THE RISK PERCEPTION FOR CONSUMER SEGMENTS IN E-COMMERCE AND ITS IMPLICATION FOR THE MARKETING STRATEGY

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Abstract
During the past years, the Internet has gained a very important role in our everyday lives as well as in the business environment. This online trend developed also in the way companies interact with their customers by means of Internet platforms, or in the form of e-commerce. Despite the easiness with which customers order products from home, the online shopping has also many risks. Most of the risks are related to the lack of information about the company who sells online or the uncertainty that the ordered products will be delivered. Starting with the presentation of the processes taking place in online shopping, the present article reviews the rights consumers have when buying online and then focuses on researching the risk of online shopping as perceived by Romanian consumers. The study analyzes the differences in the risk perception and the willingness to buy online in the future depending on gender, age or income. The way in which consumers perceive risks affects the company’s marketing strategy, because if consumers see a greater risk in online transactions, the probability that they will buy online decreases. Consequently the company must focus its communication strategy on the reduction of the risk perception.

Keywords: consumer behaviour, risk perception, e-commerce, consumer rights, online marketing

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Introduction

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In the first stage (Figure no. 1) the Internet primarily fulfilled for end users the function of
information, while in the second stage the direct company-customer interaction appeared
(Pall & Közel, 2008). With the help of the Internet the offers of the companies can be
presented to the open public and the customers can easily order the products from home.
While the development of the Internet goes into the era of networking, the e-commerce and
the online transactions gain an even more important role for the development and the
marketing strategies of the companies.

Figure no. 1: Developments on the Internet

[Online] Available at:

In the European Union, Internet transactions for 2006, according to the Marketing Charts
Site, amounted to a value of 106 billion – 0.9% of the union’s GDP. The forecast predicted
for 2007 an annual increase of 25% and a value of 323 billion for 2011. Global B2C E-
Commerce Report September 2009 presents the effects of the economic crisis, which led to
a slowdown of growth in 2009 to 13% in Germany and 17% in Britain. However Europe is
not facing the drastic figures the United States are: a decrease of 1.5% in the e-commerce
market for 2009. In Romania the e-commerce with credit card payment registered in 2008 a
volume of 53,1 Million Euros, expectation for 2009 being by 70 Million Euros. The
number of transactions was expected to increase from 652.000 to approximately 860.000
(Teodorescu, 2009).

Online shopping has a lot of advantages because of the comfortable way in which it takes
place, the transparency of markets and so on, but also many disadvantages. The main
problem that can appear is the risk of fraud because the buyer cannot control in a direct way
the company or the person who sells the products. For instance a consumer can buy a
product, pay for the product and in the end he doesn’t receive the ordered product or he receives a product of unsound quality.

Because of the fact that e-commerce has developed very fast, there have been developed a wide range of laws, which should protect the consumers who buy online. In this article there are analyzed the aspects which have to be taken in consideration when making online transactions, the laws which help to protect the consumers and the perception of the consumers on the risks of buying on the Internet. From the perspective of the marketing strategy and customer relationship management it is more important to analyze how the consumer perceives risk in online transactions because consumer’s subjective perception leads to the finalization of a transaction or not. Of course every company must consider the norms of the existing legislation and the consumer rights when it creates an offer on the Internet. However, in the purchase decision, in most cases a consumer doesn’t know all his rights and usually he makes the decision based on his subjective perception of risk. This paper presents the results of a survey that analyzes the perception of risk of online shopping of the consumers in Romania.

1. Characteristics of electronic commerce (EC)

Throughout business history the evolution of technology has brought a shift in consumer behavior (Wang et al., 2000, p. 374). Information and communication technology facilitates the access to markets and goods all around the world; it eases access to information and thus, influences consumer attitudes and expectations.

Today EC constitutes itself as a completely new business area with its own set of rules and characteristics. Customers have access, per mouse click, to an immense diversity of goods and services, available to them worldwide, with specific payment conditions. Internet users with common interests establish virtual communities, in which they exchange information, shape preferences and share knowledge. Moreover, companies have the opportunity to interact with customers directly over Web2.0, effortlessly collecting customer data and offering mass customized products. In addition e-commerce reduces the number of distribution layers and imposes close cooperation relationships among businesses.

