

E-ECONOMY: PAST, PRESENT AND FUTURE

Assist. Costescu Mihai Alexandru Ph. D
University of Craiova
Faculty of Economics and Business Administration
Craiova, Romania

Abstract: Major condition of future economic development, seen in its totality, e-economy growth has, at an international level, a crucial role for the future of human society. E-economy is a major component in minimizing economic differences and removing interstate barriers, with the support of information and communications technology and production of software applications for the economy.

JEL classification: L86, M15, O33

Key words: e-Economy, information society, information and communication technology

1. INTRODUCTION

A term frequently met lately in almost every debate about the direction towards which the international economy evolves is that of e-Economy. When we say e-Economy, we don't refer to something in particular, well defined, but we try to comprise in this exclusive word all that we understand by economic activities – simple or complex, either it is about an on-line payment, an on-line launched order, an on-line developed auction or the transmission of a contract, in electronic format, through the e-mail – in other words, all activities that a person, individual or legal, understands to develop on-line, through the Internet.

So, e-Economy is the “mirror” image of the economy, transposed in the virtual environment, the place where virtual demand meets virtual offer and virtual customers meet virtual providers.

Although it is a relatively new term and concept – having an existence of approximately 20 years – e-Economy rapidly found a place in the virtual vocabulary, being, at the present time, one of the fields which know a special attention, considering its development potential. In time, several definitions were given for this term, trying to identify it in a correct way.

Thus, according to *qfinance.com*, e-Economy is the economy mostly based on on-line transactions, an economy based on an intensive use of the Internet and of information technology.

At the same time, *websters-online-dictionary.org* identifies e-Economy with that new economy based on the use of electronic equipments, computers, multimedia applications and Internet. Also, *economic.dictionarybrowse.com* shows us e-Economy as a combination of fields of activity, which implies the purchase and sale of goods and services, through the Internet.

Since the concept of e-Economy – although well known – is still at its beginning, it not wrong to say that the possibility exists, that not all the components of this new type of economy to have been identified. So, we can not certainly say that the definitions above are overall complete and that they are the only available definitions, but doubtlessly they help us to identify a specific component of e-Economy: we can not talk about e-Economy without bringing in discussion the Internet, as between these two notions there is a causality relationship, a close relationship – without Internet there is no e-Economy.

2. FIRST STEPS TOWARDS E-ECONOMY

The apparition of the Internet – or at least of the idea itself – took place during the period of the Cold War, on the matter of the conflict between the two large world powers: USA and URSS. The Internet predecessor – ARPANET network - connected, at the beginning, only four organizations – California University from Los Angeles, California University from Saint Anne, Utah University and Stanford Research Institute. Beneficing from the support of the USA Defense Ministry, ARPANET knows a rapid development, establishes the communication protocol TCP/IP and, in 1992, the current Internet exceeds the psychological threshold of a million of connected computers. In time, the Internet development had an amazing evolution.

Date	Number of Internet users	% of total population
December 1995	16 millions	0,4%
December 2000	361 millions	5,8%
December 2005	1,018 millions	15,7%
June 2011	2,110 millions	30,4%
2020 Forecast	5,000 millions	60% (approx.)

* according to *internetworldstats.com*

e-Economy evolution can be connected, in a very close relation, to the Internet evolution and, of course, to the information and telecommunication technology evolution. The 50s and 60s offered the database concept and lead to the apparition of the first applications that used this concept, together with the first data transmission systems. But, being the start period, there were few opportunities for a practical use, mainly because of the “natural” resistance of organizations to what was new on the market. Only later, during the period of the 70s, airline companies recognized and started to use these systems, because of the great benefits brought by computerized reservations and marketing component. Thus, is was created a starting point in accepting, on a large scale, the new opportunities, whose added-value was immediately explored by the financial institutions, by creating direct connections between commercial transactions and financial services provided on the market.

Increased information exchange, interconnection of various fields of the economy, the growing demand from the market – all these lead, at the beginning of the

90s, to the apparition of a growing demand for communication services, which exceeded the conventional borders of a country and of its economy. This situation is understandable, especially through the fact that, first, the one million Internet users in 1992 mainly followed the practical and economic aspect of the connection. Ultimately, as in any authentic economy, "the market" was the one who dictated the development direction: increased and diversified services, up to the point we are at present.

