

HOW TO UNDERSTAND THE NEW ECONOMY

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Abstract

The work presents the main evolutions towards the New Economy based on knowledge by passing from the Industrial Era to the Informational Era. The new economy is the result of a veritable economic revolution, with a powerful impact on the society's functioning manner. We have introduced the fact that the novelty of the global economy derives from the appearance and the potentiating of a new economic factor, that is the knowledge, and the companies' leaderships have been obliged to accept the capital importance of the fifth resource: the information.

For understanding the concept of new economy based on knowledge, which, according to the New School from Cambridge, are classified as follows: the principle of the human existence in a closed circle; the principle of reintegrating the human in nature; primum non nocere; preserving and developing biomass, biodiversity and bio-productivity; the permanent insurance of the resources; the principle of the economic, social and ecologic efficiency; the societal existence is interactive with the environment; the passing from the discretionary demographic growth to another one, based on the conscious responsibility of the man-woman couple and on the adequate implication of the society; the principle of the social equity; government accountability for the way the policies promoted, manage and enhance resources and to ensure the new generations' future, too.

We concluded the work by introducing the main features of the new society and of the new economy based on knowledge, specific to the post-capitalist society.

Key words: the new economy, economy based on knowledge, knowledge revolution, informational revolution, knowledge, information.

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1. INTRODUCTION

The motivation for the theme chosen for this work is due to the fact that the New Economy became a reality of the present world. The impact of the information technologies and of the communications is great; they determine a competitive advantage and accelerate the globalization. The globalization leads to a more accelerated competition, but also to a better quality of life through the access to the information available in electronic format, regardless of the geographical location and to new conveniences in a business environment characterized by the reduction of the economic cycles.

Using the analytic approach, this work presents a theoretical frame referring to certain aspects related to the New Economy based on knowledge and its implications.

The change determined by using the information and communication technologies (ICT) affects all the domains and all the enterprises. The Internet phenomenon amplifies the transformation, offering, on a large scale, to the people and to the organizations, the informational resources.

2. THE NEW ECONOMY BASED ON KNOWLEDGE

The name of "The New Economy" has been given for the first time by the Business Week publication in 1996 to a complex reality, already manifested since several years in the most advanced economies. Although so far any precise definition hasn't been adopted, together with the subsequent literary effervescence, it has been accepted on a large scale that *The New Economy refers to permanently improved products, commercialized by innovative agents who firstly exploit*

the newly opened niches or the ones created by themselves on the markets in process of globalization. This suggests the entering into a new paradigm of the economy as social activity (1). It has to be mentioned that this assertion is sometimes disputed. For example, Gordon (2001) sustains that the New Economy isn't a new industrial revolution (that's because any new paradigm). Thus, the new historical-economic hasn't a single name, but a multitude, each one having a justification, distinguishing a specific feature of the new economic and technologic forces which come into view. Here are some of these:

- Post-industrial society,
- Informational society
- Technological civilization
- Post-capitalist society
- Economy based on knowledge and information etc.

In this period, we discuss more and more insistently about a knowledge revolution and/or an informational revolution, like an indistinguishable passing from an economy based on material resources to an *economy based on knowledge* (2); it is hard to clearly distinguish between the two revolutions, because their essence is permanently “mixed” (3) At the heart of this informational revolution is the Internet and the computer networks, with all the socio-economic implications induced by this technical component (4).

We can describe the information as being “something new” we find out about a certain system or about the manner in which this functions. But the knowledge is more than simple information; it represents, besides the purely mathematical value, the understanding of that information. As the knowledge is superior to the information, also the economy based on knowledge is superior to the informational economy.

The novelty of the global economy derives from the appearance and the potentiating of a new economic factor: the knowledge (5). We can define the economy based on knowledge as being the economy which surpassed the development step beyond which *the knowledge represents the key resource* (6). What makes this knowledge such an important resource? There are a lot of factors which have this as consequence, the most important being: the progress registered in IT&C (7), the growth of the development speed of the new technologies, the competition at a global level, the market liberalization, the continuous change of the demand determined by the growth of the number of persons with medium and big incomes (who develop a sophisticated demand, of good quality products), the increase of the life quality importance.

This type of economy has imposed together with the phrase *the economy of the knowledge*. “The real impact of the informational revolution, Drucker says, is hardly beginning to be felt”; yet not the information or the computer are at the origin of this revolution, but the Internet phenomenon and the electronic commerce, which has become the main means of distributing the merchandise, the workplaces and the managers; this phenomenon thoroughly modifies the economies, the markets, the industrial structures, the goods distribution, the consumers’ behavior, the values category and the labor market (8).