The number of opportunities the Web brings both to customers and businesses alike is unfortunately directly linked to the risk of fraud. Data protection and transaction security are high on the agenda of companies but still a long way from being fully insured.

• Offer

Using the Internet companies reach out to more customers than they would have ever done through traditional retail channels. The widespread use of the web revealed the opportunity to reach a vast number of customers directly into their homes. According to the Internet World Stats web page, by the end of September 2009 there were 1.733.993.741 Internet users worldwide – 4,8 times more than in 2000. In the European Union 60% of individuals aged 16 to 74 were in 2009 regularly using the Internet. Even more, 83% were living in a household with broadband access. For Romania, Eurostat indicates only 31% of individuals as being regular users in 2009, but the number has risen 3,1 times since 2004. Furthermore, as mobile devices evolve the use of mobile web will make customers available everywhere. The online CIO publication points out that “the number of smartphones in use throughout the world will increase by an average of 33 percent each year through 2012”.

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Customers have the possibility of easily accessing information about the product of interest: watching commercials; reading the specifications; finding out pricing, packaging and delivery conditions; staying up to date with product launches. Meta search machines allow quick searches for competitors’ products and customer reviews thus, empowering customers to make comparisons and make informed decisions.

The downside of easy access to information over the Internet is the information overflow. It is extremely difficult to skim through the variety of web sites and their offers or promotions. Although the amount of information on the web is difficult to assess, because often not all the information stored on a server is available for all Internet users to access, there is a relation between the increase of digital information and the expansion of the Internet. As Ganz points out in his forecast, this increase is rapid and difficult to grasp: “between 2006 and 2010, the information added annually to the digital universe will increase more than six fold from 161 exabytes to 988 exabytes” (Ganz, 2007, p.1).

• **Worldwide market**

As the Internet is not bounded by any country’s border, the market of electronic commerce is the biggest possible: it is worldwide. Regardless of where companies or customers are in the world they have the possibility to come in contact with each other over the web. Furthermore, new translation services, like Google Translate (www.google.com/translate_s) are becoming more performing and put even language barriers aside.

Consequently, the target market of any EC offer is not only the domestic one. Companies may choose to deliver their products anywhere they choose. Often, the limitations they impose themselves regard countries with known high risk of fraud. Unfortunately, Romania is one of these countries – according to The Los Angeles Times the US auction site eBay considers Romania to place first in the top of the countries where major Internet auction fraud is committed.

• **Reduced distribution layers**

Marketers describe the downstream side of the supply chain, the one that looks forward to the customers, as the marketing channel or the distribution channel (Kotler et al., 2008, pg. 880). The way each company configures its distribution channels may result in superior value to the customers and thus, into competitive advantage.

The distribution channel in the traditional business world relies on wholesalers and retailers; wherein cases of international businesses the wholesalers often also play the role of the importer. EC gives companies the opportunity of having direct contact with their customers, consequently allowing them to shorten the distribution channel or even deliver directly to end consumers. Companies may benefit from this by transferring price reductions directly to end consumers, by reacting more quickly to market changes and staying up to date with consumers’ preferences.

• **Interaction with the customers through Web2**

With the up rise of Web2.0 companies have new instruments in range, which enable them to stay in contact with their customers. Blogs, wikis, social networking and discussion forums alike changed the status of customers from passive web page readers to active
content placers. Companies have the opportunity to find out opinions, to research preferences and to develop new communication strategies.

Ford, for instance, got for its Fiesta campaign, according to McCracken on his Harvard Business Review blog, 6.5 million YouTube views. The contents were posted by the 100 consumers to whom cars were given by Ford. The cars were theirs for six months, in 2009. These consumers had to comply with the request of completing a different mission every month.

