ANALYSIS OF THE FACTORS IMPACTING THE ONLINE SHOPPING DECISION-MAKING PROCESS

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Abstract. Selecting online the most suitable product or service can be a draining process, and the broad diversity of products on retailers' websites is overwhelming. Following this, there has been a high interest in examining buyers' motivations and recognizing the determinant factors that affect the decision-making process in the case of online shopping. Hence, in this article, we carried out an empirical study and we analyzed to what extent certain factors such as product features, confidence in the online shop, product reviews, product price, consumer evaluations, the trust of the sources, usability of the online shop, convictions and commitment to the brand, product notoriety, consumer loyalty programs, WOM, and eWOM influence the purchasing decision. The findings reveal that the most significant variables determining the acquisition decision are product features, confidence in the online shop, reviews of the product, product price, and evaluations of customers from trusted sources. The most relevant information resources are trustworthy websites that offer specialized product reviews and reliable websites that offer customer product reviews.

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1. Introduction

Online shopping is increasingly being used widely as a way of purchasing products and services, becoming a popular medium in the world of the Internet. With its development, the Internet has begun to provide consumers with a range of information and options for comparing products, features, and prices. Also, it offers several variants of purchasing the desired products from different suppliers. Online shopping satisfies modern consumers looking for convenience and speed (Katawetawaraks and Wang, 2011). In the purchasing process, consumers search for product information online, analyze different assessments, and consider product reviews from other consumers. According to previous studies (Floyd *et al.*, 2014), over 70% of consumers say they trust online product reviews, and the use of online recommendations in decision making is increasing. The opinions posted online influence consumers' choices in a surprising variety of contexts such as airlines, telephony, tourism, movies, restaurants, or food ordering. Choosing the right product or service online can be an exhausting process, and the wide variety of products on retailers' websites is overwhelming. In this context, customer reviews have become a major source of information for online shopping customers, which greatly influences the purchase decision (Kostyra *et al.*, 2016). Also, the use of social media (Goodrich and de Mooij, 2014), word of mouth (WOM), electronic word of mouth (eWOM), and other sources of information have an increasing effect on the purchase decision.

In general, consumers often use the brand name of the product and the name of the store as a substitute for product quality. As a result, they reduce risks and simplify the purchase decision, especially when shopping online, where many product attributes cannot be directly examined. The brand image of the product influences consumers' perceptions of the product attributes, the evaluation of the attributes of a product may be influenced by the consumer's impression of the brand image. As a result, a strong and favorable brand image can positively influence consumers' impressions of product attributes. The image of the online store can have a similar effect, also preserving consumers' perceptions of product attributes (Aghekyan-Simonian *et al.*, 2012).

Consumers are increasingly seeking information, products, ratings, and buying items online through online stores. However, little is known about how these activities affect their level of trust, their attitude towards online selling, and their online shopping behavior. However, it is not clear enough how or to what extent the impact of the brand name or the store affects consumers' purchasing decisions. Recent research (Katawetawaraks and Wang, 2011; Floyd *et al.*, 2014; Kostyra *et al.*, 2016) shows a high interest in investigating consumer motivations and understanding the factors that influence the decision-making process in online shopping. Therefore, in this paper, we want to observe to what extent certain factors such as product characteristics, trust in the online store, reviews of the product by specialists/clients, product price,

opinions of customers, the trust of the sources, usability of the online shop, attitude and brand loyalty, product popularity, customer loyalty programs, WOM, and eWOM affect and influence the purchase decision.

2. Literature review

The online decision-making process for products or service purchase is complex and is influenced by several factors. In the following, we will briefly review the specialized literature that analyzes how different factors contribute to the selection process for different users of online commerce. The impact on which the brand image of the product and the online store on specific types of perceived risks, respectively online purchasing intentions, is studied by Aghekyan-Simonian *et al.(*2012). Thus, the results show that the brand image of the product influences consumers' online purchasing intentions, both directly and indirectly, by reducing various perceptions about risk. On the other hand, the image of the online store indirectly affects the purchase intentions by lowering the perceptions about the risk. Also, the impact of the image of the online store on the intention to buy online is less than that of the image of the physical store on the purchase intention for traditional stores.

