

## Competitiveness in the New Economy. Implications for Romania given its Adhesion to the European Union

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***Abstract:** At the present moment there can be noticed that world's economy is evolving from an essentially industrial society towards a Global Information Society known as Knowledge Society.*

*This paper pursues to analyze the perspectives of the Romanian economic and social environment development given the transition to the new knowledge economy, upon its decisive and specific factors.*

*The purpose of the material is to underline the current trends in the economic environment in Romania given the new context of shifting to an information based society, in view of the adhesion to the European Union. Studies performed by this moment clearly demonstrate that Romania must above all build a developed economic society in order to be able to implement more easily sources of communications and information technologies existing in the world. This demonstrates that a very close correlation exists between a country's development level and its current use of Information Technology and Communications.*

**Key words:** Global Information Society, Knowledge Society, New Economy, globalization, innovation, sustainable development, information power.

### **1.The "New Economy" Concept. Origins, Evolution, Interpretation**

Today world's economy evolves rapidly from a largely industrial society towards

a **Global Information Society**. The result of this evolution, known as the " **New Economy**" is characterized by an enormous development, integration and continuous transformation potential.

Nowadays it is considered that the society we aim is the **Information Society – Knowledge Society** (IS-KS), which is known as the “**New Society**”. Thus, starting from the very analysis of the term, there can be unveiled from the beginning the means on which such will base in the near future.

It is understood that this occurring society also has an economic side, in other words, an economy radically changed from the existent one, and which is frequently named “the **New Economy**”. The concept’s name clearly shows the tendency towards progress, already a characteristic of the modern economy.

Regarding the concept of “**New Economy**” there can be asserted that an important number of terms and expressions exist that are characteristic to such. The variety of terms is amazing: “information economy”, “knowledge based economy”, “digital economy”, “Internet economy”, “dot-com economy”, “net-economy”, “virtual economy”, “e-economy”, “immaterial economy”. All these names designate a major technologic change, according to which the most important production factors of the economic process become information and knowledge. According to this reality the new techniques and technologies are those generating the increase of productivity.

Some authors associate to the expression “**information economy**” all goods and services comprising information, publications, research, juridical services, insurance, education and entertainment, and to the expression “**digital economy**” only those goods and services the production, development and trading of which are dependant on the digital technique and technology. They associate the “**New Economy**” with certain consequences of the information and digital

economy, namely to the occurrence of a high economic growth rate, of low inflation and unemployment rates (Daniel Piazalo, 2001; Erich Gundlach, 2001).

Other authors consider the “**New Economy**” as a much wider concept, in which the final output and the intermediary inputs consist of information, and that these techniques, technologies and information communications means provide free access throughout the Globe to any kind of available knowledge or information ( Jack Triplett, 1999; Kevin Kelly, 2002).

Most specialized papers in this field define the “**New Economy**” as having an essential characteristic, the increase of potential output, to which weak inflationist pressures are associated. The authors Paula De Masi, M. Estavo and Laura Kondres consider the “**New Economy**” as “an economy characterized by long term sustainable growth determined by an ever larger productivity growth rate, which is mainly caused by continuous production, adaptation and distribution of information technology and communications” (“Who Has a New Economy?”, „Finance & Development”, June, vol. 38, nr. 2, pg. 1-8, 2001).

In the paper “The New Economy Index” (published by The Progressive Policy Institute in 1998 in the form of a report on the effects of the new technologies appeared in the USA and in the developed countries), a more complex definition is given to the concept of “**New Economy**”: “the term of “**New Economy**” refers to a set of quantitative and qualitative changes which during the 15 years have transformed the structure, functioning and rules of economy. The “**New Economy**” is an economy based on knowledge and ideas, in which the key factors for creating jobs and

higher living standards are innovative ideas and technologies incorporated in products and services. It is an economy in which risk, uncertainty and continuous changes are rather a rule than an exception".

