

National Transformation in Saudi Arabia towards a Knowledge Economy

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Abstract

The relationship between knowledge and the economy is the eternal relationship existed since the practice of human activities such as hunting and primitive agriculture. Knowledge is K_khasash underground rights owned for as long as it had a prominent role in the economic process, which pays tribute to Adam Smith in his writings contributions made by specialists The new layers of specialists in the production process through the integration and use of the various useful economic knowledge that, as Frederick Friedrich List emphasizes the importance of infrastructure and Educational institutions in the preparation and rehabilitation of operational powers through the creation and dissemination of knowledge. It describes Cham Peter Joseph Schumpeter creativity as a key driver of economic dynamism, and followed them in this trend many economists K. Galbraith, Qodwin, and Hirschman. Thus, many communities transformed during the last three decades of the industrial societies rely mainly on its activity on the exploitation and conversion of material resources of nature, to knowledge societies based on production And the distribution of knowledge, and emerged with a new series based on the centrality of valuing human knowledge element. Therefore, the discovery of the properties and the fact that these changes are plaguing the global economy, and to study their effects on the activity of Almndmat has become a subject of the utmost importance. Through the above float to the surface what is currently known landmarks knowledge-based economy.

Keywords: knowledge, economy, Competitive.

Introduction

The concept of the knowledge economy has witnessed great development in the last few decades with the widening use of the Internet, electronic commerce, electronic payment, and does this economy on a data are developed to information and hence to knowledge and wisdom in choosing the most appropriate among the broad options that Athaa knowledge economy .And the economics of knowledge depends on the availability of information and communication technologies and the use of innovation and digitization, and on the contrary, based on production economy, where knowledge plays less a role, the qualified human resources and high skills, or human capital, is the most valuable asset in the new economy, knowledge-based and in the knowledge-based economy, the relative contribution of knowledge-based industries or enable them to rise, and are mostly in middle- and high-tech, such as financial services and business services industries .

The knowledge economy based on the new technologies of information and communication and the availability of information highways Internet And the degree of correlation network global information and gaps in mobile services and digital exchanges, which are the foundations that have become all walks of life and style of business performance control, was reflected in the development of electronic commerce and the increase of new companies that establish a day for the exercise of its business via the Internet (E-commerce) Including companies Aldotkom, and the establishment and implementation of E-Government (M-commerce).

Electronically via mobile phones, do banking and financial transactions electronically, and the creation of educational, research, health, tourism and other networks while seeking to codify all of these processes through the development of the necessary legislation (Paula, 2001). Knowledge-based economy is also dependent on the effectiveness of key companies combines the knowledge and use to raise productivity and generate new goods services across distributed networks of knowledge that the information in which change at a fast rate. Internet network and will lead a key role in networking knowledge.

Several labels have launched a function of the knowledge economy, such as: the information economy, experience economy, the Internet economy, the digital economy, the virtual economy, networked economy, Allammoosat economy, the electronic economy, and even the attention economy) Abdrahman 0.2007: 24 (, due to the divergent views of thinkers and those interested to the theme of not only the knowledge economy as stated in the United Nations Development Programme that the knowledge economy is the "dissemination of knowledge, production and employ enough in all areas of societal activity: the economy and civil society, politics and private life and the way to upgrade the humanitarian situation is steadily any establishment of human development steadily. This requires human capacity building possible and successful distribution of human capabilities "(United Nations, 2002)

Kick, economists and international economic organizations to enrich the concept of the knowledge economy, World Bank counted the use of internal and external knowledge and generation when you need an influential element in the economy and society development. While the concept of knowledge-based economy, according to the Organization for Economic Cooperation and Development (OECD) perspective (OECD) Knowledge and information being the center of economic development, the knowledge economy is directly based on knowledge production, distribution and use.

In the same sense, see Organization for Economic Cooperation for Asia and the Pacific (APEC) The knowledge economy has the task of knowledge production, distribution and use, which is the basis for economic growth engine, and the generation of wealth, and knowledge based on a knowledge-based society.

Brinkley Brinkley believes that the knowledge economy is the economy where knowledge is at the heart of the value added of manufacturing industries such as high technology, information technology and communications, and the birth of new industries (hardware and media) In its analysis of the concept of the knowledge economy, Keith Smith keith smith believes that there are four entrances can be seen through to the knowledge-based economy, there are those who believe that knowledge is one of the factors of production as well as labor and capital, and adopts this approach approach each of the Peter F. Drucker Peter Druker Most economists for Economic Cooperation and Development (OECD). Others argue that knowledge is a commodity producer is reflected in the increase of new forms of activities that depend on trade in goods knowledge. While there are of the opinion that knowledge embodied in skills which are an important component of the knowledge-based economy in the components. The last entrance believes that knowledge is a companion development in information and communication technology, and recent work to make significant changes in the production and distribution of information.

As defined by the Arab Human Development Report 2003 as "humanitarian situation superior to just get the information, and it consists of data, information, guidance and ideas or overall visions Avatar, man-portable or owned by the society in the semantic and historical context and orientation of human behavior individually or institutionally in the areas of activity all humanitarian, in the production of goods and services in the activity of civil society, politics and private life "(UN, 36: 2003). It is the outcome of mixing between the hidden information, experience and perceptions and ability to govern, and information broker to gain knowledge within several ways Kalhds and guessing and actual practice.

The knowledge economy expands to include explicit knowledge (standard which facilitates the storage, retrieval and use through information technologies) and tacit knowledge, which is the bulk of the knowledge of individuals and institutions so Many prefer to use the knowledge economy because it is more inclusive and representative of the assets of the knowledge of all kinds (Alian 0.2002: 376).

The concept of the knowledge economy

And knowledge-based economy in which knowledge is employed in various economic activities: production, organization, management, marketing, financial, accounting for the source of knowledge to create wealth and a source of competitive organizations (abdelkader, 2006: 37).

Knowledge-based economy as defined as the integration of modern technology in the production elements to facilitate a simpler and faster production of goods and services swap, also known as a shareholder in the production of knowledge and exchange of economic activity "knowledge as a commodity". So I knew the Economic Community for Asia and the Pacific of the knowledge economy as follows: Knowledge-based economy is mainly based on the production and dissemination of knowledge economy and use it as a key driver for the development and collection of wealth and employment across all sectors of the economy "(al-Azzawi, 2007).

