

Interferences Between e-Commerce and Insurance

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Internet use grew faster than any other technology in the last few years and it has a powerful impact on international commerce development. New opportunities appear for small and medium companies which use the internet to make commerce across the borders. Citizens save their time and money making payments on the internet, ordering goods and services using their home computers. With all this advantages, a wide variety of barriers show up and disturb the internet activity. Using the internet, companies can be affected by the losses of revenues, losses of information, security dates, reputation damage, interruption of activity, theft of private information, etc. To cover all this internet risks, insurers develop new products in order to meet all the company and citizens expectations.

Keywords: *electronic commerce, internet risks, insurance.*

Introduction

The electronic commerce knows a considerable development. Companies are selling their products on line, there are taking place a lot of electronic funds transfer, companies are using internet for marketing, for electronic data transfer, etc. There are a lot of information which must be protect by any company: payroll dates, sales dates, human resources dates, information about prices of products and services, clients information, etc.

The more exposed companies to e-risk are those who use internet to make their businesses (on line commerce) and in the last decade the number increase considerably.

Although companies take measures for their internet protection, a lot of problems take place in cyberspace: disappears of dates, e-mails, secured information, server crash, damages form computer viruses, etc. Experts

try to develop new informatics products to protect companies from all this events which can disturb their activity.

E - commerce and cyber crime trends

All economic world is changing due to Internet development. Internet opened new opportunities for companies to improve their relations with customers, to sell and promote their products and services, etc. All companies need to rethink their ways of operating, to adapt their businesses to the new global changing, to try to find new solutions to protect their businesses by the internet risks.

The analysts estimate that the e-commerce revenues are more than 176 billion \$ in a year and are growing continuously. [8]

Only if we take into account US, which we can consider the leader of electronically commerce, we can notice the rhythm of development in the last few years.

Table 1 Summary of U.S. Shipments, Sales, Revenues, and E-commerce: 2000-2005
 (Shipments, sales, and revenues are shown in millions of dollars)

Item	Value of				
	Manufacturing Shipments ¹	Merchant Wholesale Excluding MSBOs ²	Trade Sales ¹ Including MSBOs ²	Retail Trade Sales ³	Selected Services Revenues ⁴
2005 Total	4,735,387	3,585,038	5,177,338	3,693,430	5,983,689
E-commerce	1,265,987	474,801	945,359	93,280	95,691
Percent of Total	26.7	13.2	18.3	2.5	1.6
2004 Total	4,308,971	3,296,520	4,799,679	3,474,340	5,539,555
E-commerce	996,174	434,948	896,196	76,344	83,280
Percent of Total	23.1	13.2	18.7	2.2	1.5

	Total					
2003	Total	4,015,081	2,962,284	4,345,336	3,265,477	5,114,011
	E-commerce	842,666	397,113	828,442	60,015	57,297
	Percent of Total	21.0	13.4	19.0	1.8	1.1
2002	Total	3,920,632	2,835,528	4,151,597	3,134,322	4,900,995
	E-commerce	751,985	345,539	765,452	46,819	47,998
	Percent of Total	19.2	12.2	18.4	1.5	1.0
2001	Total	3,970,500	2,785,152	NA	3,067,725	NA
	E-commerce	724,228	309,315	NA	35,296	NA
	Percent of Total	18.2	11.1	NA	1.2	NA
2000	Total	4,208,582	2,814,554	NA	2,988,756	NA
	E-commerce	755,807	267,838	NA	27,968	NA
	Percent of Total	18.0	9.5	NA	0.9	NA

NA Not applicable.

¹Estimates include data only for businesses with paid employees.

²Manufacturers Sales Branches and Offices.

³Estimates include data for businesses with or without paid employees.

⁴Estimates include data for businesses with paid employees except for Accommodation and Food Services, which also includes businesses without paid employees.

Estimates for 2002 and 2003 exclude landscaping services, landscape architectural services, and pet care services.

Source: U.S. Census Bureau, 2005 Annual Survey of Manufactures, 2005 Annual Wholesale Trade Survey, 2005 Service Annual Survey, and 2005 Annual Retail Trade Survey

The levels of using the internet in company businesses, as we can see below, are very diversify by one company to other but all of them are trying to improve this level. The ideal situation is to use the internet all the lifecycle of the products or services in order to reduce the total cost and increase the profits.

In Romania, people are using the internet to achieve: photo equipments (35%), software (32%), hardware (30%), computer games (32%), telephones and accessories (32%), etc. [14]

With all the benefits which internet brings in our lives and in company businesses there a lot of concerns about the damages and the cost which may occurred using it.

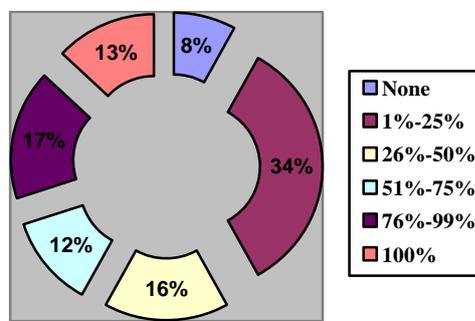


Fig.1. Percent of business through online channels

Source: 2007 E –commerce Issues Survey

All over the world people and companies are feeling threatened by cyber crime (cyber fraud and identity theft are the most common).

