KNOWLEDGE – THE MAIN DRIVER IN THE NEW MILLENNIUM

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Abstract:
Future economy will be in general quite different from what it is today. This new economy will find support in scientific and technical progress, in future technologies, which should work according to priority environmental requirements. This trend is manifested especially in IT industry. The economy of future, on the other hand, will have to be more effective than today, the motivation is already known: the population always grows and resources are often limited, even if today is an important mutation in the place and role of factors production It is the process of creating a new kind of civilization (based on particular elements arising from science and technical), but this will be found in a permanent conflict with other civilizations existing today, which also seeks to extend their influences. In the information society, the basic economic resource, there is neither capital nor land nor labour. Is and will be knowledge.

Key words: *knowledge, Era of Information, evolution, human factors*

JEL classification: A10

In the 90s, in the context of the diverse technological change and economic globalization under pressure, began to be increasingly used the concept of knowledge society. Fundamental feature of the global economy today is the rapid evolution of globalization and to use information technologies and communications. Therefore knowledge policies - research, innovation, education and training - are of exceptional importance for the future transition to a Europe of knowledge.[2]

The knowledge society progressively replaces the industrial, which replaced it, in turn, the agrarian and the last two are focused on the production of material values. The knowledge society is one in which information means power in the most general sense - whether it is political, economic, financial - obtaining, possession and use of superior information and thus being the key to the vault of this company. It is the peak development of human society in which knowledge is the last and highest source of power fundamental social succeeding other sources that have influenced the development of human - violence (force) and wealth (money).

Knowledge is high power quality, as defined graphically A. Toffler, whereas it is very versatile, appreciably increases the strength and richness, is efficient, and it makes the power and wealth to depend on it. The future society and, implicitly, the future of the organization will be focused on knowledge, on turning to the greatest extent of it.

Knowledge has always been extremely important, not in vain we are homo sapiens. Down through history, the victory was in the hands of those who use knowledge, being aware of its unmatched potential: among these winners are primitive warriors who have learned to make weapons of iron, businessmen from the United States, which for a hundred years, the beneficiaries are the best system of public schools in the world, with a handful of extremely well educated, and of course the list can

[2] Tsoukalis L. – 'Noua economie europeană', 1997,traducerea Irina Dogaru, Nicolae Negru, Ed. ARC, 2005,p.89

continue. But knowledge is more important than before, because we are in the middle an economic revolution that gives birth to the Era of Information.

The knowledge society has several defining characteristics that are clearly distinguish in terms of quality of previous models of companies (table no. 1).[3]

The features of the Knowledge Society (examples)

Table no.1

No.	Characteristics	The Industrial Society	Knowledge Society	Notes
0	1	2	3	4
1	The main resource	The capital	The knowledge	Progress of knowledge is the basis of society in general.
2	The characteristics goods	Machinery, power plants, vehicles, transport and communication networks	Electronic computers in the network, program products, services and information and communication.	Information and communication technologies make the globalization possible.
3	The share costs.	a) Production activities b) raw materials, energy and materials	a) Design activities. b) investments	-
4	Change of values	Equivalent values: the value of goods exchanged is equally sensitive.	Multiplication value: exchange of information without loss, the information obtained could lead to a significant increase in the amount of initial information.	By using information and communication technologies, can quickly reach the critical number of specialists who work together, which appears likely to generate great ideas.

[3] Breeanu P., Poanta D. – 'Organisme financiare internaţionale', Ed. Lumina Lex, Bucureşti, 2003, p.37-39

4	The labour	Productivity growth accompanied by unemployment (more rapid growth than the required number of personnel)	Generation of new activities that absorb labour	- New economic sectors: industry, multimedia programs, etc - New services: information centres, etc... - New areas: serving the population, etc...
5	The education	Rigid, according to principles. Disruption of education-training.	Flexible, as required in perspective Continuing-education training.	
6	The access to information	Using specialized units	Directly via computer networks.	
7	Democracy	Representative	Participative	For the purpose of exercising the right to take part in decision problems.

To note that some features of the knowledge society suggests its potential for:

- achieving a high performance operation of the democratic rule of law
- the achievement of the performance of the market;.
- achieve increased social welfare and the standard of living of the population

The knowledge society gives new dimensions of learning. It will not tarry longer be exclusively in schools and educational institutions. The Centre of gravity of the learning will be transferred gradually to school organizations and institutions, from school, and high school students by employees. Each organization and institution that uses employees, so as a second school, in which various forms of training will be current coin: learning how to teach employees; rotation of specialists in areas of specialty and other areas; work "intervention teams" (task force) cross-functional, attending courses and seminars, regular meetings of the consultative meetings to stimulate creativity; conduct specialized training courses and study visits, study-based continuously updated programs etc.

In the knowledge-based changes are more consistent and succeed at a pace that is accelerating continuously. And these changes are concentrated in several major directions, which, even if they can not be considered exhaustive, give a sufficiently clear picture of future challenges and the impact that they will have on the existence and business organizations.

1. The acceleration of the innovation rhythm of the products/services also of the political and social changes. Statistics last few decades indicates steep increases, often exponential, the demographic change (eg. the aging population in some developed

countries), the structure of employment (eg. changing the ratio of "white collars and blue collars), endowing technical work (eg. increase in fixed capital per worker), living standards in most countries the world (for example, reducing the share of family food expenditures and increase those for buying durable goods).

In the current conditions are considered as priority the following industry sectors: media and technical computing electronic office top media and media broadcasting, publishing and printing, telecommunications equipment. Among the factors that have influenced the dynamics of these industries may include, in addition to technological advancement of knowledge, the degree of saturation of markets associated application development structure, the impact of industrial policy and restructuring measures undertaken by the producing companies, the impact of environmental protection laws, influence the economic environment and scientific and technical progress.[4]

Industries associated with knowledge-based society can be classified as follows:.