The influence of the perceived quality of the product, the price and the risk, on the perceived value of the product, and the consumers' desire to buy products were studied by the existing literature (Kim, Xu and Gupta, 2012; Beneke *et al.*, 2013). The results (Beneke *et al.*, 2013) show that there are strong relationships between perceived relative price and perceived product value, as well as between the perceived product value and the desire to buy. There was a negative relationship between the perceived quality of the product and the perceived risk. The results indicate that establishing a value perception is essential in the buying process and it is suggested that the risk should be minimized through the optimal quality of the retail service. Moreover, according to previous studies (Kim, Xu and Gupta, 2012), the perceived price exerted a stronger influence on the purchasing decisions of loyal customers compared to that of the potential customers. Respectively, in the case of the perceived trust, it was found that it exerted a stronger influence on the purchasing decisions of the potential customers, compared to that of the loyal customers.

Katawetawaraks and Wang (2011) bring evidence that the online shopping decision-making process was offered by comparing offline and online decision making. Thus, the factors that motivate customers to decide whether or not to buy online were identified. It was found that the communication process and marketing strategies must be different in order to influence consumer decisions offline and online. The bottom line is that management needs to channel its resources to develop the online store, improve the website, and develop a different marketing strategy for the two environments. The cultural dimensions are used by Goodrich and de Mooij (2014) to compare the use of social media and other sources of information for consumer decision-making

in 50 countries. The results indicate that the use of information sources that influence online purchasing decisions varies widely by culture. Also, there are major differences in the behavior of online complaints, depending on the countries, due to cultural variations. Moreover, the results (Nadeem *et al.*, 2015) show that the quality of the website's services and the consumers' predisposition to use Facebook for online shopping directly and positively affect the consumer's confidence in an online store. Conversely, peer recommendations affect attitude directly, rather than indirectly through trust. Also, peer recommendations have a significantly stronger influence on female attitudes than on men's attitudes.

Word of mouth (WOM) (Goodrich and de Mooij, 2014) involves communication between family, friends, and different people. This informal communication is directed to other consumers regarding the ownership, use, or characteristics of their goods, services, and sellers. The results showed that it has an effective influence on purchasing decisions. According to existing studies (Wang and Yu, 2017), the positive and negative valence of the WOM, the content of the WOM and the observation of the purchases of other consumers significantly affect the consumers' intention to buy a product, thus increasing the probability of buying and sharing product information with other websites. According to WOM, the concept of electronic word of mouth (eWOM) (Goodrich and de Mooij, 2014) also appeared, which is a form of WOM that has become increasingly popular with the development of social media. It offers opportunities for sending messages that can be directed from an individual to many online consumers and has an increasing influence on the decision-making process.

Chen *et al.* (2016) show that the online information about brands from eWOM, neutral/third parties and manufacturer/retailer has a positive impact on customers' attitudes towards the brand and the purchase intention for that brand. Moreover, the source of eWOM is likely to be perceived as more useful by customers with a high sensitivity to informational influence than neutral/third-party and the manufacturer/retailer sources. In contrast, all three sources of brand information are considered useful by consumers with low susceptibility to informational influence. Moreover, López and Sicilia (2014) find that both the customers that seek opinions and those that provide opinions predict the influence of eWOM on the purchase decision. Thus, the perceived reliability of the source partially mediates the correlation between the customers that seek opinions and the influence of eWOM on decision making. In contrast, the perceived reliability of the source mediates the correlation between customers that give opinions and eWOM influence on decision making. Therefore, the perceived trust of sources appears as an important factor in eWOM's influence on decision making for those who regularly express their opinion.

Motivating satisfied customers to share their experience has proven to be an essential strategy (Kostyra *et al.*, 2016), and customers should be encouraged to do so. Loyalty to the brand appears as a crucial factor that can protect the brands so that they are positively evaluated against others, based on online customer reviews. If loyalty comes from an emotional affinity with the brand and not from a functional belief,

then online customer reviews are more likely to be omitted during purchasing decisions, and social media offers many opportunities to strengthen the relationship between a brand and his audience. Moreover, according to Purnawirawan *et al.* (2015), sets of negative reviews that include few positive reviews have the strongest effect on perceived usefulness, while sets of positive reviews that include few or no negative reviews are most successful in influencing attitudes. Also, review valence has a stronger influence on perceived usefulness when reviews refer to experienced (rather than search) products and have a stronger influence on attitudes to unknown (rather than familiar) brands. Finally, the strongest influence of revision valence refers to recommendation intentions.

