Conceptual Model for Exploring Customers' Online Purchase Intentions

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Abstract - Online shopping has become a regular part of people's lives, especially during the corona virus pandemic. Therefore, the optimization of online stores has become crucial to ensure the experience that store visitors, that is, potential customers, expect. A positive customer experience can result in increased revenue for a company, while a negative one can lead to the ultimate loss of customers. Accordingly, the subject of this paper is the identification and quantification of factors that influence the consumer's decision to make a purchase through electronic commerce. After a detailed review of the relevant literature, a new conceptual model was proposed and verified on empirical data.

1. Introduction

The e-market and e-commerce are growing rapidly year by year. The coronavirus epidemic greatly affected the expansion of e-commerce among consumers during 2020 and 2021. Based on the reports, in 2020, over two billion people bought goods or services online [1]. Due to the restrictions imposed by governments to control the spread of coronavirus, millions of customers found the alternative to brick-and-mortar shopping in digital channels. However, it is expected that e-commerce market will continue to grow in post-pandemic period since COVID-19 could be seen as a catalyst rather than a direct cause of huge e-commerce market growth [2]. Since the e-commerce has become present in consumers' daily life, especially during the COVID-19 pandemic, optimization of online shops has a crucial role in providing the experience that potential buyers expect. Since adequate customer experience leads to purchase decision, companies should ensure that clients get what they need in a way they prefer [3].

When it comes to e-commerce in Serbia, according to Statistical Office of the Republic of Serbia, there is a constant growth of the percent of the population that buys products or services online. For instance, in 2011 only 18.1% of population bought at least one product through e-commerce any time in the past, while that number rose to 57.0% in 2019 [4]. When the data for 2020 becomes available, it would be of interest to analyze the change of this percentage and the level of influence of the COVID-19 pandemic on the growth in the usage of e-commerce channels. According to Statistical Office's yearbook, 84.4% of the companies in Serbia had a website in 2020, while in 2019 27.9% of the companies sold their products or services on Internet [4]. As reported by Statista, share of the revenues obtained through e-commerce is 9% of total revenues of companies in Serbia [5].

In spite of year-to-year growth, e-commerce in Serbia has not reached European average yet - there is still a large percentage of population that does not buy products on Internet. Some of the key reasons could be lack of information on the buying process, a fear of data breach and lack of information on security mechanisms [6]. But even so, e-commerce in Serbia is developing every day because of a large amount of information that

is available on the electronic market and that number of information is constantly growing [7].

Based on data from Republic Institute for Statistics of Serbia 81% of households in Serbia had an Internet connection in 2020, while the percentage of people in Serbia who have used the Internet until the end of 2020 is 83%. Also, according to the 2020 data, 36.1% of individuals within the last three months of survey stated they shopped online while 11.8% stated they shopped online in the last year [8]. The data also show that the most commonly bought products were sports equipment (68.2%) and furniture (14.1%) [9].

Having all the above-presented in mind, the aim of this study is to identify and quantify the factors that impact customer's decision to buy a product or a service through e-commerce in Serbia. This study assumes that existing models could be upgraded by including additional constructs and modifying the current ones. In accordance with that assumption, a new conceptual model for determining significant factors has been proposed and verified.

The main purpose of the study is to list the factors which have an influence on the customer's readiness to shop online and to create a conceptual model taking into account their impact on purchase decision. In order to evaluate the proposed model, an online survey was conducted while the survey answers were analyzed using multivariate analysis - structural equation modelling (SEM).

Main hypothesis of the research can be defined as: Existing conceptual models for analyzing the customers' decision to purchase a product online could be upgraded, while the new model validation could be quantified using structural equations modelling.

The paper is organized in the following way. The introduction part briefly describes importance of this topic, subject and purpose of the study, and the main hypothesis. Second section provides a literature review on e-commerce trends in Serbia and worldwide. Third section presents the proposed conceptual model, its hypotheses, the method used for model validation and different models for determining factors that impact on the decision to buy a product through e-commerce. Fourth section includes the description of the conducted survey, the sample characteristics, and the study results, while fifth section presents the managerial implications based on the model results. The final section gives a brief summary on the most important findings and conclusions, directions of future studies on the topic as well as the explanation of research limitations and challenges.

2. Related Work

In order to identify the factors which will make the conceptual model, a review of the related work has been performed.