United Nations Development Programme has been known knowledge-based economy that: "the dissemination of knowledge, production and employ enough in all areas of" economic, civil society, and politics, and private life ", all the way to upgrade the humanitarian situation is steadily community activity; ie the establishment of human development steadily, and requires that human capacity building possible and successful distribution of human capacities for various productive sectors. As for the catalysts knowledge economy is to globalization and the proliferation of networks, resulting in increased transmission of information faster and make it available to all (United Nations Program for Human Development 0.2013) One of the major features of the economy of knowledge is adopted primarily on the following (Fruiting, Nadia 0.2002: 22)

- Relying mainly on investment in human resources as the intellectual and knowledge capital that builds this economy.
- Reliance on qualified manpower and specialized and trained in modern techniques.
- Transmission of economic activity of production and industry to the production of goods and knowledge services industry.

The Emergence of the Concept of the Knowledge Economy:

The first mention of the term knowledge economy was the world of the Australian economy Fritz Machlup 1962 in research published on measuring the output of knowledge in the United States, where as much knowledge of the volume in the period to 136.4 million dollars, or approximately 29% of the US GDP (Godin, 2014)

To Attaly mentioned later in the research and reports issued by some international economic institutions the World Bank and the Organization for Economic Cooperation and Development. Perhaps the best definition is the definition that brought him for Economic Cooperation and Development (OECD), which is known as the knowledge economy knowledge economy as a concept emerged as a result of full adoption of the role of knowledge and technology play in more than the rest of the resources and economic growth (natural resources, capital, labor Basta ... etc.))Alvaaroa, 2008)

The Department of Trade and Industry of the United Kingdom UKTID knowledge economy is defined as "economy in which the generation and exploitation of knowledge is the key to wealth creation." The Charles Leadbeter has provided a definition qualitatively interested in more areas of the knowledge economy, where confirms that the knowledge economy is not limited concept in high-tech industries - hi- tech industries, but is the economy includes the total of the new competitive sources, and that any institution in any region and any can its use, ranging from agriculture, retail trade and access to the software industry, and biotechnology (Fruiting, Nadia 2002: 22).

Through previous definitions can we define the knowledge economy as the economy where the prosperity and development are increasingly subject to the condition on the effective use of the assets of the moral as knowledge, skills, and creative capacity as a strategic resource for competitive advantage.

The emergence of the knowledge economy factors:

US researchers attributed Strategic Center for Economic Studies, John Houghton and Sheehan Peter the dawn of the knowledge economy to two main factors (Shammari , Laithi, 2008)

First, the growing knowledge-intensive:

It has resulted in the steady spread of information and communication technologies to an increasingly large and fast in the rates of creation and dissemination of knowledge, and this by facilitating contact technical and scientific cooperation between researchers in different parts of the world operations, which enhanced the research and development activities and improved cost-effectiveness, and open ports in front of the knowledge and technologies New.

Second, the accelerated pace of globalization: Globalisation In addition to increasing knowledge-intensive in the economy there adds another reason was behind the increased interest in the subject of the knowledge economy, namely, the rapid globalization of economic activities, which contributed to increase the dissemination of knowledge and technology transfer rates.

Although there are many periods of detente in the world economy, but the current stage is the opening of an unprecedented stage can be monitored on several levels:

- International raced to join the World Trade Organization it resulted in a growing trend for the Liberation of economic activity Economic deregulation clearly represents cancellations in the gradual tariff and non-tariff barriers to trade in goods and services to a series of restrictions.
- A growing global trend to float the local currency and the globalization of international capital markets.
- Encourage direct foreign investment Foreign direct investment and other forms of capital flows Capital flows.
- Fight economic protection laws and work on the liberalization of product markets The Deregulation of product markets in many countries and break the monopolies National National monopolies in vital and sensitive sectors such as energy, Telecommunications, air transport, financial services ... etc.

The Pillars of The Knowledge Economy

Knowledge-based economy is based essentially on four pillars Four pillars It is as follows (burned 0.2009, 9-10).

1. **Innovation (R & D):** an effective system of trade links with academic institutions and other organizations that can keep pace with the growing knowledge revolution, absorb and adapt them to local needs.
2. **Education :** Education is a key factor to enable individuals in the knowledge society, where governments need to provide skilled labor and creative or human capital capable of integrating new technologies at work, And the growing need for creative skills in curricula and programs for lifelong learning .
3. **Infrastructure based on information and communication technology :** That facilitate the processing and dissemination of information and knowledge and adapt it to local needs, to support economic activity and stimulating projects on the production of high added values .
4. **Good governance:** Which is based on strong economic foundations that can provide all the legal and political frameworks in order to increase productivity and growth, as intended in its entirety to make information and communication technologies more accessible and affordable, and the reduction of customs duties on technology products tariffs and increase the competitiveness of small and medium enterprises?

It should be noted that the difference between knowledge society's quantitative difference, it is not here you knowledge society and knowledge-based society is, but there is variation in up to his knowledge of the different communities, depending on the performance of cognitive activities) Abu el-Sheikh, 2010) Which:

- The production of knowledge through research, development and innovation effectiveness Ntam .
- Dissemination of knowledge products to education, training and effectiveness of communication technology.
- The use of knowledge in the production of new services to solve the problems of society and the advancement of society all activities: professional, economic, political, cultural, social. . . The dispute.

For the economy of knowledge which is the focus of this paper, these different activities above are used to calculate what is known as evidenced by the knowledge economy (Knowledge Economy Index (KEI) (UNESCO, 2010). It uses knowledge economy guide a measure of the ranking of countries according to the evolution of cognitive activities. Table 1 below gives an example of the order of some Arab countries, according to the knowledge economy index. KEI

Table (1) the order of the Arab countries according to knowledge economy index KEI

Ranking	Country	Knowledge Economy Index (KEI)
1	Qatar	6.73
2	Arab Emirates	6.73
3	Bahrain	6.04
4	Kuwait	5.85
5	Jordan	5.54
6	Amman	5.36
7	Kingdom of Saudi Arabia	5.31
8	Lebanon	4.81
9	Tunisia	4.42
10	Egypt	4.08
11	Morocco	3.54
12	Syria	3.22
13	Mauritania	2.36
14	to whom	2.20
15	Sudan	1.78
16	Djibouti	1.47

Source: Report of the UNESCO Science and Technology UNESCO Science Report 2010) 2010)

The importance and the role of the knowledge economy

The importance of the knowledge economy: The importance of the knowledge economy in achieving the following:

- The relationship between development and the generation and use of knowledge has become clear, and statistics show that more than 50% of GDP in developed countries is based on knowledge and thus became one of investment in information production factors .
- The Internet has provided many information and at the lowest cost, also led to the reduction of trade transaction costs to minimal, this is what led to the increased use of electronic commerce and to improve the competition on a global scale, also led to the emergence of new economic activities were not known before .
- Internet is the best represents the information society; because they are the result of the convergence of the so-called era of information and communication, it is head of a tool for the dissemination and exchange of information.
- Knowledge-based economy works to facilitate the task of states and stakeholders rehabilitation and increase the contribution of the role of women in the development process .
- Scientific knowledge is important to represent the foundation in achieving innovations and technological discoveries and inventions (Ahmed, Khaled 0.2009: 22)

