

# THE INTERNET AND THE BUSINESS ENVIRONMENT

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*The technological progress made possible the accelerate development of the IT&C domain. On one hand it was developed the necessary equipment to sustain the computers' network, and on the other hand, it was developed new types of transport. It is easy to imagine that the future business will have as support the Internet, and what happens today in the markets, well localized in space, will be transferred somewhere in the “ virtual space” where every meeting or negotiation of a transaction will be possible within seconds or more minutes... This diminishing of the distances and even their elimination, the time reduction for shopping in many cases, it makes that the definition given to the classical commerce not to be totally right. The Internet investment development and the appearance of new players are the results of the factors that contributed to the development of the electronic commerce.*

*The Internet services have been developed fast at the world level becoming a real star in the services world. These contribute to the development of many existent domains such as: education, culture, science, health, entertainment, business, social and governmental domain by creating new approaches as: electronic mail, informational transfer in real time no matter the distance, electronic commerce and online publicity.*

*Key words: Internet, Globalize, Router, Technologic process, Connection, Server*

## **Introduction**

The Internet can be considered a huge library of available information or a mean to “bound” people all over the world and from another point of view it represents a worldwide network of computers. The Internet services represent a very dynamic domain at worldwide level. Its roots came from 1960's and we can talk about several preparing moments such as:

- The first transatlantic phone cable installed in 1858, but it became operational in 1886 and it functioned almost 100 years;
- The Former Soviet Union launched the first artificial satellite of the Earth in 1958;
- In the same period USA was looking for solutions as in the case of a nuclear attack to have a properly communication canal between the commando centres all over the USA territory.

They became well known started from 1990's when it began their opening to population and companies. In 1981 it was recorded 1 million PC's all over the world and it appeared incorporated in the PC's the first types of data transfer modems of 300bps.

The Internet services appeared along with the development of the calculus equipments, the informational need increase in taking a decision, especially the bankers one, of insurance, transport and telecommunications, the deregulation of certain domains as telecommunications, transport and energetic system, the globalisation and the technological progress recorded the last decades.

The deregulation led to the opening of certain markets for the competition. The most important deregulation market was that of telecommunications, especially the telephonic one. The telephonic companies had the biggest voice infrastructures. These infrastructures were transformed in data's infrastructures, due to the competition from other domains (cable, fibre, radio suppliers), which led to the development of the data's communication market. The opening of the other markets led to the increase of the competition on these markets and the companies to face the stronger competition; the companies accorded a special attention to the information and data that had to be accessible in a facile and quicker manner.

The world distances were reduced and we can say that the data transmissions services conducted to the significant decrease of the world distances and also it permitted the administration of the data in real time.

The development of the Internet on the street level had been done by the network interconnectivity in different parts of the world. These interconnections were done step by step, started from the local level, than zoned, national, continental and world.

The Internet services are characterized by the services proprieties: the inseparability, the variability, the perishable ness and the intangibility. The Internet services are done both through the equipment and people mediators.

Due to their multitude of utilities, the Internet services tend to become a real starlet in the services world. These facts contribute to the development of many existent domains such as: education, science, health, entertainment, business, social and governmental domain, creating new approaches as: the electronic mail, the real time informational transfer, disregarding the distance, the e-mail or the on line publicity.

At the moment the Internet represents the support of two big categories of services: data transmissions and the Web services. The data transmissions are data packets propagated between two or more computers. Here are included services like: accessing web sites for information, e-commerce, radio and TV “streaming”, telephony, e-mail and FTP.

The Web services can be structured in two major categories: the creation and the housing of the web sites. Regarding several criteria among them the economical and security ones, a web site can be hosted on a specialized server or on the firm server.

## **The internet evolution**

We can easily imagine that the future’s affairs will have as a support the Internet and what is happening today in real markets, well located in space, it will be transposed in a “virtual space”, where every meeting, negotiation, end of the transaction will be possible in several seconds or minutes at least...

In 1992 the term “ navigation” is attributed to the Internet and also then the World Bank began its on-line activity. It recorded 1000.000 host servers, the most important one being Michelangelo.