For instance, Palvia [10] analysed how a combination of customer satisfaction, perceived value, loyalty, and word-of-mouth recommendation impact the intention to buy a product online. The author found that when a customer uses a company's website, it leads to a certain level of customer's satisfaction and a perception of the proposed value, which both effect customer loyalty and positive word-of-mouth referrals. He also discovered a weak connection between customer satisfaction and loyalty and positive relationship between loyalty and word-of-mouth referrals. Besides that, perceived value significantly influenced loyalty and consequently had a long-term effect.

Lin [11] investigated how system quality (measured through website design and interactivity), site information quality (measured through informativeness and security) and service quality (measured through responsiveness, trust, and empathy) affect customer satisfaction. He found that the quality of the system significantly affects customer satisfaction. He also confirmed that the quality of information on the site significantly affects customer satisfaction. Regarding service quality, it was found that trust has the greatest influence on customer satisfaction in the entire model, while empathy had no significant impact.

Dhingra, Gupta and Bhatt [12] used website design, its reliability, responsiveness, personalization, and customer trust to describe a website quality, and then observed the relationship between website quality and customer satisfaction and customer satisfaction and purchase decision. Their results show that only customer trust influenced website quality. Additionally, findings suggest that there is a positive relationship between website quality and customer satisfaction and customer satisfaction and purchase decision as well.

It is interesting to mention the research by Ghiffarin, Priyandari and Liquiddanu [13], who focused on e-commerce in small and medium enterprises using an extended marketing mix model where elements are: products, price, distribution, promotion, people, processes and virtual environment. Authors observed two indicators – level of importance and level of performance in SMEs. Their findings show that the

highest gap between level of importance and performance was present in the information about the shipping costs, followed by the impermanent dynamics of commodity price variations.

Authors Aggarwal & Sharma [14] developed a structural model to obtain the determinants of e-commerce success. They considered customer satisfaction, referrals and repeat purchase intent to be essential elements of e-commerce success. According to them, customer satisfaction can be considered as a positive evaluation after purchasing products or services. A recommendation can be a consequence of satisfaction. It is believed that a satisfied customer is most likely to suggest the website to their friends or relatives. Another consequence of satisfaction may be repurchase intention. It can be represented as the probability that a previously satisfied customer will repeat the purchase at the same place. Because of all this, satisfaction can be seen as the driving force behind repeated purchases on the electronic market.

When it comes to studies conducted in Serbia, one can state that the number of relevant studies is minor. For instance, Ivanović and Antonijević [15] observed the role of online shopping during the COVID-19 pandemic, aiming to identify whether coronavirus led to changes in customer behavior. The results of the study which included 408 respondents showed that there is a significant association between shopping online before and after the appearance of the infection. Moreover, three predominant motivational factors for purchasing online during the pandemic were saving time, reducing health risk and the fact that many stores were working only online.

Kaurin and Bošković [16] examined the impact of various aspects of online shopping on customer satisfaction in Serbia. Their conceptual model included five aspects: website quality, information availability, security, privacy and reliability. Survey results demonstrated customer's dissatisfaction with online shopping services, whereby a level of satisfaction depends on the customer's age and does not depend on the customer's gender.

The presented literature review indicates that the exploration of factors that impact the purchase decision using online services is a prominent field of study, that numerous factors have been identified and that such research in Serbia are needed.

3. Proposed Conceptual Model

This study focuses on the purchase intention on the e-commerce market due to its direct influence on the rise of profitability and competitiveness. The underlying question is which aspects encourage customers to buy a product or a service online. Based on the literature review [2, 9, 13], factors that could potentially be significant for online purchase intention are:

1. Free delivery – it refers to the fact that customers do not have additional costs associated with delivery. For products that are of large dimensions delivery fee can have much higher price for the customer and for that reason can additionally higher total cost of product purchase. For those customers delivery fee amount can be of crucial importance for choosing the right online store. The customers that are living in far away (from the warehouse) places can also have higher delivery fee (because of higher delivery cost for the online store) than those who live in cities where warehouses are. This factor could positively influence the purchase intention.

2. Expected delivery time – it relates to the expected delivery time communicated by the seller. Sometimes seller can't deliver products in a few days, but instead it can take a week (or even weeks) for the delivery to happen. Sometimes seller can deliver products the same day when the products are ordered. Delivery time can depend upon lot of things: warehouse availability, orders backlog, delivery distance and accessibility, and other factors. Short delivery time is assumed to make a positive impact on the decision to shop online.