Role in the development of the knowledge economy

Modern Nations depends on the development of human beings and the organization of human activity, and scientific knowledge was considered an engine for development (bovard, 2002: 50), and vary the roles of knowledge in the fields of process development contrast, and perhaps the most prominent of these roles are:

- Accelerate the development process: speed up development resulting from technological development-induced cognitive development in all its branches and the fields of process, where one of the attributes of modern technological development is the speed of evolution (Ahmed, Ayoub 0.2006: 41)
- Reduce the cost of development: the impact of technology to reduce the cost of development of things are stable and which does not need to confirm, as the resulting reduction in production costs and then the costs of development through :
- Reduce the rates of use of inputs.
- Reduction in energy consumption.
- Raise the productivity of other factors (work and Capital)
- Industrial waste and provide alternatives cheaper than exhaustible natural resources.

Cultural change: the impact of cognitive development can be seen on the cultural change from multiple angles in the forefront (Ahmed, Ayoub 0.2006: 42)

- That cognitive development especially in the areas of information has significantly contributed to the interaction of cultures and in spreading the culture of globalization, with the need to deal with the repercussions of globalization caution, so as not to build on the suppression of developing nations and cultures and bring Western culture misplaced.
- Make look old cultural legacies of myth-based review and replacement of science and scientific thinking as a backdrop for contemporary traditional cultures.

Knowledge economy indicators

Knowledge economy includes a set of indicators that are important pillar in its development and success and knowledge of its variables through these indicators can join in this economy, we will address the most prominent divisions contained in the classification of knowledge-based economy indicators:

1. **Knowledge production indicators** : Or as it is called science and technology indicators, including data on research, statistics and patents, scientific publications, and these elements are a great deal of importance to the knowledge-based economy are as follows (Adnan, Huda 0.2010:62)
 - **Indicators related to research and development** : Data form the research and development of basic indicators of the knowledge economy, and relate to a particular country with the support of R & D spending, either through financing or through policies to support R & D activity can be classified as indicators in this area to :
 - Spending on research and development: includes government spending, as well as the expenditure of companies and organizations, institutes and contributions received from organizations and individuals residing outside the country .
 - R & D institutions: investment in research and development field are in universities or research centers or specialized in productivity and economic institutions .
2. **Patent statistics** : It is the right of a temporary monopoly granted by the government to an inventor in exchange for publication of his invention for a limited period of time, And the outcome of patents generated by the national system of science and technology constitute an overall indication of the technological situation and is used to assess the success and specialization for other countries (Adnan, Huda 0.2010: 91)
3. **Scientific Publications** : Is one of the important indicators by which to see the potential of researchers and their ability in the countries and the greater the number of scientific publications contrary, the state's interest in this aspect, but this indicator is a large and supportive importance of the knowledge economy in terms of the increase in research papers and scientific publications guide to absorb the workers in this field to the role played by the deployment of scientific and cultural awareness in the economic and social aspects (Fruiting, Nadia 0.2002: 40)

But it remains the most important characteristic of scientific research in the Arab countries environment lack of clear scientific policy defines the objectives and priorities through the available resources (Adnan, Huda 0.2010: 89)

- **Infrastructure indicators** : The infrastructure for the dissemination of knowledge in the following :

1. **telecommunications infrastructure and information:** ICT occupies a substantial position in the knowledge-based economy has been developed by UNCTAD of the ICT set of indicators, and allows these indicators compared to capacity building in information and communications technology between countries based on a set of specific criteria under which allows for decision-makers and policy development of appropriate and adequate to develop action plans policies They are divided into the future:

- Telephone: is the gateway to the information age.
- Contact digital technologies and Readiness: The availability of computer of the basic criteria to measure the arrival of information technology through the new technical media.
- The means of access to the media: The media of the most important mechanisms for the dissemination of knowledge and one of the fundamental pillars of contemporary society based on knowledge.

- Culture and deployment of cognitive awareness: Culture is the best fruits of the information society, and must be accessible to the sources of culture for all citizens is available, it must be the exchange of cultural materials print and digital distribution, and to encourage clubs and cultural associations, forums, and support for intellectual activities including libraries, periodicals, books and the Internet.

Standards Index economy identifier of

1. Standards Index / knowledge economy guide and index / knowledge guide: United Nations Special program evaluates knowledge management levels in the different countries of the world communities have tended to consider four main factors as key elements that are essential criteria in determining the level sought national economies towards the achievement of the information society which is:

- **System of the national economy:** And it includes three main areas: the obstacles related to the existence of tariff or not, which is a measure of the degree of competition existing in the market, and the level of organization, which is a measure of the cases-market policies that are trying to price controls, or the absence of appropriate control of the banks, and strict parameters that depend in the same areas link to foreign trade. Finally comes the role of law, which is a measure of the amount of confidence
- **Education and Human Resources :** And the level of enrollment of citizens interested in the various stages of education, which may be considered as a standard for the level of literacy in adults. And taken into account spending on education level, and the size of skilled human resources in the community.
- **Innovation and competitiveness:** As the innovation depends in most of its activities on research and development, it has adopted variants of this axis on the number of researchers per million inhabitants, and patents, which are recorded by researchers.
- **Infrastructure, information and communication:** It reflects the solid ground on which to grow the economy to a knowledge-based activity. Consisting elements of this hub of information and communication tools with traditional phones, and mobile phones, and the number of personal computers available in the national environment, which is standard on the amount of the employment of information technology in access to the Internet, and e-government services, and the volume of spending on information infrastructure.
- **The concept of the digital divide:** There are many definitions that tried to define the concept of the digital divide mismatch narrow definition, which limits the concept of the digital divide in access to knowledge in terms of availability of the necessary access to information and knowledge by mechanical means infrastructure environment. Such as the definition Walt To: "is the degree of disparity in the level of progress - whether the use, production - in the field of communications and information technology from country to country or bloc and another or within regions of the same country, with the concomitant this disparity of social and economic effects are caused by inequality of all categories opportunities in access to computers and the Internet and they do not possess the same level of efficiency of the use of these technologies "(Mohammed 0.2004: 160 (

What the knowledge economy

Knowledge Economy: Is the economic pattern developed, based on the optimal use of multiple technologies in general and ICT in particular, depending on the production and dissemination and circulation and the use and recruitment of knowledge, as a key component in the production process, an anchor on the human and societal cognitive abilities (information society - a knowledge society), education, scientific research and research and development, innovation and invention and Father innovation and intermediary institutions and new, capable of creating the necessary mechanisms and means just recruitment knowledge resources, in the framework of political and legislative environment Luton Aviation Safety and basic infrastructure advanced, for the collection of wealth across all economic sectors and non-economic .