We can talk about an “ explosive” development of the Internet by the increased number of the hosted servers, the appearance of the first Internet browser called Mozaic, of the first radio station, which broadcast Internet programmes.

It realizes the first commercial connection to Japan using a rental line. TWICS supplier began to offer dial-up connections. Important institutes have begun their on-line activity: White House, United States Organization.

Starting with 1994 began the first virtual malls; the first bank that offers services using the net, called “FIRST VIRTUAL”; it appears the first Internet “ banner” on the web.hotwired.com site which promoted an alcoholic drink called “ Zima” and the “AT&T” company, it spread the radio programmes on the Net; the NFS network traffic overcome 10 trillions bytes/month; many governs appear online: Japan, Great Britain, New Zealand.

We can say that starting with 1993-1994 Media and the Business Medium have become effectively interested by the Internet.

In 1995 has appeared:

- The first firms with the internet as a main activity and they are cited at NASDAQ exchange;
- The domains recording are no longer for free;
- It started the online activity other governs: Canadian and Vatican;
- World Wide Web and the search engine are voted the year technologies; new technologies are developed: Java, Virtual environments (VRML);
- New countries are recorded their domains: Ethiopia (ET), Ivory Coast (CI), Cook Isles (CK), Cayman Isles (KY), Anguilla (AI), Gibraltar (GI), etc.
- The number of the host servers reached 4.652.000;

1996 brings new events:

- Over 100 countries are connected to the net and transmit over 300 millions emails everyday;
- The internet suppliers want to have the possibility to ensure their services for many users;

- The Internet telephony attracts more and more the American traditional telephony companies that require the USA Congress to out law this new technology;
- There is a real war between Netscape and Microsoft browsers through new technologies developed in several months;
- The most wanted domains are: „.com, edu, net, uk, de, .jp, .us, .mil, .ca, .au”.
- It was a first “chat” session between the Malaysian Prime Minister the Palestinian Leader Yasser Arafat and the Philippines President Fidel Ramos;

In 1997 there were 16.000.000 computers connected to the Internet.

1998 year:

- The number of domains is continually growing. It has recorded this year the domain number 2.000.000, and the web pages is estimated between 275 and 320 millions for the first trimester;
- In Canada has installed the first network with optical fibre;
- Several important events are broadcasted on the Net, generating an important traffic: Olympics Games, The World Football Championship;
- The year’s attacks have been done to the web pages of the American Commerce Department, the New York Times, and the Chinese Study Society for the Human Rights and UNICEF Organization.

1999 year:

- New technologies: related to the Internet telephony;
- The year viruses were: Melissa and Explore Zip.

In 2000:

- The web pages are over 1 milliard
- It recorded 100 million systems of calculus all over the world connected to the net with over 250 million people accessing the Net
- The new technologies of the year 2000 were the Wireless equipments and the Ipv6 protocol, applied by Internet;

In 2001 was broadcasted on the net the first movie „The Technophobe & The madman”.

In 2002:

- USISIP Association (USISPA) has recorded– the American suppliers association for the Internet services.
- The Internet 2 network has 200 Universities, 60 Companies and 40 affiliate members
- All the commercial sites from Spain must recorded to the govern due to important protests;
- The French Minister for Culture forbid the use of the word “e-mail” by the French ministers and adopts the French word “courriel”.

In 2003 were several viruses that affected the Internet networks; Network Solutions begin to offer domain records for 100 years

In 2004 the no.1 problem the „Spam” –sending unwanted messages, and in China has launched a research network with 25 universities from 20 cities with a speed between 1 and 10Gbps.

Year 2005:

- The battle between viruses and the Spam;
- Were launched better versions for security;
- It continued the world level improvement of the networks, which led to a better speed for navigating on the Net.

Year 2006:

- It has significantly risen the number of Internet messenger users;

- It were recorded web sites with hundreds of unique accessing;
- Spam continue to represent a serious problem for the internet users;
- The online publicity has significantly risen at the world level.

The Internet revolution of the affairs world was the platform of the appearance and development of the e-commerce. The e-commerce represents an alternative of the commercial transactions unfurling against the traditional one. The e-commerce begins and knows the biggest evolution in the USA.

