# Study of e-commerce trends based on customer characteristics in Latvia

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#### Abstract

The current topics of e-commerce studies in Latvia are examined and basic directions of research are highlighted. The key trends of e-commerce development processes in the country are analyzed, based on the study of the main characteristics and preferences of e-costumers. The main problems in the development of e-commerce in Latvia and further steps to address them are substantiated.

This article aims to investigate trends in Internet commerce in Latvia based on the characteristics of e-customers and determine the prospects and ways in which Latvian businesses can take advantage of the opportunities offered by the Internet.

Based on the research results, an author can note that there is significant ecommerce development potential in Latvia and, in particular, by local businesses.

**Keywords:** Internet commerce, trends, e-customers, e-commerce, consumer characteristics, Latvia

## 1. Introduction

The steady growth of the digitalization of modern society, significantly accelerated in recent years by the impact of the global pandemic and its economic consequences, has brought to a new level the challenge of improving business processes and, in particular, profit-making processes through the Internet and digital technology. It has become virtually impossible for modern businesses to compete successfully in the marketplace without using the tools and capabilities of the global network and e-commerce. At the same time, the presentation of a company's products for sale on various Internet services is not in itself a prerequisite for successful sales. The effectiveness of e-commerce in today's world is driven by several factors, not the least of which is a clear understanding of your target audience and their needs. In this context, the study of e-commerce through the prism of consumer preferences is of particular relevance.

## 2. Literature review

During the last decade, the topic of e-commerce has been on the radar screen of a large number of researchers all over the world. In Latvia's case, several research areas prevail in the research field. The first group aims at finding ways to develop small and medium-sized businesses using e-commerce. For example, it is worth mentioning a joint research paper by several Latvian and Lithuanian researchers on the problems of the e-commerce segment in the Baltic states (Rivza et al. 2020), one of its key conclusions being that there is a lack of specialists with socio-technical knowledge, which prevents the domestic e-commerce market in Lithuania and Latvia from reaching the level of most EU member states. In other words, there is a lack of business understanding of the needs of e-customers, and a failure to recognize and study their target audience, including in terms of choosing effective e-marketing tools.

The second line of research is based on identifying the factors that contribute to the development of e-commerce in the Baltic States at the macro level. Particularly, Gudele and Rivza (2015) and Gudele and Jekabsone (2020) conclude that the development of e-commerce in the country depends, among other things, on the general level of education and digital literacy of the population, stressing the point that Latvian businesses do not take full advantage of the existing potential of e-commerce.

The third group of researchers focuses specifically on e-commerce management, attempting to justify innovative ways of developing Internet commerce through customer interaction analysis (Pollack et al 2021).

The fourth group of researchers concentrates on the study of the characteristics and factors of successful performance of firms in the field of Internet marketing. In particular, we can

note the work of Gulevičiūtė, Išoraitė, and Sohail (2019), The author have analyzed the functioning and performance of digital marketing companies in the Baltic States, and have been able to justify different employment and profitability models for companies in the digital marketing sector.

A particular area of research is the area of evaluating the effectiveness of e-commerce activities and digital marketing channels. So, Sceulovs and Lorencs (2017), based on a study of the main characteristics of the digital marketing sector in Latvia and an expert survey, a list of indicators for evaluating the effectiveness of applied digital marketing channels was formed. In turn, Kotane, Znotina, and Hushko (2019) conducted research on key trends in the use of digital marketing tools to identify the most effective strategies for local businesses.

Thus, we can say that two main directions prevail in the Latvian scientific field: the study of e-commerce processes itself and the study of the sphere of digital marketing as a factor in its development. At the same time, there is a great need for further research into the prospects and ways of effective e-commerce development in Latvia based on the characteristics of online customers, which would allow local businesses to form online sales strategies and thus effectively compete in the market not only in Latvia but also at least in other EU countries.

## 3. Aim, Scientific novelty, Theoretical significance and Methods

## 3.1. The aim of the article

This article aims to investigate trends in Internet commerce in Latvia based on the characteristics of e-customers and determine the prospects and ways in which Latvian businesses can take advantage of the opportunities offered by the Internet.

## 3.2. The scientific novelty

The scientific novelty of the study consists in highlighting the characteristics and trends of ecommerce processes in Latvia during the last decade and substantiating the ways of development of online trade by national businesses.

## 3.3. The theoretical significance

The theoretical significance of the study lies in deepening the understanding of the Latvia's place in comparison to other European Union countries, in terms of e-commerce share in a gross domestic product, which can be further applied to form state programs of online business sector development and to form private online commerce strategies of companies.

### 3.4. Methods

The methodological basis of the study is general scientific and special methods of economic theory. In particular, in the process of work on the study the following methods were used:

comparative analysis and synthesis - to detail the object of research; economic and mathematical - to analyze the behaviour of businesses and users on the Internet; graphic - to illustrate and chart the subject of research; abstract-logical - to justify objectives, generalizations, and formulation of conclusions.