3. Delivery service – it refers to the information available to the customer related to the specific delivery service company responsible for the delivery. If the customer had negative experience with a particular delivery service, he or she may decide not to buy product within the online store that has the same delivery service. It is expected that customer's opinion on the delivery service company influences the online purchase intention.

4. Price – it concerns the price of ordered product or service. Customers can easily compare prices between different online stores and can easily see which store has the lowest price. Unlike classical retail stores where customer, if he or she wishes to compare prices, needs to go from store to store where stores can be in different parts of the shopping mall or even city, online customers have all prices in just a few clicks. Online customers can find specialized websites that provides price

comparison. In this situation customer can easily find the web-shop where the product/service he or she is looking for has the lowest price. It is presumed that the lower the price is, the stronger the purchase intention will be.

5. Website functionality – it refers to the website characteristics such as responsiveness, page loads time, and number of steps needed to find the product. If the customer cannot easily navigate through website, or the web-site takes a few seconds longer to load the page, he or she can decide to leave the page immediately. If that happens, store has not just potentially missed purchase but also missed customer who may not even remember the store he was in. It is assumed that inadequate functionality prevents customer from purchasing online.

6. Ease of ordering– it relates to the number of steps and the amount of data needed to successfully finish the buying process. Overcomplicated and confusing purchasing forms can turn off the customer at the very end of the purchase. It is hypothesized that smaller number of steps leads to a higher e-commerce shopping motivation.

7. Payment methods – it refers to the offered payment methods on the e-commerce channel. Some customers will not make the purchase unless the webstore has card payment available, while others who do not trust card payment will not place the order unless the webstore has cash on delivery payment method. Companies can also offer different ways of payment, since they are buying products for business. It is assumed that if a preferred payment method is missing, a customer will not even place the order.

8. Assortment size – it concerns the webshop size and the number of different products disponible in the catalogue. It is expected that higher number of disponible products positively influences their purchase intentions.

9. Seller recognition – it refers to the fact whether a customer recognizes a seller's brand or not. Seller recognition can give customer not only sense of security and secure purchase, but also better opinion about product quality assurance. It is presumed that customers are more likely to buy products from sellers they already know.

10. Loyalty programs – it relates to the benefits of being a loyalty member, such as gift cards or free vouchers or anything that can be an additional benefit for loyal customer (lower prices than those for non loyal customers, free delivery...). This factor could positively impact the purchase decision.

11. Change in customer behavior caused by COVID-19 – it is evident that the pandemic provoked an increase turn to the e-commerce market. The question is to what extent the pandemic motivated customers to choose online shopping instead of traditional shopping.

As we determined eleven factors which the model will comprise of, we have eleven hypothesis – we hypothesize that each factor has a positive impact on purchase intention.

To evaluate the proposed model, an online survey was conducted. Survey results were analyzed using structural equation modelling (SEM). SEM analysis is a multivariate technique that provides a quantitative test of a conceptual model proposed by a researcher. Precisely, various models that hypothesize how sets of variables define constructs and how these constructs are connected can be tested using this technique. The objective of the SEM is "to identify the degree to which the proposed model is supported by the sample data" [17].

The motivation for applying SEM analysis in this research lies in the fact that this technique was widely used in previous studies focused on determining factors that influence online shopping decision. In one of the studies, the authors observed the impact of customer's knowledge and trust on e-commerce shopping activities and tested hypotheses using SEM analysis [18]. Another group of researchers [19] analyzed convenience risk, product risk and perceived risk influence on online purchasing decision in Pakistan, whereby SEM was applied to evaluate the model. In a study by Tarhini and his colleagues [20], the adoption of online shopping in the United Kingdom was analyzed based on trust, product variety and product guarantee with the application of SEM.

The model we here propose is a hierarchical latent variable model [21]. Namely, each of the eleven constructs is comprised of particular statements, while the outcome variable Online purchase decision is comprised of the eleven latent constructs.

4. Research results
In this section we will present the research methodology and the obtained results.

4. 1. Conducted research

To evaluate the model, an online survey was conducted in August 2021 using Google Forms while the statistical analysis was performed in SPSS 25 and AMOS 22. The questionnaire consisted of questions related to three areas: demography, online customer shopping habits and eleven previously mentioned constructs. First section of the questionnaire included questions on general demographic characteristics. Second section of the survey was dedicated for the respondents who stated that they do purchase products or services online. Third part of the survey included questions on the proposed constructs, whereby most of them were measured using a four-point Likert scale. The central point was deliberately omitted in order to achieve less biased and less socially acceptable responses and results [22].