## 2. Defining Features of the "New Economy"

The "New Economy" equally involves **sustainable development** and **economic growth**. This time, in the newly created context, the accent is on:

- Satisfying human needs;
- Ensuring the necessary resources and the existence of interest in finding and valorizing new resources;
- Making correlations between the public interest (the general interest of the society as a whole) and the individual interest;
- Increasing the role of public policies;
- The impact of the democratic nature arising by the actions of values' promotion, by economic, technical and scientific professionalism;
- The development of education and research;
- Implementing the cult of all that involves learning, innovation, professionalism, professional development, in their real sense;
- Increasing efficacy and efficiency on all levels;
- Implementing standards from developed economies;
- Harmonizing short term strategies with the medium and long term ones, in order to ensure continuity, complementarity and fluidity of economic, political and social reforms.

According to specialized studies, there

can be asserted that the idea of **information based society** was launched in the USA and is today of high interest in Europe also.

The West European countries, and the United States reached in the post-industrial society phase are facing at this moment a series of concepts regarding the new phase of the **information based society**.

### Amongst such we can mention:

- The development of education and training activities both for the youth and for adults;
- Promoting distance work ( **e-work** or **telework**, as it was referred to by the late 1990s, represented a form of distance work characterized by flexibility in terms of time and performed mainly by using information technology and communications; performing **teleactivities** or **teleservices**), source of reducing costs and spreading the IT&C, and also a way to new opportunities for some human categories (individuals in rural areas, disabled people or old people);
- Increasing specialization in computer assisted study;
- Distance learning;
- The occurrence of activities that can be performed on a distance;
- The complexity of the learning processes and the explosion of immaterial activities;
- The ease of communication within interest groups;
- The access to data bases for general use purposes;
- The generalization of electronic mail as a more simple communication means between people and exchange of information, including multimedia;
- Balancing activities between levels, mainly the correlation between the local, re -

gional and global level;

- Stimulating rapid and profound structural changes on a microeconomic, macroeconomic, social, ecologic and political level;
- Encouraging the development of new public services for IT&C for health insurance, labor force, access to cultural information, promoting initiative for spreading the electronic commerce.

Under these circumstances, the **Internet phenomenon** successfully marks the shift to a society in which information becomes extremely necessary, thus the borders being eliminated and the mentalities of people in various environments being changed. The **New Economy** often identifies in the current language with **Internet based economy** (network of computer networks), being also named "**digital economy**", "**network economy**" or "**e-economy**". The "**New Economy**" represents however an extremely complex synthesis between digital economy (Internet, digital goods and services, new business models, new jobs), to which the concepts are added of globalization, innovation, sustainable development.

The intense activity in the industrialized countries regarding the **Information Society** aims the activation of the governmental bodies' role in adopting a favorable framework for developing **information technologies and communications** (IT&C). We can refer here first of all to the characteristics that are specific to the new society's infrastructure, and secondly to the fact that in those countries it is pursued for the public opinion to become aware of the new phase in which the society enters, trying to make its members responsible in order to accept such and take active part in its establishment.

Amongst the main and complex processes in the "**New Economy**" we mention the following:

- The occurrence and continuous development and innovation in new advanced communications;
- The occurrence of the Internet phenomenon and the worldwide generated "boom";
- The occurrence of the concept of electronic commerce ("**e-commerce**", "**electronic-commerce**" – names attributed to any form of business transaction in which the parties act upon electronic sources) and its continuous development;
- The occurrence of the new **re-engineering** concept attributed to goods, services and companies in general, as a new modality for making business;
- The implementation of the new organization forms based on **innovation**;
- The occurrence of the distance labor concept, as a new activity form.

The "**New Economy**" is based on three specific principles:

- Rapid access and response;
- Multitude of customized services, specific and appropriate for each category;
- The possibility of being present simultaneously in more places (ubiquity).

### 3. Tendencies in the Evolution of the "New Economy" Worldwide

The "**New Economy**" marks a fundamental change in the history of human society development. In the new context, the specialists estimate that the duration of the transition from the industrial society to the global knowledge based society will be made throughout a 20 to 40 years period.

In the same time, the transition to the **"New Economy"** also involves the **change of the paradigms** in all activity areas.

In the following we will refer to the change in the paradigms of the production processes and in the managerial and organizational paradigms.