The characteristics of the knowledge economy

The structure of this economy is characterized by the characteristics different to a large extent the traditional economy; based on the fixed assets of the concepts and calculations of the size of expenditure and yield and timetable to achieve profitability and compensate the firm foundations and a knowledge economy, the ability to generate and use knowledge or else the ability to innovate in the sense, not only represents the main source of wealth , but it is the basis of the acquired comparative advantage in the new economy .

In general characteristics of the knowledge economy is characterized by the following:

- Global abundance and diversity, openness and exceeded place economy is knowledge-based economy is open to the whole world because it cannot be a monopoly and creating a knowledge-based economy without participating or import new knowledge from others.
- Advantage of the new production system in the era of the knowledge economy as a system You high-quality production flexible knowledge-intensive, targeting excellence, open-minded, and adopts advanced technologies and alternative energies, and uses effective marketing system senses the needs of the market
- The knowledge is increasingly available to all individuals are provided in a consistent and individual and social needs can be including every member of the union decisions are wiser.
- Technical structures that represent the knowledge economy tools change, due to the continued and increased employment of knowledge in all fields of the economy, which makes continuous and rapid change inherent in this economy feature.
- Non-applicability of the law of value as a result of the low repeat use, which increases the value of knowledge the greater the volume of employment in the largest sectors.
- Bring knowledge replace capital wealth, which would result in a shift in the institutional power centers, and arent the border between the powers and duties of the various elements of the employment of the knowledge economy.
- The growing importance of the relevant functional sites employing knowledge and investment which may require restructuring of work assignments.
- Increase the size of the influence of some institutions and organizations that employ knowledge-based economy and diminishing the role of the central control.
- High levels of job satisfaction than what is the investigator in other traditional areas of the economy.
- Characterized by being a knowledge-based economy and the economy of abundance rather than scarcity economy, unlike other resources that implemented as a result of consumption, increasing knowledge and practice to use and spread to participate.
- Allows the use of appropriate technology to create markets and enterprises hypothetical where you cancel the limits of space and time, for example, e-commerce that offers a lot of advantages, including cost reduction and increase efficiency and speed in the completion of transactions on the clock and worldwide As a result, the focus is primarily on the development of markets, partnership and strategic alliance with external parties before focusing on product development .
- Difficult to knowledge in the application of laws and restrictions and taxes on the basis of national economy Search As long as the knowledge available at any place of the world, and it has become a basic element of production, it means that there is a global economy dominated the national economy .
- The knowledge workers is those who scoff at the code more machines Kalmsamman and workers banks, researchers and teachers with knowledge can be regarded as a public good (in contrast to work and capital) as at the discovery and dissemination become share with more participants and provide some means such as patents and property rights and trademark protection for a product Knowledge .

As well as characterized by the following:

- The emergence of communication technology represented in space satellites and space networks and the Internet that the client was quoted wherever to all vendors in the world to see their shows, including their products and their prices and compare easily.
- The shift from paper to electronic management administration or management without papers as a mechanism for the new recording, storage, retrieval and transfer of information, any use of laser discs and compact electronic memory and disks replace traditional cost files and facilitate decision-making and increase the speed of the process.
- Transformation products replace competition from products based on the production of raw materials into products where the underlying cognitive component is growing in the minds of men .
- Rapid obsolescence of goods and services (reduction of the product life cycle), says economist Robert Theobald "The products that were offered for sale over twenty-five years, has become no more than the period of their presence in the market for five years, but in a quick change such as electronics and pharmaceuticals and pharmaceutical fields the period so may be short up to six months.
- Ballammoos attention Kalovkar, trademarks and patents.

The pillars of the knowledge economy

Human is a stone corner in the knowledge economy must be human construction or base of human capital because the individual skills and creativity and innovation are crucial intervention in directing the production process, a source of wealth and a catalyst and motivation for economic growth, and with the growing intense competition for knowledge in various global institutions has become a concern for the development human resources strategy absolute priority. Thus, increasing the size of this economy requires:

- Institutional framework or system and national economic institution able to find mechanisms to recruit knowledge resources and means to establish the roots of organized labor and the ability to create new institutions relay employs the knowledge economy to create developmental renaissance .
- Cognitive capabilities of human and community, as the best investment you can play any economic institution building is where the human element is prepared mentally and psychologically as much as he can from the leadership of the wheel of production and development.

The main structures of the knowledge economy

Suffice reference to the main components, namely:

- **Political environment, legislative and executive:** The adjusts in their own relationships and the organization of mutual operations between the various components and tools of the knowledge economy laws. The legal system is still not fully available in any country of the world but the initial nucleus to be adopted in some European countries.
- **Basic infrastructure :** The infrastructure for information and communications technology for the country's most important factor in determining the ability to move to a knowledge-based global economy and form the telephone lines - fixed and mobile, and the proliferation of personal computers and the use of internet density .

Knowledge economy community

1. Information Society

1-1 concept of the information society

We have brought the information and communication revolution a number of transformations, which affected various aspects of the life of society, both economic Bbenith or labor relations or the attendant human relations grew out of the information society as a result of the decisive shift in the global structure of the society from the industrial society model to a new model called the "community Global Information ". It was reported (Abdel Hadi, 2006) several definitions of the information society, including the concept sees the shift from an industrial society to a society where information in more forms extensive and diverse is the driving force and dominant, and he mentioned also "It is a society that is busy most of its members to produce information or collected or banked or processed or distributed, "It is also these definitions:" The information society is a society that depends in its development as head of the information, computers and communication networks, that is, it depends on the intellectual and technical, those involving goods and new services with the ever-growing labor force information that producing, processing, processing, dissemination and distribution and marketing of these goods and services ".

We can know **the information society** As "a society which is based on the optimal use of information and communications technology, including the Internet, where the cosmic connections are The information produced over the distributed and the majority of its members create, receive and share information, stored and processed and distributed equitably to contribute to the transfer of the society to the knowledge society ".

2-1 components of the information society

It is determined by the information society Bmayle components :

(A) Technical component:

It includes cultural structure of developed infrastructure and equipment and technical space tools and systems and software within the ICT sector, which should be on the case of the modernity, reliability and breadth so that it is linking the various forms of communication sound, image and data accessible to all, institutions and individuals, wherever they are, and at a cost suitable.

(B) The cultural component:

This includes the philosophy of community cultural and information systems, education systems and the system of values and ethics awareness and system information, communication, and information systems and the transfer of information networks, and the relationship of citizens with each other and with state and social attitudes national human cadres educated and skilled.