### **The internet evolution in Romania**

The Internet in Romania has begun in 1993, it was hard due to the insufficiency of the material support: computers and communication equipments. The evolution of the net would be influenced by the politics. Until present the monopole of the Net was part of the USA, being imposed the American culture and politics.

In Romania the net appeared thorough the dial –up connections with 9,4kbps modems and calling the West Europe countries.

Id.est the most popular service was the e-mail access; all the users had e-mail addresses with the endings like: “.nl”, “.de”, “.at”.

The most important moment was in 1993 when IANA (Internet Assignment Numbers Authority) admitted the Romanian right to enrol to the root domain (Top Level Domain) “.ro”, the possibility of administration of a national domain registry and to record domains under “.ro”.

It followed a continual development regarding the Net access as well as the domains number. There are many events that marked the Net evolution in our country but I will mention only several of them being important for the present level.

In 1984 it realised the first data transmission network between distanced computers. The project was called RENAC/RENOD.

In 1991 the Romanian Academy, the National Committee Of Informatics and The Ministry of Science and Education required the government the approval of the connection to the nods from ICI- The Central Institute of Informatics, IFA – the Atomic Physics Institute and IPB – Bucharest Polytechnic Institute at EARN (European Academic Research Network).

The Internet access was done through phone calls in other countries, especially Holland, Germany and Austria.

In 1992, ICI began the protocols to RIPE and IANA to record the root domain “.ro”, and in December it realised the first permanent connection in Romania by connecting ICI to Vienna University using a rental line of 9,6kbps. This year it established the RNC framework – The National Research Network with attributions in promoting and developing the Internet access for the academic media.

In 1993, the “.ro” domain was recorded to IANA and ICI became the only organism to use the “.ro” domains opening the roads to the following types of domains “name.ro”, done through a single phone call.

The first recorded domain in Romania was “mc.ro”.

In the same year appeared in Romania the first Internet suppliers: ICI, EUNET (bought by KpnqWest and today used as GTS), PCNET (bought by RDS in 2004) and STARNETS (today EUROWEB).

In 1994, ICI connected with PTT Austria using a 64kbps satellite connexion with PHARE funds.

In 1995, the “.ro” domains are no longer free.

In October 1996, it installed the terrestrial connexion Bucharest – Budapest for connecting RNC to Europanet also with PHARE funds.

In 2001, it has constituted the National Association of the Internet Service Providers-ANISP and it functioned RONIX – Romanian Network for Internet eXchange, the biggest interconnection nod of the Romanian suppliers.

At 25.09.2002 take part ANRC – the National Authority of Communication Settlement.

We can mention the fact that when the first email addresses appear we can talk of the beginning of the Internet as an affair.

ITCNet was the first Internet supplier, which provided the Romanian market with a free e-mail service with phone connexion. At that time on the market there were free emails but the user needed an Internet connexion to access it. The user needed a computer, a modem and a phone line and he could benefice of a free e-mail address and he could access all the web pages hosted on the ITCNet server.

Nowadays the Romanian Internet market has a continual growth both as affairs and also as the client's number. The affairs cipher has doubled every year, whereas the users number has no precise cipher due to several factors among it:

- At the dial-up connexions the same cont can be utilised by several persons because the dial-up connexion implies knowing a cont name, a password and an access number, being a well known practice using it for “borrowing” to friends, relatives or using the work place cont at home.
- There are apartments networks with no recordation to ANRC (the National Authority of Communication Settlement.) for not paying the taxes. There are such types of networks with hundreds of subscribers, which distorted the real number of the clients.

Although we can estimate the number of the Internet users as 20% and 28% of the country population recorded the frequency of the Internet usage. Whereas the firms, we can mention that only 52% of the Romanian companies use the Internet.

We can say that the Internet became in Romania very indispensably for several domains such as the stock exchange, the media, the online publicity or the VOIP communication (voice over Internet Protocol), and so on...

### **The business development on the internet**

The Internet remains a global phenomenon and to understand the Romanian market we must analyse the world one. The “Google” appearance brought a new development of the Internet life. A great merit of it is the opening door for the smaller competition and any web site owner can gain having his own page.

