The Impact of the Pandemic Covid-19 on the Digitalization of Trade in Developing Countries

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Abstract: - E-commerce is a new form of commerce where the consumer buys products and services from the comfort of where he is. The Covid-19 pandemic forces consumers to buy products online due to the inability to go out. Consumers have more used E-commerce in developed countries than in developing countries; several factors cause this. In developing countries, the COVID-19 pandemic brought the digitalization of trade by encouraging the number of online purchases. In developed countries, it also brought digitization because it encouraged the purchase of products that were not considered before to be bought online or that have yet to be bought online. The purpose of the study is to highlight the role and impact that the pandemic had on the digitization of trade in developing countries and, more specifically, in Albania. The primary data of the study are from a sample of 610 respondents. Some of the study's conclusions are the frequency of online product purchases affects the consumer's satisfaction with online purchases, the repurchase of online products after the pandemic shows the level of satisfaction that the consumer receives from online purchases that force him to return.

1 Introduction

E-commerce is the conduct of sales in digital form through the Internet. E-commerce is an indicator that increases the possibility of business development. Also, E-commerce affects the economic growth of a country, [1], [2]. In 2018-2019, the most developed economies in the world had an impact of e-commerce with 11% of and 4% of GDP for the whole world, [3]. Based on the rate (CAGR) for e-commerce retail sales in the first countries, there are seven developing countries; this is based on the projection for the period 2023 to 2027, an element that shows that E-commerce has a more significant impact on the economy of a developing country than for a developed country, [4]. E-commerce is selling through telecommunications, [5]. E-commerce is the exchange of values by applying information and communication technology,

[6], but it also involves doing business from the Internet or digitizing products and services through the Internet, [7]. E-commerce has created relationships between consumers, businesses, and governments, [8], [9]. The most frequent monetary transactions are between B2B, where the most frequent are communication, electronic procurement, and electronic supply chain management, [10]. The other most widespread form of e-commerce is (B2C), where the business sells to the end consumer, where the most popular businesses are Amazon and Alibaba. Besides the advantage that B2B has over B2C, retail trade has had rapid growth, [9], but there is also another form of electronic commerce, such as (C2C), where consumers sell from each other through online platforms.

2 Literature Review

2.1 E-commerce and Digitalization of Trade

E-commerce has made transactions more comfortable for the consumer and has influenced the increase in trade efficiency. The Internet has an impact on international trade, [11]. The Internet has revolutionized trade worldwide, mainly in exports, [12], [13]. The Internet has had the effect of increasing accessibility and creating relationships between buyers and sellers. The Internet has an impact on the economic growth of a developing country. E-commerce allows businesses to expand quickly and with little operational cost, [14]. E-commerce increases productivity and can reduce costs, [15]. E-commerce is a development that has changed how businesses are done worldwide, [16]. E-commerce combines sales between individuals, companies, and governments, [17].

2.2 E-commerce in Pandemic

Based on the World Bank, the countries with the most significant impact of the pandemic with a negative effect on the volume of sales are: Albania (87.4 percent), Georgia (87.2 percent), Republic of Moldova (90 percent), North Macedonia (76.9 percent), the decline occurred compared to a year ago where the average decline was recorded for Albania with 51.6%, for Georgia, 47.1%, for the Republic of Moldova with 57.1% percent and 43.0% for North Macedonia, [16].

Table 1. E-readiness in the Transition Economies of the UNECE source: UNECE, based on UNCTAD B2C Index 2019 and UNCTAD B2C Index 2020

Country	Rank, 2019	Rank, 2020
Albania	75	86
Armenia	78	84
Azerbaijan	62	65
Belarus	37	35
Georgia	50	47
Kazakhstan	57	60
Kyrgyzstan	111	97
Republic of Moldova	54	53
Montenegro	77	78
North Macedonia	51	52
Russian Federation	40	41
Serbia	45	43
Tajikistan	129	121
Turkey	53	57
Ukraine	52	51
Uzbekistan	93	107

For 2020, the impact of the pandemic on companies was 36.6% in Georgia, 39.5% in the Republic of Moldova, 24.3% in North Macedonia, and 18.1% in Albania, [18].