- **Virtual communities**

Internet users with common interests establish virtual communities on social networking sites, exchanging opinions, advice and reviews. For companies having access to the dialogue between the members of such communities may represent a significant advantage. They have insight on trends and preferences but also on dislikes and are able to adapt their business process accordingly.

- **Customer data base**

The Internet facilitates access to a wide range of customer data:

- Servers automatically store IP and access data.
- In addition companies may extract data from subscriptions, forums or social networking.
- Furthermore, online research provides the fastest, simplest and inexpensive way to collect data about customers’ preferences.

- **Mass customization**

The evolution of the Internet and Web 2.0 lead to the appearance of a new way of doing business: the Enterprise 2.0, where business process is dependent on online communication. Companies have found completely new ways of creating value by using the opportunities of the Internet. One of these ways is the mass customization: customers are able to put their modular product online together according to their wishes. And as the trend to individualization continues, companies are keen on offering more customization possibilities.

- **Payment methods**

Electronic commerce uses payment methods that allow long distance transactions:

- cash payment on delivery – the customer introduces the delivery address and pays on the arrival of the product;
- online card payment – the customer introduces the debit/credit card details, the money is drawn from the account and the delivery follows;
- and money order – the customer orders the payment at the bank or postal office and provides the relevant bill details to the EC company, the delivery follows.

Services like online payment (Click and Buy, Google Checkout, e.g.), or online banking, further facilitate payment within the frames of EC. Online payment providers store credit card information in order to shield consumers from possible fraud and provide, per mouse click, all information needed to EC companies. Online banking makes money order available from the comfort of one’s home or office.
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- Risk of fraud

The Internet and consequently EC are subject to illicit actions from hackers, crooks and identity thieves. According to the US Internet Crime Complaint Center, in 2008 there were losses of 264 million US Dollars resulting from the registered complaints. The top ten of complaint categories includes non-delivery (32.9%), auction fraud (25.5%), debit/credit card fraud (9%) and check fraud (5.4%). The Top Internet Scams for 2008 by the US National Commerce League puts non delivery on the first place with 33.41% of total and an average loss of 1.370.07 US Dollars. The following ranks are occupied by fake check scams (31.25% of total, average loss 3.179.03 US Dollars), Nigerian money offer (8.01% of total, average loss 9.107.08 US Dollars); Internet auctions (4.63% of total, average loss 1.317.05 US Dollars) and Phishing (4.36% of total, average loss 474.13 US Dollars).

In Romania, the police report according to the Capital publication a doubled number of online frauds within a year – 526 in August 2006 compared with 256 in September 2005. On its web site the Internet Crime Complaint Center warns that “Romania is associated with the most widespread Internet fraud”. One can only conclude that local authorities do not cope with Internet crime cases.

2. Regulation on electronic commerce

As a member of the European Union, in Romania both EU regulations and local legislation apply. By the means of the i2010 policy framework for the information society and media, the European Union tries to promote the positive contribution that information and communication technologies can make to the economy, society and personal quality of life. One of the three objectives in this policy, communicated in 2005, is the Single European Information Space offering affordable and secure, high bandwidth communications, rich and diverse content and digital services. This policy supports Internet penetration and contributes thus to the evolution of electronic commerce.

Within the European market Customs Duty and Import VAT do not apply. Buyers from outside the European Union on the other hand, must be charged with both taxes.


Usually, when goods and services are purchased via the Internet the law governing the state in which the trader operates applies. This is particularly important precisely because the Internet facilitates trade between a company and a customer physically located thousands of kilometers away, from environments with different legislation. But the customer’s country law may apply when the foreign site is in the language of that specific country and it sells products in that country.

According to the European Consumer Centre, the Consumer Directive 97/7/EC on distance contracts applies for online purchases too. It establishes a minimum period of seven working days from delivery or the conclusion of the contract within a customer can exercise the right of withdrawal. The customer does not have to justify his decision but
must pay the return postage equivalent. On the other hand the company is prohibited from levying any penalties for the return. If the company fails to communicate in a timely manner, the information required, the right of withdrawal may be extended. Romanian legislation in force provides a period of 10 days for return and an extension of up to 90 days.