The present development of the e-commerce will revolutionise both the affairs conduct and the commerce one, which will globalise more and more. The Internet raises the sellers' field of action and destroys the barrels form the Net, even for the smaller and medium companies. The consumers have the possibility of choosing the products and the services and searching for the suitable ones form the market. They have rapid solutions which destroys the national or zone barrier.

The internet approach as a business medium represents the consequence of several factors as the computers- telecommunications relation, the implementation of the www technologies, the advantages offered by the electronics business compared with the classical ones, the easiness of the information transmission and the advantages which are offered by the web network to the participants.

Due to this technology both producers and consumer can benefice, because it opened the road to a new type of competition between organisations.

Due to the www technology we can obtain a multitude of information as: text, audio, video and can become form a variety of sources.

There are a lot of reasons why we buy products using the Internet: the rapidity of the transaction, the competitiveness of the prices, the selectivity, etc.

The easiness of the users to press the button to look for a book (this book could be in Australia), the information is easily brought to him in several seconds. In this way we reduce the time and the space using the computers' mouse.

We realise that doing the electronic business we have many advantages comparing to the classical ones: it diminishes the transactional costs, new services for the clients, it improves the business medium, etc. the access to many information help the buyer to take important decisions in ordering the products.

In this way the electronic market transactions became global. This market presents some disadvantages related to the human nature relation, to the need and custom of the clients to see, smell, taste or touch the products they buy.

## Conclusions

The specialists estimate a real explosion of the Internet market until 2010.

The Romanian businessmen sense the Internet as a vital force for the 21<sup>st</sup> century marketing. Although the lack of education of the Romanian firms vis-à-vis of web is caused by the existent offer on the Romanian market. The interactive agencies and the software consultancy, as well as the web design agencies are the ones to “teach” the Romanian client in using the Internet. Whereas the Romanian web offer concentrates on a attractive design, sometimes abusive by Flash elements. A secondary motif is the lack of material resources that oblige the Romanian businessmen to pay no attention to the classical marketing instruments and to choose instead to promote their business among friends and relatives, to make deals with “relations” and to reduce the concept that “ the image counts” to the “ personal image, the car and the building counts”. In this environment where the recommendation and the relation primes, the necessary creativity to overcome the financial obstacle is no longer present.

The Romanian businessmen want to include this new communicational canal in the marketing strategy. But they need a guide for this new territory and at the moment many Romanian web designs agencies are not prepared to assume such a role.

## References

1. BOBIRCĂ Ana - Economia serviciilor internaționale, Editura Economică, 2005, București,
2. CRISTUREANU Cristiana – Economia invizibilului. Tranzacțiile internaționale cu servicii- Ed. All Beck, București, 2004
3. ROȘCA Ion Gh., BUCUR Cristina-Mihaela, TIMOFTE-STANCIU Carmen, PAIU Octavian, VIȘEAN Mirela, - Comerțul electronic, concepte, tehnologii și aplicații, Editura Economică, București 2004.
4. Revista Amfiteatru Economic – Ed. ASE, București, nr. 21 din 2007
5. [www.ibm.com](http://www.ibm.com).
6. [www.internetworldstates.com](http://www.internetworldstates.com)
7. [www.bizcafe.ro/articole/cine-face-marketing-online.html](http://www.bizcafe.ro/articole/cine-face-marketing-online.html)
8. [www.romcard.ro](http://www.romcard.ro)
9. [www.marketwatch.ro](http://www.marketwatch.ro)
10. [www.bnro.ro](http://www.bnro.ro)
11. [www.clubafaceri.ro](http://www.clubafaceri.ro)
12. [www.afaceri-online.net](http://www.afaceri-online.net)
13. [www.mcti.ro](http://www.mcti.ro)
14. [www.metromind.ro](http://www.metromind.ro)
15. [www.google.ro](http://www.google.ro)
16. [www.business-online.ro](http://www.business-online.ro)
17. [www.siteaudit.ro](http://www.siteaudit.ro)
18. [www.eafacere.ro](http://www.eafacere.ro)
19. [www.biblioteca.ase.ro](http://www.biblioteca.ase.ro)
20. [www.efinance.ro](http://www.efinance.ro)