

## E- BUSINESS – SECURITY AND SPEED

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### **Abstract:**

*Starting an e-commerce operation involves a many variables. In the online business need to offer customers a safe environment for trade, open round the clock and can manage an unlimited number of users. Recent recession is still persistent among us, and some business owners in shifting to an e-commerce business, which may seem like a life buoy. The main reason why there is this orientation is because the number of consumers shopping online is increasing.*

**Key words:** e-commerce, information security, risk management, ITC

**JEL classification:** L86, H55, M15

Electronic communications have become a global priority in the second half of the 1990s, as a result of that knowledge society has a significant impact on competitiveness and rapid development of communications and IT technologies.

In a global company located in a significant transformation process in the early 3rd millennium requires a vision of modernizing the society and developing the competitiveness of the European economy. This vision, formulated after the Lisbon European Council in 2000 (Lisbon strategy), sought to outline strategies and policy guidelines that are appropriate responses to challenges posed by aging European population and increasing competition increasingly fierce global. [6]

One of the major problems of electronic business is lawful gathering and storing information related cards. This issue is vital for the implementation and development of electronic business. Of legally not allowed to collect and store related information card. This information must be transmitted to a server for processing MasterCard and Visa, but no such bodies have no authority to store information.

About outsourcing is preferable to storage and handling by a third party cards able to process payments online. In terms of information security is the best choice. Besides the issue of security processing cards still considering requires Internet connection for Web Server's e-commerce site. This connection should be broadband electronic environment necessary to ensure speed and scalability that meet user requirements in terms of speed of response and computer security transactions, including security measures to protect customers from possible attacks from hackers.

### **Security Basics Web Transactions**

*Redundant firewall protection* - by activating the firewalls can be reduced to zero cyber attacks on e-commerce site. Existence of a firewall hardware or software in a business online is vital and irreplaceable.

*Web application protection* - In addition to hardware firewalls in a business e-commerce is required and there is a better protection software for computer security. By activating the firewall protection software is made to protect electronic business in various attacks like SQL injections and cross-site scripting (XSS) attacks.

*DoS/DDoS mitigation* - Denial of Service and Distributed Denial of Service are ways to attack a website generated by a robot that identify a fake user aims at using all available

resources of the Web server generating Thus, you lock the server. Devices DoS / DDoS hardware or software intended to eliminate such attacks are considered a security buffer zone.

*SSL VPN (Secure Sockets Layer virtual private network)* - creates a secure connection for remote administration of the website that hosting environment.

*Vulnerability Monitoring* - monitoring services are designed to scan vulnerability code web applications that require information from the server to identify possible malware application and informatics attack.

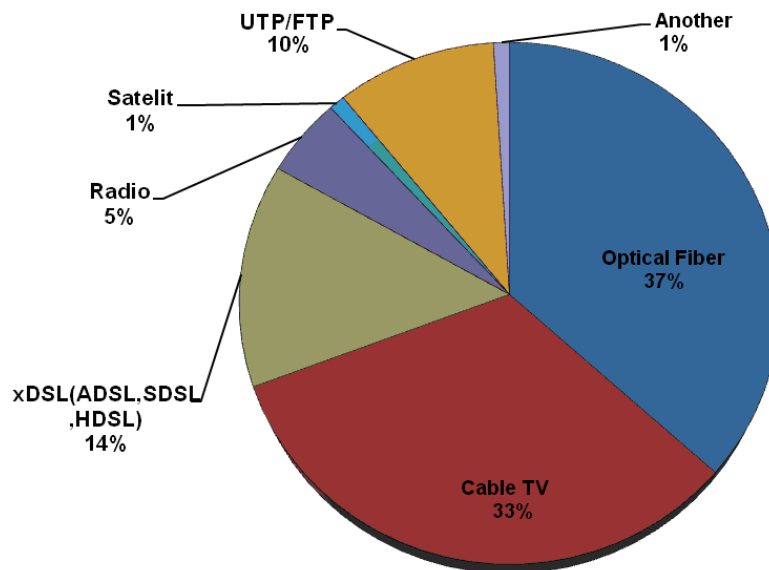
*Antivirus protection* - is to monitor and block access to various applications (viruses or Trojans) running on the Web.

*Two factor authentication* - double identification is requested Web site administrator. It is necessary to pass twice through the filter identification before access to the hosting environment to prevent theft of data, especially the password.

*Encrypted backup, service monitoring and response* - encrypted restoration services are offered that monitor activity in electronic business by making the web hosting company. Are needed for better security in addition to a computer and the keys decrypted is to the business electronic owner.

They are valid in terms of security of electronic transactions.[7] But in terms of connection speed?

The essence of the concept of broadband communications, can be understood only if it is interpreted as a set of technological opportunities that allow rapid transmission of large amounts of data so as to ensure access to a wide range of digital services. Bandwidth is required for various online services varies significantly depending on them.