Authorities supporting customers when problems occur are: the European Consumer Centre of the state of residence - when the site is a foreign one; and the Local Commissioner for Consumer Protection - when the site is in Romania.

3. Perception of risk in e-commerce transactions

Since online transactions are a recent phenomenon they also involve, from the psychological point of view, the human reaction against new and unknown. Nyshadham and Ugbaja (2006) stresses that a new risk, as the Internet identity theft, is most likely perceived differently than the familiar risk of a storm. Consequently, the authors argue that risk assessment for EC is done without the precision that customers have developed for other familiar risks. Therefore, the statement of Ha (2002) that the customer perception of EC risk is greater than the risk perception for classic trade is not surprising. The next chapter will also demonstrate that risk perception in young people, skillful in using computers and the Internet is lower. For these people the Internet has become a part of the familiar environment.

Liebermann and Stashevsky (2002) list nine different components of risk associated with the use of the Internet:

- Credit card theft;
- providing personal information;
- pornography and violence;
- large amount of advertising on the Internet;
- reliance on information from the Internet;
- lack of physical contact with products;
- failure to supply the product purchased;
- lack of human contact;
- Internet addiction.

The first point mentioned by the two authors can also be found in a study cited by them, the Pew Internet and American Life Project on the main concerns of consumers about EC. 84% of Internet users are concerned that personal data may fall into the hands of unknown representatives of companies. Regarding credit cards, 68% of users are concerned about the possibility of their card numbers being intercepted by hackers.

Based on the literature presented above, the article will use the risk perception as a subjective concept, which mainly includes the risk of personal data, the risk of theft of credit card and risk of non-delivery.
4. Risk Perception of Romanian Consumers of Online Shopping

A big part of the possible fraud in online commerce takes place because consumers are not aware of the risks that might occur. For this reason we have investigated how Romanian consumers are aware of the risks that exist in Internet transactions. We called risk perception the way in which they are aware of the risks of Internet transactions. Moreover, the way in which consumers perceive the risks of Internet transactions influences their online buying behavior: the higher the risk, the lower the probability that a consumer will buy on the Internet.

The perception of the consumers of online shopping, and the risks which are involved in the online transactions in Romania were determined with the help of a research we had done with the purpose of determining the main characteristics and the willingness of the Romanian consumers to surf and to buy on the Internet. The research took place in the period March-April 2008 on 503 respondents in the main cities of Romania. The questionnaire contained 45 open questions, multiple choice and Likert scale questions, and was filled out by randomly chosen respondents in the main cities of Romania. This article presents only the questions that are related to the way in which consumers perceive the risks of online shopping because they are related to their rights, and the way in which they are implemented. The rest of the questions will not be considered because they refer generally to consumer behavior on the Internet and they do not fit in the topic of the journal.

One of the aspects that have to be taken in consideration when analyzing the buying transactions on Internet is the perception of risk. On a scale from 1 to 5, where 5 represents a very high risk and 1 represents a very low risk, the Romanian population has an average of 3.25, which indicates an over average risk perception of online buying transactions. This perception differs on several homogenous segments of people. As it can be seen in figure no. 2 the women have a higher risk perception then men. This can, speculatively be explained by the hypothesis that men are more computer/technology oriented than women.

![Figure no. 2: The risk perception of online shopping depending on gender](image)

The risk perception of older people is higher than the risk perception of younger people, as it can be observed in figure no. 3. Thus, the groups of people with the highest risk perception are the ones with an age of 55-65 years and the segment of people older than 65 years. This can be explained by the hypothesis that the people older than 55 years are not...
well acquainted with the Internet. The difference of score between the segment of people between 55-65 years (score 4.05) and the people with an age of over 65 years (score 3.88) can be explained as follows: people between 55-65 years use the Internet more, and they are more aware of the risks of buying on Internet than the people older than 65 years.