After attacks on Estonian, US and UK systems in 2007, NATO defense ministers met to find solutions for these problems. Almost every country has anti hacking legislation which can be used in case of cyber crime but the problem is that there is not a unique legislation with the same stipulation for all the countries. Today more than 120 countries are preoccupied in cyber warfare and cyber espionage and try to find solutions to punish the cyber criminals all over the world.

In Europe, since 2002, the European Digital Rights deploys his activity in order to establish civil rights in the information society. Until today 17 countries joined to this international association.

Japan has a worried situation in cyber crime levels over the last few years. After a total of

3161 cyber crime in 2005 the level rose with 52% in 2006 and is continuously increasing. [12]

If we are making a world statistic, US hold 31% from the total of computer attacks, followed by China with 10% and Germany with 7%. [12]

The motivation for all this cyber criminals is almost all the time one financially. All these steal information (accounts numbers, social security numbers, clients information, etc) are selling on the underground market. The allocation of these markets worldwide is represented below [1]:

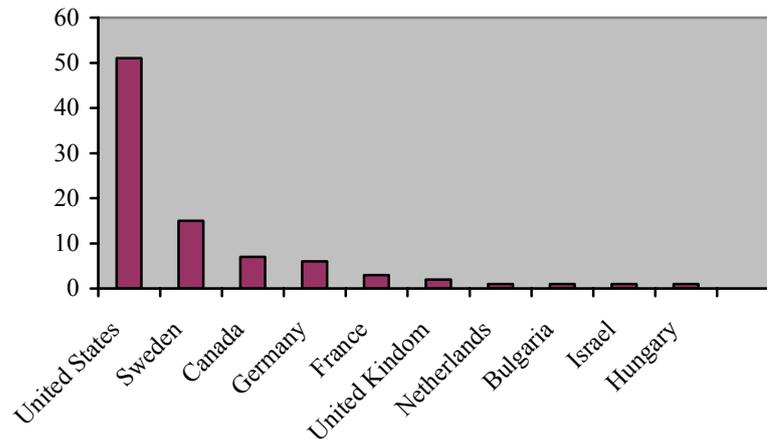


Fig.2. Location of underground market

Source: Adapted from Symantec 2007

Generally speaking not only the companies have problems with the internet, there are a lot of civilians who are using their computers at home and reported serious internet problems.

Insurance for internet risks

Nowadays to protect our companies from losses and liabilities which may occur from email and internet we need a special insurance product. The companies can be affected by the losses of revenues, losses of information, security dates, damage to reputation, interruption of activity, theft of private information, software, etc.

The traditional insurance policies don't offer coverage for this kind of situation, so, the insurance companies developed new insurance products to face these problems which cover claims like:

- damage to computer systems (cost for repairing the computer systems and repairing and restoring the lost dates)
- violation of confidentiality
- losses from interruption of activity caused by inaccessibility of using computer systems or caused by losing their data

- damage to company reputation (cost of consultants for rehabilitate the company reputation)

The insurance agents need to identify the exposure of the company to the internet risks in order to establish an accurate premium. They need to exam a lot of aspects like:

- identify the internet perils who can affect the business
- identify the methods and standards who are used by company to maintain a secure internet system
- identify the necessary of technical and human support in case of internet damages
- **establish the procedures to demonstrate the incidents**

First party insurance policies cover losses derived from interruption of activity due to hardware and software damages, degradation of computer network, losses of information, client dates, etc.

Third-party liability coverage defrays losses arising from damages provoked by a company computer (software, hardware) damages to others.

The year 2006 brought for 82% from Romanian companies record spy ware attacks

and losses reached almost 8 million euro. [10] With all this problems Romanian insurance companies don't offer a policy for covering all the internet risks. If the companies are interested to protect their businesses from this risk they can appeal to an international insurer like AIG, Zurich, Lloyd's, Marsh & McLennan, AON, etc.

There are problems for insurance companies to offer the best policy and solutions for internet risks for their clients but also there are problems for companies which are trying to find the best solutions for their businesses. In order to find a good policy to cover their internet risks, companies need to follow a few steps:

- 1) find the right policy which cover the company specific internet risks (explain to the insurance agents or brokers the internet risks which you are face with)
- 2) find a financial stable insurance company when you achieve your policy
- 3) find the right price for the internet risk cover (the price can vary from one insurance company to other).
- 4) find a package policy (business owners policy for example)
- 5) find a good balance between price and deductible (the companies can choose a higher deductible and to pay a small premium or to choose a policy without deductible and to pay a bigger price). Depends on how independence on the internet the companies are, how many incidents they had in the past, etc. they can choose to have a deductible or not.

Conclusions

Internet offers for companies new opportunities of developing their businesses. We can say that in the next future companies that are not present on line, in a way or another, will not exist anymore.

With all advantages which internet brings in companies businesses, it brings a lot of problems for its users. Companies can face with this threaten buying new and modern hardware and software technology, finding solu-

tions with IT specialist, buying new insurance products to cover the internet risks.

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