The detailed list of questions which make the questionnaire can be seen in the lines below.

Demographic questions:
1. Gender: Male/Female
2. Year of birth
3. Place of residence: Vojvodina/Belgrade/Šumadija and West Serbia/East and South Serbia/Kosovo and Metohija/ Outside the borders of Serbia
4. Educational level: Primary School/ High School/ Bachelor's Degree/Master Studies/ PhD Studies
5. Total monthly household income: Up to 250 euro/250 to 400 euro/400 to 550 euro/550 to 700 euro/700 to 950 euro/950 to 1100 euro/1100 to 1250 euro/Above 1250 euro/I don't want to answer

Questions related to customer's online shopping habits:
6. Do you do (have you ever done) shopping online?: Yes/No
   Question 6 was an eliminatory question, those who have never purchased online were not suitable for further participation in the survey.
6.1. (For those who answered No) Do you intend to start shopping online?: Yes/No
   Question 6.1 was added to explore the future actions of those who have not purchased online so far.
7. How often do you shop online?: Several times a week/Several times a month/Once a month/Several times a year/Once a year/Less than once a year
8. What type of media have you used to shop online in the past (select multiple answers)?: Online shopping websites/Online shopping applications/Instagram/Facebook/ Something else (type what)
9. Through which type of media have you most often made online purchases in the past (please select one answer)?: Online shopping websites/Online shopping applications/Instagram/Facebook/Something else (type what)
10. With which means of payment do you most often pay for online purchases (it is possible to mark one answer): Cash on delivery/Credit card/ Account payment/Other (type what)
11. How much confidence do you have in Credit card payment: I always have confidence/ I mostly have confidence/ I mostly don't have confidence/ I don't have confidence
12. In which online stores do you most often shop (write the names of the stores)?

In the next lines we will present the statements used to quantify each of the defined constructs. All statements were measured using a four-point Likert scale (I don't agree at all/ I don't agree/ I agree/ I completely agree).

13. Free delivery construct:
    13.1. If I have to pay the shipping cost I will reconsider the purchase
    13.2. If I know that delivery is free, it will be easier for me to decide on a purchase
    13.3. If shipping is free after a certain cart amount, I'll try to reach that amount so I don't pay for shipping
14. Expected delivery time construct:
    14.1. When shopping online, it doesn't matter to me how many days it takes the ordered products to arrive
    14.2. A shorter expected delivery period will influence the choice of where I will shop online
    14.3. If the delivery of the product is delayed, I am ready to wait for it
15. Delivery service construct:
    15.1. I don't care which delivery service does the delivery

15.2. I check which delivery service will deliver before I decide to buy

15.3. There is a possibility to cancel the purchase on the seller's website if I have a negative opinion about the delivery service that seller is using

16. Price construct:

16.1. The lower price of the product is a decisive factor that will influence whether I will buy a product on a certain website

16.2. I compare the prices of the same products on different sites and choose the place to buy where the price is the lowest

16.3. I don't care about the price of the product if I like the product

17. Website functionality construct:

17.1. If the website takes too long to load, I won't wait and I will stop loading

17.2. If I need a lot of steps from the home page to the desired product, I will give up the search

17.3. I will leave the website if the display size does not adjust to the screen size of my mobile phone

18. Ease of ordering construct:

18.1. If I encounter any difficulties during the ordering process, I will stop the purchase

18.2. If I have to register in order to buy what I want, I will give up the purchase

18.3. If it takes too many steps to complete a purchase, I will stop the purchase

19. Payment methods construct:

19.1. If I can't make a purchase with deferred payment, I will stop the purchase

19.2. If there is no cash on delivery among the payment methods offered, I will not make the purchase

19.3. If there is no card payment among the offered payment methods, I will not make a purchase

20. Assortment size construct:

20.1. If the site doesn't have a large selection of the type of product I'm looking for, I won't make a purchase on that site