The segments of people with the lowest risk perception are the ones of ages between 19-25 years and 25-35 years. These are actually the generations that grew up with the Internet. Therefore, they are more acquainted with the Internet and with making transactions on the Internet. These are also the generations that, according to this research, use the Internet for shopping, more than they use it for socialization or information.

The groups of people with an average risk perception on online shopping are the segments of people of ages younger than 19 years or 35-45 years and 45-55 years. With a score of 3.3 all these segments are closer to the category of people with a low risk perception. These scores can be explained for the segments of people with an age of 35-45 years and the segments with an age between 45-55 years by the hypothesis that they are more aware of the risks in Internet than the younger people. The segment of people younger than 19 years does not have their own income so they do not buy directly from the Internet, but indirectly, through their parents. Therefore, they do not know so well the risks of buying online.

![Figure no. 3: The risk perception of online shopping depending on age](Source: Online Shopping Research (2008))

Regarding the categories of income, the people having an income over 3200 lei have the lowest risk perception. This can be explained by the fact that they have the financial means to buy online. It is also interesting to analyze if the higher income has a connection with the level of education these people have, so people with a university degree, who are also computer skilled, have usually higher incomes. Moreover, because of their financial possibilities, they are more willing to risk buying on the Internet. Other categories of people who have a low risk perception about online shopping are the ones with an income between 1600-2200 lei, and with an income lower than 400 lei. These are groups of people who think that there are better offers on the Internet. Besides, this in the segment of people with an income lower than 400 lei, there are many young people who work part time or they have their money from their parents. All other groups of people with an income of 400-
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1000 lei, 1000-1600 lei, 2200-2800 lei and 2800-3200 have about the same risk perception of online shopping. (Figure no. 4)

![Figure no. 4: The risk perception of online shopping depending on income](source)

Source: Online Shopping Research (2008)

Regarding the willingness of consumers to buy again from the Internet 41% state that they would buy online again and 30% state that they might (“maybe”) buy online again. Only 11% of the interviewed persons say that they will not buy again on the Internet and 18% do not know if they will buy again or not. These percentages differ depending on the gender, the age and income of the questioned people. So 49% of the men say that they will buy online again, while only 35% of the women say with certainty that they will buy again. Women are not so determined about online shopping for 33% say that they might buy again and 22% say that they do not know if they buy again, while these percentages are lower for men. So only 26% of the men say that they might buy again on the Internet and only 12% do not know if they will buy again. Overall, 13% of the men and 10% of the women state that they will definitely not buy on the Internet in the future.

As it can be observed in figure no. 5, the younger people are more willing to buy on the Internet in the future. So in the segment of age between 25-35 years only 4% of the questioned people say that they will not buy online in the future. In this segment 47% of the questioned people say that they will buy on the Internet again, while 37% may buy again and 12% are undetermined. A similar structure can be observed for the segment of people of ages between 19-25 years. In this segment also 47% of the questioned people say that they would buy on the Internet in the future, while only 6% say that they will not buy again and the rest are undetermined. In the categories of people of ages between 35-45 years only 10% of the people say that they will not buy on the Internet in the future, while in the segment of people with an age under 19 years only 8% state that they will not buy again. In this last category the response can be explained by the fact that young people are not so acquainted with online shopping.

In the segments of older people the percentage of people who state that they will not buy on the Internet in the future is higher. So in the category of people of ages between 45-55 years 18% of the questioned people say that they will not buy on the Internet in the future. In this category also the percentage of people who will surely buy online in the future is by 34%
lower than the younger categories. The rest of the respondents do not know if they will buy on the Internet or they are not determined. In the category of people between 55-65 years 45% of the respondents say that they will not buy online in the future, while the rest of 55% are not determined. It is interesting to remark that no respondent gave a sure response that s/he will definitely buy on the Internet in the future. In the category of people older than 65 years, 80% of the respondents gave a firm answer that they will not buy on the Internet in the future. 13% from the respondents of this category are not sure yet. This result can be explained by the hypothesis that older people are not so familiar with the Internet and therefore they are not willing to buy on the Internet. Besides this, at a certain age it is more difficult to change one’s buying behavior.