#### 4. Research results

The progressive development of e-commerce has given a significant boost to the number of online consumers of products and services due to COVID-19 worldwide, not excluding Latvia, where, according to US Office of International Trade estimates (International Trade Administration, 2022), as of summer 2021, 90.8% of adults were using the Internet daily. This is a huge potential and partially active e-commerce audience, as 85% of those surveyed had made at least one online purchase during the year (International Trade Administration, 2022).

For its part, the European Digital Trade Association estimates (The European Digital Commerce Association) that the growth of e-commerce in Latvia in 2020 is 27%, but e-commerce only accounts for 1.03% of Latvia's gross domestic product (Ecommerce Europe, 2021).

Based on the above results, an author can note that there is significant e-commerce development potential in Latvia and, in particular, by local businesses, which is still passively used nowadays in comparison to EU countries. To understand the key factors of this situation, let us compare the indicators of enterprises in Latvia with e-commerce with the number of real e-customers (Fig. 1).

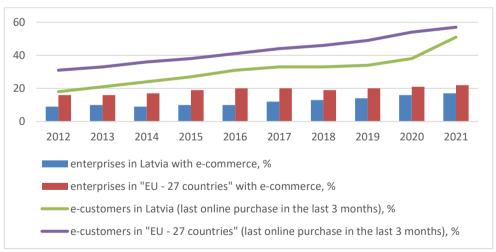


Figure 1. Comparison of the share of companies using e-commerce tools and the share of real e-customers in Latvia in 2012-2021, %\*. \* formed on the basis of data from Eurostat (2022).

These data allow conclusions to be drawn, first of all, about the reasons why the role of internet commerce in Latvia's gross domestic product is so insignificant. Thus, as of 2021, only 17% of companies were using e-commerce means in their business activities. However, until 2017, the share of companies operating in the field of e-commerce did not exceed 10%. This is a low figure if we compare it with all the EU countries, where, according to Eurostat (2022), 17% of companies were actively using e-commerce opportunities in 2014, and in 2021 the proportion was already 22%.

Thus, we can say that Latvia's Internet business has only now reached the level of Europe in 2014. At the same time, there is a reduction in the gap between Latvia and all European countries in the use of e-commerce by businesses, which allows a conclusion about the growing e-commerce potential in Latvia.

The logical explanation for this situation could be a lack of e-customers in Latvia who made at least one online purchase in the last 3 months. During the period under study, the share of online users in Latvia who have made at least one online purchase increased from 18% in2012 to 38% in 2020, which means 20% growth only, it is 3% less in comparison to All European countries. Although the growth rate of the share of businesses using e-commerce tools in Latvia during the survey period is quite significant, it is not enough to fully meet the demand of e-shoppers.

However, the data obtained show quite significant growth rate of e-customers in Latvia who made at least one online purchase in the last 3 months during the 2021 when it increased by a significant 13% in 2021. An author expects it can be strongly reflected in the e-commerce gross domestic product percentage in Latvia in 2021.

This is supported by the fact that no more than 40% of online purchases are made by national businesses (Figure 2). At the same time, such high rates of online shopping by national businesses in Latvia were observed only in 2021, largely due to multiple quarantine restrictions and fear of individuals stimulating them to change their habitual lifestyle and, among other things, to switch to an increased list of goods bought online.

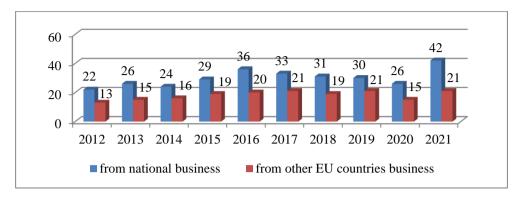


Figure 2. Share of online purchases in Latvia depending on the seller's territorial affiliation in 2012-2021, %\*.

\* formed on the basis of data from Eurostat (2022).

And it is only in 2021 that there is a significant gap between the share of online purchases from local businesses and companies from other EU countries. In fact, for the first time in ten years, the share of online purchases by users from Latvian businesses was twice as high as the share of online purchases by Latvians from businesses from other EU countries. A dynamic analysis of the age structure of Internet users who have never made an online purchase (Figure 3) suggests that the last decade has seen a very significant change in the purchasing behaviour of users under the age of 45. In particular, if the results of the study in 2012 showed that more than 40% of users in this age group have never made an online purchase, by the end of 2020 there will be no more than 11% in each of the selected age groups. This situation confirms the global trend of growth in the active use of online shopping opportunities among the younger population.

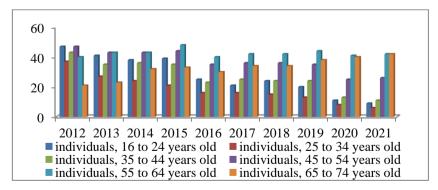


Figure 3. Dynamics of the share of Latvian Internet users by age category who have never made an online purchase in 2012-2021, %. \* formed on the basis of data from Eurostat (2022).