20.2. If I notice that a lot of the items I'm looking at are out of stock, I won't make the purchase

20.3. I will shop where I can find the most products I need

21. Seller recognition construct:

21.1. I prefer to buy products from sellers I know

21.2. I always buy from verified sellers

21.3. It will take me more time to decide on a purchase if the seller is unknown to me

22. Loyalty programs construct:

22.1. I will always prefer to buy products in places where I am a member of loyalty programs

22.2. Emails and messages with special offers encourage me to view the offer and make a purchase

22.3. The discounts I have based on my membership in the loyalty program will encourage me to make a purchase at the place where I am a member

23. Change in customer behavior caused by COVID-19 construct:

23.1. After the start of the corona virus pandemic, I make online purchases much more often

23.2. I started shopping online more because I spend more time at home during the pandemic

23.3. Due to the curfew and the impossibility of movement during some parts of the corona virus pandemic, I started shopping online more

As it can be observed, the conducted survey is long, complex, and detailed. To be sure there will be no missing answers, all questions and sub-questions were mandatory to answer. We believe that due to the questionnaire length that there has been a dropout, but we continued with the surveying period until we obtained a large enough sample for a valid and trustworthy analysis.

4. 2. Sample characteristics

Total number of respondents who participated in the survey was 295 – majority of them were females (72.2%) while their average age was 25.98 years. Belgrade is the residence place for the most of respondents (67.3%), followed by Central Serbia and Western Serbia (14.6%). The rest reside in other regions of Serbia. When it comes to education, 53.9% of participants have a bachelor's degree or higher level of education, while 46.1% of respondents finished high school. Apropos of household incomes, 36.3% stated that their total household income was less than 800 euros, 46.8% claimed to have income higher than 800 euros, while 16.9% did not want to answer the question. We can conclude that our sample covered younger, student population, who come from families with high income.

Almost all respondents stated that they purchased a product online at least once (93.6%). The respondents who never purchased a product or a service online were removed from further analysis and observations.

The next two questions aimed at analyzing the respondents' online consumer frequency and habits. Almost half of the respondents stated that they shop online several times a month (43.1%), while only 4.3% of the respondents purchase online ones in a year or less. When it comes to the online shopping channel that they used 89.0% used the store's online shop, 49.0% used Instagram, 44% used online shopping apps (AliExpress, Amazon, Zara app…). Regarding the preferred payment methods, a large part of participants prefers to pay after the delivery (60.7%), while the number of those who pay online with their debit cards is 36%. The respondents also expressed high levels of trust in online payment process, as they stated that they always or almost always have trust in the online payment process (82.5%). We can conclude that the survey participants are experienced in online shopping on several channels and that they have trust in online shopping.

4. 2. Model verification using SEM analysis

The first step in the SEM analysis is to explore the internal validity of the items within the defined latent variables. To do so, most commonly, the Cronbach's alpha is used [23]. Cronbach's alpha is a coefficient which takes values between 0 and 1 and indicates the level of the respondents' consistency in answering the number of questions observed. The closer the Cronbach's alpha is to 1, the higher the internal consistency of the observed construct. The contemporary literature suggests 0.7 as the threshold – the values of Cronbach's alpha above 0.7 are seen as acceptable. It should also be noted that the value of this coefficient depends on the number of items within the construct. The obtained results are shown in the Table 1.

Table 1. Obtained Cronbach's alpha per model construct.

Construct	Number of items	α
Free delivery	3	0.627
Expected delivery time	3	0.436
Delivery service	3	0.753
Price	3	0.741
Website functionality	3	0.712
Ease of ordering	3	0.744
Payment methods	3	0.175
Assortment size	3	0.723
Seller recognition	3	0.730
Loyalty programs	3	0.709
Change in customer behaviour caused by COVID-19	3	0.901

The construct reliability of Delivery service, Price, Website Functionality, Ease of ordering, Assortment size, Seller recognition, Loyalty programs and Change in customer behavior caused by COVID-19 exceed 0.7, hence they are within the commonly accepted range [18]. However, reliability of Expected delivery time and Payment methods are significantly below 0.7 which implies that these constructs should not be included in the model as such. As the authors' found these items of interest for the model, several statements from these constructs were separately included in the model. When it comes to Free delivery, reliability value can be considered as marginally acceptable since it is shown that Cronbach alpha is sensitive to sample size and the number of items included in the construct [24].

When analyzing the questions that make up the construct Free delivery, most respondents agree or fully agree that if they know that delivery is free, it will be easier for them to decide on the purchase (84.4%). Also, 53.8% of the respondents agreed with the statement that they will reconsider the purchase if they have to pay the delivery cost, while 52% of the respondents will try to reach the billing amount above which the delivery is free.

