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THE PORTRAIT OF THE MODERN ONLINE CUSTOMER IN LATVIA

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Abstract. The study is aimed at examining the characteristics of the Latvian e-shopper segment in comparison with the average indicators across the European Union, with the goal of identifying the typical profile of an e-buyer, as well as the problems and trends in the further development of e-commerce in Latvia. As enterprises in Latvia become increasingly dependent on digital technologies and the effective use of e-commerce opportunities, understanding the key characteristics of e-shoppers and trends in this consumer segment plays a crucial role in further researching the target audience profile and selecting marketing strategies for effective communication with them. The article employs a combination of monographic analysis to study the peculiarities of e-consumers and statistical methods to evaluate trends in this segment. Characteristics such as age, education level, preferences in the use of electronic devices, and economic characteristics from 2015 to 2021 were used to study the Latvian e-shoppers. The research showed a noticeable trend towards the alignment of Internet usage and e-commerce indicators in Latvia with the EU averages, both on desktop and mobile devices. The novelty of the research lies in the further development and refinement of the understanding of the characteristics of the Latvian e-shopper segment, as well as its dynamics compared to other EU countries, of enterprises operating in the e-commerce.

Key words: e-commerce, e-shopper portrait, online shopping, online consumer, profiling.

JEL code: M31, L19, D91

Introduction

The widespread use of Internet technology stimulates the rapid development of e-commerce, which is due to a significant increase in the number of online transactions and, consequently, an increase in their share of the Gross Domestic Product (GDP). According to the report published by Research and Markets the market value of global e-commerce reached 18.98 trillion United States dollars (USD) in 2022 and is expected to reach USD 47.73 trillion by 2030 (Research and Markets, 2024). E-commerce is the most promising method of stimulating business growth. Therefore, it is becoming increasingly important to determine the most effective ways, methods, approaches, and tools for e-commerce.

One crucial aspect that has emerged is the understanding and refinement of effective online customer experiences. Bleier, Harmeling and Palmatier (2018) illustrate how diverse web page design elements, from linguistic nuances and visual cues to interactive features, synergistically mold the complex dimensions of online customer experiences. These dimensions include informativeness, entertainment, social presence, and sensory appeal, all of which are essential in transforming potential online interactions into substantial business growth.

The task of describing the online customer profile has gained importance with the development of online payment technologies. According to Stafford and Gonier (2004), it has been widely recognized that understanding the possibilities of Internet usage by e-shoppers allows to create products and services that are more relevant to existing needs. Ho and Wu (1999) emphasize that in the realm of e-commerce, every Internet user is a potential customer. They highlight that the pivotal challenge for e-businesses lies in transforming these potential customers into actual ones. This transformation process is contingent on a thorough understanding and consideration of the users' specific requests, habits, and needs.

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At the same time, the development of customer profiling has increased concerns about the security of personal information. The development of the technological basis of e-commerce in recent decades, has simplified personalization processes, involving dynamically displaying offers based on previous user activity across digital platforms like portals, websites, etc. (Mohamed et al., 2022). As a result, businesses have begun to employ personalization technologies, ranging from creating offers to analysing user paths and experiences (Khoali et al., 2022).

This has created the need to balance the interests of organizations and Internet users, especially in relation to the storage of user profiles and the use of this data in business. This requirement is particularly emphasized by the European Consumer Organization (BEUC, *Data collection, targeting and profiling of consumers online*, 2010) as a necessary condition for maintaining the balance of interests among the parties in the digital economy. Additionally, the European Commission underscores the importance of establishing mutually agreed-upon communication strategies with e-shoppers (European Commission, *Digital Markets Act*, 2022).

The joint research envisages the study and analysis of the behaviours, shopping habits and other indicators of online customers in various European Union (EU) countries over several years. Since the researchers of the study are Latvian scientists, the situation in Latvia was identified at the initial stage in order to plan the methodology and choose the most appropriate research methods and to compare the results with average across the European Union.

This **article aims** to profile Latvian e-shoppers by analysing data on their characteristics from 2015 to 2021 and comparing these characteristics to the average metrics across the European Union. The **novelty of the study** lies in advancing our understanding of the characteristics and dynamics of the Latvian e-shopper segment, compared to those EU average.

Research results and discussion

The development and application of effective e-marketing strategies necessitate a scientific and practical understanding of modern e-shoppers' profiles. Leading marketing research specialists, such as Kotler, Bowen, and Makens (2010), Lambin (1993), Engel, Blackwell, and Kollat (1978), have established the theoretical foundations for consumer behaviour research, which includes profiling these consumers.