(C) Economic component:

Take institutions and includes utility and supporting and executing and supervising, ibex encountered by with all the institutions in the countries of, It also includes data and information and the process of production and sharing, distribution and use, and how and methods of funding and also man's relationship to his society, and the relationship of some communities, some of the economic terms, through the organization of informational work, in addition to investments, projects and programs innovative to strengthen institutional and community capacity .

(D) Legislative component:

This includes all laws and regulations governing the information society, and to ensure that liberalization of information and communication technologies sector of antitrust restrictions, in addition to intellectual property protection for customers who live on the network, and the issuance of legislation and laws to ensure freedom of information and communication leading to the strengthening of awareness and social participation, also includes the control process to ensure the integrity of the competition and a commitment to technical conditions and not to harm the interests of the community or individuals with ensuring the confidentiality of communications between dealers, and follow-up legal tampering crimes, infiltration and wiretapping and fraud through information network .

2. Defined community of**1-2 concept of the knowledge society**

The modern societies today are based on knowledge, new technologies have brought about in general and ICT in particular, a major coup in thought and in human activity, and their effects affect all kinds of social, economic, educational and moral life .Known Arab Human Development Report for the year 200 3 knowledge society that "this society, which is based mainly on the dissemination of knowledge, production and employs them efficiently in all areas of society's activities: the economy, politics and private life and the way to improve the humanitarian situation is steadily, any establishment of human development.

You can visualize a comprehensive definition of the knowledge society as a "society that results from a new collective consciousness, harmonious and coherent parts, capable of knowledge production, circulation and dissemination, and improve employment in all walks of life and pouring the knowledge easily, and looks at knowledge as power and authority, rights and is considered the top basic money to him, a society think and innovate in order to chart its members. "

The foundations of a knowledge-based society

The knowledge society enriched by the cadres of the employment of the knowledge and tools of knowledge, needs to be a range of vital activities him Kahioah blood to the human body, it is based on the employment of technology communication and media to promote a culture of knowledge and sciences community, and these activities need a specific size of human capital sufficient to achieve the desired goals . And begin preparation for the construction of the knowledge economy process from an early stage where it is priority to education given in early childhood, and in parallel with him at the same time is the introduction of the founders of the format for Adult Education lifelong, and quality improvement in all levels of education, and pay particular attention to higher education and a focus on basic science and research, development and innovation and work to reach the level of a refined education .

Knowledge Society indicators

There are many indicators that can be relied upon to determine the extent of the community closer to the description of the knowledge society and these indicators follows Nzkerma :

(A) Attention to research and development and focus on the role of computers and the Internet, and provide competitiveness in the production and dissemination of knowledge in the world.

(B) the ability to produce knowledge as information and communication technology and other methods and systems of advanced technology plays a key role in the economics of knowledge, and helping to create a knowledge society and give it its characteristics and its components, as they replace the organization and production of Industrialists as the main source of production so that they can watch calendar not only by What enters in the composition of raw materials or what to do in the production of effort or what was spent from the capital, but according to knowledge that led to the innovation and production of that commodity .

(C) The increasing importance of cognitive wealth : Which is the most important factor in production, as the superiority of capital and effort at work. The one who determines the value of the item of knowledge in the first place is the innovation and thought behind the creativity of that commodity. The concept of "knowledge society" for development in the levels of looking at knowledge, and how it has been revealed that this knowledge is turned into a source of strength ahead and superior to other sources of power, the old and traditional, where it is superior to the underground resources, and also excels on the power of money .

(D) Knowledge and information flow: It happens easily and without obstacles and difficulties, so it can be accessed highways, and multiple ways in a short time, and without great effort. And be available to all without discrimination or class. This means spreading knowledge and dissemination in all walks of life, so that knowledge is the core and be distinctive to the nature and community character attribute. Because knowledge is easily transported and spread quickly across the world so we find that the institutions producing knowledge deliberately to subject electronic networks strict control and provoke intellectual property problem and impose high prices on the sale of knowledge produced and determine the licenses to use, thus depriving least communities developed to take advantage of realizing the aspirations him of the progress and prosperity.

(E) The growing role of scientists and people of experience and knowledge : They are that segment of professionals who represent a fundamental trend, so that the description you know it, is the description given to the society as a whole, as if turned to scientists and the people of the knowledge society and contribute to this society effectively in the production of knowledge and development, Li Q mere mastery of use and employment, has become progress in the world today is measured by the ability to produce knowledge, updating and accumulation standards. And turning this area, the focus of competition between the developed countries and communities that are racing in them to acquire sources of power and prestige and superiority of civilization.

And - **the emergence of the manifestations of social, cultural and knowledge**: such as "feature of knowledge society-good organization of society and the revival of the system of values and ethics and the emergence of the role of communication and information effectively - multiple options offer in front of human beings to develop their own abilities - cultural diversity within the nation and Damh- strong social ties between members of the community " .

Institutions of knowledge economy

Snarj and concisely old models Moshiri him to the role of information technology in development and then we review recent models as institutions of informatics and incubators.

- **Institutions, educational and knowledge-based economy**

Education is a key industry by the iron and steel industry. Education major manufacturing industry and the human form of raw materials. It guarantees the future before the present. The education system is the most important factor of the paper is the nation factors that generate creative minds. In light of the challenges facing the education outcomes we had to develop the educational environment. The goal of education is not memorization and imparts information and ideas but also to develop and make innovations. Therefore, it is necessary to insert a modern teaching techniques based on the updated role of the teacher in creative dress is a pioneering approach to learning. Education has been affected by the technological revolution and became a modern education system is characterized by including the following:

- Openness and competitiveness.
- Flexibility and keep abreast of developments.
- Knowledge-intensive high-quality.
- Effective employment of Technology.
- Access to high-quality output.
- **Institutions of higher education**

The University is one of the fundamental pillars not only in the scientific and cultural development, but development in the Renaissance, a window on the current societies and civilizations gone by, and serve to reinforce the peaceful coexistence and development of universities to contribute to the knowledge-based economy following the following:

- Adoption of academic qualification in accordance with the quality standards.
- Evaluation of university level according to international standards and criteria evaluation stimulating.
- Promote cooperation and coordination between the universities locally "and strengthening Arab cooperation, regional and international inter-university.
- Promote joint scientific production between researchers and encourage researchers to publishing in magazines and international journals and provide support and allocation of financial awards to researchers who publish in journals Court.
- Motivate researchers to create magazines and periodicals according to international standards.
- Create Web sites for universities and continued development and make it compatible with international standards.