In order to elucidate the meanings of the presents changes, it is useful even a summary historical analysis of the evolution of the economic -technological systems, from the assertion of the industrial production manner and until nowadays.

The first scientific-technical revolution, called also “industrial revolution”, the essence of which has been represented by the mechanization, has been characterized by the passing from the manual, the handicraft work, to the mechanized, manufactured activity.

The second scientific-technical revolution had as essence the automation of the production. The new technologies assimilated integrated solutions, regulating entire technological processes, imposing the activities of conceptions and of programming as an essential element of the work and of the process of creating the economic value. The computer and the informational technologies turned into real symbols of “the second industrial revolution”.

These revolutions in the science and technology domains brought many changes as regards the manner of organizing and functioning of the society:

- The new technologies are more and more productive, allowing thus the companies to sell better products, at low prices. This leads to the increase of the industrial goods accessibility for a wide range of people.
- The most attractive investments are those from the high-tech domains. Thus, the companies become more and more interested by innovation.
- Moreover, many companies straighten the research towards finding solutions for removing the pollution or for reducing the staple consumption. This means an improvement of the process of production, with positive effects not only for the environment, but also for the consumers.
- The development of IT&C determine the increase of the communication between the people, the development of new types of businesses (ex. e-commerce), the development of on-line informational centers, etc.
- The society gradually becomes much more alert at the existent problems. The accessibility of the information makes the information and the expression easier for the people. The importance of a person as a unique entity becomes greater in the new society, based on knowledge.
- Thanks to the development of the science, more and more people are engaged in the development of new activities. The number of frontier research domains increased very much. For becoming a good specialist, a person needs more and more years of study.

In the end, the determination of the knowledge and of the information as development resources make us familiar with the phenomena situated at the origins of *the new economy*. These reveal the fact that the generalization of the values of the science and of the technique hasn't an alternative at the scale of the human society evolution. Variedly names, as we already mentioned, the new economic and social reality has as specific various features: the technologies centered upon microelectronics and informatics, the biologic technologies, the genetic engineering, the green revolution, the nuclear technique, the spatial navigation etc.

The passing from the industrial Era to the information Era changed the organizations and the society, the added value relies on information and knowledge, appeared a new type of worker, the worker with the information.

In time, the managers of the companies paid a greater attention to the administration of the money, of the materials, of the equipments and of the people. Today, they have been obliged to accept the capital importance of a fifth resource: *the information* (9). The companies' need to be informed in a more and more competitive society makes that the analysis of the market and of the consumer's desires become primordial. The powerful companies try to know all that can be known about the consumers: what they want, what they don't want, how they consume, when, what makes them faithful to the product, when they prefer to change the brand. The need to know, determined by the need to take correct decisions in a real time, determined an explosion of using the informatics' systems at the level of the companies. In function of the directors' information needs, the companies elaborated SIMs that is Marketing Informational Systems, by which they can always be acquainted with what happens on the market. Also, an increasing number of companies resort to management systems of participative type, where the decisions are taken by several persons, thus reducing the risk of a failure. It is obvious that all these persons must have access to information and actually communicate for their step to be successful.

Consequently, within the economy of the knowledge, the successful firm or company – for remaining and flourishing in businesses – is obliged to reconsider the role given to the knowledge and to the applied management (10). It will further operate with certain active/attainable materials, with a certain infrastructure, but the market value of the company is determined more and more significantly by its intangible actives, by the knowledge stock accumulated, by the intellectual capacity of its wage earners, by the capacity of getting knowledge, by the capacity of producing and selling knowledge (11).

The propriety and the traditional capitalism, Toffler says, turns nowadays into “something new and bizarre”; more and more, alongside with the physic aspects which define the propriety and give it value, the intangible aspects which we attach to the propriety multiply quickly and

permanently (12). For successfully working in this new type of economy, the company and the wage earners which compose it must learn permanently (13), explicitly refer to various theoretical developments and accept the change as a natural behavior in the management applied daily.

3. THE MAIN PRINCIPLES OF THE NEW ECONOMY BASED ON KNOWLEDGE

In order to understand the concept of the new economy based on knowledge, we must start from the main principles that have been traced in various studies realized in a group or individually, on their own initiative or from practical reasons of the international organisms which reflect alike the existent situation and the demands, the immediate aspirations, but also those on long term, in which the counterpoise of the negative effects accumulated in the process of the existence up to now always existed.

