chain (shapro, 2000, p. 41).

6.2 Requirements for the transition towards a knowledge economy

The development of a knowledge-based economy has imposed a series of changes in the nature and organization of society in general and within the framework of the economic environment - in particular - which is mainly characterized by strong competition, which prompted many institutions to rearrange their organizational and strategic arrangements to become more compatible with: globalization, technology and economic values new. The path of transformation and development requires a number of factors that we can list as follows:

- ➔ The need to use information among the general public and it is broad - within the framework of the information society - they use information extensively in their activities as consumers as well as as citizens to exercise their rights and responsibilities, in addition to establishing information systems that expand the availability of education and culture for all members of society.
- ➔ The necessity of using information as an economic resource, as institutions and companies must exploit information and increase its efficiency, which confirms this growing trend towards information companies to improve the overall economy of the state.
- ➔ As a guarantee for the effectiveness of the aforementioned, it is necessary to provide a basic and necessary factor, which is the factor of training and continuing education. What distinguishes the economy based on knowledge is the need to constantly acquire information and develop the necessary qualifications for its investment, as education and continuous training have become the two basic conditions for success within any society regardless of economic necessity.

Involvement of institutions in building a knowledge and information society:

Information is at the core of the modern management of organizations, especially those that have entered into globalization, which have become more demanding than before to invest in knowledge capital to preserve and develop it, as well as in the tight management of its information balance. This investment in modern information management is a prerequisite for permanent competition between institutions. However, information cannot be used and controlled easily, similar to what happens with physical property, and this explains the frequent failure in information management despite the widespread use of the Internet, digital technology and multimedia (Toumi, 2002, p. 49)

Thus, investment in information has become one of the factors of production, as it increases productivity, as well as the provision of job opportunities, as providing knowledge and converting it into digital information makes it turn into a commodity and this depends on the stages: knowledge generation, transfer and dissemination, investment. In this, the knowledge economy relies heavily on the effectiveness of institutions in collecting knowledge and using it to raise productivity and generate new goods and services distributed through knowledge networks in which information changes at rapid rates.

The relationship between development and information and its use has become clear, and therefore investment in information and the Internet has become a new source for cost savings and

production efficiency as the Internet provides information at the lowest costs and e-commerce has increased in its use at the level of global competition.

It is now impossible to dispense with knowledge in an organization that wants to succeed in the new global economy. Success in the future will depend on the strategic management of knowledge. Therefore, the development and management of knowledge sources will constitute the main test for the constitution's preservation of its economic health and strength in the market.

6.3The impact of information and communication technology on the economy

All sectors of the global economy are witnessing an information revolution, especially the industrial sector. This is revealed by indicators describing these transformations, which has led to a sustainable growth and increase in productivity due to the hypothesis of moving towards a knowledge-based economy.

In addition to this, the manufacturing of the basic processes that take place in the fields of knowledge is seen in four processes: knowledge generation, documentation and storage, knowledge dissemination, and finally, the most important use, use and investment of knowledge. Information technology is one of the outcomes of a knowledge economy, as it depends on the following characteristics:

- ➔ This technology offers new ways of managing and using information in all economic sectors.
- ➔ ICT brings economic benefits, since it improves the capabilities of all sectors to acquire, process, disseminate and use information;
- ➔ Creativity and development in information and communication technology increases the productivity of the individual and his benefit from knowledge, science and technology.
- ➔ Information technology affects the economy positively as an important tool for improving the tool, as a result of the increase in knowledge at all levels, and this is what the Algerian economy can pay attention to and plan for the proper use of this tool..

7. Results and discussion:

Through the study results, it is recognized that information and communication technology has a positive impact on the economy as an important tool for improving the tool, as a result of the increase in knowledge at all levels, and this is what makes economic institutions plan for the proper use and employment of their tools in study, production, distribution and decision-making...etc.

-Furthermore, Information is at the core of the modern management of organizations, especially those that have entered into globalization, and which have become more demanding than before to invest in the knowledge capital to preserve and develop it, as well as in the tight management of its information balance. Following that, investment in the modern management of information and communication technologies is a prerequisite for permanent competition between institutions, but information cannot be used and controlled easily, similar to what happens with physical property, and this explains the frequent failure in information management.

-Thus, the knowledge economy means the use of technological inventions in addition to the process of employing them in order to reach an advanced life in all fields and activities.

-The relative contribution of knowledge-based or enabling industries to a knowledge-based economy is high, and they are mostly represented by medium and high-tech industries, such as financial services and business services. Moreover, knowledge contributes to changing the structure of the economy; it also leads to increased interest in direct and indirect knowledge production, enhances investment in knowledge capital, and supports exports of knowledge products.

-The knowledge economy is based on certain pillars: innovation (research and development), education, and infrastructure based on information and communication technology.

-The knowledge economy is an economy of weightlessness and size. Rather, its main assets are knowledge assets. Therefore, it can be said that it is an intangible economy based primarily on knowledge capital.

-The knowledge economy depends on qualified and specialized labour, as the most important characteristic of the new economic situation is the high demand for highly qualified and specialized labour in the field of knowledge, and the decrease in activities that depend on the least efficient labour force. The knowledge economy works to move and organize the economy from the production of goods to the production of services, as there is an escalating transition of economic activity from focusing on goods to the service industry in all its forms.