• **Scientific Research Institutions**

The need for scientific research in the present day has become more than ever before, where the world is in a feverish race to reach the greatest possible fruitful accurate knowledge that ensure comfort and luxury of the human person and ensure his superiority over the other. The world is divided into developed and developing countries depends primarily on the development of scientific and technical research in the states. What made the developed countries of the technical and economic development is attributed mainly through its success in harnessing scientific research in the economic and social development, through the drawing scientific policies, comprehensive and effective technique, backed by huge financial investments in the various components of the system of research and development, and education and training, and supporting activities and others. It is noted that many of the government's policy of linking technological and industrial policy, and integrate them into national policies and objectives. Competing countries of the world in knowledge generation and harnessed in the production of goods and the development of resources to maximize the value added to gross national income and thus maximizing national wealth and per capita income is leading this competition mainly research and development institutions must be the development of R & D centers through the following:

- Use of the experiences of developed countries.
- The involvement of researchers and scientists be engaged in development projects and part of the profit and continuous improvement of their salaries and give them suitable for every invention awards .
- Coordination and cooperation between all sectors and research centers in the state .
- Treatment of diseases of favoritism and caution, to achieve justice in the scientific and assume management positions.

- Supervision of the serious scientists on the research and development centers.

- Expansion in bringing specialized and independent research centers, ministries, universities and the creation of new centers of each institution and support.
- Identify priorities and move within available resources and determine what is strategic and what is Annie.
- Encourage teamwork and cooperation with Arab, regional and international institutions.
- Organization of conferences, seminars and scientific work intensively and actively participate in most of the international scientific conferences.

Knowledge economy institutions modern

It models of communities that depend on high-level technology, and these communities may be composed of a group of bodies belonging to different sectors and each one using relatively large amounts of products other bodies and cooperate with various links to a variety of production projects -apetkarah - productivity .

It also cooperates with various destinations in the dissemination of scientific innovations and are linking their activities sectors or projects in the form of value-added chains, and contribute to achieving higher levels of economic growth

Forms of modern knowledge-based economy institutions

1. Cities technology

It is a relatively new entities within a specific geographic area based on encouraging innovation and technology transfer and development projects and includes scientific and industrial activities are the exchange of experiences between the universities and centers of industrial research, and is considered an attractive environment for industrial projects and projects developed include research labs of major projects, universities, research institutes and enterprises based on technology Services and technology transfer.

The most important conditions for the success of technology cities:

- Enabling environment for work and living.
- Proximity to a university or research centers.
- The existence depends on the source of skilled labor.

1. Gardens technology

They are similar to the cities of technology but focus on the transfer of technological expertise on manufacturing, and includes technology companies and tenants and government agencies and institutions, manufacturing, and business owners and contribute to provide and develop expertise in the field of industrial processes and work to support research and development and to increase high-income jobs and contribute to the development of society.

2. Knowledge Parks

And a gatherings be close to universities, laboratories, research centers, scientific and research activities and includes resulting from cooperation and coordination between universities and research centers are working on the development of local technology and commercialization of the output of scientific research facilities and research and development and experience in business projects and financing Yale technological projects in a particular area, and allows the interaction between academics, businessmen and the development of knowledge-based industries and is working to create a lot of excellent opportunities for high-income and check big profits and revenue for the state from taxes and fees and percentage of profits has followed this technological parks cities .

3. Innovation Centers

It centers operating in the actual application of science and technology, and is working to excellence in production and seeks to achieve a revolutionary applications of technologies the new service economy where innovation centers in assistance projects and institutions in the production of new goods and the discovery of the means of production of sophisticated mechanisms in order to discover new products or the development of this item in the possession of the Foundation In order to raise the added values and make a profit and contribute to the overall development .

4. Centers of excellence

It centers working in the field of science and technology and work for us capacity building based on plans to embrace, and the primary objective of which is to help new projects based on high technology level to continue development through the provision and achieve discoveries technology creations high level contribute to the support of institutions and development .

5. Innovation networks

It is a model of one of the best institutional SAT in applying the default settings, and include university professors in various disciplines, and graduate universities, scientists, technicians and Mdarien and financiers of projects and bankers, government officials and employees who work in the field of achievement of goals for innovation or are seeking to achieve in a variety of applied fields can networks of innovation that enhances input innovative, and provide competencies in the areas of expertise that cannot help individual countries and institutions reached, these competencies that form the core of competitiveness, and contribute to innovation networks as a new institutional form in the achievement of the following :

- The accumulation of human capital and knowledge.
- Help organizations and countries to achieve more competitive and thus relieve the weight of the challenges posed by globalization and the shift towards knowledge-based economies.
- Providing continuous learning as well as job training on a large scale.

- Help tacit knowledge in coding and dissemination.
- Promote innovation and penetration in all institutions.
- Facilitate the spread of the continuous development of knowledge in all sectors of national economies.

start = "6"

Centers and networks of virtual research

It is a research center connected to the Internet, and through which cooperation between researchers in all parts of the world in certain areas and working tools increasingly important in promoting capacity building in science, technology and innovation and in the support and promotion of retail and institutional capabilities and the creation of a critical mass of researchers and experienced in specific areas and the promotion of multi-approach - disciplinary and cross-sectoral through cooperation and coordination, resulting in the emergence and development of the research community

7. Incubators and technology business incubators

- **The concept of incubators :**

The idea of a global incubators in the industrialized countries to support small businesses and to encourage them to start in business, has proved incubators effective in supporting the economy in many countries, and by providing new business opportunities of the medium and small enterprises, and raise the level of the market implementation of innovative and new ideas offered by the pioneers of that New Business, stems idea incubation in business from the fact that the entrepreneur holds a new and innovative idea, but may not have the capital or sufficient experience in the areas of business or technology to create his own business, and here the role of the incubator comes during a period of incubation in helping the entrepreneur foster parent to establish His company emerging and skip the first phase of the foundation which like Wen which more what is likely to fail, and you know the incubator as "a place that is providing services and expertise and equipment and facilities for those wishing to establish facilities (industrial, agricultural, commercial or service small) under the technical and administrative supervision by the owners of expertise and competence, and aims incubator to the adoption of creators and innovators, and turn their ideas and projects than just a laboratory model to production and investment, through the provision of services, support and practical help for innovators in order to get the product that creates added value in the market economy".

Achievements and expected results of the incubators

Incubators contribute in supplying the cultural, social and economic aspects of the movement and remind them of interest:

- IT literacy and access to outstanding performance and better services.
- The development of methods used in the information and communications sector to develop new activities provide added value.
- And capacity building and skills development and extension of Mandhanan to ensure the release of their talents and their creativity and improve their chances in the labor practice.
- Increase efficiencies and ensure that there is a distinct competencies and attract new competencies for the labor market
- The dissemination of new ideas constantly to enable young people to provide quality work.
- Encourage creativity and leadership in thinking by the deployment of the entrepreneurial spirit and creativity and dissemination of excellence and quality in work.
- Supporting the national economy: in order to achieve economic growth through the establishment of modern enterprises new technological ways to support the national economy. And allow the provision of job opportunities. It cans also Ontzmmh building high-quality projects in a competitive price.
- **The social gains of the incubators :**

The most important

- - Launch and care for young men and women capabilities.
- - Rehabilitation of cadres to create successful projects for the future.
- Forming new insights into the concepts and practices of self-employment and the creation of value-added.