3. Data analysis and results

The research methodology is based on an empirical study of data collected using a questionnaire. The questionnaire was filled in via Google Forms and was completed by 140 people. After analyzing the specialized literature we made a series of descriptive statistical analyses. In the following, we will present in detail the results obtained. The respondents are between the ages of 18 and 48, with an average age of 22.7. Their gender distribution is 60.7% women and 39.3% men.

The distribution of preferences by gender for certain types of devices is graphically represented in Fig. 1. Thus, the preferred devices for online shopping are the 76.4% desktop. On the other hand, mobile devices are preferred only in a proportion of 23.6%. Depending on gender, there are significant differences ($p < 0.01$) regarding the devices on which online shopping is made. Consequently, the purchase of products from mobile devices is preferred among women, their percentage is 2.9 higher than that in men.
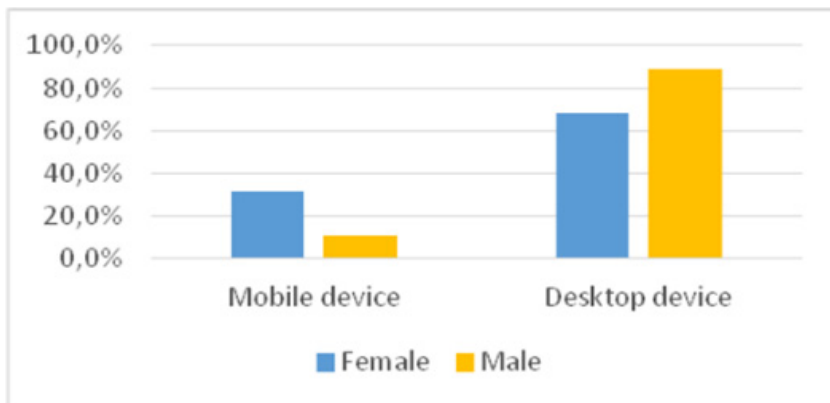

Figure 1: The preferred device for online shopping

In Fig. 2 we can see the distribution of the frequency with which online shopping is carried out. Thus, a percentage of 50.7% orders around 5-6 orders per year, 27.1% make about one order per month, and 13.6% make one order a year. Only 0.7% say they do not shop online. Depending on gender, it was found that there are no significant differences between men and women regarding the frequency with which they order goods and services online.

Information sources that users consult before deciding to purchase a product can be seen in Fig. 3. At the top of the most frequent sources of information is, with 25.7%, the trustworthy websites that offer specialized product reviews, followed by trustworthy websites that offer customer reviews, with 34.3%. On the other hand, the most unpopular sources of information are the official social media page of the brand and any websites that offer specialized product reviews, which are never consulted by 12.1%, respectively 11.4% of visitors.
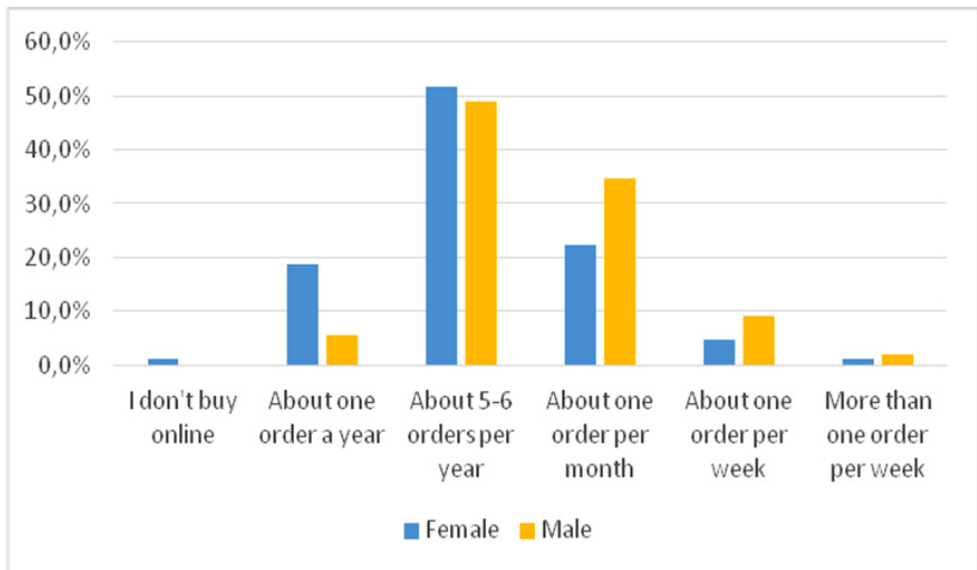