Source: www.ancom.ro

**Figure 1.** Broadband access in Romania, 2009

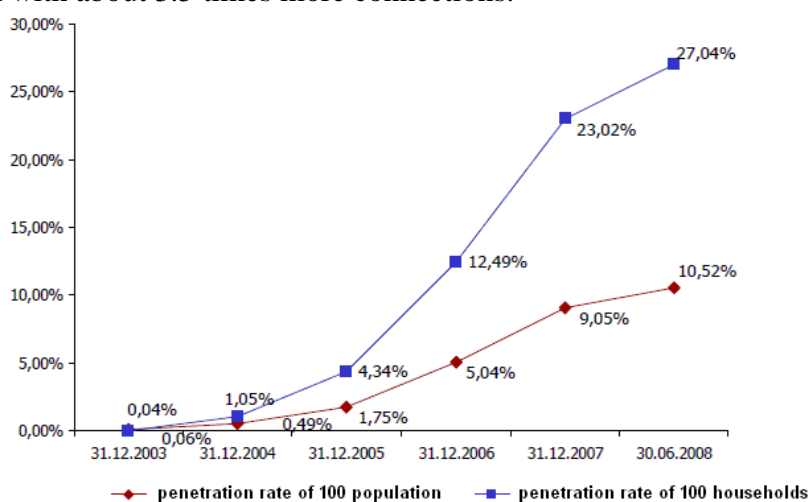
Benefits of broadband access is not reflected by the activity recorded performances, the latter can be executed without access, but much harder in a smaller area, geographically limited. Great benefit is that it allows carrying out a new form. This possibility and its influence on the society has only begun to appear. Work at home through electronic communications systems, are solutions to problems such as unemployment, transport or environment. Another example is e-learning offering an alternative to traditional learning, making it the applicant to be independent of time and space managed by specific institutions, creating the possibility of adjusting the pace of progress on individual ability and need. Access to broadband will also play an important

role for applications will appear as the emergence of new needs arising from the information society and knowledge economy.

Measurable benefits resulting from broadband access, include:

- easier and faster search of information - information is widely available, unlimited space-time;
- support continuing education there are no geographic or social barriers;
- simplification of relations between people, business, business, business, government and other organizations;
- create new employment opportunities, such as working from home;
- a more efficient management of enterprises, especially SMEs, leading to increased efficiency and develop competitiveness;
- new opportunities on entertainment or cultural life;
- improving quality of life in rural or disadvantaged people by supporting the development of disadvantaged areas through tourism;
- implementation of telemedicine solutions, communication between physicians to exchange experience.

In the last two years in the electronic communications market has registered a remarkable evolution in the provision of Internet services. If mid-2006 record of 2.66 million connections a number of Internet access in mid 2008 this number amounted to 9.25 million with about 3.5 times more connections.



Source: [www.ancom.ro](http://www.ancom.ro)

**Figure 2.** Broadband access penetration in Romania, 2008

This particular increase is due to a accumulation of economic and social factors: technological development has led to a significant decrease in the cost of purchasing personal computers and information networks available to the Internet and continued development of support services using the Internet have created youth trend and even a lifestyle.

All this made for a short time to register significant growth of Internet access connections and in particular the broadband.

In Romania, the penetration rate of broadband communications services continues to grow in 2008 but remains one of the lowest in the European Union - 10.52% and 27.04% in the population at the household level. Several reasons led to this situation, namely late market liberalization (2003), launching DSL Late (late 2005), reduced use of personal computers (only 35% of households have access to the PC), an area reduced coverage of electronic communications services broadband (30% of the population lives in cities without coverage of broadband communication services) and low incomes, particularly in rural areas. [3]

For 2015 period, the following indicators are expected:

INDICATOR		TARGET	TARGET
	2007	2010	2015
Penetration of broadband households with access to dedicated	23%	40%	80%
Rate of broadband access in the population	10,5%	40%	100%
Percentage of individuals using Internet for interaction with public authorities	2,6%	10%	50%
Utilization of e-government services by individuals (demand) in total	5%	20%	50%
Rates online commercial transactions (e-commerce)	1,2%	5%	40%
Rates available computers in households	26%	50%	90%
Percentage of people who used the Internet for teaching and training	2,3%	10%	40%
The rate of broadband penetration among companies	59%	70%	90%

Analysis of broadband services market characteristics indicate that, although there are a number of advantages and opportunities to develop these services, in the absence of intervention measures tailored to the problems in Romania, there is significant risk of deepening the digital divide and to maximize the differences recorded between regions and between rural and urban. Also, appropriate measures are required since it was found that no technical support needed to boost regional development by encouraging competition and increasing the accessibility of communications services.

Given that spread the benefits of the Internet is becoming increasingly dependent on the availability of high speed Internet access among citizens and companies, increased use of broadband communications services is a major goal in development of Romania.

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