Consumer behaviour is complex and influenced by numerous factors. However, understanding this behaviour is a crucial task for marketing managers, as noted by Kotler et al. (2010). The variety of influencing factors necessitates their categorization, a topic widely discussed in scientific literature. He delineates consumer segmentation into several categories: geographical, demographic, psychographic, and behavioural (Kotler et al, 2010). While some researchers, including Lambin (1993), argue for the inclusion of economic characteristics as a distinct category — encompassing not just income but also attitudes towards benefits and costs — Kotler et al (2010) integrates economic characteristics within the behavioural category.

The research conducted by Hamad and Schmitz (2020) examines the impact of demographic variables and consumer shopping orientations on the purchasing preferences for different product categories within the context of online grocery shopping in the UK. It aims to identify possible correlations between demographic variables, consumer shopping orientations, and the preference for purchasing certain products online, in order to provide a more comprehensive understanding of consumer behaviour in the online grocery shopping context.

Sadraddin (2019) investigates various factors impacting consumer purchasing behaviour, including the web environment, product features, Internet security and trust, promotional offers, and product price. He

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focuses on external factors, distinct from the e-shopper's personal traits and indicates that the web environment, product characteristics, and promotional offers significantly influence online purchasing behaviour.

The assertion regarding the minimal influence of product price characteristics on e-shoppers' decisions appears controversial and may not be generalizable across all e-shopper categories. In contrast, "European e-shoppers in 2021" report by DpdGroup, which profiled European e-shoppers' online shopping behaviours, offer a more nuanced perspective. Utilizing a random sampling method, the study conducted 40,000 interviews globally, including 23,394 with European respondents. DpdGroup identified several distinct e-shopper types, including the regular, aficionado, senior, epicurean, eco-selective, and the emergence of the price-conscious e-shopper (DpdGroup, 2021).

Regular e-shoppers, individuals aged between 18 and 70 who make online purchases in at least one product category monthly, constituted 48% of all European e-shoppers in 2021. They were responsible for 86% of the online market share volume in Europe, receiving on average almost six parcels monthly. This group significantly contributed to increased sales in various categories, notably home equipment and food. Technologically adept and frequently online, 65% of regular e-shoppers prefer using their smartphones for shopping activities.

Senior e-shoppers, individuals aged 55 and above, increasingly turn to e-commerce, often driven by health-related necessities and availability of certain products. Like typical beginners, they place a high value on the trustworthiness of online platforms and are particularly conscientious about delivery details. Preferring to use computers or notebooks, they engage with social media more frequently than other e-shopper demographics. Characterized by their cautious and meticulous approach to online purchases and payments, senior e-shoppers account for one out of every ten online purchases, as reported by DpdGroup (2021).

The rise of the price-conscious e-shopper is notable, with these cost-focused individuals constituting 10% of the European e-shopper demographic. Based on a study of European online shoppers, Carmen Curé (DpdGroup, 2021) states that today's e-shoppers are confident in the online shopping experience and now expect a high level of service with every purchase. They are perfectly at ease buying food online and intend to keep doing so. They care about the environment, and, as ever, convenience is a key motivator.

Litavniece and Znotiņa (2017) investigate online shopping behaviour in Latvia in more detail. In the end, the authors conclude that the frequency of online shopping of Latvia's customers is dependent on their income level - a higher income level contributes to a higher frequency of online shopping, as well as increases the amount of money spent per shopping session. The authors can agree with the second part of the statement, because the amount of money spent on purchases directly depends on the income level of customers. In authors' opinionless relevant is the statement that the frequency of online purchases of Latvia's customers depends on their income level, given a significant increase in availability for customers with different income levels of both the Internet connection itself, and mobile devices that allow active use of the network opportunities.

The researchers Volvenkins, Sloka, and Cipane (2019) are more focused on identifying the problems faced by e-shoppers in the online shopping process and the influence of the delivery factor on the choice of an online shop. Thus, the authors, based on their findings, concluded that the most attractive for Latvian e-shoppers in the context of online shopping is the price of the product, the trustful name of an online store, and fast and preferably free delivery.

Customer profiling is a method of defining the portrait of each user, which includes personal and transactional details (Upadhyay, Vidhani, & Dadhich, 2016). Online profiling refers to the collection of information about the behaviour of online users (Internet surfers) across various resources and websites to develop a profile of their habits and interests. This perspective is supported by Wiedmann (2001). According to Nykamp (2001), online profiling allows to provide the user strategic insight into how to manage customer relationships with each e-buyer. The authors argue that a group of profiles enables the creation of a universal customer portrait to facilitate relationship management with e-shoppers. Franzak, Pitta, and Fritsche (2001) also emphasize that the more comprehensive the data is used, the more detailed the customer portrait will be.