Figure 2: Frequency of ordering goods and services online

Trustworthy websites that offer customer product reviews are visited very often by 34.3% and often by 25.7% of the respondents. Trustworthy websites that offer specialized product reviews are consulted often by 44.3% and very often by 25.7%. The official website of the brand is sometimes accessed by 30.0% and often by 25.7%. The official social media page of the brand is often accessed by 32.1% and rarely by a significant percentage of 25.7%.
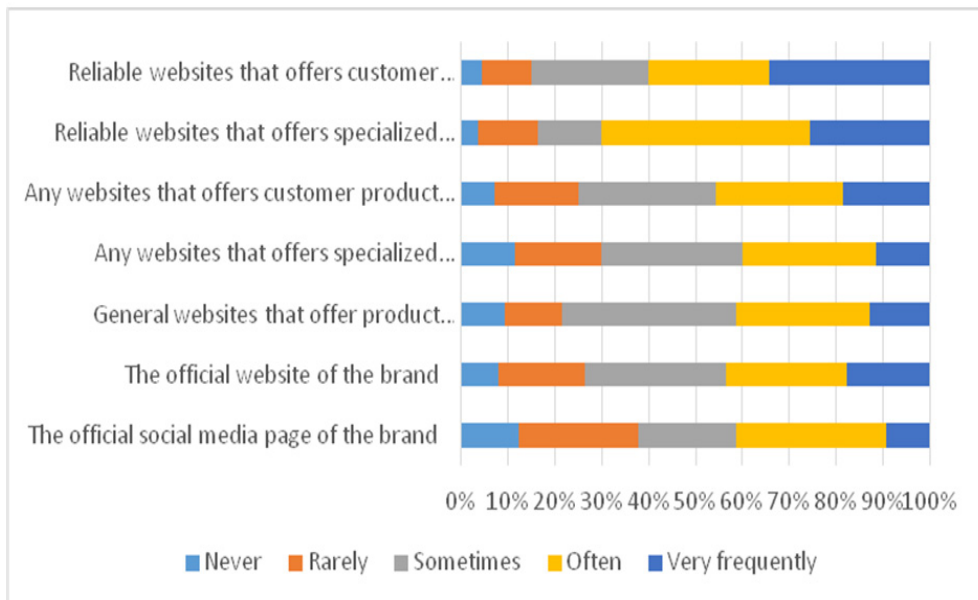
Figure 3: Information sources that users consult before making the decision to purchase a product