2.3 Factors Affecting the Digitalization of Trade

Technology has impacted society as a whole on a global level but has increased commerce's speed, security, and efficiency. E-commerce has developed the trade process from the exchange of consumer products and information between the customer and the organization, [19]. The ecosystem of commerce around the world has changed, [20]. M-commerce is about selling over the phone, a convenient way to buy products and receive services. This also constitutes a transformation of doing business, [21]. Through E-commerce, services such as various payments, financial services, sales, and purchase of various products, etc., are performed. Despite this transformation, the sale of products will combine M-E-commerce and E-commerce. However, the application of M-commerce also needs help because it combines three elements: money, technology, and consumers, [22].
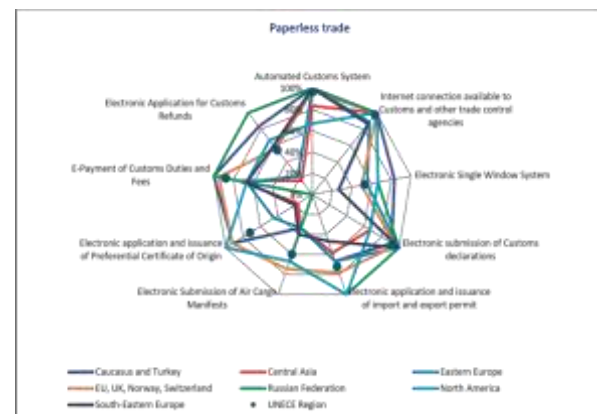

Fig. 1: Implementation of Paperless Trade-Related Measures in the UNECE Region, 2021 UNECE Regional Report on Digital and Sustainable Trade Facilitation, 2021

The Figure 1 shows M-Commerce in 2021. The increase in the number of smartphones has led to the growth of M-commerce. E-commerce is predicted to have an upward trend based on two strong points: convenience and personalization of buying products. This forecast with an upward trend is closely related to the increase in the number of smartphones; the more the number of smartphones increases, the more

it increases (M-commerce). However, the so-called "Social Commerce," where e-commerce is integrated with social media, has also made consumers buy products from social media. It should be emphasized that the application of AI in e-commerce will increase the efficiency and variety of services in E-commerce, improving the consumer experience. Some innovative services where AI has been applied in e-commerce are personalized recommendations through algorithms, chatbots, and voice assistants; consumers through social media receive much information and recommendations for products and services, and social media influences the consumer's purchase decision, [23]. Artificial intelligence (AI) will significantly influence the revolution in E-commerce. However, artificial intelligence will also influence the marketing process because the efficiency of targeting consumers will increase, and the demand will be better matched to the offer. It will Bhardwaj customer service is further improved, [24]. Another form of E-commerce is multi-channel sales, where there is a mix between offline and online channels where there is a mix of contact points, such as physical stores, applications, and websites, [25].

2.4 E-commerce in Albania

In 2020, the figure of 113 million USD is reached for E-commerce in Albania, while the projection in 5 years is that it will reach the figure of 192 million USD with an annual increase of 11.2%. Where the number of e-commerce users is expected to be 1 million. E-commerce users have an increase of 36.6% more users; in 5 years, this driver is expected to be 40.8%. Most of the payments in Albania are made with cash, which makes it much more challenging to measure purchases in E-commerce, where it is calculated that 8% of consumers have credit cards. Something that is also related to the culture of not using cards in everyday transactions. Payment by card is an essential element for conducting trade through E-commerce. Although the Albanian consumer uses credit cards sparingly, he uses telephone and prepaid payments. At the same time, digital wallets are a method that is not used by the Albanian consumer or is used in a meager percentage. Albanian consumers use prepaid cards more because they offer safe and fast payments. Another form applied by the Albanian consumer is Mobiano, which deals with mobile phone payments, and more specifically, payments by the Albanian consumer are by credit card-20%, prepaid card-30%, via phone 35%, by transfers banking-10%,

with Ewallet-5%. In Albania, it is estimated that there will be about 1.4 million users on social media by 2020, and the most significant part uses smartphones to log into social media, [26]. The most popular social media is Facebook, which can reach up to 1 million individuals, while the social media that comes after Facebook is Instagram, with 870 thousand if it is used to communicate with target individuals.

In contrast, if used as a means of communication to target individuals, Twitter reaches 91 thousand consumers, [27]. Another element that has a high impact on e-commerce is logistics. In Albania, logistics has a low level; the infrastructure also causes this because Albania is classified as a hilly-mountainous country to the extent of 75%, an element that affects the speed of transport and the quality of service. The railway lines need to be functional and can be very slow at best, [28]. E-commerce in Albania is at a low level, but the COVID-19 pandemic increased the number of online purchases. However, the level of mistrust is high from the consumer, which makes the Albanian consumers visit physical stores as much as possible. Electronic payments are at a low level, but this market is expected to grow by 11.9% for the years 2022-2027. It should be emphasized that e-commerce in Albania, after the e-commerce pandemic, has had an expansion. This element has made many businesses see this aspect as an opportunity to adapt to consumer demand. Also, the Albanian government, through legislation, has given E-commerce support to companies that offer products within Albania, [29].

