The Role of Infocommunications in the World-Wide Human Society Development

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Abstract - The idea of transparent market relations discussed in the light of the spiritual component of man as a pledge to build a more sustainable economy. In place of free competition must come to a transparent, free competition with responsibility for business development of society. A key role in building a sustainable economy belongs to Telecommunications.

Keywords – Infocommunications, sustainable economics, regulation, human society.

Infocommunications being developed rapidly change the world from the industrial to the information society. The infocommunication progress contradicts the ongoing financial and economic world crisis and therefore stimulates searching new alternatives of world-wide human society organization.

Considering that Bologna Universities Charter proclaimed "the future of mankind depends largely on cultural, scientific and technical development and this particular development is being built in the centers of culture, knowledge and research represented by true universities" we feel our portion of responsibility against future generation.

That's why the objective of the report is the economics development analysis and on its basis suggesting a hypothesis of possible way of the world-wide human society perfecting on the basis of new opportunities which open Infocommunications.

I. ECONOMIC ASPECTS

Two certain statements will be introduced.

2. Economics is a special science that is connected with a human (man). There is no economics without a human (man).

3. Philosophy says about human duality, both spiritual and unspiritual unity.

Let's analyze some fundamental regulations of economic theory from the given statements point of view as follows.

1. The main (fundamental) economics assumption [1] is formulated as follows: "The public needs (individuals and institutions) are uncountable and completely inexhaustible".

2. The list of the initial needs that satisfy vital human needs are formulated as follows: clothing, nourishment, accommodation, sex and others.

3. The goal of enterprise is considered to be profit earning.

Even this insignificant information shows that at the economic basis only biological, unspiritual component is considered but not human spiritual one. Thus, we send a signal both to people and to business to enrich them despite of anything. It is naturally that life denies both assumption

Petro Vorobiyenko - Odesa National Academy of Telecommunication n.a. A.S.Popov, Kovalska Str.,1, Odesa, 65029, UKRAINE, E-mail: vorobiyenko@onat.edu.ua. and definitions and logical buildings resulting from it.

1. It is evident that assumption statement about needs inexhaustibility is denied, at least, concerning individuals. There are multiple life examples of human self-limitation right up to self-sacrifice.

2. As for enterprise earning profit there are multiple examples when some companies embrace an idea of business responsibility against society.

3. A human (man) is not always limited with the initial needs given above. So, even at the most severe trials and terrible life conditions, the greatest masterpieces of art were created, there were scientific discoveries made in jails and people retained human image. Man does not live by bread alone.

If to speak briefly in the 17-20th centuries only two economic models were suggested. The first one is unregulated open market. There existed a certain phrase "invisible hand of the market" that will settle everything. The model falsity led to the lengthy crisis of the 20-30th . The world-wide society realize that fact and introduced government regulation with the aim of free competition making that appeared to be the second economic model. However, the economic situation analysis showed that free competition doesn't provide stable economic development. Thus, despite of existing free competition between banks, in the world there appeared dead financial economic crisis that started exactly in the bank sector. It should be mentioned about the Soviet Union economics with the total regulation that burst. It is evident, that there exists an optimum value of the regulation level that world-wide society was unable to provide.

So what is the way out of the arisen situation? The following hypothesis is suggested to your consideration: "The guarantee of the business doing harmonization and regulation level is financial economic and legal relations transparency".

The organization form of customers unifying can be civic institutions which appear and develop all over the world in a dynamic way.

The result of three subjects interaction is to develop financial economic and legal relations transparency system. As nowadays there is a high level of infocommunications development, so exactly they are able to provide transparency and it means the interests balance that will lead to sustainable world economy development.

Thus, we can observe the following evolution of the opinions about market state: open market; free competition; transparent competition.

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II. THE ROLE OF INFOCOMMUNICATIONS IN REGULATION

In many countries there were established regulation bodies charged with certain functions and sphere of responsibility, the definition of which are of great importance. Let's assume that they are already defined. It is needed to realize these functions under terms of the field of responsibility. Here let's pay attention to two problems, there are much more of them though.

The first problem is connected with the amount of work that should be fulfilled by regulatory authority and the second one with the human factor that, in this case, is expressed in possible indeliberate and deliberate improperly biased decisions. These problems can be solved by means of electronic regulatory medium (ERM), covering organization activities as well as technological ones. Such medium creating can be guaranteed with the increased potential of technological infocommunications. That's why ERM should develop collaterally with infocommunication development. Nowadays such kind of development takes place under terms of Next Generation Networks (NGN). The concept of Next Generation Regulation System (NGRS) should be developed in a similar way.

III. INFOCOMMUNICATION DEVELOPMENT TRENDS

While using Academy groundwork some following development trends which do not exhaust all the possibilities can be suggested:

1. New Telecommunications Technologies establishment. This trend appeared since nowadays the technologies formed on the IP are applied throughout. With a brief data package (as it concerns IP-telephony) for package transmitting it is necessary to have more additional information than useful information. Thus, the transmission efficiency is much less than 50%. The transmission value of useful information cost is twice increasing and the fact of energy consumption is still very important. And here the process of switching (routing) takes much time that is not acceptable. Integrated Telecommunications Technology UA-ITT described in [2] was suggested at the Academy. The technology is based on new three-level model interaction of open systems and multidisciplinary protocol that is realizing the information flow (traffic) switching principle. The flow switching unites in itself advantages of networks with channel switching and networks with package switching, it is applied for different traffic types transmission - from conventional telephony and file package exchanging to multimedia messages with meeting requirements to service provision quality. Thereby, address space possesses properties of minimum redundancy and therefore allows this space to increase without limitations and to extend it as it is necessary without base network protocols changing. Besides, UA-ITT technology gives a guaranteed way for new infocommunication services realization.

2. Creating of Next Generation Regulation System concept and software technological areas for their implementation.

3. Software technological media formation for new infocommunication services realization. Practical work at services development shows that at present period there is a necessity in a flexible approach to open systems interaction development with the aim of required quality of service provision in optimization of network recourses application efficiency. For system solution of the given problem the term "service domain" was implemented that led to development of three-dimension model of open systems interaction – layers, planes, domains. In this case the model is adaptive relating to the service or a set of related services.

IV. CONCLUSIONS

For steadily developing economy formation it is necessary:

1. To formulate economic laws with the regard of ethic human component.

2. To establish a new global economic model based on particular responsibility of business institutions for the stable society development.

3. To implement transparent business processes and guaranties of truly free competitive market.

4. To develop advanced infocommunication technologies increasing their performance efficiency.

5. To create transparent infocommunication media.

6. To introduce electronic governmental and civil monitoring and control of market development and business processes.

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