(14): These principles, according to the New School from Cambridge, can be classified as follows

1. *The principle of the human existence in a closed circle* (until the conquest of the extra-terrestrial space). The nature itself exists within some closed cycles or circuits which we must know better for learning another manner of living. From here results the consequence that we cannot appeal to resources from other planet, we cannot move to another place and we cannot get rid of the “derived products” of our existence, that is of the negative effects that we induce on the environment and which turn then against us as pervert effects;

2. *The principle of man's reintegration in nature.* Acting on the nature, when he produces the goods he needs, the human being has reached the state in which he must reintegrate in the nature he derived from and he always wanted to subjugate, forgetting he must be in harmony with it. Because the nature is offering more and more evident signs that the present models of the human existence cannot be sustained, we must mark their understanding and we must actively align our existence to the nature's exigencies for giving a chance to the perpetuation of our existence;

3. *Primum non nocere* (firstly, do not harm the environment). All the countries are confronted with the problem of polluting the environment, but at different levels. At least until now, the most developed have been those which polluted the most, and the pollution, by the natural and economic circuits, generalized. The under developed countries, although they have a smaller contribution to the pollution, suffer more because they don't have the necessary resources to the actions of preventing and de-polluting. Romania is among the countries with serious problems in this respect. But the pollution diminishes a lot the reproducible natural resources and it is a great danger for health which increases the expenses in this respect. According to some calculations, over 60% of the population from our planet is affected by the insufficiency of the medical cares;

4. *Retention and growth of biomass, biodiversity and bio-productivity.* The bio-state and the bio-productivity represent indicators of the human resources quality. Starting with protecting the soil fertility and finishing with the preservation and the development of the ecologic systems, there is a large spectrum of problems that need to be quickly solved, mostly in the countries under development, but not only there;

5. *The permanent insurance of the resources.* This principle imposes not only the rational preservation and utilization of the non-regenerative resources, but also the realization of equilibrium between the rhythm of the exploitation of the other resources and the rhythm of their regeneration. The best solution here seems to be the conceiving of the economic activities and the existence of nature itself in a closed circuit of a circular active flux type. This supposes that all that is taken from nature and at the actual state of knowledge is economic useful to be utilized, and the useful substance from the waste and from the used goods to be recycled. We must also have in view the removal of the dissipation, the fact that "in all the sectors of the economy, a considerable reduction of the consumption of natural resources per product unity is, incontestably, possible and that without involving a decrease of the life level (15). A lot of more efficient technologies of using the staple are already available but they must be applied and generalized, and others could be developed by intensifying the research;

6. *The principle of the economic, social and ecological efficiency.* Conceived in a broad sense, the economic efficiency neglected the costs supported by the nature. Considering also the expenses for renewing the nature, for protecting and developing the environment is very necessary in order to redefine the concept of economic efficiency. We can call it economic, social and ecological efficiency because to the economic interests are added those of the whole society, and the society cannot develop ignoring the natural environment. Interpreted on a large term, the actual production seems to be very big compared with the one obtained 100 years ago, let's say, but its contribution to raising the quality of life was sensibly smaller than this increase, because the difference represents expenses and productions destined to the reproduction of some natural conditions freely offered by nature.

7. *The societal existence is interactive with the environment.* The theories of the growth and, moreover, the developed activities consider the natural environment as the space where the man manifests economically in order to get hold of it, but about the man, “only good”; he is the supreme, intangible value. How should we then act on the man and on the humankind in terms of the actual reality hasn’t become yet a very evident preoccupation, but it has become clear that in the economic activity, the fluxes must be bilateral, and that slops towards the nature cannot be waste or toxic products. This biangular relationship must be favorable for the environment, too. Within it, the man has to answer the environment exigencies for ensuring his perpetual existence.

8. *The passing from the discretionary demographic growth to another one, based on the conscious responsibility of the man-woman couple and on the adequate implication of the society.* A world in which 25% of population has severe problems with the alimentation and over 60% with health ensuring, where the pollution affects the agro-alimentary potential of the planet and the genetic dowry of the new generations, and the resources seem to be more and more unequally distributed and worst administrated, reveals the necessity of tackling the demographic growth on more realistic basis, because the scientific progress allows not only the control over the births, but also over the normal development of the young generations.

9. *The principle of the social equity.* It implies a continuation of the following of the development objective in a modern sense, respectively of reducing the disparities regarding the incomes. Moreover, we have in view the avoidance of discriminations and the assurance of the equality of the chances of assertion for all the members of the society. The durable development imposes a larger vision on the social equity by considering the rapports with the environment. The social equity needs also an equal access to the environment actives, not only from a synchronic perspective, but also from a diachronic perspective.