The first group includes factors related to the personal characteristics of the online buyer himself: socio-demographic, psychographic, behavioural aspects; the level of education and skills of the Internet user, their involvement in the Internet environment and social networks; indicators of financial security. **The second group includes factors** related to the functioning of e-commerce technology: availability and quality characteristics of the Internet for a region or a specific buyer; accessibility, functionality, convenience, user-friendliness, loyalty, attractiveness of the online trading platform, popularity of its brand; informativeness of the presentation of the product, its visualization, fair pricing, quality of the product, brand awareness; convenience and cost of purchase delivery.

This article analyses statistical information about customers' online shopping in Latvia for the period from 2015 to 2021 in the context of key gender, age, education, and economic characteristics. The article posits that existing researches have insufficiently explored the in-depth characteristics of e-customers/e-shoppers in Latvia. Recognizing the growing importance of the target audience analysis in e-commerce, the research aims to fill in this gap. This endeavour is crucial for enhancing customer engagement, sustaining e-commerce profitability, and increasing the prevalence of e-commerce tools in Latvia, which, as Babics and Zvirgzdina (2022) note, currently is below the EU average. Moreover, this study addresses the impact on Latvia's Electronic Gross Domestic Product (E-GDP). The European Digital Commerce Association's report (European Commission, 2022) indicates that Latvia's E-GDP growth, contributing merely 1.03% to the national GDP, trails behind Western European standards and the European average.

This research aims to highlight the differences in the profiles of the average e-shopper in Latvia compared to the EU average, which could potentially explain their position in the digital economy. It is important to emphasize that research is being conducted in the field of developing optimal strategies for interacting with e-shoppers. Specifically, the "European E-Commerce Report 2021" contains an in-depth analysis of the behavioural aspects of e-shoppers in Latvia (EuroCommerce, 2021). The quantitative research methods used in it include surveys and analysis of social media data, which revealed a significant dependence of Latvian consumers' preferences on the opinions of influencers and on the possibility of accessing online stores through social networks, which e-shoppers prefer. The conclusions of the European report emphasize the importance of integrating social networks into e-commerce strategies, which can serve as a basis for further research in this direction.

In the context of this research, the authors study legal ways of collecting the e-shopper's portrait formation and also aim to study **the personality of e-customers in Latvia**, their key characteristics — income level, economic activity, education, etc., in relation to the age category as far as their behaviour online is considered. However, the focus of this study is shifted precisely in the direction of users who make online purchases at least once every three months and are defined by the authors as active e-customers.

According to data from the "Internet Purchases by Individuals" section of the Eurostat report (2022), the percentage of Latvian online customers who have shopped online in the past three months increased from 27 % in 2015 to 51 % in 2021, indicating an 88.9% increase of the proportion. Note that the average share of e-buyers per country in the EU in 2021 was 75%. At the same time, the dynamics of indicators of the frequency of online purchases allows to identify two periods of drastic change — 2016 and the period 2020-2021. Where in the first case there was an increase in the use of Internet banking capabilities and, consequently, the development of e-business, and in the second — the quarantine restrictions acted as the catalyst for changing customer behaviour. At the same time, the proportion of individuals who make purchases online more than 10 times in three months, is 9% according to Eurostat data (*Internet purchases by individuals*, 2022), which, based on the number of Internet users in the country, is at least 153,000 individuals.

Statistical analysis of active buyers, those who make at least one purchase per quarter, indicates that in older age groups, the largest share of consumers partakes in 1-2 e-purchases per quarter. Specifically, in the age group of 65 years and older, 56.1% of consumers undertake 1-2 purchases per quarter, with 6.3% of them engaging in more than 10 transactions. In the demographic of 55 to 64 years, the proportion making 1-2 purchases drops to 44.8%. The age brackets of 25 to 34 years and 35 to 44 years represent the most confident online shoppers, with 31.3% and 30.9%, respectively, making 1-2 purchases per quarter. Additionally, more than 22% of e-shoppers in these groups make over 10 purchases quarterly.

The results of this study indicate that frequent online purchases are common among the working-age population in Latvia. The share of individuals aged 55-64 years who engage in online shopping at least once every three months stands at 29%, and 16% for those aged 65 and older. These figures are significantly different from those of the working-age demographic, where among individuals aged 25-34 years, the proportion reaches 80%.