The factors influencing the purchase decision can be seen in Fig. 4. Those having the most influence in making the purchase decision are product characteristics, trust in the online store, and product price. They have a great influence on 62.1%, 42.1%, respectively 32.9% of the respondents. The factors with the least influence are WOM, eWOM, and customer loyalty programs. Of the respondents, 18.6%, 16.4%, respectively 14.3% said that they had very little influence in making the purchase decision. In the following, we will analyze each factor and the influence that the respondents consider to have in influencing the purchase decision. Their hierarchy can be seen in Table 1.
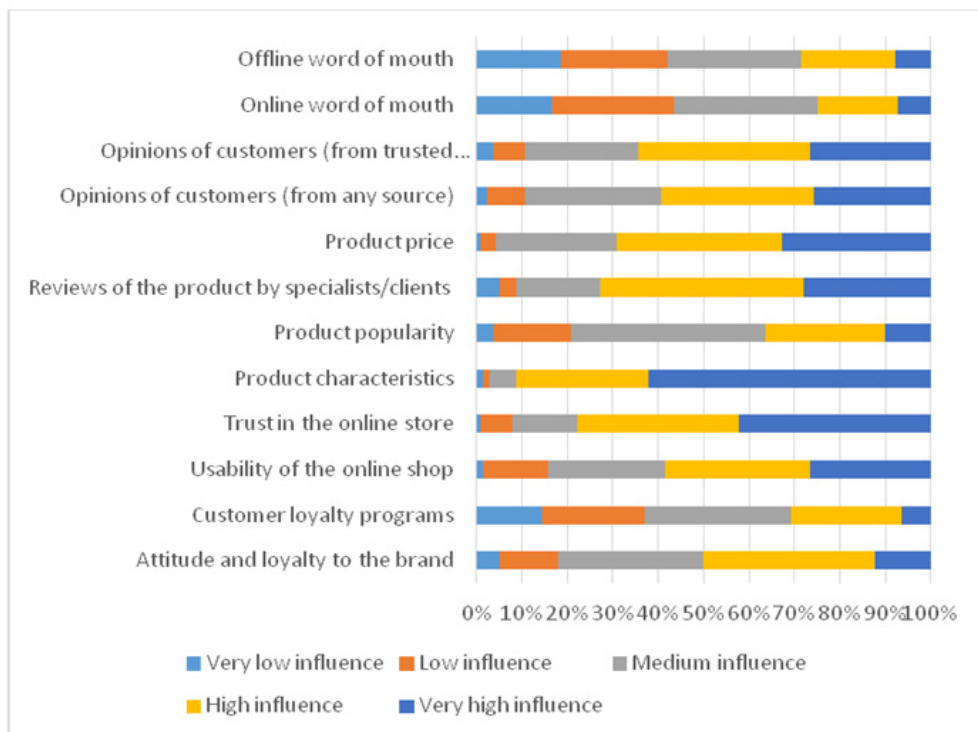
Figure 4: Factors influencing the purchase decision

Product price has a great influence on 36.4% of the respondents and a very great influence on 32.9%, gathered being 69.3%. Opinions of customers (from trusted sources) are considered an important and very important factor for 64.3%, and opinions of customers (from any source) for 59.3% of the respondents. The usability of the online shop is considered important and very important for 58.6%, attitude, and loyalty to the brand by 50.0% and product popularity by 36.4% of the respondents. The smallest impact in the purchase decision is customer loyalty programs, which are considered important and very important for 30.7%, WOM of 28.6%, and eWOM for only 25.0% of the respondents.

We can see in Fig. 5 the distribution of preferences regarding the store type from which the purchases of goods will be made. Thus, 57.1% from the site you find most reliable, 18.6% from the site that offers most detailed information, 15.7% from the site that offers you the lowest price.

Only 8.6% if possible, will buy the product only from the physical store. Depending on gender, it was found that there are no significant differences between men and women in terms of the store where shopping is made.

Table 1: The ranking according to the importance of the factors that influence the purchase decision

| Influence factor	Influence / Importance
Product characteristics	91.4%
Trust in the online store	77.9%
Reviews of the product by specialists/clients	72.9%
Product price	69.3%
Opinions of customers (from trusted sources)	64.3%
Opinions of customers (from any source)	59.3%
Usability of the online shop	58.6%
Attitude and loyalty to the brand	50.0%
Product popularity	36.4%
Customer loyalty programs	30.7%
Offline word of mouth	28.6%
Online word of mouth	25.0%
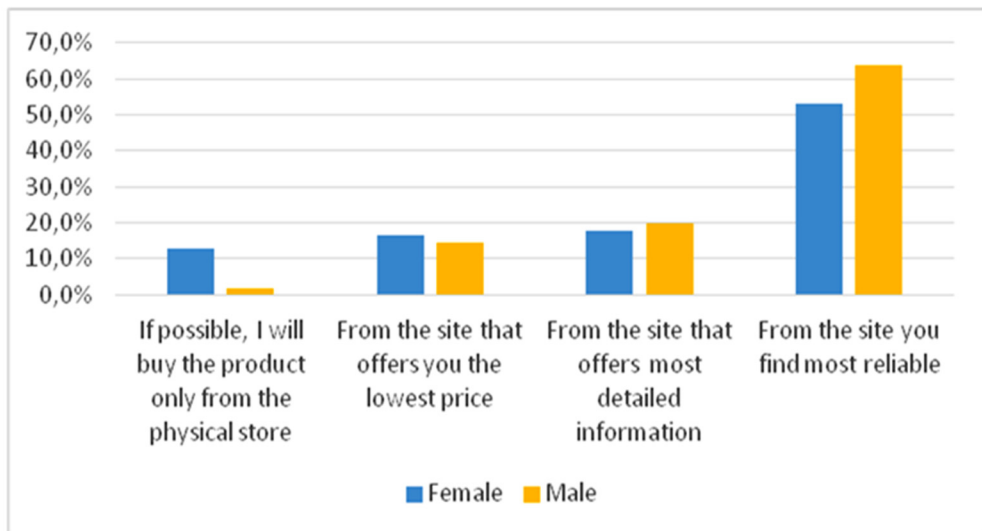
Figure 5: Preferences regarding the store type from which the order will be made