There can be noticed that the **change of the production, manufacturing processes' paradigms** implies the shift:

- From the **"mass production"** concept (characterized by a large number of products, of lower important quality) to the one of **"flexible, diversified, customized production"** (focused on the demands of individual clients, of pretentious target groups);
- From the concept of **"standard goods and services"** (grounded on the same construction, on the same pattern), to the **"categories differentiated higher quality goods and services"** (the attempt of cultivating the citizen's sense of belonging to a certain category of goods which define him, which best value and represent him);
- From the **"long life goods"** to the **"ever improved goods, under the influence of innovation"**;
- From the concept of **"material, tangible goods"** to the **"immaterial, digital, intangible goods"**;
- From the expression of **"production – products"** to the one of **"products – services"** generated by the diversification and improvement of production and trading processes, the increase of quality, feasibility and warranty and post-sale services dominating the market;
- From the concept of **"long technological cycles"** to the one of **"continuous innovation"**;
- From the concept of **"comparative**

**advantage"** to the one of **"competitive, competition advantage"**.

On the other hand, the **change of organizational and managerial paradigms** implies in its turn the shift:

- From the concept of **"centralization"** to the one of **"de-centralization"**;
- From the concept of **"rigid hierarchy"** to the one of **"flexibility"**;
- From the concepts of **"presence"** and **"tangible goods"** to the ones referring to **"new methods and models of organization in flexible networks"**, such as **"on-line networks"** (real time connection to the Internet), **"clusters"**, **"technopolis"**, in which a very important part is played by small and medium businesses high-tech based, and also by the **"virtual"** enterprises and offices;
- From the concept of **"structure – companies"** to the one of **"project – companies"** and **"enterprises networks"** one;
- From the concept of **"ensuing success on the national market"** to the one of **"ensuring success on the world market"**.

The main objective in drafting policies in the field of information technology is the development of **Information Society** and the creation of the conditions for improving people's life quality (for instance, in order to increase the efficiency of the central and local administration, and to provide support for industry and business environment development).

The **Information and Communications Technology** represents one of the key factors in the economic development, which can directly contribute to the performance of fundamental exchanges in the economic field and to ensuring **sustainable development**. The expression of **"sustainable development"** refers to the development way pursuing to

accomplish a stable rate in the long term development process, by correlation of the demand for satisfying the needs of the society as a whole with ensuring the possibilities for developing future generations under the conditions of complying with environmental, ecologic norms, by maintaining a benefic, stable climate and a clean environment.

Another development direction for the **Information Society** is represented by designing an information system for the public administration, which will make the administration more simple and efficient, and hence making it the most important support for the people.

Applying the **information technology** will also contribute to creating jobs, of higher qualification and demands, one of the State's obligations being also to reduce the impact of the information technology development over the people having low education level or low economic and social statue.

**Information technologies** will also have a major impact over the protection of nations' cultural patrimony, in its protecting, transmitting and valorizing by all people.

The extreme development of the technology during the last decay has created new development directions for businesses by the occurrence of **electronic commerce**, activity which involves production, advertising, sale and products distribution, as well as a multitude of collaboration forms between economic entities. By its expansion, **electronic commerce** has contributed to the **communications' globalization** and to the development of mobile communications.

Nowadays, we can refer to three basic concepts of the "**New Economy**", namely: **on-line business**, **electronic commerce** and **on-line networks**.

#### 4. The "New Economy" in Romania. History, Phases, Actual Development Stage. Strong Points and Weak Points

There can be asserted that in **Romania information technologies** are in an incipient use stage. Specialists consider that first of all a society should be build that is economically developed, because it is obvious that a correlation exists between the development level and the use of IT&C. It is only then that we could aim for a shift to information based society.

Industrialized counties have launched a number of programs in order to support developing countries in their effort of integrating in the international information flow. The use of **Internet** and the expansion of the communications and information technology use allow people to develop and to have access to worldwide existent knowledge. Innovation is disseminated more quickly, which leads to **economic progress** and to a better **life quality**.

