

# OVERCOMING PERCEPTIONS OF UNCERTAINTY AND RISK IN E-RETAILING

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## *Abstract*

Increasing development of the Internet and the use of information and communication technology contributed to the development of e-retailing in consumers' purchasing. The main purpose of this paper is to explore overall perceptions of e-retailing among Croatian consumers. In particular, the focus of the paper is on the areas which influenced the customer commitment and loyalty in e-retailing. In understanding whether the Internet and home shopping affected consumers' purchases and what is the level of acceptance of e-retailing comparing to traditional, brick-and-mortar stores, the quantitative study on the sample of 392 consumers was conducted. The on-line questionnaire was designed specifically to find out consumers' acceptance of e-shopping, factors affecting their on-line shopping behaviour, consumers' perceived usefulness of e-retailing, etc. The findings of this research indicate that consumers use on-line purchasing more than two years ago but that they still do on-line purchasing activities with a significant level of uncertainty and distrust.

**Keywords:** e-retailing, trust, risk, uncertainty, consumers, Croatia

## 1. INTRODUCTION

In increasingly competitive retailing markets, being able to retain consumers and influence their loyalty is seen as the key factor in winning market share. A veritable explosion occurred in new types of store formats, competing each other on the same market, for the same segment of consumers. Therefore, consumers are taking into account different factors in evaluation and making their choice of the retail formats. They continue to buy in various brick-and-mortar store formats but they start to introduce on-line purchasing for some type of products and services, as well. Consumers discovered the enormous potential of e-retailing (McKnight et al., 2002) and home shopping. Several factors have influenced the growth of their popularity, such as: access and the number of households purchasing personal computers (Newmann & Cullen, 2002), easy comparison of competing products and prices which helps in finding the best offer (Finne & Sivonen,

2009), overall costs reduction (Luarn & Lin, 2003), etc. There is a growing body of literature concerning factors which encourage consumers to use Internet shopping facilities and electronic commerce customer relationship management. Previous research (Wang et al., 2001) has shown that such factors as ease of use, information content, innovation, security protection, customer support, product/service itself, and transaction process will influence Web customer satisfaction. However, there are some areas which cause problems in e-retailing consumers' acceptance, such as uncertainty about product quality, incomplete product information (Ba & Pavlou, 2002), a lack of trust in the technical and institutional environments surrounding the Web (McKnight et al., 2002), etc. Trust plays a central role in helping consumers overcome perceptions of risk and insecurity (McKnight et al., 2002, p. 334). The importance of trust is magnified in the highly uncertain e-commerce environment (Wang & Pho, 2009).

The paper is organized as follows. First, a brief literature review is given to provide a background of the study. In the section that follows, a discussion on research methodology and results of the study are given. Finally, a discussion of theoretical and managerial implications including limitations of the study and directions for future research are presented.

## **2. LITERATURE REVIEW**

It is worth noting that literature sources on the topic of consumers' acceptance of e-shopping are very often related to risk and uncertainty elements. Risk and uncertainty are constructs included in interacting with an e-vendor (Gefen et al., 2003). Some researchers have suggested that online customers generally stay away from e-vendors whom they do not trust (Reichheld & Scheffer, 2000), while most researchers also agree that trusting beliefs directly influence repeated purchase intentions (McKnight et al., 2002; Kim & Benbasat, 2003). The perceived risk of having one's personal identity or financial information stolen by hackers (O'Brien, 2000) can deter Web site use. Choi and Lee (2003) empirically showed that increased level of perceived risk reduces purchase intention.

Perceived transactions risk considerably affects e-shopping (Lee & Clark, 1996). Moreover, the protection of privacy is an issue of increasing concern (Liao & Shi, 2009). Individuals may be reluctant to use e-business for the fear of unauthorized or illegal duplication and circulation of information (Keeney, 1999). Cunningham et al. (2005) empirically proved that perceived risk is a significant factor in relation to consumer behavior.