Characterizing the e-shoppers in Latvia based on the level of education according to Eurostat data (*Individuals – internet use*, 2021), it is worth noting that there is a clear dependence on the level of activity of online shopping individuals in 2021:

- 82% of individuals with a low level of formal education used the Internet at least once every three months, and 39% of them made at least one online purchase at the same time;
- 88% of individuals with a medium level of formal education in Latvia have used the internet at least once every three months in 2021 and 39% of them have completed at least one online purchase in the same period of time;
- 99% of individuals in Latvia with higher education in 2021 used the Internet at least once in three months, and 72% of them have completed at least one online purchase.

In this regard, the growth in the share of e-shoppers in the structure of each of the considered groups, identified by the criterion of level of education, as can be seen in the diagram presented in Figure 1, are very different. Thus, individuals with higher education in Latvia are much more likely to use e-business services. However, there is also a noticeable trend of a significant increase in the number of active e-buyers among those with low level of education: from 12% in 2015 to 39% in 2021, indicating almost 225% increase of the proportion.

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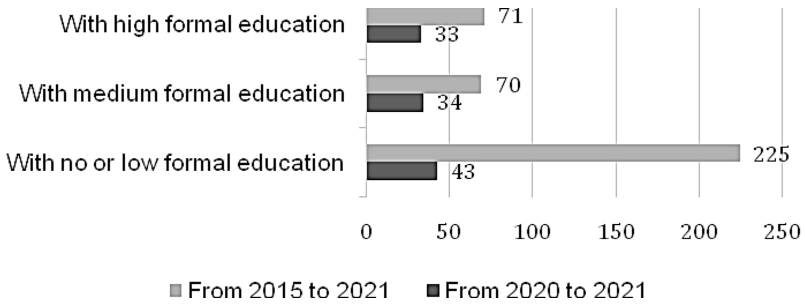

Source: created by the authors based on the data from the European Commission (European Commission. Digital Economy and Society Index 2021)

Fig. 1. **The increase in the proportion of e-shoppers who buy online at least once in three months among all individuals, according to the education criteria, %**

A comparison of the increase in the proportion of e-shoppers who buy online at least once in three months within each of the education criterion-based groups in Latvia and the EU average values is depicted in Figure 2.

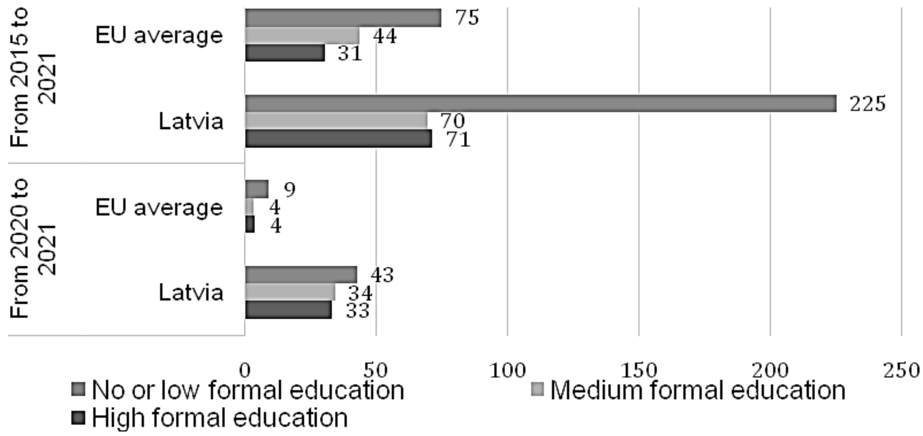

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Fig. 2. **Increase in the proportion of e-shoppers who buy online at least once in three months within each of the education criterion-based groups in Latvia and the EU average values**

In Latvia, compared to the EU average, a more significant increase in the proportion of e-shoppers making online purchases at least once every three months has been observed within each education criterion-based group. This study does not examine the potential impact of the COVID-19 pandemic on this aspect. However, it's worth noting that the pandemic affected all EU countries, implying that online shoppers in all nations faced similar conditions in this respect. Upon integrating the age as a supplementary factor alongside educational criteria in Latvia, the result is illustrated in Figure 3.