If we consider individuals aged 45-54, more than 25% of them have never made an online purchase in Latvia as of 2021, and the share of users over 55 not buying online is over 40%. If we add the education criterion to the age criterion, we get the following data (Fig. 4).

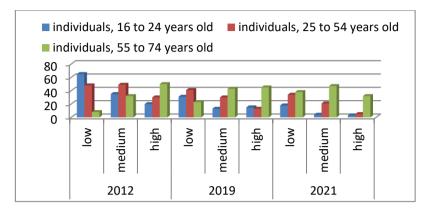


Figure 4. Dynamics of the share of Latvian users who have never made an online purchase, by age and education, %. \* formed on the basis of data from Eurostat (2022).

The results show that the criterion of users' education has a greater weight the younger the individual is. Thus, there are significant differences in the proportion of young people - from 16 to 24 years old - who have never made an online purchase, depending on their level of education. In 2012, 65% of young Internet users with a low level of education did not use the opportunities of e-commerce, while their peers with a high level of education had only 20%.

While until 2019 the share of Latvian Internet users who have never made an online purchase was decreasing gradually, the last two years have seen significant shifts. At the same time, the importance of the educational criterion has become quite clear in the group of users aged 25-54 years old - thus, according to a survey in 2021, only 5% of users in this age category with a high level of education have never made an online purchase in Latvia.

On the other hand, the 55+ age group in Latvia is the least dependent on educational criteria in the context of online shopping. When targeting this group of consumers, it is worth looking for other factors that contribute to their involvement in e-commerce processes.

Another aspect of studying e-commerce trends in Latvia is an analysis of the preferences of e-shoppers, especially in the context of the impact of the global pandemic (Fig. 5).

For this purpose, we have chosen 2019 as the year before the pandemic and 2021 as the period which is a vivid reflection of the impact of COVID-19 both on the Latvian economy as a whole and the consumer preferences of online shopping users.

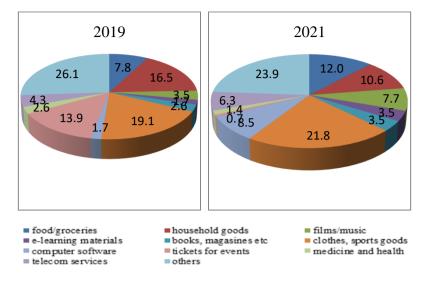


Figure 5. Structure of online purchases by Latvian Internet users by product type in 2019 and 2021, %.

\* calculated on the basis of data from Eurostat (2022)

The analysis of the above data allows us to conclude that significant changes in purchasing preferences in Latvia during the study period occurred. Thus, if before the pandemic, 13.9% of online purchases by the country's users were for tickets to various events, in 2021 it was only 0.7%. Instead, users increased the number of online purchases of software by a factor of five, movies and music by a factor of two. In addition, the number of online purchases of food, educational materials, clothing and sports goods, and telecommunications services has also increased.

Thus, we can identify several key characteristics of e-shoppers in Latvia that should be taken into account by the central authorities responsible for e-commerce development in the country and by businesses themselves when shaping their e-commerce strategy:

The first is the willingness and availability of users to shop online - 75% of the country's online users have experienced online shopping, and more than 51% of them have done so in the past three months. At the same time, only 17% of Latvian companies use e-commerce tools in their operations, which is still relatively less nowadays in comparison to EU countries.

Secondly, there is still an insufficient interest of Latvian e-costumers in national businesses' products and online services. Thus, in the study period, no more than 35% of online purchases by Latvians were purchased from representatives of local businesses. The exception was 2016 with 36% and 2021 with 42% of purchases.

Third, there is a fairly high correlation between a user's willingness to shop online and their level of education. Users between 16 and 54 years of age with a medium to high level of education are more open to online shopping.

Fourth, the analysis of the structure of online purchases by Latvian Internet users by product type in 2019 and 2021 shows significant changes in online purchasing preferences during the study period.

All the above-mentioned allow us to state the necessity of e-commerce sector development in Latvia, as at the moment e-customers to a greater extent finance the formation of the gross domestic product of other countries. At the same time, a special role should be given to working with businesses themselves, so the key areas for further research should be to identify the problematic aspects of online sales tools application by national businesses in the context of different business areas, to build a profile of e-shopper for different product categories, and to determine the main obstacles for users to make online purchases.

## 5. Conclusion

Significant growth in the digitalization of the modern economic space leads to the increasing dependence of businesses on the level of application of information technologies, including in communications with consumers and the sale of products. In this context, most Latvian businesses have not yet adapted to new aspects and continue to base their operations on twentieth-century approaches and concepts. At the same time, users in the country becomes more active in online shopping, and the situation with the global pandemic has made this number especially high. Thus, there is a need for active development of e-commerce in Latvia, primarily through the application of its tools by businesses, which requires further research into the reasons holding companies back from entering the online segment and identifying incentives for its activation.

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