From a detailed reading of the literature on consumers' acceptance of e-retailing, we observe the following. Academic researchers tend to focus on the structure of trust-building mechanisms, while practitioners tend to focus more the trust-building mechanism, especially in terms of technical solutions and implementation.

Kim et al. (2005, p. 144) conclude that trust has been identified as a key component in marketing and e-commerce literature, as in the worth mentioning works of Beatty et al. (1996), Hoffman et al. (1999), and Jarvenpaa et al. (2000). According to Urban et al. (2000), consumers make Internet purchasing decisions on the basis of trust. There are differences in the concept of trust in electronic commerce (e-commerce) and in traditional businesses that involve brick-and-mortar stores (Kim et al., 2005, p. 144). In brick-and-mortar retailing, trust is based on personal or business relationships and interactions between the consumer and the merchant at an individual or a firm level. In e-retailing, trust

is based on the consumer's confidence in the processes and is especially critical when two situational factors are present in a transaction: uncertainty (risk) and incomplete product information (information asymmetry) (Swan & Nolan, 1985). Uncertainty in e-retailing is often related to the product quality which is avoided in a traditional business setting. Buyers in online marketplaces have to rely on electronic information without having the ability to physically check the product; hence, they are vulnerable to additional risks because of potentially incomplete or distorted information provided by sellers (Lee 1998). The lean nature of the electronic environment relative to the traditional face-to-face market leads to transaction risks rooted in uncertainty about the identity of online trading parties or product quality (Ba & Pavlou, 2002, p.243). Information asymmetry may give rise to opportunistic behavior such as misrepresentation of product quality, which could lead to mistrust or even market failure. Koller (1988) argues that trust is a function of the degree of risk inherent in a situation. McKnight et al. (2002, p. 337) propose that consumer subjective probability of depending involves the projected intention to engage in three specific risky behaviors—provide the vendor personal information, engage in a purchase transaction, or act on vendor information (e.g., financial advice).

According to Jin (2010, p. 30), service quality contained in e-retailing affects both perceived value and customer trust. Namely, good service will lead to customer trust and improve perceived value. Sultan and Mooraj (2001) indicate security as the service quality factor which is linked to trust. The same authors also point out that customer trust could be improved due to advanced security technologies of a Web site.

The concept of perceived value is a general judgment of a product or service associated with perceptions of expense and payback. It is the balance between the use-value of the products or services and the cost such as time, money and emotion (Jin, 2010, p. 30). Perceived value is assessed by the consumer and based on simultaneous considerations of what is received and what is given up to receive it. Clearly, certainty and lower risk related to time, money and quality of product/service and a Web site are logical drivers of perceived value.

Switching costs could be also observed as an important segment of certainty and risk taking in e-retailing. Switching costs refer to the time, money or emotion that customers will spend when switching from one service provider to another (Jin, 2010, p.30). As the majority of reviewed researches were conducted in Western countries, it was interesting to compare their findings with the findings of this research. Consumers in Western countries demonstrate less trust in online shopping than Croatian consumers which can be probably attributed to several reasons: more sophisticated fraud techniques in Western countries and higher number of online shoppers generates higher interest in online frauds. Since Croatian e-tailing is its infancy, greater trust of Croatian consumers's can also be attributed to beginners' infatuation with novelty called online shopping.

### **3. RESEARCH METHOD**

For the purpose of this paper, a research study examining the overall perceptions of e-retailing among Croatian consumers, the level of confidence in on-line purchasing, the areas which influenced the customer commitment and loyalty in e-retailing, etc. on the sample of 392 Croatian consumers was conducted. The method used in this study was an on-line questionnaire. The questionnaire consists of three sections. The first section consists of statements related to consumers' acceptance of e-retailing (such as, perceived usefulness

of e-shopping, the level of confidence, the fear of unauthorization and information asymmetry, etc.). The second section includes question about the lengths of on-line shopping and the most frequent bought assortment. The third section is devoted to demographics of the sample (results are shown in Table 1).