10. *Government accountability for the way in which, by the promoted policies, administrate and enhance the resources in order to ensure the new generations' future, too.* The principle is applicable in the whole world and it is applied, but for Romania it is highly necessary, if we take into account the robbery made after 1990 and that continues to a greater extent. It is also necessary the judicial settlement of this responsibility, because its absence offers freedom to the disaster. This principle is related to the war, the economy, the weaknesses manifested for those who plunder and for the deplorable state of the society.

4. THE CHARACTERISTICS OF THE NEW ECONOMY

Each society had its economy and that was a new economy compared with the economy belonging to the old society. Anyway, what prefigures at present is totally different from what we experienced so far. It's a truism, but we must say it: the past is history, and the new society outlines more and more clearly its background coordinates. The new society is, generically, from all points of view, a "post" society.

Which are the main features of the new society (16):

1. The prevalence of the theoretical knowledge as a consequence of the quasi -general computerizing of the social space

2. Under an institutional report, the organizations specialized in researching and forming the human capital will ensure the legitimacy at an expert level for all the decisional instances

3. The economic basis of the whole production will be constituted by the production of specialized knowledge

4. The human resources will practically dominate, unlimitedly, for a pragmatic development of the centers of stimulation and motivation of the individual and collective intelligence

5. The politic will preserve the vocation and the prerogatives in conceiving and projecting the economic and social action, but it will concentrate especially on the strategy of research and of forming the human capital

6. The dynamic equilibrium of the new society will be ensured by maintaining the structural symmetry between the private and the public system

7. The social stratification will have as natural source the types of professional components, generated by the diversification of the models of qualification and by the standards of each qualification

8. The exponential growth of the social space diversity will bring to foreground the problem of the social cohesion of the global social space

9. The resistance to bureaucracy and its incapacity of ensuring a corresponding level of the efficiency will orientate the historic movement towards a d-hocratism and towards the adverse culture

10. The organizational culture, specific to the industrialism, based on codes and institutionalizing of work and duties, will gradually surrender to the attitudes and the behaviors marked by materialist hedonism. In the new existential context, will prevail the “inter-relational life”, the need to communicate, the need to plan the knowledge and to transform the social reality into a conscience network (17).

The new economy based on knowledge, specific to the post-capitalist society, is defined by the following features (18): the supremacy of non-corporal values, disintegration of the markets, the modification of the work character, the innovation is the key of the success, the return to the “reduced scale”, the disturbance of the organization, the integration of economic systems, computerizing of the business infrastructure, the acceleration of the rhythm of transactions and of the economic operations.

5. CONCLUSIONS

According to Peter Drucker, *The New Information Revolution*, revolution that has already affected each person's life, is about to change dramatically the organization and the management of the institutions of the following two/three decades; in the newly created context, the knowledge became accessible to all the wage earners, which turns this resource into the basis of the success for future businesses (18). In the emotional economy, the position and the importance of the wage earners are completely redefined; obvious, the future wage earners remain to a great extent a reflection of what happens in the "demographic area" of the society (19). As the robots and the computers become familiar presences in the daily life of the companies/institutions, three major trends start manifesting (20):

- The decline of the young population from the total population
- The decline of the production/industry in total GDP
- Major structural changes in the labor force.

We don't know precisely how the future society will look like and we can only make suppositions to this hypothesis; but it is absolutely sure that it will be totally different by the present society. "To try predicting the future using of the informational market, Dertouzos says, is like Alexander Graham Bell would have dreamed of that his invention would lead to... ."automatic telephone centrals, hotlines, faxes and mobiles for cars (21). Today, we find ourselves in a situation somehow similar to the one in which was Bell a century ago; because we cannot anticipate in which

direction the computer and the IT will lead the society. In other words, if we refer to economy, management, or to other practical activity, today we can exclusively formulate speculations regarding what will bring the future in the international relationships and the behavior of the future organizations.

The knowledge benefits from the information flux, from the production and its endless circulation and the knowledge thirst of the contemporary civilizations. We live in a period in which the intangible resources (the knowledge) are more and more important. The mere knowledge is not sufficient if it is not spread, if it doesn't become a "good" for everybody. For a society to progress, all the knowledge must be socially verified. For this, the (tele)communications represent the means by which the knowledge is realized and fructified, in every domain.

NOTES:

- (1) It is noted that this statement is sometimes challenged. For example, Gordon (2001) claims that the New Economy is not a new industrial revolution (so no new paradigm).
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