Competitive elements in the knowledge economy

The knowledge economy characteristics make it economical competitive to play knowledge of a prominent role and factor crucial in the production process. Calovrh, diversity and flexible global and overcome space and increase the value of goods is material and flexible production system, system of a knowledge-based, innovation and intelligence of production depends on top of the flexible cognitive money which changes very quickly change with new technologies and with the desires and needs of the ever-changing and with the progress of research and development and innovation, a high-quality excellence targets more than it aims to meet the need. It is open to achieve global competitiveness. Through the following:

First : Increase the level of competitiveness of the economy, because of the participation of the private sector and private to the public sector in economic activity through transparency, accountability and greater openness and liberalization of trade, leading to higher productivity incentive and employment of knowledge in this regard through innovation adoption as one of the foundations of basic knowledge in the institutions and the state's economy, and whether it comes to individual companies or macroeconomic, Innovation key to any competitive advantage, which is a driving force towards achieving growth and open up new horizons and that what distinguishes the knowledge economy of the characteristics make it economical competitive to play knowledge of the role of B rice and factor crucial in the production process, Calovrh, diversity and flexible and global and overcome space and increase the value of goods is material and flexible production system, system of a knowledge-based, innovation and intelligence of production depends on knowledge capital flex, which very quickly changed with the change of new technologies and with the desires and needs of the ever-changing and with the progress of research and development and innovation, a high-quality targets excellence more than it aims to meet the need, depends on the recruitment and use of several technologies that could be ultra-precision "nanotechnology" and depends mainly on the computer and the adoption of an information system for high-speed, precision and communicative, and feel the needs of the market and consumers constantly, and is the main Mtnevsh effective system of international marketing and local

Second: Competitive product increased in the light of the knowledge economy and to increase its ability to engage in competitive markets both locally and internationally because of the growing value-added generated by adding the knowledge component to the product; as a result of the adoption of institutions and companies in the light of the knowledge economy on innovation, which is key to any competitive advantage a driving force for growth.

Thirdly : Increase the capacity of institutions and companies in the knowledge-based economy, to improve the performance of its business, access to new markets, and increase market share, increase profits and depend on the macro level on the strong performance of productivity and the economy's ability to shift to the activities of high-productivity, which in turn contribute to the rise in wage levels , and open up new horizons for many small and medium enterprises, especially in the light of globalization and the development of technological, as a result of innovation in small and medium-sized enterprises as an important knowledge economy appearances, to operate in the areas they require huge capacities in the past, and enhance the competitive advantage of small and medium enterprises as possible competition on the basis of no longer reduce the cost and by, the market is requiring quality, as well as speed and flexibility to meet the demand, as a number of determinants of comparative advantage for industrial projects change, phase industrial cycle, and facilitate capital, the volume of research and development, and the age of the plant, equipment, and accessories manufacturing, marketing, and came all this change for the benefit of small and medium enterprises, grew its activity, but now compete efficiently industrial giants in some products, through the rapid pace of technological progress, particularly in the field of information technology and its applications, and the market response to these developments .

Fourthly: Increase the capacity of institutions and companies in the knowledge economy to innovate and increase their profits and happening that impact directly on the competitiveness and performance of their ability, but the performance is not only the subject of innovation, it is a result of a number of other factors, including innovation, but it seems that in the absence of innovation, may fail any Company to achieve positive results. Field surveys also analyzed the differences between innovative companies and non-innovative, Fast khalst innovative companies that have the ability to improve the performance of its business, access to new markets, and increase market share, increase profits.

Fifthly: New institutions contribute in light of knowledge "cities technology economy - business incubators - haddaiq knowledge - innovation centers - centers of excellence-groupings based on the technology of high-institutions default - institutions new." In the competitive increase in the economy, as it works to improve and diversify the production base, than through the transfer of technologies from research institutions to the scope of the projects and through interaction and convergence among researchers, business people and support new companies and emerging and the use of MWard innovation more effectively, is also working on the deployment of digital literacy r nor to the superior performance and better services n is also working on the development of the methods used in the information and communications sector for the development of the new activities offering high added value and open up new prospects for export .

VI: Increased competition for goods put up new and innovative services in all fields of knowledge.

VII: The growing influence of knowledge on the competitiveness and productivity of the sectors of production and services increased by an unprecedented.

VIII: Increase the capacity of institutions and companies to respond to economic conditions / adaptation Nologih paces changing rapidly, and that means achieving competitiveness and contribute to the restructuring of the companies and development.

IX: The ability to produce goods and services to compete in global markets, and increase the real incomes of the population.

Knowledge Economy attributes

There are attributes characterize the knowledge economy can be inserted as follows:

1. If economics is defined as the science of scarcity Science of Scarcity the knowledge economy is defined as the science of plenty Science of Abundance That is that the mouths of knowledge and information are growing in use, unlike what it is the case of all other economic inputs that deplete when used.
2. Knowledge-based economy is subject to the law of increasing returns, that is, increase input lead to the production of knowledge at a higher rate, depending on the cumulative knowledge that increasingly towards, as the production of new knowledge leads to the potential for the production of new knowledge of other
3. The human capital component of the value of the President in the organization of knowledge-based, meaning that the last factor is the basis of production, and thereby the knowledge economy differs from the agricultural economy, industrial economy. As the knowledge economy depends on the intellectual effort and substitutable replace muscular effort, as well as the replacement of the existing intellectual work on the scientific and practical knowledge of the quality of the highest intellectual workplace of lower quality, and continuously increasing and accelerating, as appropriate and advanced techniques contained
4. Knowledge and pricing depends on the value of the ocean which they are used, since the same information and knowledge vary depending on the value and price of persons, as well as the same person depending on the time. Set words, the data of the knowledge economy and techniques achieve a high return on investment, which makes it economical not competitive by virtue of resources and large potential that you need the knowledge economy activities, and in return bring high added value, especially as input material tangible almost disappear, and are limited to input the knowledge of intangible
5. Increase the value of communication as a result of the flow of knowledge, and the knowledge economy depends on the networks in the delivery of outputs to the market through the use of modern means of communication.