Whenever possible, we developed items measuring the constructs by adapting existing scales developed and tested in previous research. As the original items were in English, we asked two researches whose native language is English to check the translation validity.

The level of trust in on-line purchasing was adapted from the model proposed by McKnight et al. (2002). Perceived usefulness was adapted from the study of user acceptance of information technology (Davis, 1989; Davis et al., 1989).

All the research constructs were measured using multiple-item 5-point Likert scales adapted from previous studies, with strongly disagree (1) and strongly agree (5) as the anchors. The research was conducted during May 2013. A total of 392 completed questionnaires were received, a response rate of 78.4%.

The collected data were analyzed using relative and absolute frequency analysis.

Table 1 Demographics of sample (Total sample=392 respondents)

| Item                                       | Percentage |
|--|------------|
| <i>Place of residence</i>                  |            |
| Large town (more than 100.000 inhabitants) | 59.93      |
| Town (less than 100.000 inhabitants)       | 27.05      |
| Village                                    | 13.01      |
| <i>Gender</i>                              |            |
| Female                                     | 61.99      |
| Male                                       | 38.01      |
| <i>Age (Years)</i>                         |            |
| 18-24                                      | 16.78      |
| 25-34                                      | 61.64      |
| 35-44                                      | 18.15      |
| 45-54                                      | 2.74       |
| 55+  | 0.68       |
| <i>Education</i>                           |            |
| Unfinished Elementary                      | 0.0        |
| Elementary                                 | 23.63      |
| High school                                | 10.62      |
| College/University                         | 36.64      |
| Master degree                              | 23.63      |
| Doctoral degree                            | 5.48       |
| <i>Occupation/Employment status</i>        |            |
| Industrial worker                          | 65.07      |
| Owner of the company                       | 7.53       |
| Unemployed                                 | 10.96      |
| Pensioner                                  | 0.34       |
| Student                                    | 16.10      |

Source: survey

#### 4. RESULTS AND DISCUSSION

According to the data in Table 2, the largest percentage of respondents recently started with on-line shopping. Namely, 29,45 percent of respondents are practicing on-line shopping only 1-2 years, while 27,40 percent are doing it some 2-4 years.

As the number of product categories sold via Internet is continually growing, it was interesting to find out what categories Croatian consumers usually buy on-line. The results in Table 2 show that clothes, airplane tickets and travelling services are the most preferred ones.