When observing the results of the scale that measures the Expected delivery time, it can be seen that 80.3% agree or completely agree with the statement that a shorter expected delivery period will influence the choice of the place where they will make an online purchase.

The results of the scale created to measure the construct Delivery service company show that respondents do not care which courier service will deliver (74.2%), which also corresponds to the opinion that 71.5% of respondents do not check which courier service will deliver before deciding to purchase. However, on the contrary, 57.3% of the respondents agreed or completely agreed that there is a possibility to cancel the purchase on the seller's website if they have a negative opinion about the courier service that makes the delivery.

The results of the scale created to measure the Price construct show that for 80.3% of the respondents, the lower price of the product is a decisive factor that affects where they will make the purchase or not. Comparing the prices of the same products on different

websites and choosing the place to buy where the price is the lowest is done by 85.6% of respondents.

The results of the scale created to measure the Website Functionality show that 73% of respondents will not give up their search if they need more steps from the home page to the desired product. Contrary to this answer, 56.4% of respondents will stop loading the site if it takes too much time to load the site.

The results of the scale created to measure the Ease of ordering show that 65.1% of the respondents will abandon the purchase if they encounter any difficulties during the ordering process. In addition, 60.5% of respondents will stop the purchase process if they have to register in order to make a purchase.

The results of the scale created to measure the construct Available payment methods show that 92.7% of the respondents will not abandon the purchase process if they cannot make the purchase with delayed payment. The answers show that 60.5% of respondents will not make a purchase if there is no cash on delivery payment among the offered payment methods.

The results of the scale created to measure the construct Assortment size show that 86.4% of respondents will make a purchase at the place where they can find the largest number of products they need. Also, 75.5% of respondents will not make a purchase if they notice that many of the items they are looking for are out of stock.

The results of the scale created to measure the Seller recognition show that 92.7% of respondents prefer to buy products from sellers they know. As well as 70.8% of respondents always buy from verified sellers, while 76.7% of respondents will need more time to decide on a purchase if the seller is unknown to them.

The results of the scale created to measure the construct Loyalty programs show that 59.1% of the respondents will rather buy products at the place where they are members of the loyalty program. Discounts that respondents have based on membership in the loyalty program will encourage 78.6% of respondents to make purchases at the place where they are members.

The results of the scale Impact of COVID-19 show that 69.4% of respondents make online purchases more often than before the corona virus pandemic began. As well as 58.0% of respondents started shopping online more because during the pandemic they spend more time at home. On the other hand, 57.5% of respondents did not start buying more online due to the curfew and the impossibility of movement during part of the pandemic.

In the next step the SEM analysis was employed. The quality of the initial model was: $\chi2=780.411$, $p<0.01$, TLI=0.788, CFI=0.819, and RMSEA=0.064. These values indicate that the model can be modified and enhanced. To upgrade model quality, we firstly excluded several individual statements ("I compare different websites and the choose the one with the lowest product price" and, secondly, statements "I don't mind the delivery length period" and "If the list of disponible payment methods doesn't include cash, I won't purchase the product") due to their statistical insignificance ($p>0.05$). Additionally, we used modification indices in the modification process.

The value of χ^2 test for the final model was statistically significant ($\chi2=479.55$, $p<0.01$). Since the chi-square is sensitive to sample size, the conclusion on model fit should be reinforced with the examination of other indicators [25], such as Root mean square error of approximation (RMSEA), Comparative Fit Index (CFI) and Tucker-Lewis index (TLI). Their values in the final model are: TLI=0.828, CFI=0.906, and RMSEA=0.051. Considering the model quality metrics, one can conclude that the model quality is marginally acceptable as TLI and CFI are close or above 0.9 and the RMSEA is close or below the 0.05 threshold. Therefore, the model results could be interpreted in detail. The assessment of the final model is given in Table 2 in which we provide the values of the unstandardised regression coefficients, critical ratios (C.R), and the p-values. When creating a latent variable of higher order, the regression coefficient of one latent variable within must be fixed to 1. In our case that was the regression coefficient of Ease of ordering. As the regression coefficient is fixed, it is automatically statistically significant, and the C.R. and p-value are not available.

