Abstract

Along human history there were periods in which advanced technology and changes in business management generated both social and economic upheavals. These events do not only bring forth an increase of productivity in a leading economic sector but they also offer solid instruments for all social-economic sectors, producing such major transformations so that we can speak about an economic revolution or the emergence of “a new economy”. Nowadays we are the witnesses of a transition period towards “a new economy” often called “Knowledge Economy”. 

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„For leading countries in world economy, the balance between knowledge and resources inclined so much that knowledge probably became the most important factor to determine the living standard, more than land, tools or labour. Nowadays the most developed economies are based on knowledge” \(^1\).

We leave in an information era. The cycle of development and implementation of new technologies is permanently reducing. The number of Internet users worldwide is continuously increasing. More than 50% of the Gross Domestic Product of the developed countries’ economies is the result of the production and dissemination of “knowledge”. We witness a transition from “the industrial era” to “the information era”.

As compared to matter or energy, information presents distinct characteristics. It is never original, it can be copied on and on and it does not

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\(^1\) *World Development Report, 1999.*
depend on location. Information never “gets old” and it can be combined unlimitedly. A very important characteristic of the information is that it is highly condensable.

The Internet proves an evolution of the academic world which is today stimulated especially by the computer industry. In essence, the Internet is a communication system representing an alternative to telephony. Also, with regard to the use of standards it is one of the rare exceptions in computer industry which, along its history, hasn’t generated opened and generally accessible standards. But the standards which allow communication by Internet are opened and accessible to anyone and they are not the private property of companies. This standard makes the Internet, both software and hardware, independent from its producer.

In the last two hundred years, the neo-classical theory of production identified only two production factors: labour and capital. Knowledge, productivity, education and intellectual capital were considered as exogenous factors. The economist Paul Romer from the Stanford University, together with other economists tried to explain the causes of a long-term economic growth (exactly what happened in the USA economy between 1980 - 2000) by developing a new theory on economic growth, as the traditional economic models could not coherently explain it. Starting from the results of the models developed by the supporters of the neo-classical theory of production like Joseph Schumpeter, Robert Solow and others, Romer proposed a modification of the neo-classical model by introducing the technology (and implicitly knowledge on which it is based) as an inherent factor of the economic system. Knowledge became the third production factor in the most developed economies.

“Knowledge Economy” is that in which the generation and use of knowledge are predominant in creating welfare”. During the industrial era, welfare was created by the use of machines which replaced and multiplied the human labour based on energy consumption. In information era, “workers based on knowledge”, the so called “symbol analysts” are workers operating more with symbols than operating machines. Among these, there can be included not only IT&C specialists but also architects, bankers, designers, researchers, professors, political analysts and others. In advanced economies such as that of the USA, more than 60% of workers belong to this category of “knowledge workers”.

Research, marketing, advertising, sales, client assistance and other non-productive activities became major aspects of business management. This tendency towards a non-productive company profile reflects itself in business strategies based on quality management, information technology, client-oriented strategies, brand support, re-invention of technological processes. In terms of employed labour force, four of five USA workers were employed in non-productive sectors in the year 2000.

The economic order which dominated between 1938 and 1974 was based on the production of goods, oriented towards a standardized production, managed
by a rigid hierarchical structure, preoccupied mainly by the reduction of costs and oriented especially towards domestic markets. These factors represented the beginning of prosperity for the majority of the national economies.

Nowadays in the most developed countries a *New Economy* has emerged: an economy based on innovation, an economy in which the key of success and creation of new work places is given by the extent to which the ideas, innovation and technology are implemented in all economic sectors.

Better said, the New Economy is a new model of management rather than a new technology. One of the major structural changes in the New Economy is the degree in which the dynamism, permanent innovation and rapid adaptation have become norms.

Enterprise and initiatives brought along the risk. Almost one third of work places permanently change each year in the USA economy (either they have recently appeared or will be soon eliminated). This is an effect of the new technologies but also of the increasing competition – as a result of the globalization.