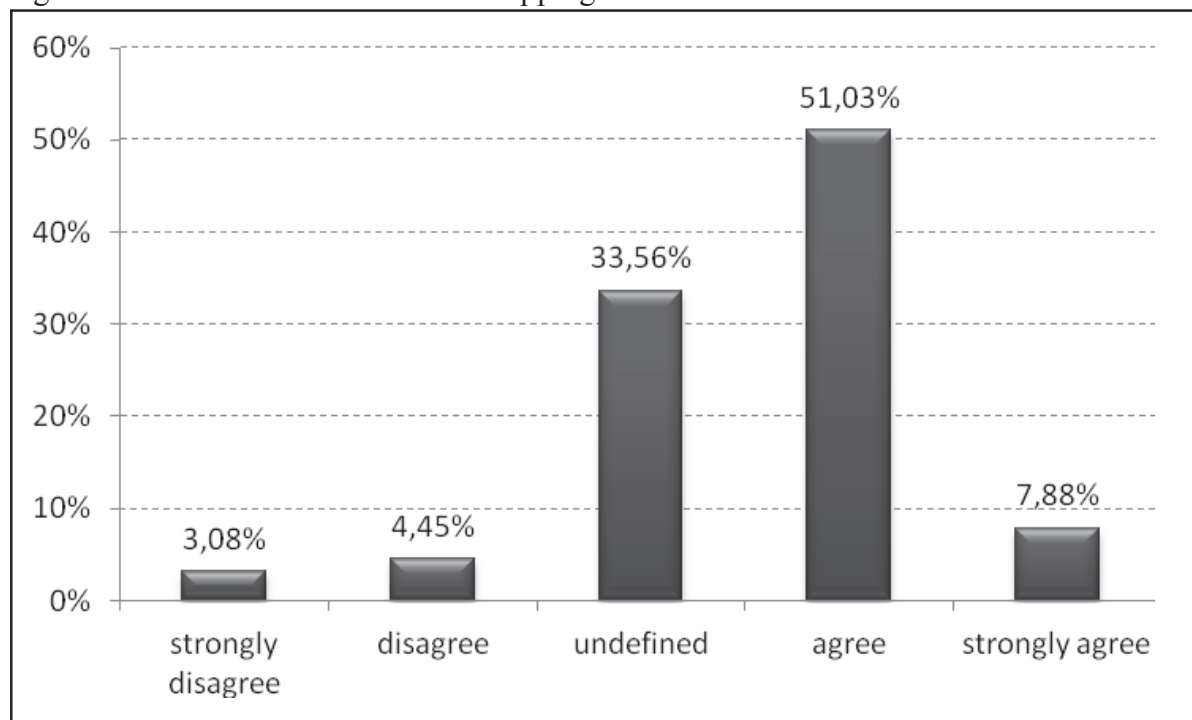
Table 2 Specifics of e-shopping

| Item                                    | Percentage |
|---|------------|
| <i>Length of on-line shopping</i>       |            |
| less than 1 year                        | 17.81      |
| 1-2 years                               | 29.45      |
| 2-4 years                               | 27.40      |
| 4-6 years                               | 11.30      |
| more than 6 years                       | 14.04      |
| <i>Mostly bought product categories</i> |            |
| Clothes                                 | 29.45      |
| Cosmetics                               | 7.19       |
| Food/drink                              | 3.42       |
| Books/DVD/CD                            | 15.75      |
| Computers, softwares                    | 19.18      |
| Travelling, airplane tickets            | 25.00      |

Source: survey

The overall confidence in e-retailing is pretty high. As Figure 1 suggests, 51.03 percent of respondents showed trust in e-shopping. However, there is also high percentage of respondents who are undefined whether to have confidence in this type of shopping or not.