4. Discussions

In online and traditional commerce, demographics like age and gender are considered very important factors in marketing population segmentation (Blanca, 2011) (Meyers-Levy and Sternthal, 1991; Velaudham and Baskar, 2015). This study focuses on young people and explores the influence of gender to differentiate certain behaviors regarding the studied criterion.

The analysis revealed that, in the context of an Eastern-European country, desktop computers are most used as online purchasing tools than mobile devices. Also, on the segment of mobile device usage, women are more "abusive" than men. Similar behavior was found for online Nordic consumers in 2015, where women prefer using smartphones and tablets for shopping more often than men (49 percent of women and 36 percent of men) (Statista, 2020). This can be explained by the fact that being more analytical in online shopping activities than women (Kumaravel, 2017), men require larger screens and office or home comfort to perform various and complex comparisons since mobile devices are a bit limited from this point of view.

The number of annual online purchases increases in the younger population, but for the age range of our sample, there is not a clear distinction in shopping frequency behavior by gender. Our result is also confirmed by (Sramova, Blandina, Pavelka, 2019), that says there are not identified a significant difference in such a habit between men and women. However, this assertion may be applicable only at the global level, significant differences may occur in specific product and service categories (fashion, cosmetics, gadgets, etc).

This study shows that company/site trust and lower prices are the most important variables influencing the purchase decision. To search for a lower price represents a normal behavior for a rational consumer (Moore and Mathews, 2008; Kostyra *et al.*, 2016). The price reference is in many cases that one given by a physical store (Lo, 2014). However, the lowest price for a product cannot guarantee the success of the online purchase process completion. Site reputation contributes significantly to this success (Moore and Mathews, 2008; Aghekyan-Simonian *et al.*, 2012), but many other factors may intervene in this complex equation.

5. Conclusion

Online shopping is widely used as a way of purchasing products and services, becoming an increasingly popular means of everyday life. With its development, the Internet and social media have begun to provide consumers with many opportunities to compare products, features, and suppliers. Besides, it offers several variants of purchasing the desired products from anywhere in the world. Making the purchase decision for a product or service online is a complex process and is influenced by a lot of factors that have been analyzed in this research.

In this paper, we conducted a study in which we analyzed the influence of the main factors on the individual buyers' purchasing decision. The results showed that the preferred devices for online shopping are desktop. On the other hand, mobile devices are preferred among women, their percentage is 2.9 higher than that of men. Therefore, there are significant differences regarding the devices on which online shopping is made according to gender. The vast majority of respondents make online purchases around 5-6 orders per year, with no significant gender differences. The most important information resources are trustworthy websites that offer specialized product reviews and trustworthy websites that offer customer product reviews, without gender differences.

The most important factors influencing the purchase decision are product characteristics, trust in the online store, product reviews by specialists/clients, product price, opinions of customers from trusted sources, and opinions of customers from any source. On the other hand, the factors with the least influence are product popularity, customer loyalty programs, offline word of mouth, and online word of mouth. As for choosing the store from which to make the purchase, the large majority prefer from the site one finds most trustworthy, followed by the site that offers the most detailed information. For further research, given the struggle with the pandemic situation that kills not only people but also businesses, it is critical to continue exploring how buyers' behavior is influenced, including the online purchase.

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