3 Methodology

3.1 Research Questions

This paper aims to give answers to the following research questions:

1. How much does the frequency of purchases affect customer satisfaction from online shopping?
2. Does repurchasing online products after the pandemic affect customer satisfaction from online shopping?
3. Buying thoughtless products during the pandemic affects consumer satisfaction.
4. How much does online product repurchasing affect customer satisfaction?
5. How much does the purchase of thoughtless products affect the consumer?

3.2 Research Method

The type of study is quantitative. The Method applied in the study is the survey, and the questionnaire was applied as a research instrument. The sample is probabilistically random, where each element has the same choice. The sample consists of 295 respondents, where the population in the city of Tirana consists of 925,268 individuals on January 1, 2023, [30], with a margin of error of 5% and a confidence level of 95%, for the sample to be statistically representative there should be 385 individuals. In the study, 610 respondents.

3.3 Data Analysis

The study was built based on the linearity of research instruments, such as research questions, methodology, and analysis, that serve the study's purpose. Based on the type of descriptive study and quantitative approach in the analysis, reliability analysis was applied to measure the stability of the questionnaire; with Cronbach's Alpha test, multiple regression was applied to measure the influence the variables have on each other.

3.4 Research Limitations

The study's limitations consist of failing to study all the factors affecting a country's trade. The study did not consider the factors that influence consumer behavior in E-commerce. In the study, the macroeconomic variables that can affect trade directly and indirectly should have been considered.

4 Data Analysis and Research Findings

Table 1. Reliability analysis
Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.903	.557	15

Based on the Table 1 the questionnaire is reliable to be applied in the study because, based on Cronbach's Alpha test, the reliability coefficient is 0.9. This result makes the questionnaire valuable for the study and, subsequently, for other analysis phases. It also shows that the survey can measure 90% of the purpose of the study.

Table 2. KMO Test
KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.700
Bartlett's Test of Sphericity	Approx. Chi-Square	30.800
	df	3
	Sig.	.000

Based on Table 2 the KMO test measures the suitability of the variables taken in the study and is based on the KMO coefficient of 0.7 and the sig value that is less than 5%. The variables taken in the study are suitable for analysis based on multiple regression.

Table 3. Total Variance
Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.181	39.372	39.372	1.181	39.372	39.372
2	.994	33.126	52.498			
3	.825	27.502	8.130			
4	.723	26.7501	100.000			

Table 4. Component Matrix
Component Matrix

	Component
	2
How often do you buy products online?	-.762
If yes, how satisfied are you with the online service during the pandemic?	.663
How likely are you to continue shopping online after the pandemic?	
During the pandemic, have you bought products you did not think you would buy online?	.554

Table 5. Regression model
Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.654[a]	.684	.062	1.19904	.592

Based on Table 3, Table 4 and Table 5 on the regression analysis, it was found that the independent

variables measure 68% of the dependent variable. The value of R2 measures the equation's significance, indicating that the equation is suitable for prediction.

$$Y= \beta0+ \beta1 * x1+ \beta2 * x2+ \beta3 * x3$$

Customer satisfaction from Ecommerce=4.258-0.228x *frequency of online shopping* - 0.021 x *online shopping after the pandemic* + 0.31 x *online purchase of unthinkable products*

Table 6. ANOVA TEST

ANOVAᵃ

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	33.567	2	16.783	11.674	.000 b
	Residual	1381.631	961	1.438		
	Total	1415.198	963			

Hypothesis 1: The variables that were not taken into the study impact the satisfaction of online shopping. Based on Table 6, the value is less than 5%, which shows that hypothesis 1 is accepted and that the factors that should have been taken into the study have much influence on the satisfaction the consumer gets from online shopping.

Hypothesis 2: The frequency of online shopping has an impact on the satisfaction of online shopping.

Based on Table 6, the sig value is less than 5%, which shows that hypothesis 2 is accepted and that the frequency of online purchases greatly influences the satisfaction the consumer gains from online purchases.

Hypothesis 3: Post-pandemic online repurchase has an impact on shopping satisfaction.

Based on Table 6, the sig value is less than 5%, which shows that hypothesis 3 is accepted and that repurchasing online products after the pandemic impacts the satisfaction that the consumer gains from online shopping.

Hypothesis 4: The purchase of unthinkable products has an impact on the satisfaction of the purchase.