3. ADVANTAGES AND DISADVANTAGES OF CURRENT E-ECONOMY

Nowadays, the great advantages of e-Economy are found, first and foremost, in the economic environment. Seen through contemporary management, competitive advantage increasingly focuses more on participation, accountability and decision-making power of managers and employees at lower levels, considering that those involved know what to do, want to succeed and their interests meet their organizational objectives. A successful business depends, at the same time, on the harmonization with the environment where it operates, on the openness to the external influences and, in general, on the adaptation capacity of that organization both to social and moral-contemporary flows, and to the elements related to technology to a micro and a macro-economic level.

Information technology allows the organization to obtain, analyze and interpret a large quantity of information, it helps the decedents to react more rapidly in a more and more complex and dynamic economic environment, and, last but not least, it allows a transfer of responsibility and decisional power towards all organization levels.

This is a very beneficial situation in the conditions of changes and virtual environment evolution. Low operating costs lead to closer to market organizations, from two main points: firstly, it brought "about" supply and demand, in a way that 20 years ago we could only dream of, and, at the same time, it realized an openness of the markets up to a level to which the adjustment of micro and macro-economic indicators of a company can be made only if rapid and immediate decisions are taken, in concordance with the international evolution of the economy.

Current situation was possible also because of the apparition and development of extremely complex software applications, for example ERP (Enterprise Resource Planning Systems – organizational resource planning systems) and CRM (Customer Relationship Management), but also because of the special growth of the Internet and of the number of Internet users, for whom new branches of the economic theory and practice were developed: e-banking, e-payment, e-learning, e-marketing, e-government etc.

But, a series of disadvantages make us see the limits of the e-Economy and these are also coming from the economic environment. Countries policies, leading to the creation of some trading areas, with close circuit or with restrictive conditions for those that aren't part of these trading areas, automatically conduced to the decrease of e-economy benefits. Although the theoretical aspect obviously remains the free access to information, the practical element disappears, by the impossibility to use this information, because of the political, economic or social required conditions.

However, this aspect was removed, at least up to a certain point, by the globalization process of the economy. Globalization automatically lead to a greater economic cooperation at global level, in both areas, public and private, allowing a more rapid circulation of resources of any kind (material, financial, work force etc.), a rapid change of information, a process extremely beneficial for economic players directly

involved in economy, but which was confronted with some reserves, at the political level. The situation is understandable, as a country's openness to the outside market and the acceptance of international economic cooperation automatically means the compliance to a set of external rules, already established, over which they do not have a decisional power, but only the right to put them into practice. Giving up to some aspects of national sovereignty is not a subject that political class would easily accept and this thing is observed in the set of restrictions that politics tries to impose on local level, with direct implications in economic life.

One of the fields suffering from the consequences of the impossibility to align all standards to a general known and accepted level is the informatics field, dominated in a large measure by the software piracy phenomenon – according to the report for the year 2011 of Business Software Alliance – BSA – approximately 47% of computers, at international level, use methods that aren't legal to obtain or to the use software applications. In time, this lead to the apparition of another phenomenon, incompatible with the notion of e-Economy: many organizations still do not have an integrated software system, to allow a rapid change of information with the others players from the market, thus registering a big enough inertia in terms of the reaction speed to the market tendencies, that legal regulations not succeed yet to remove.

Nowadays, e-Economy is an actual concept, well defined and identified, with extremely valuable and practical applications – through its components, but which, because of some economical, political and social elements, could not yet show the whole truth of its possibilities.

4. IT&C – A PREREQUISITE FOR THE FUTURE ECONOMY

The key for solving this situation is also found in the globalization phenomenon. Although, at present, this phenomenon conduced, for many times, to the apparition of some rejection situations, for the future people must understand that the entire world economy is not a collection of little entities – national economies – but a whole, an unitary one, where the change of consumption tendency in X point can influence the economic activity of Y company, located to thousands of miles away.

This is even more important as we assist to the development of a new aspect of consumer's personality, respectively the virtual reality. The development of the Internet technology and software applications faced an extraordinary “boom” in last years, thus, at present and certainly in future, people will turn more and more to the virtual reality, where everyone can be who ever he or she wants.

This tendency is and will be speculated more and more by the e-Economy components – e-marketing, e-banking, e-commerce, fields that will know a spectacular development in next years. We shouldn't forget that there are already software applications where users already met a part of the simulated economy, with virtual money, virtual transactions, so, why not imaging a future world where “virtual” becomes “reality”?