![Figure no. 5: The willingness to buy online in the future depending on age](source: Online Shopping Research (2008))

The segments of people with higher income are the ones who will buy again on the Internet. So 63% of the respondents in the category of an income over 3200 lei and 52% of the respondents in the category with an income between 2800-3200 lei will definitely buy online again. In these categories less than 10% of the respondents say that they will not buy on the Internet in the future, while the other might buy or they do not know. The segment with the lowest percentage of people who will buy online is the one with an income between 1600-2200 lei. This is the group with the lowest certainty of future online buying. For in this category 45% of the people say that they might buy on the Internet, 16% do not know and only 8% state that they will definitely not buy again. The segment of people with an income between 2200-2800 lei is the one with determined people, because 40% say that they will buy again, 24% say that they will not buy again and the rest might buy or they do not know. The other segments have a similar structure with a conviction of buying again of over 35% and a low negation percentage. The only exception is the group of people with an income between 400-1000 lei where 18% state that they will not buy on the Internet in the future. In all three categories the percentage of the undetermined ones is over 40%. (Figure no. 6)
5. The Impact on the Marketing Strategy

The way in which consumers perceive the risk of purchasing on the Internet influences the marketing strategy of any company. In most cases a high-risk perception leads to a restraint of consumer’s Internet shopping. Thus a company must take all measures to reduce consumer’s risk perception and thereby to facilitate online shopping.

A first aspect that a company should consider is the image it creates for itself. A company must convince its consumers that it is safe to buy its products and services both through the communication policy and through the quality of its services. Furthermore, the recommendations based on customer experiences, are an important element in the creation of the company’s image.

Creating an image of trust should be done on several levels. On a first level the company should focus on protecting the Internet transactions, and moreover it should inform its consumers about the safety measures it has implemented. Orzan G. and Orzan M. state that Internet security measures are the same as of any computer system, but they must be stronger (Orzan, G.; Orzan, M., 2007, p. 120). Also the recommendations of the existing customers are an important element in the creation of a positive image of the company. For this reason many companies operating on the Internet, should permit their customers to make evaluations of their services. These evaluations provide some information about the products and services, but they are subjective because they are based on randomly chosen opinions of the customers who want to evaluate the company. They can also be influenced by some fictitious users; who are employed by the company to improve its image. At another level, responsible institutions should notify consumers about the online companies that fulfill all legal requirements. The problem with this type of communication is that it is often not promoted enough to create a positive image to the companies.
On the other hand, any company should guarantee the quality of the provided services. Consequently, in all elements of the marketing mix, the company must meet all the promises made to the consumer. So, all products must have the promised quality standards and they should also comply with the pictures presented. The prices must be mentioned clearly and there should be no hidden charges. The distribution policy must respect all rules imposed from the beginning. Thus, it should respect the delivery dates and conditions. Only through the assurance of a continuous quality of the products and services, a company can create a positive image and give by this a guarantee to the potential consumers. Especially on the Internet, it is very important to respect these rules, because by posting information on blogs, forums or other means of communication, consumer information, especially negative one is spread much faster than in real space.

Conclusions

E-commerce and Internet shopping have gained in the past years a great importance for the business environment. In many domains the online presence of a company is crucial for its existence and its success. Many consumers prefer to stay at home and order products and services on the Internet because it is more comfortable and it is easier to compare the offers. This online trend can be also observed on the Romanian consumers. Especially the young people, who are the consumers of the future, have the tendency to buy more and more on the Internet. Even though most people are aware of the risks which online shopping entail, most of them state that they will buy on the Internet in the future, which shows the importance of this distribution channel in the future.

The volume of e-commerce transactions and the market’s growth rates attract many companies in this market. In order to benefit from the market’s potential, the companies’ effort should focus on reducing risk perception by creating a trusted image and brand and generating positive recommendations. For this, the Internet may be through web.02 and its virtual communities an important point of support and a genuine tool in marketing strategy, respectively in the communication strategy.

References


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