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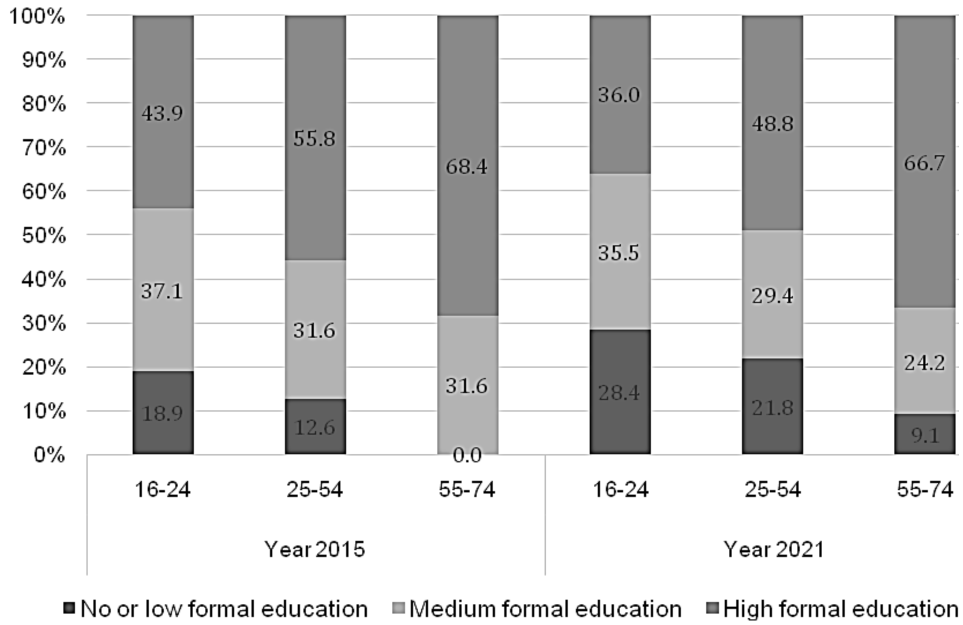

Source: created by the authors based on the data from the European Commission (European Commission. Digital Economy and Society Index 2021)

Fig. 3. **Structure of e-shoppers in Latvia by age and education criteria in 2015 and 2021, %**

The data indicate that in 2015, in Latvia, online shopping at least once every three months was predominantly typical among web users with higher education. In 2021, the proportion of active shoppers with higher education constituted a smaller share, due to a more intensive increase in the number of active e-shoppers with medium and lower levels of education.

Another important component of the portrait of online customers in Latvia, which is emphasized by Litavniece and Znotiņa (2017), as already mentioned, is the **level of income**. Therefore, this study involved conducting an analysis of the structure of individuals living in a household who made at least one online purchase during a three-month period, as shown in the dynamic presented in Figure 4.

The values obtained demonstrate that the largest share of active e-shoppers in Latvia and the EU average are people with the highest income, but it is worth noting that there is no total dominance in the dynamics of this group of buyers over those with lower incomes. The structure of the active e-shoppers in Latvia has shifted towards an increase in the share of buyers from the lower half of income distribution in the overall volume of e-purchases, while conversely, an opposite trend is observed on average across the European Union, indicating a reduction in the proportion of e-shoppers with incomes below the median and an increase in the shares of such e-shoppers in the income groups of the third and fourth quartiles.

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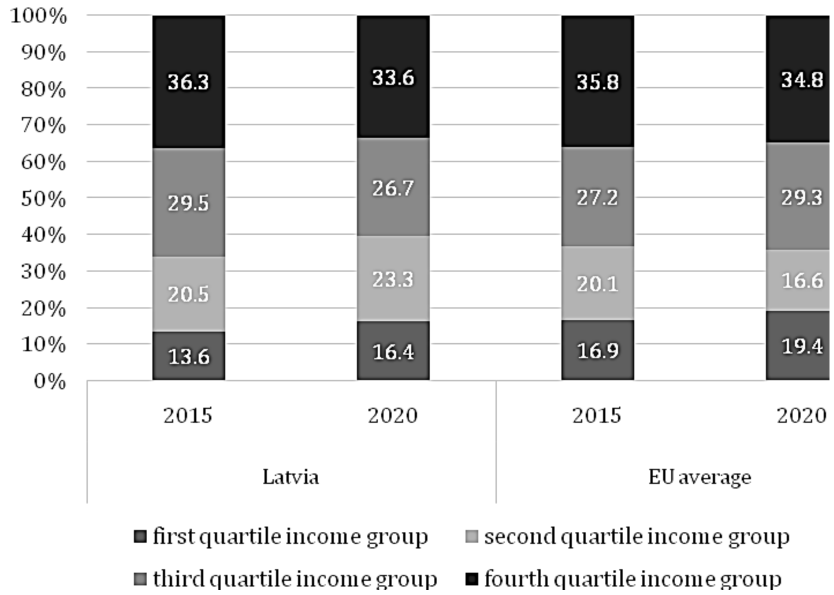


Source: created by the authors based on the data from the European Commission (European Commission. Digital Economy and Society Index 2021)

Fig. 4. **Structure of e-shoppers living in a household making at least one purchase within three months, 2015-2020, %**

It is essential to gain insight into **the devices employed for Internet browsing by diverse age groups** in Latvia and to contrast these findings with the average statistics prevailing across the European Union. For instance, statistical data of the dynamics in the percentage of users utilizing specific types of devices to access the internet. The data are presented in Table 1.