The Internet development, the increase of number of users and websites – at present, there are more than 250 millions websites – make these things possible, but we shouldn't forget that all virtual elements are based on technology. Organizations, companies or national states, don't have to ignore this field, where software applications and equipments go hand in hand and without them, many of us would be “lost”.

More and more automated environments, new network communication methods, will allow the more rapid information dissemination, rapid organization of

flexible working groups, a better synchronization of activities on global level. The development and the increase of data traffic level – bandwidth – and the generalization and the improvement of wireless technology, in order to increase mobility, are the central elements of the connection of all economy branches or geographical regions to virtual economy. We can say that the development of information and communication technologies and the possibilities that these offer will directly influence the peoples thinking, the organizational behavior, the decisions spontaneity, thus creating certain premises to new informational products and services with impact on the e-Economy development.

But, probably, what will really help us understand the complexity of e-Economy evolution is a process that at present is in an incipient and exploratory stage – the integration of various technological components with the access to Internet. Great players from the market understood a very important aspect of the e-Economy future – *the progress cannot be obtained by individually developing one component or another*. Computers, laptops, tablets, phones, TV sets etc., interconnected – technical part – at a given point, will represent a very easy-to-use way to access the virtual world of the user – software part – by means of which it will have access, from anywhere in the world – mobility – to friends, to preferred products, to banking system, to preferred movies – e-Economy.

5. CONCLUSIONS

In my opinion, a series of support programs and projects need to be conceived and applied, on global level, in a unitary way, in order to sustain the implementation of informational systems in various areas of economy. These programs must be conceived as major intervention fields in economy and to follow, at least for an average period of time, the following objectives: a reorganized and strictly configured informational system to meet the needs of business environment, improved managerial decisions through the implementation of some innovative software systems, that are adapted to the existent risks, a even more developed e-commerce and the extension of the use of on-line learning applications.

We are moving towards a fully computerized society by sustaining the introduction of computers and Internet access. The IT&C evolution is caused by a complex of cultural, social, economic, scientific and technological factors, still one is truly required – the one related to the information generation, collection, transmission, development and dissemination. Wherever information is presented, it becomes an object of processing through technological means, or, better said, through software systems.

In order for the new technologies to be fully effective, their introduction and use should not be limited only to research activities, theoretical programs or courses, but will also need to penetrate deeper into the economic society. Thus, it should create the proper and necessary flexibility for the users to access the Internet network, even more – if possible – from a distance. This situation should reduce information duplication, allow a wider access to the new economy and lead to a sustained process of lowering costs in an area that is still expensive and prone to aging.

From this point of view, inter-organizational systems should have a particular role, to allow the automation of the information flux between organizations, in order to create an efficient information management system. Such a system allows previsions on customers' demands and an efficient delivery of products and services, conducting to a

better management of the relationship customer – provider, or, better said, demand – offer.

Inter-organizational system can also allow the rapid exchange of technologies and information, which leads to an increased accessibility to business partners “know-how”. In time, we can notice an increased accumulation of this knowledge and, from this point forward, the differences between organizations – as of the information perspective – can be reduced.

The ever growing information society, at different stages in different parts of the world, is not a technical concept, so it really cannot be measured in terms of technical solutions. It is rather a stage, with an economic advantage of one kind or another, reached by the society at a certain point of its evolution. Such a stage is a result of a series of steps that need to be completed and which can be measured only by considering all its aspects: technical, economic, social, administrative, and organizational. Thus, the development of complex software systems for the e-Economy means sustained actions and efforts to ensure at least the presence of all the above, as the omission of only one of them can compromise the efficiency of the overall system.

Finally, e-Economy support derives from the adoption of some integrated solutions to a national and global level, by reducing the long term costs, a more facile entry into the domestic and foreign markets, the development of a more efficient management system, increased security of electronic networks, all these leading to a safer and more dynamic e-business sector.

REFERENCES

1. Ibrahim M., Human Knowledge Resources and Interorganizational Systems, Ribbers P. and Erasmus Research Institute of Management, July, 2007
Bettonvil B.
2. Marquis C., Acting Globally but Thinking Locally? The Influence of Local Communities on Organizations”, Harvard Business School, Boston, 27 November 2007
Battilana J.
3. Tremblay R. Commercialization and Future Access to the Internet Highway”, Global Research, 18February, 2007
4. * * * www.fonduri-structurale.ro
5. * * * www.cbsnews.com
6. * * * www.internetworldstats.com