**Romania** enters a new world, a world in which **Communications and Information Technology** accelerate the expansion of dematerialized economy, modifying the components of **competitiveness** and generating new sources of **economic growth**, as well as new jobs.

Technologic progress must make society more transparent, it should bring people more close to the public services and to their elected representatives, it should develop new working tools for teachers, it should ease the search for jobs and it should allow the efficient use of information.

The new society's technologic support consists in three activity sectors: information technology, communications technology and

informational content production, sectors which are convergent.

Upon this objective, the programs or action plans in which Romania is involved or in which it is to adhere and which represent conditions for Romania's European integration are the following:

a) **Communications sector**, which represents one of the priorities in Romania's economic and social development for the next 10 years. The strategy developed by the Romanian Government for 2000-2012 undertakes a systematization of the Government's actions and of the telecommunication industry in order to exploit the opportunities in this sector.

b) In the first phase, the Government's actions are focused on 3 axes, namely: **telecommunications, radio-broadcasting and mail services**. The constraints and other specific economic parameters are different in these 3 sub-sectors, which justifies the existence of different sector related strategies.

c) Under the influence of **the convergence of services and associated infrastructures**, it is more and more difficult to exactly define the limits between telecommunications, radio-broadcasting, IT and mail services.

d) **Telecommunications** are no longer considered a luxury service, given the fact that the right to communication and information is recognized as a fundamental citizens' right and respected accordingly. In the specialized literature digital division is mentioned: the division of people into favored and disfavored compared to their access to communication means. This division is manifested both on an international and national level.

During the last years, the **telecommunications sector** faced an extremely dynamic evolution, characterized by restructuring,

privatization and liberalization, under the conditions of spectacular technologic developments. The transition from the industrial society towards the **New Economy** is obviously illustrated in the statistic data analyzed in order to assess the development level.

In **Romania**, the telecommunications sector is private in majority, in terms of turnover, share capital and number of customers, both consequent to private Romanian and foreign investors' interest in this sector, and to the Romanian State's releasing policy. The share of the private sector will still grow during the next period.

The investments in communications have a major impact over the economic development in general, due to the dual nature of this sector: economic branch by itself and support for the development of the other economic sectors.

In telecommunications numerous business opportunities still exist, considering the partially unsatisfied demand and the imminent complete market liberalization.

The major role played by communications in the **New Economy** involves a flexible and efficient administration in this area. The sector's dynamics can have negative influences if it is not known and analyzed, and in the same time it can provide new opportunities. Telecommunications' administration has a very important international component, regarding the international promotion of the state, companies and Romanian citizens' interest under the globalization conditions.

The large use of information and communication technologies (ITC) leads to profound implications in the social and economical life and to fundamental transformations in the way of realizing products and services, in the human behavior. The superior value

rization of these technologies can ensure an economic and social process which characterizes information society, under the condition of achieving conditions and orientations of strategic nature, by policies adequate to the stage we live in:

**a) Consolidating democracy** and the lawful **State's institutions** by people's participation in the political life and easing the unbiased access to public information, by improvement of public services quality and modernization of public administration ("**e-government**", "**e-administration**");

**b) Market economy development** and progressive **shift to the new economy, increased competitiveness** of economic agents and creation of new jobs in high-tech sectors by developing **electronic commerce, teleworking**, new business management, financial management and human resources management methods, integrating ITC capabilities in new products and services, the development of the ITC sector;

**c) Increasing life quality** by using new technologies in this field, such as: social securities, health care, education, environment protection and calamities monitoring, transport safety etc. and by this means integrating into the Euro-Atlantic structures and in the Global Information Society.

**d) Accelerating electronic commerce:** in Romania, the economic reform, the foreign investments growth, the rapid development of the markets focused on Europe, as well as the strong inter-connections with companies in the EU provide opportunities for a fast modernization and advancement, mainly in the field of electronic transactions. The development of infrastructure and of the access to communication means upon acceptable prices, as well as the supportive policies for SME

could lead to a rapid development and to a significant demand growth.