Based on Table 6, the value of sig is less than 5%, which shows that hypothesis 4 is accepted and that buying products online impacts the satisfaction that the consumer gets from online shopping.

Hypothesis 5: The frequency of online shopping harms the satisfaction that consumers get from online shopping.

Hypothesis 6 is accepted since the sig value is less than 5%. The impact measure is 22.8%, which shows

that if all variables are zero with 1% of the frequency of online purchases, consumer satisfaction from online purchases will decrease by 22.8%, so an increase in the number of online purchases will increase consumer dissatisfaction with online purchases. The increase in the number of online purchases will lead to an increase in dissatisfaction, which indicates that the quality of the service as a whole decreases. It should be emphasized that buying products online is a process and not just a factor.

Hypothesis 6: Online repurchasing after the pandemic negatively affects the satisfaction that consumers get from online shopping.

Repurchases of online products after the pandemic negatively affect consumers' satisfaction with online shopping. Hypothesis 6 is accepted since the sig value is less than 5%. The impact measure is 2.1%, which shows that if all variables are zero with a 1% increase in online repurchases after the pandemic, consumer satisfaction from online purchases will decrease by 2.1%, so an increase in the number of online repurchases will increase the dissatisfaction of consumer towards online shopping, which shows that consumers have not received the same level of satisfaction with online shopping as during the pandemic. The increase in online repurchases will lead to an increase in dissatisfaction, which shows that the same quality of service has yet to be received. This element relates to the companies' service or the increase in the consumer's expectations for online purchases.

Hypothesis 7: Buying mindless products online positively affects the satisfaction consumers get from online shopping.

Hypothesis 7 is accepted since the sig value is less than 5%. The impact measure is 31%, which shows that if all the variables are zero with a 1% increase in purchases of unthinkable products, it will increase consumer satisfaction from online purchases by 31%, i.e., an increase in the number of unthinkable products purchased online will increase consumer satisfaction with online shopping, which shows that buying a specific category of products, especially those that a consumer did not think he could get online, gave him a certain level of satisfaction. The pandemic has forced consumers to buy products they did not think they could buy online, influencing the transfer of online purchases for a specific category of products. It has influenced the digitalization of trade.

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5 Conclusions

Many variables besides those taken in the study have much influence on consumers to buy online, this fact guides studies in the E-Commerce field to analyze other variables that were not taken into the study because they significantly affect the satisfaction that the consumer benefits from shopping online. The frequency of online purchases has a significant impact on customer satisfaction, the more the frequency of purchases increases, the more the risk that the customer will be dissatisfied with the quality of the service because the very characteristic of the service is that it cannot be provided equally to all customers, it should be noted that the service combines interpersonal communication because, in the case of machines, the service is standard. Customer dissatisfaction brings a negative word of mouth for online shopping, an element that would demotivate online shopping; it should be noted that the increase in online shopping can necessarily affect the quality of the service, and if it does not affect it then it will turn into a positive service and will make the consumer make a positive word of mouth element that would influence the increase of online purchases by consumers. Regarding online repurchasing after the pandemic, it affects satisfaction in online shopping, an element that shows that individuals who bought online during the pandemic had a certain level of satisfaction that they would return to buy online again, an element that shows that the pandemic has affected digitalization of trade because it has encouraged consumers to buy online, and this has influenced their approach to buying online. The pandemic has also influenced the purchase of products they did not think of buying online; this shows that the pandemic has influenced the promotion of online purchases for products that the consumer has been skeptical about buying for many reasons. Based on the study, the pandemic with the ban on movement that it brought encouraged many individuals to buy online, so during this period, E-commerce has been a forced choice rather than a desire.

A limitation of the study is that only some factors affecting online shopping have been studied. Also, there is no measuring indicator to record whether consumers who have shopped online during the pandemic continue to shop online. Future studies in this field should be oriented towards the identification of the indicators that are the most important in the step of the consumer in developing countries in the use of E-commerce platforms, it should also be researched in the description of the consumer in developing countries taking into consider the macro and micro economic factors of the country where the study takes place.

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Contribution of Individual Authors to the Creation of a Scientific Article (Ghostwriting Policy)

- Ph.D. Gerti Dajçi conceptualized the article, interpreted the data, and revised them critically for crucial scientific content, principal findings, and recommendations.
- Msc. Mateus Habili designed and performed the statistical analysis collected the data and contributed data analysis tools; he was also accountable for all aspects of the work in ensuring that questions related to the accuracy and integrity of any part of the work were appropriately investigated and resolved.