Table 2. Assessment of the final model

Construct	Unstandardized coefficient	C.R.	p-value
Free delivery	1.284	3.615	<0.001
Shorter delivery time influences my choice of online seller	0.956	3.230	0.001
Delivery service company	0.611	2.326	0.020
I don't mind the price if I like the product	1.513	4.042	<0.001

Website functionality	1.366	5.374	<0.001
Ease of ordering	1.000		
If the list of disponible payment methods doesn't include card, I won't purchase the product	1.378	3.860	<0.001
Assortment size	1.155	3.688	<0.001
Seller recognition	0.884	3.403	<0.001
Loyalty programs	0.997	3.284	0.001
Impact of COVID-19	1.158	3.269	0.001

The obtained standardized regression coefficient between the constructs Free delivery and Purchase Intention is positive and statistically significant (1.284, p<0.05). This result indicates that free shipping offered to the customer has a positive effect on his intention to make a purchase at a certain place. It follows that the first hypothesis is confirmed.

As the Expected Delivery Time construct is not in the final model, the second hypothesis cannot be confirmed or rejected. Instead of this construct in the final model, it was measured how the agreement with the statement "Shorter delivery time influences my choice of online seller" influences Purchase Intention. The obtained standardized regression coefficient is positive and statistically significant (1.513, p<0.05). It follows that a shorter expected delivery period has a positive effect on the choice of the place where the customer will make the purchase.

The obtained standardized regression coefficient between the constructs Delivery service company and Purchase intention is positive and statistically significant (0.611, p<0.05). This result indicates that the courier service that will deliver to the customer has a positive effect on his intention to make a purchase at a certain place. It follows that the third hypothesis is confirmed.

As the Price construct is not included in the final model, the fourth hypothesis cannot be confirmed or rejected. Instead of this construct in the final model, it was measured how the agreement with the statement " I don't mind the price if I like the product" affects the Purchase Intention. The obtained standardized regression coefficient is positive and statistically

significant (0.956, p<0.05). It follows that the customer does not care about the price of the product when buying if he likes the product.

The obtained standardized regression coefficient between the Website Functionality and Purchase Intention constructs is positive and statistically significant (1.366, p<0.05). This result indicates that the functionality of the site has a positive effect on the customer's intention to make a purchase at a certain place, i.e. that the better the functionality of the site, the higher the probability that the customer will decide to buy through it. It follows that the fifth hypothesis is confirmed.

The obtained standardized regression coefficient between the Ease of Ordering and Intention to Purchase Intention is positive and statistically significant (1.000, p<0.05). This result indicates that the ease of ordering has a positive effect on his intention to make a purchase at a particular place. It follows that the sixth hypothesis is confirmed.

As the construct Available payment methods is not in the final model, the seventh hypothesis cannot be confirmed or rejected. Instead of this construct in the final model, it was measured how much the agreement with the statement " If the list of disponible payment methods doesn't include card, I won't purchase the product" affects the Purchase Intention. The obtained standardized regression coefficient is positive and statistically significant (1.378, p<0.05). It follows from this that the possibility to pay electronically with a card has a positive effect on the choice of the place where the customer will make the purchase.

The obtained standardized regression coefficient between the constructs Assortment size and Purchase intention is positive and statistically significant (1.155, p<0.05). This result indicates that the size of the assortment has a positive effect on the customer's intention to make a purchase at a certain place. It follows that the eighth hypothesis is confirmed.

The obtained standardized regression coefficient between the constructs Seller recognition and Purchase intention is positive and statistically significant (0.884, p<0.05). This result indicates that the recognizability of the seller has a positive effect on the buyer's intention to make a purchase at a certain place. It follows that the ninth hypothesis is confirmed.

The obtained standardized regression coefficient between the constructs Loyalty Programs and Purchase Intentions is positive and statistically significant (0.997, p<0.05). This result indicates that membership in loyalty

programs has a positive effect on the customer's intention to make a purchase at a certain place. It follows that the tenth hypothesis is confirmed.

The obtained standardized regression coefficient between the constructs Impact of COVID-19 and Intention to purchase is positive and statistically significant (1.158, $p<0.05$). This result indicates that the corona virus pandemic has a positive effect on the customer's intention to make a purchase in a certain place. It follows that the eleventh hypothesis is confirmed.

The obtained unstandardized regression coefficients range from 0.611 (Delivery service company) to 1.513 (Statement on the aspect of price). All coefficients are positive, which implies that with the increase of the importance of the aspect or construct, the purchase intention becomes stronger.