Table 1

Devices used by individuals to access the internet depending on age, %

Country	**Latvia**				**EU average**			
Category, %	**Desktop computers**		**Mobile devices**		**Desktop computers**		**Mobile devices**	
	2016	**2021**	**2016**	**2021**	**2016**	**2021**	**2016**	**2021**
16–24-year-old	48	39	96	98	53	37	94	97
25–54-year-old	49	38	79	95	50	36	83	94
55–74-year-old	32	34	34	69	33	29	47	71
All individuals	43	36	67	86	45	34	73	87

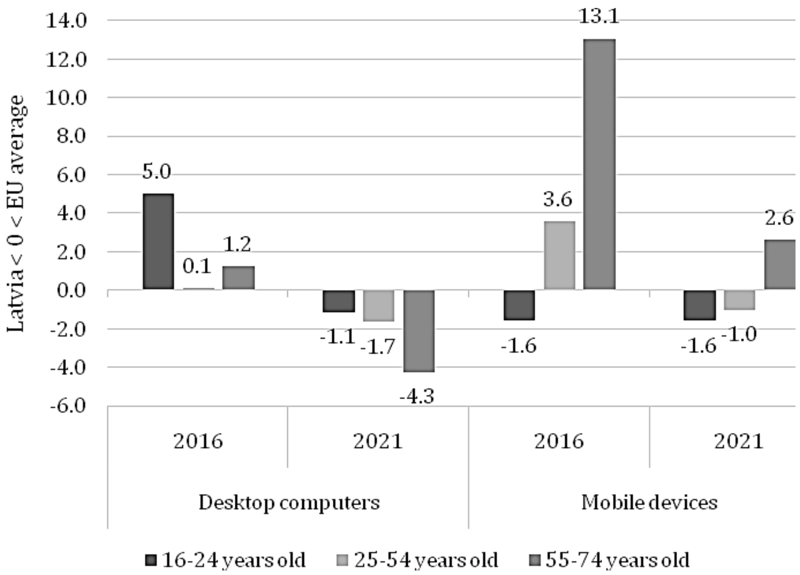
Source: the authors' calculations based on the data from Eurostat (Eurostat. Individuals – internet use, 2021)

The data shows the decline in desktop computer usage in favour of mobile devices all age groups. In Latvia, the 16-24 age group shows a drop in desktop usage from 48% to 39%, while mobile device usage increases from 96% to 98%. The EU average for the same age group shows a similar trend, with desktop usage decreasing from 53% to 37%, and mobile usage increasing from 94% to 97%.

For the 25-54 years old individuals in Latvia there is a decline in desktop usage from 49% to 38%, and an increase in mobile device usage from 79% to 95%. The average across the European Union reflects a similar pattern with desktop usage decreasing from 50% to 36%, and mobile usage increasing from 83% to 94%. The 55-74 age group in Latvia shows a specific trend of increased mobile device usage from 34% to 69%, with a slight increase in desktop usage from 32% to 34%. The average across the European Union for this age group also shows an increase in mobile device usage from 47% to 71% and a decrease in desktop usage from 33% to 29%. Unlike desktop devices, the use of mobile devices to access the internet is gaining popularity among individuals. While it is expected that a high percentage of young individuals are active internet users via mobile devices, it has also become a trend among older age groups.

This study presents a comparative analysis, as illustrated in Figure 5, focusing on the percentage of internet device usage among Latvian users relative to the EU average, categorized by age groups. During the specified period, there was a notable reduction in the proportion of internet users utilizing desktop devices in both Latvia and the European Union average. Notably, in Latvia, the decline in desktop device users was more gradual, and there was even an increase among users aged 55 to 74 years. For instance, in 2016, the average number of desktop internet users in Latvia was lower than average across the European Union; however, by 2021, the number of such users in Latvia had surpassed the EU average.

Among mobile device users in Latvia, there was a lag behind the European Union's average in 2016, especially in the age group of 55 to 74 years. Over the subsequent five-year period leading up to 2021, this situation evolved towards an alignment of internet usage rates via mobile devices. In 2021, 86% of mobile device owners in Latvia used their devices for internet access, compared to an average of 87% across the European Union.



Source: created by the authors based on the data from Eurostat (Eurostat. Individuals – internet use 2021)

Fig. 5. **Comparison of the size of Latvia's users and the EU average in terms of internet device usage by age groups, 2016-2021, %**

Overall, the data indicates a strong shift towards mobile-first internet access, driven by the convenience and evolving capabilities of mobile devices. This shift is uniformly seen across all age groups, suggesting a widespread digital integration.