8. Conclusion:

The present study concludes that the knowledge economy is the intangible economy in comparison to the physical economy which is vanishing and being replaced. If the industrial age was characterized by the accumulation of property and material capital, then the knowledge economy is an economy of weightlessness and size, but its basic assets are knowledge ones. Light building materials, metal alternatives, the trend towards miniaturization and the replacement of physical content with information, and the increasing role of services in the field of information and communication technology contribute to the process of reducing the material nature of economic outputs. Thus, the change in value from tangible (physical) assets to intangible (abstract) assets has begun to manifest itself in various aspects of the global economy. The data indicate that about 90% of the market value of the capital of some companies with a high knowledge density is represented in intangible assets.

On the same line of thought, the knowledge economy seeks to reduce the financial weight of the institution and enhance its market value in return by devoting most of their energy to creating intangible (knowledge) assets based on knowledge creativity on which agile institutions are based, always keeping pace with the developments of information and communication technology and employing them to serve their development and production with less losses. As a conclusion, the future in the knowledge economy is for these companies, where value is measured by ideas Instead of physical assets and assets.

9. Bibliography List :

-Books

1- خلف فليح حسن (2007)، اقتصاد المعرفة، جدار للكتاب العالمي، الأردن.

2- عليان ربحي مصطفى (2008)، إدارة المعرفة، دار صفاء للنشر والتوزيع، الأردن.

3- خلف فليح حسن (2007)، اقتصاد المعرفة، جدار للكتاب العالمي، الأردن.

4- عبد الونيس أحمد، أيوب مدحت (2006)، اقتصاد المعرفة، مركز الدراسات والبحوث للدول النامية، القاهرة.

5- قاسم أمجد (2011)، تعريف اقتصاد المعرفة وأهميته في تقدم المجتمعات" آفاق علمية وتربوية.

6- الإبراهيم يوسف حمد (2004)، التعليم وتنمية الموارد البشرية في الاقتصاد المبني على المعرفة، مركز الإمارات للدراسات والبحوث الإستراتيجية، أبو ظبي.

1- زاهر أحمد (1997)، تكنولوجيا التعليم وتصميم وإنتاج الوسائل التعليمية، الطبعة الأولى، المكتبة الأكاديمية، القاهرة.

2- حمدي محمد الفاتح (2011)، تكنولوجيا الاتصال والإعلام الحديث، مؤسسة الكنوز الحكمة للنشر والتوزيع، الطبعة الأولى، الجزائر.

3- دليو فضيل (1998)، مقدمة في وسائل الاتصال الجماهيرية، ديوان المطبوعات الجامعية، الجزائر.

4- أبو الحمام عزام محمد، (2011)، الإعلام والمجتمع، دار أسامة للنشر والتوزيع، عمان.

5- دليو فضيل (2007)، تاريخ وسائل الاتصال، دار أقطاب الفكر، قسنطينة، ط3.

6- عباس مصطفى الصادق (2008)، الإعلام الجديد، المفاهيم والوسائل والتطبيقات، ط1، الأردن، دار الشروق.

7- بيلي أولجا جوديس وآخرون (2009) تر: علا أحمد صلاح: فهم الإعلام البديل، مجموعة النيل العربية، القاهرة.

8- عبد الوهاب عبد الباسط محمد (2005)، استخدام تكنولوجيا الاتصال في الإنتاج الإذاعي والتلفزيوني، المكتب الجامعي الحديث.

9- دليو فضيل (2003)، الاتصال مفاهيمه، نظرياته، وسائله، دار الفجر للنشر والتوزيع، الأردن.

10- شطاح محمد وآخرون، القنوات الفضائية تأثيرها على القيم الاجتماعية والثقافية والسلوكية لدى الشباب الجزائري دراسة ميدانية، دار الهدى، عين مليلة.

11- المحنة فلاح كاظم (2002)، العولمة والجدل الدائر حولها، الوراق للنشر والتوزيع، الأردن.

- Theses:

12- الحدراوي حامد كريم، تأثير إستراتيجية تكنولوجيا المعلومات في اقتصاد المعرفة، أطروحة دكتوراه غير منشورة، الجامعة المستنصرية، العراق، 2010.

- **Journal article**

13- طعان صادق، الاقتصاد المعرفي ودوره في التنمية الاقتصادية، جامعة الكوفة. العراق.

14- بن الشيخ عصام (2015)، اقتصاد المعرفة وبناء دولة القانون K جامعة قاصدي مرباح، ورقلة – الجزائر.

15- بولصباغ رياض (2013)، التنمية البشرية المستدامة واقتصاد المعرفة في الدول العربية الواقع والتحديات، جامعة فرحات عباس، سطيف- الجزائر.

16- الجازي هايل والعنزي علي (2016)، مفهوم اقتصاد المعرفة "مدى توافق الاستثمار في وسائل التواصل الاجتماعي مع معايير اقتصاد المعرفة، جامعة الملك سعود. "المملكة العربية السعودية

17- سعادة معيل، بوباكور فارس (2004)، أثر التكنولوجيات الحديثة للإعلام والاتصال في المؤسسة الاقتصادية مجلة الاقتصاد والمناجمنت، جامعة تلمسان.عدد03

références étrangères

1. Carl shaprohab varian (2000), **Information rules (Astrategic guide to the network economy**, New york, MIT press.
2. Kamel Youcef Toumi (2002), **Industrial infomation technology**, First Arab conference on Industrial Iformation and Networks , Dubai .
3. Peter Drrucker,(1969), The Age of Discontinuity; GuidelintoOur Changing Society". Harper and Row ,New York.
4. Thomas H Davenport, Laurence Prusa 2000), Working Knowledge, How Organisations Manage What They Know, Harvard business school press.