5. Managerial implications

With the evident importance of customer's online shopping behavior for the business development and company's financial performance, this research should receive significant managerial attention.

As more than 90% of survey participants purchased a product online at least once, we find that it is in a merchant's best interest to have an e-commerce channel (if the product or a service characteristics enable that kind of business model) since potential audience is apparently large. Not only that e-commerce would provide another revenue stream, but it will also contribute to the company's recognition and brand awareness.

As more than 40% of respondents buy products online few times per month, it implies that, for a large group of customers, online purchase is not an exception but a habit, hence investing in e-commerce channels and experience could support retaining and acquiring a significant number of customers.

Regarding the payment methods, it is of value for businesses to include more than one payment method having in mind that, on one hand, significant group of online shoppers won't buy a product if cash isn't one of the provided payment options and on the other hand, every third online shopper pays a purchase with his debit card.

When it comes to the most popular online sales channels, there is a clear predominance of store's online website shop, which, from managerial point of view, brings numerous advantages, such as inexpensiveness, ease of accessibility and availability. However, already

high percentage of usage of shopping applications is expected to increase further as the environment for mobile application is becoming upgraded due to the continuous development of mobile devices [26]. Despite rising attractiveness of shopping applications for customers, businesses should examine this opportunity very carefully, considering its higher costs compared to a website shop and the fact that online seller without brand recognition will struggle more to get a first-time user on the app compared to website [27].

Based on the previously explained implication and proven significance of loyalty programs and seller recognition, it is evident that companies should invest in brand capital as it influences purchase intentions on multiple levels. Creating a positive brand image and perception of the customers encounters more than only marketing and advertising activities – it includes all the other elements of this proposed model, such as improving website functionalities, delivery service and products themselves. As a result, owing to the relationship with each element of the model, strong brand capital would substantially strengthen online purchase intention.

6. Conclusion

Having in mind previously presented results of the empirical study, one can conclude that free delivery, customer's perception on delivery service company, website functionality, ease of ordering, existence of loyalty programs, wide assortment, recognizable seller's brand and change in customer behavior caused by coronavirus pandemic significantly and positively influence online purchase intention. Although certain hypotheses could not be accepted or rejected due to insufficient reliability of corresponding constructs, the general hypothesis (existing conceptual models could be upgraded by modifying the list of included constructs) can be considered as approved. Overall, the results clearly indicate that the consumers take into account many aspects when purchasing online, whereas method of payment is the most important one. Therefore, online sales managers should focus on price, methods of payment available, and website functionality.

Study results are aligned with the study by Bucko, Kakalejčík and Ferencová [3], who concluded that price, shipping costs and special offers (analyzed as a group of factors) are among the most important factors when purchasing a product online. Furthermore, they also concluded that reviews about the seller and the number of social media followers, which are the aspects of

seller's brand recognition, significantly influence customer's behavior. Regarding assortment size, the results are in line with the findings of Simová [28], where it is shown that both experienced and less experienced online shoppers appreciate wide product assortment. On the other hand, when it comes to website functionality, findings of this research differ from the conclusion of Javadi and his colleagues [29], who evidenced the insignificance of user-friendly website on online shopping.

Study results should be interpreted in the light of its limitations. Namely, the findings cannot be generalized to the Serbian population due to small sample size. Moreover, sample profile is limiting due to the predominance of female respondents, which does not correspond to the actual gender distribution in Serbian population [4].

Besides the increase of the sample size and the improvement of sample profile, one of proposed directions for the future research is to more closely analyze the construct Change of customer's behavior caused by pandemic. It is believed that the pandemic could have significant impact on e-commerce market. Also, other constructs could be integrated in the model such as CSR activities of the company [30]. Another interesting direction of the research could be towards conducting a similar survey in the region and do a comparative study so as to observe the similarities and differences in the consumer behavior. Also, it could be of interest to conduct a segmentation of online shoppers based on their attitudes, such as done for movie goers [31]. The segmentation results could be very useful as they could indicate different approaches the company should take when communicating with potential customers.

The value of the study is in the fact that the number of papers focused on exploring the factors which influence customer's online purchase intentions in Serbia is limited. The authors believe that this research could be of help for decision-makers in companies since it provides an insight into customer's perspective on e-commerce, which is directly associated with company's profitability. In addition to that, these findings could serve as a foundation for related academic research.

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