Strategic branches

- The ones that assure the functionality of a system-national socio-economic and even in conditions of social instability, political (food industry textiles, medicine, the car industry or the energy industry, arms, etc).
- The infrastructure supporting the country and energy production thereof (fuel processing, extractive industry, distribution of heat and electricity).

Branches of specialization in production relative to market - index that is calculated for the specialization of production in relation to the European Union is considerably greater than unity and it is emphasized that the special fund growth efficiency.

- the processing of leather and footwear
- textile industry

Branches of specialization of exports relative to world trade:

- wood processing and furniture
- main textile industry
- Industries with rising trend of imports for which the share of industrial production is relatively high.

The evolution of such branches is uncertain, usually presenting variations of the rate of increase in production based on internal and external demand and is very sensitive to world price (eg. construction machinery and equipment).

Industry trends with emphasis on the growing international support - for essential infrastructure in the future: Office equipment and technical computing, telecommunications equipment and radio, publishing-printing, means of transport by road and air accessories.

2. Due to the political good of public awareness and global dimensions of competition in production and marketing, the state should be actively involved in creating the premises to build a knowledge society (primarily through investment in basic research and public education funding, but also through an active policy of creating a culture of knowledge).[5] Economic and social benefits of investment in developing knowledge and/or professional qualifications can not be foreshadowed in the short term, are sometimes regarded as unproductive expenditure, made social

[4] www.infoeuropa.ro

[5] Dumitrescu B.S.– 'Economie mondială', Ed. Economică, Bucureşti, 1999, p.77

obligation and not an actual investment, which can bring socio-economic revenue, and positive externalities. In fact, public expenditure on education differs fundamentally from government spending for social welfare and medical expenses are not whereas maintenance of human capital, but its development. Investing in education can reduce the need to spend more of their income for public health, social protection and justice. An increased level of education reduces public spending to prevent crime, fire, public health and medical care.

3. Decentralization growing economic and social activity, increasing the importance of local authorities.
Multiplicity of centres of decision, far from weakening the social fortify it by the very fact that huge bureaucratic systems that involve centralized structures is gradually reduced, and decisions are taken in the best knowledge of the realities. Solving energy at local level, promotional campaigns focusing on the regional market, booming concept of regional development are just some of the latest trends that anticipate the changes profound, imminent in this direction.

4. Human factor is central to the production of knowledge. The most important factor of production becomes a human being - the key to competitiveness lies in the ability of individuals and groups to produce knowledge and use it effectively. The central role given to social actors, individual or community, in the production of knowledge, change perceptions about wealth productive nations.

This new reality requires a different treatment applied to human capital as a factor of production, since it differs from other categories of factors of production through the following character:[6]

a. Unlike physical capital, the human capital can not become the property of another person than the subject itself which holds qualifications, education or knowledge in question. Instead, this is more mobile and more flexible in use than any other category of factors of production,
b. Unlike land and natural resources, which are given a natural, human capital is created with the same investment funds as well as physical capital, but investment in human capital requires a time horizon greater than before becoming productive. Instead, the income of qualifying investments is more than two times higher than those for investment in productive plant and equipment.
c. If other resources as determined consumed reduce profits, human capital operates according to another principle: usually the business people increase as they acquire experience. Those who had the chance of a good preparation, followed by a period of experience in the workplace, with a complex activity, may become increasingly valuable with time, is difficult to overcome others. In fact, their benefits may be extended over the generations, when their earnings are invested in additional studies of their children.

5. Environmental overheating problems - Accelerating ecological disaster produced in the last two or three decades (reducing genetic fund of the planet by the disappearance of some species of plants and animals, the pollution due to discharges of oil and harmful substances, the phenomena of concern for non-exhaustion of resources, the occurrence of holes in the ozone layer of Earth, etc.) associated with accentuation of the tendency of exhaustion of resources have imposed progressive consciousness

[6] Commelin B. – 'Europa Economică. UEM, piața comună, politici comune', Ed. Institutul European ,2004, p.101

makers and economic policy and global public opinion the concept of sustainable development, sustainable.[7] This is an ecological concept with economic implications, as postulates the dependence of economic growth and welfare of the people of the availability of natural resources.

The economy based on knowledge is a new type of economy, radically particular type of industrial economy. The structure of the economy based on evolving knowledge of resources, processes, products and distribution systems to material resources, processes, products and distribution systems symbolic.

A key element of this change is the changing emphasis on different components of the existing stock of capital in the economy. Thus, the natural capital (natural resources and environment), a resource, largely non-renewable, and produced by human capital (physical capital and financial assets), capital renewable short-term, all these are increasingly being substituted for human capital and capital social resources practically inexhaustible.[8]

Defining features of the economy based on knowledge are:

- The primacy of knowledge in all spheres of economic activity, due decisive impact they have on the functionality and performance. In the processes of knowledge production is an input more important than land, money or labour;
- Concentration of economic activities, not on the production of goods, but the handling of information, knowledge accumulation and production of goods-knowledge;
- Knowledge capital is a particular capital, intangible, fluid, whose only possession is difficult to claim and can be retrieved and reused;
- The eliminating the need to concentrate large amounts of natural and human resources in an organization, to generate economic performance. The first steps were made by the "just in time" processing based on the integration of computers, etc.,
- Majority share in the continuing growth of services sector in total economy, to the detriment of the production.

Knowledge is information with thermonuclear weapons, competitive today. Knowledge is more powerful and more valuable than natural resources and great factory.

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