These findings have significant implications for a variety of sectors, particularly those focused on digital marketing, e-commerce, and online content delivery. Adapting to a mobile-first approach is essential to meet the changing preferences of users. Moreover, the data highlights the importance of inclusive digital access for all age groups, emphasizing the need to consider older groups of internet users in the digital landscape.

Conclusions, proposals, recommendations

1) The authors conclude that the segment of Internet users in Latvia is increasingly and actively using shopping opportunities on the Internet. Both the number of e-shoppers is increasing and the frequency of their online purchases is also increasing. Several main features of the Latvia's e-shopper profile:

- there is a significant level of conservatism among e-shoppers, especially among the elderly with no or low education, but the number of e-shoppers with the lowest incomes is relatively rapidly increasing;
- users with higher education are predominant across all age categories of e-shoppers;
- there is a clear dependence of the frequency of online purchases on age, and the highest proportion of e-shoppers who shop online six times a month is observed in the age group from 24 to 44 years;
- young people up to 24 years old: about 70% of these users shop online at least once every three months, with a slight predominance of highly educated users;
- people aged 25 to 44: e-shoppers who frequently shop online and have a higher education have a significant advantage.

2) In Latvia, compared to the EU averages, the study reveals the following characteristics:

- in each group based on educational criteria, a significant increase in the proportion of e-shoppers who shop on the Internet at least once every three months has been observed. This study did not investigate the potential impact of the COVID-19 pandemic on this aspect.
- There is a noticeable decrease in the use of desktop devices for Internet access. In Latvia, this trend is characterized by a more gradual decline, ahead of the EU average.
- There are significant changes in the structure of e-buyers, with an increase in the proportion of buyers from the lower income side in total e-purchases. In contrast, in the EU as a whole, the number of e-shoppers with lower incomes has decreased and the number of buyers from the highest income quartiles has increased. Although young people mostly represent active Internet users on mobile devices, this behaviour is now becoming more common among older age groups as well. Overall, the findings show a significant trend toward prioritizing mobile devices for Internet access.

3) Businesses should tailor their marketing strategies to cater to the increasing diversity of e-shoppers. Recognizing that younger age groups and individuals with higher education are more inclined toward frequent online purchases, marketing campaigns should be customized to appeal to these demographics. At the same time, the rising number of older e-consumers and those with lower educational levels becoming active e-shoppers indicates a need for inclusive marketing that addresses these segments' unique preferences and barriers to entry.

4) Businesses need to prioritize optimization of their online platforms due to the rising number of older age groups. Ensuring that websites and apps are user-friendly for them, fast, and accessible on mobile devices can significantly enhance the shopping experience, catering to the consumers' evolving preferences. Essential features for older adults include simplified navigation, larger text, clear instructions, and enhanced customer service support, such as chatbots offering real-time assistance. Additionally, providing tutorials or guides on navigating the online shopping process can further enhance the user experience for this demographic. This approach not only makes the platform more accessible to older adults but also reduces their hesitation to engage in online transactions.

5) The rapid penetration of mobile devices into daily life has unequivocally resulted in the frequency and volume of internet use on these devices surpassing those on desktop systems. Mobile devices are

utilized by individuals across a wide array of professions, including construction workers at job sites, warehouse personnel, and even preschool children. However, the indicators of internet usage frequency and even the frequency of purchases made through mobile devices do not always uniformly fit all business sectors. Each business must consider the specifics of its sector and take into account not only the e-shopper's portrait but also their human portrait. Businesses must now consider not only the activities of their e-shopper but also the importance of shoppers' life situations, particularly in terms of the timing for delivering marketing messages. This approach emphasizes the importance of considering the context in which the client will receive and potentially react to the communication, ensuring that the timing and delivery are precisely aligned with the e-shopper's daily activities and actual needs.