Requirements shift towards a knowledge economy

In order to shift from the traditional economy to a knowledge-based economy, there are requirements to be met to achieve it, is as follows:

1. Macroeconomic policies stable, give way to long-term planning, including the capital, and currency stability, and the stability of the exchange rate.
2. Use effective training policies that will be conducive to the speed of learning individuals, and increasing the acquisition of knowledge.

3. Competition policies and the adoption of technology to reduce the cost of production, and the liberalization of the telecommunications, trade openness, and to allow for the entry of foreign investment, which depends on new technologies.
4. Knowledge-based economy depends on four determinants are creativity and innovation, information technology and communications, education and human capital, economic incentive and institutional regime and governance.
5. Including globalization affects include the ease of movement of goods and services between countries in the knowledge economy.

Think about the development of the knowledge economy

For nearly four centuries count (Francis Bacon) (1561-1626) "that knowledge is power" (11). The knowledge of understanding on the basis of their contribution to economic growth, and longer (Adam Smith) (1723-1790) at the forefront of economists who understood the importance of knowledge, through the division of labor, which count the cornerstone of economic growth, and the main reason for the improved economic well-being confirmed (Karl Marx) (1818-1883) the importance of value-added work, as travail (Joseph Schumpeter) (1883-1950) The importance of innovation is the introduction of new products, or make continuous improvements to products, through the use of new methods of production, or the establishment of organizations new industrial

He (Alfred Marshall) (1842-1924) that the economy is evolving with the development of technology, and market institutions, and preferences of the people, the promise of knowledge a powerful engine for productivity. As travail (Walt Rostow) (1916-2003) the importance of the forces of progress and modernization in the economy, which is superior to the institutional barriers and ideas reactionary, and between (Robert Solow) (1924) that about 50% of economic growth is attributable to external knowledge? And between each of the (Robert Lucas) (1937-), and (Powell Romer) (1955), that economic growth is the result of increased revenues associated with new knowledge, and between that knowledge has special characteristics different from other economic goods, and that the potential for economic growth By increasing knowledge generates economic opportunity for unlimited growth. As between (Paul Romer) also support research and development, and increase education contribute to stimulate entrepreneurial (innovation and creativity), and the last is a new driving force for economic growth.

Cons (VralitsMaklop) (1902-1983) that the knowledge-based economy that includes production, distribution and use of knowledge and information. He stressed the importance of knowledge through his studies of the production and its role in stimulating economic growth in modern economies.

The (Peter Drucker) (1909-2005) pioneer in the field of knowledge economy, described the difference between manual worker Manual WorkerThe knowledge worker Knowledge Worker Which produces ideas and information and expect to human transmission of the information age, and among the advanced economies, which leads the economy, the world turned into a knowledge-based economy, and stressed that they are knowledge workers who will lead the economy rather than muscle workers who moved the machines and factories. Focused study of the World Bank, through its marked (knowledge and methodology knowledge economy calendar, 2006), that the use of knowledge is.

Saudi Arabia in human development and its elements guide 2014 M:

Change in Ranking	HDI value (Per capita national income Total) purchasing power parity Dollar 2011 (The expected number of years of schooling	Average years of schooling	Life expectancy at birth (years)	HDI value (Countries
2012- 2013	2012	2013	2012	2012	2013	2013	
0	0.833	52.109	15.6	8.7	75.5	0.836	Saudi Arabia) Sort: 34 (
-	0.889	40.046	16.3	11.7	80.2	0.890	Human development countries is very high
-	0.733	13.231	13.4	8.1	74.5	0.735	High human development countries
-	0.612	5.960	11.7	5.5	67.9	0.614	Medium human development countries
-	0.490	2.904	9.0	4.2	59.4	0.493	Low human development countries
-	0.681	15.817	11.8	63	70.2	0.682	Arab countries
-	0.699	10.499	12.5	7.4	74.0	0.703	East Asia and Pacific
-	0.735	12.415	13.6	9.6	71.3	0.738	Europe and Central Asia
-	0.739	13.767	13.7	7.9	74.9	0.740	Latin America and the Caribbean curry
-	0.586	5.195	11.2	4.7	67.2	0.588	South Asia
-	0.499	3.152	9.7	4.8	56.8	0.502	Sub-Saharan Africa
-	0.484	2.126	9.4	3.9	61.5	0.487	Least Developed Countries
-	0.663	9.471	110	7.5	70.0	0.665	Small Island Developing States
-	0.700	13.723	12.2	7.7	70.8	0.702	World

Source: Human Development Index 2014 M, the United Nations Development Programme, UNESCO.

References:

- Abu Sheikh, Attia Ismail, "The role of the Most High Education in building the Arab knowledge society in light of the challenges of the times", the Third Arab Conference - Arab universities and future prospects 9-10 / January / 2010 Sharm el-Sheikh, Arab Republic of Egypt .
- The United Nations, the Arab Human Development Report: (2002). Create opportunities for future generations, the United Nations Development Programme. UN: 2002
- The United Nations, the Arab Human Development Report : Towards a knowledge-based society, the United Nations Development Programme, the United Nations 2003:
- United Nations Development Programme Human Development, 2003. 2013
- Khatib, Ahmed, and Sefan, Khaled. (2009). Knowledge management and information systems. Jordan: World Book House
- Shammari, Hashem, and Laithi, Nadia. (2008). Knowledge Economy . Jordan: Dar Al Safa
- Abdel-Alones, Ahmed, and Ayoub, Medhat. (2006). Knowledge-based economy. Cairo: Dar Al-Fikr
- Virgins, Adnan Mohammed, and Daami, Huda. (2010). Knowledge Economy and its implications for human development. Jordan: House Greer
- Al-Azzawi, Abdul Rahman, and al-Hashemi, the winner Muhammad. (2007). "Curriculum and knowledge-based economy", Cairo: Dar march for publication and distribution.
- Alian, profit. knowledge management. (2008) . Jordan: Dar Al Safa
- Burned, Maher Hassan. (2009). The role of the knowledge economy in enhancing the competitiveness of Arab women "national workshop development of professional skills and competitive capabilities of Arab women. Damascus: Arab Labour Organization
- Hashemi, Abdul Rahman, al-Azzawi, Fayza Mohammed. (2007). Curriculum and knowledge-based economy. Jordan: House march
- ministry Planning. (1436). Objectives and policies of the plan development of the tenth In Kingdom Saudi Arabia. Riyadh: Publications ministryPlanning.
- John Houghton and Peter Sheehan, A Primer on the Knowledge Economy, Centre for Strategic Economic Studies, Victoria University, USA, 200, p 2
- Lissitsa. A, Coelli. T and Rao. D (2005) "Agricultural Economics Education In Ukrainian Agricultural Universities: An Efficiency Analysis Using Data Envelopment Analysis". European Association of Agricultural Economists. August.