„Competitiveness – as Ricardo Petrella highlighted – became the only real objective – sold, disseminated and defended – of the dominant economy in Northern parts of the planet”¹. While in Economics the competitiveness represents only a facet of economic actors behaviour, in the context of markets supposed to be competitive, it is no longer a means. It became the prior objective not only of companies but also of states and society in its entirety.

The successful experiences of the United States of America regarding the economic growth and creation of new work places, based on the new information and communication technologies, demonstrated the viability of the new economic approaches.

Counting on the advance in mobile communication and digital television, the European Commission set up the bases for the development of the information society and creation of the new economy through a coherent and programmatic approach. Thus, on the European Commission initiative, at the special meeting of the European Council of March 2000 in Lisbon, there was presented and adopted, as programmatic document, the thesis “*eEurope – an information society for all*”.

The main objective of this programme is to offer an advantageous environment for private investments in order to create new work places, to stimulate productivity, to bring up-to-date the public services and to offer anyone the opportunity to get involved in global information society.

In order to revive the partnership for development and creation of work places, as a new start of the Lisbon strategy, the European Council, convened in the spring of 2005, defined “the knowledge” and “the innovation” as main motors

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for a durable development and stated that it is essential to build an information society for all in which IT&C is used on a large scale, in public services, small and medium enterprises and housing.

To address the fundamental technological changes, the European Council considers that a pro-active policy is necessary. Digital convergence requires a concurrent policy and the need to adapt the institutional and regulation framework where necessary so that they be in accordance with the new digital economy.

The Commission proposed a new strategic programme, i2010 – Information European Society 2010, defining the general policy framework. This programme promotes an open digital economy, based on competitiveness and considering IT&C as the decisive factor in development, creation of new work places and life quality improvement.

Our new intellectual instruments – modern IT&C – enlarge and focus the mental power in a way similar to that in which the instruments produced by the Industrial Revolution increased the physical power. IT&C is the strongest instrument discovered so far which permits any of the previous instruments to refine and increase their utility.

The rapidity with which this technology passed from laboratories to real life and its development dynamics are unprecedented in human history. The development and infiltration of this technology in all economic and social fields require a detailed approach not only of the legal aspects but especially of those regarding the social and economic organization.

The term „new economy” refers especially to actual changes of the economic activities as a result of using digital technologies, which ensure the access to, processing and storage of information in a cheaper and easier manner. The new economy is characterized by the intensification of knowledge inclusion in the new products and services, and the emphasis on learning, innovation, globalization and durable development. The huge amount of information changes the way in which the markets are functioning, enabling the enterprises restructuring and the appearance of new opportunities for obtaining value by fully using the available information.

Nowadays we are the witnesses of a transition period towards “a new economy” often called “Knowledge Economy”, “E-economy” or “Digital Economy”. The new economy develops within groups of peoples (nations) generating a new society model, the so called “information society”. The two notions, the new economy or knowledge economy and the information society, are interdependent and they cannot exist separately.

“New economy” has a strong global character. It is a net of networks which crosses the national state boundaries. This fact requires, not necessarily common regulations, but harmonization, consistency rules allowing the economic networks to operate as a single large global system.
The close and regulated markets turned into open electronic markets, interconnected by means of networks similar to the railways and roads in the industrial era. The present data networks play the same role within the international data and information changes as the goods and passengers transport infrastructures. The difference is that roads and railways are palpable realities while the electronic networks remain, by their nature, invisible. Even less tangible is the information transfer by these means.

In the New Economy, the economic success will be more and more determined by the extent to which it will respond the technological challenges, innovation, entrepreneurial initiative, education, specialization, development of new skills and competences, but especially the transition of all organizations – private or governmental – from bureaucratic hierarchies to educational networks. In this sense, there are a few strategies to be followed, which are particularly important for the political decision factors:

1. investments in labour force training;
2. investments in an infrastructure generating innovation;
3. promotion of a client-oriented governing system based on innovation;
4. support in turning the economy into a digital economy;
5. support in civic cooperation.