**e) Electronic governing**, electronic access to public services: "**e-Government**" represents providing public services in electronic format for people and the business environment. Providing public information availability on the Internet is one of the Romanian Government's priorities. The strategy of shifting to "**e-government**" includes a combination of the following elements:

- Encouraging competition on the telecommunications market;
- Transforming, modernizing the Government by means of Information Technology and "**e-business**";
- Making public acquisitions in electronic format;
- Attracting investments in this field.

**f) ITC based medical services:** the appropriate use of on-line technologies in order to increase quality information availability regarding health amongst citizens will lead to an increased share of preventive medicine, substantially reducing on a long run the social and administrative costs of diagnosis and treatment.

**g) Stimulating the demand and disseminating information and knowledge** by electronic means: for **Romania** taking up new IT technologies in the cultural environment and institutions (libraries, museums, cultural assets archives) in order to create a new content, transforming information and cultural materials into electronic form, ensuring mass access to the development of new services are of special importance.

**h) Intelligent transport systems**, which are starting to be recognized as an option for operating and managing transport systems. Implementing the intelligent transport sys -



tem and the services for all types of transport will significantly contribute to improving the traffic efficiency and safety, as well as the protection of the environment. Romania admits that intelligent transport systems can be taken into consideration only along with the modernization of the existent infrastructures or with the creation of new infrastructures, however not as a distinct phase.

i) **Electronic commerce and intelligent cards.** The information systems security will be regarded under its three basic aspects:

- **Confidentiality** – referring to information protection against unauthorized breach in the network;
- **Integrity** – referring to maintaining the exact and complete data content;
- **Accessibility** – referring to the users' access to vitally important information and services.

### 5. The New Economy – Challenges and Prospects for Romania in view of its Integration in the European Union

Nowadays **globalization** and the **development of knowledge based economy** are probably the main forces in the economy. The concept of “**New Economy**” is considered to be much more complex than the expression “**Information Economy**”, because the first refers to the permanent change, being able to express relations and connections between the existent forces in an economy, generating an accentuation of the globalization phenomenon, increased pressure consequent to competition, rapid development, adopting and using information, communicational technologies and adequate economic and environmental policies.

The purpose of this paper is to present a

few macro-economic problems occurred consequent to surprising economic performances registered by developed countries (such as USA and Japan), also including details more or less known regarding the increase of productivity, the key element of the “**New Economy**”.

The paper focuses on the “uncertainty” constantly surrounding all that the “**New Economy**” involves and it presents the challenges and prospects for **Romania** in view of its integration in the EU.

A largely debated problem in the “**New Economy**” is that of reducing transport and communication costs, in close connection with the government's policy, which should lead to the “elimination of distance”.

However, eloquent studies exist demonstrating that distance continues to govern the economic phenomena both within a country and in global relations.

The main recommendations regarding the implications of the “**New Economy**” over the development of **Romania** and of other European countries should be focused on:

(1) Up to date production of analysis on the changes registered in the Romanian structure, both on the labor market, and in the industry, by:

- Presenting the alternatives to knowledge based economy;
- Modalities to comparing Romanian experiences with those of other countries (USA and Japan);
- Finding plausible explanations for the existent differences.

(2) Developing a capable strategy aiming to successfully answer to the needs in the Romanian services field.

(3) Making empiric studies in order to investigate the impact of new information

technologies over organizations and companies in Romania: differences between Europe's (Romania's) experiences and those of the USA and Japan.

(4) Presenting the types of services for which Romania holds competitive advantages: selling markets for these services – existence, perspectives and potential dangers; the main competitors of Romania – modalities for improving the strategy and entering new markets.

(5) Unrevealing the motivations determining the foreign investors to come to Romania, identifying the obstacles in making foreign direct investments and the importance of investments for the country.

The term of “**New Economy**” is considered to be at the present moment the most appropriate in order to describe the changes that take place worldwide; in the same time it is however “dangerous” because it involves great uncertainty regarding the future.

Providing that instead of an ascendant productivity trend countries would suddenly register a descendent one, this would rapidly overcome all economic benefits registered until that moment. That is why it must be kept in mind that an analysis of **Romania's** economic prospects in view of its integration into the European Union should include both the benefits of the “**New Economy**” and the major implications and potential risks.

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