Figure 1 Level of overall trust in e-shopping



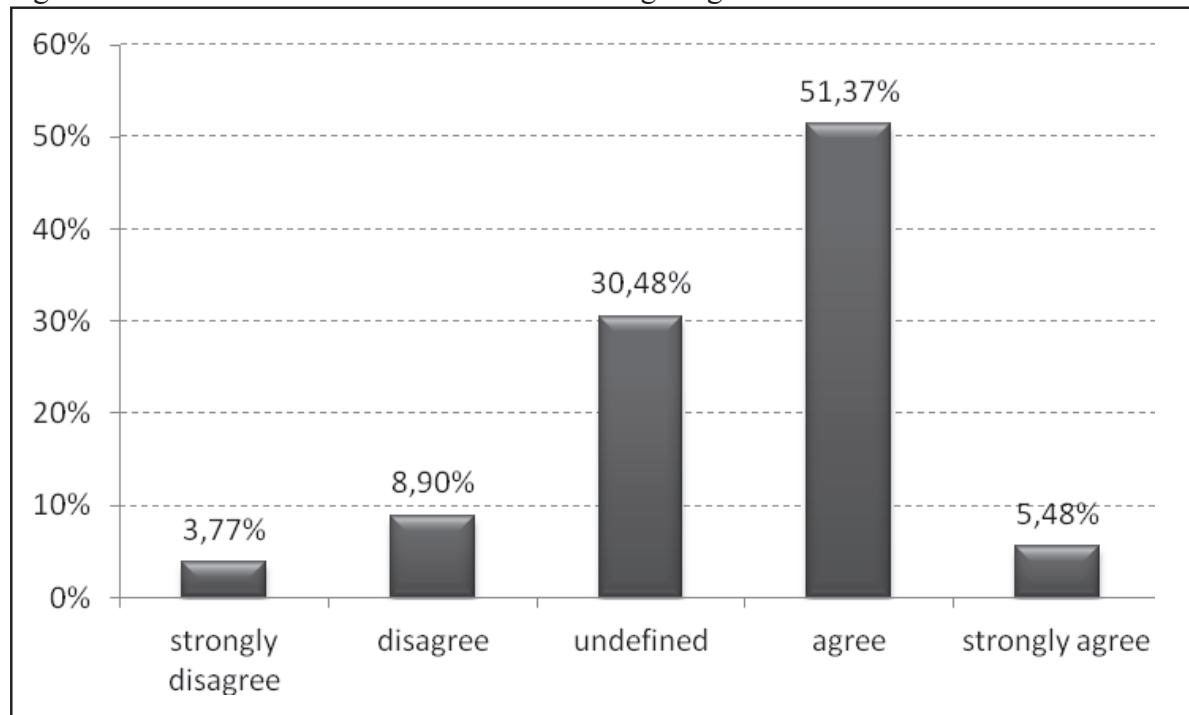
Source: survey

As we were interested in the development of confidence in e-retailing, respondents were asked to compare their current level of confidence in e-shopping with the level they felt two years ago. According to the results, 56,85 percent of respondents have higher level of confidence in e-shopping than two years ago. Only 10,96 percent of respondents do not trust today e-shopping more than before. Consumers' trust is also correlated to product categories bought online. The greatest trust consumers demonstrate when buying Books/DVD/CD and Travelling/airplane tickets, while least trust is demonstrated when buying Clothes and Cosmetics. Reason for this probably lays in the fact that Books/DVD/CD and Travelling/airplane tickets are usually bought from well-known websites while Clothes and Cosmetics are usually bought from untrustful websites with questionable reputation, driven by low prices of famous brands. Results show that trust is related to specific brand of the product but this is correct only in case these brands are bought from trustful websites.

53.42 percent of respondents believe that vendors use their data ethically acting in the their best interest, trying to help and being genuinely concerned. However, there is still 31.51 percent of respondents who are not so sure about Web vendors in general.

It should be noted that 49 percent of respondents who rely on on-line product information and 44.87 percent of respondents who believe in on-line product description. However, there are a still high percentage of those who are not sure (41.44 percent of respondents) in the description of product available on Internet.

Figure 2 Risk related to credit card information giving



Source: survey

The last question in the first section of the questionnaire asked respondents to indicate perceived trustworthiness of e-retailing. More than half of the sample (51.72 percent of respondents) consider that e-shopping is certain and without risk. However, we should bear in mind that there is still considerable percentage of those who were undefined (38.36 percent of respondents) in trustworthiness of e-retailing.

## 5. CONCLUSION

Based on the results of secondary data analysis, we may conclude increased uncertainty and risk associated with online transactions. Perceived risk factors have been considered important in online transactions. Additionally, previous researches show that such factors as ease of use, information content, innovation, security protection, customer support, product/service itself, transaction process will influence e-shopping customer commitment. This paper is an attempt to explore overall perceptions of e-retailing among Croatian consumers and the level of their acceptance of e-shopping, factors affecting their on-line shopping behaviour, consumers' perceived usefulness of e-retailing, etc. The findings suggest that Croatian consumers consider e-retailing not so risky and they have higher level of confidence in e-shopping than two years ago. However, we should bear in mind that there is still considerable percentage of those who were undefined (38.36 percent of respondents) in trustworthiness of e-retailing.

One important implication for managers involved in e-retailing, that comes out of this research, is that they need to focus their attention on the "development" of constructs of loyalty and commitment. It is important that they invest in the trust-building mechanism and to investigate their feedback mechanism as well. Future research should take a more extensive approach to cover all possible positive and negative antecedents of risks and trust



in e-retailing. Moreover, as with most research, caution must be exercised when generalizing the results. Additional research is needed to generalize our findings.

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