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Bibliography

1. Babics, I., & Zvirgzdina, R. (2022). Study of e-commerce trends based on customer characteristics in Latvia. *In Proceedings of the 4th International Conference on Advanced Research Methods and Analytics (pp. 109-118). Valencia, Spain*.
2. Bleier, A., Harmeling, C., & Palmatier, R. (2018). Creating effective online customer experiences. *Journal of Marketing*, 83(2), 98-119.
3. BEUC (2010). Data collection, targeting and profiling of consumers online: BEUC discussion paper. *BEUC, the European Consumer Organization*. Retrieved from: https://www.google.com/url?esrc= s&q=&rct=j&sa=U&url=https://www.beuc.eu/sites/default/files/publications/2010-00101-01-e.pdf .
4. DpdGroup. (2021). *European e-shoppers in 2021*. Retrieved from: https://www.dpd.com/wp-content/ uploads/sites/77/2022/02/European-E-Shoppers-in-2021.pdf.
5. Engel, J.F., Blackwell, R.D., & Kollat, D.T. (1978). *Consumer Behavior*. Dryden Press.
6. EuroCommerce. (2021*). European e-commerce report – E-commerce Europe 2021*. Retrieved from: https://ecommerce-europe.eu/wp-content/uploads/2021/09/2021-European-E-commerce-Report-LIGHT-VERSION.pdf.
7. European Commission. (2022). *Digital Economy and Society Index 2021 - Country Reporting. Latvia*. Retrieved from: https://ec.europa.eu/newsroom/dae/redirection/document/80482.
8. European Commission. (2022). *Digital Markets Act*. Retrieved from: https://digital-strategy.ec.europa.eu/en/news/commission-launches-public-consultation-implementation-digital-markets-act.
9. Eurostat. (2021). *Individuals – internet use*. Retrieved from: https://ec.europa.eu/eurostat/ databrowser/explore/all/general?lang=en&subtheme=degurb.degurb_isoc.du_isoc_i&display=list &sort =category.
10. Eurostat. (2022). *Internet purchases by individuals*. Retrieved from https://ec.europa.eu/eurostat/ databrowser/explore/all/general?lang=en&subtheme=degurb.degurb_isoc.du_isoc_i&display=list&sort=category.
11. Franzak, F., Pitta, D., & Fritsche, S. (2001). Online relationships and the consumer's right to privacy*. Journal of Consumer Marketing, 18(7)*, 631-642.
12. Hamad, H., & Schmitz, M. (2020). The impact of demographic variables and consumer shopping orientations on the purchasing preference for different product categories in the context of online grocery shopping. *Journal of Marketing and Consumer Research*. Retrieved from https://www.researchgate.net/publication/ 339031654.
13. Ho, C., & Wu, W. (1999). Antecedents of customer satisfaction on the Internet: An empirical study of online shopping. In *Proceedings of the 32nd Hawaii International Conference on Systems Sciences*, pp.1-9.
14. Khoali, M., Laaziz, Y., Tali, A., & Salaudeen, H. (2022). Survey of one-class e-commerce recommendation system techniques. *Electronics*, 11(6), 878.
15. Komalpreet, K. (2021). Impact of e-marketing on consumer purchase behaviour: An empirical study. *International Journal of Research and Analytical Reviews*, 8(1).
16. Kotler, P., Bowen, J.T., & Makens, J.C. (2010). Consumer market and consumer purchasing behavior. In: *Marketing for Hospitality and Tourism* (pp. 144-168). Prentice Hall.
17. Lambin, J.J. (1993). *Strategic marketing: A European approach*. McGraw-Hill.
18. Litavniece, L., & Znotiņa, D. (2017). Customer behavior doing online shopping: Latvia's case. *Proceedings of the 11th International Scientific and Practical Conference (Vol. 2, pp. 84-89)*.
19. Mihart, C. (2012). Impact of integrated marketing communication on consumer behaviour: Effects on consumer decision-making process. *International Journal of Marketing Studies, 4*(2), 121.
20. Nguyen, M.H., Armoogum, J., & Thi, B.N. (2021). Factors affecting the growth of e-shopping over the COVID-19 Era in Hanoi, Vietnam. Sustainability, 13(16), 21. Retrieved from: https://hal.science/hal-03335755.

21. Mittal, A. (2013). E-commerce: It's impact on consumer behavior. *Global Journal of Management and Business Studies, 3*(2), 131-138.
22. Mohamed, S., Sethom, K., Namoun, A., Tufail, A., Kim, K.H., & Almoamari, H. (2022). Customer profiling using Internet of Things based recommendations. Sustainability, 14(18), 11200.
23. Nykamp, M. (2001). *The customer differential: The complete guide to implementing customer relationship management*. New York: AMACOM, 212.
24. Research and Markets (2023). *E-commerce market: Global industry trends, share, size, growth, opportunity and forecast 2023-2028.* Retrieved from: https://www.researchandmarkets.com/reports/5732341/e-commerce-market-global-industry-trends.
25. Research and Markets (2024). *Global e-commerce market to reach $ 47.7 trillion by 2030, report*. Retrieved from: https://marketingreport.one/retail/global-e-commerce-market-to-reach-47.7-trillion-by-2030-report. html.
26. Roger, D.B., Paul, W.M., & Engel, J.F. (2006). *Consumer Behavior*. Thomson South-Western.
27. Sadraddin, A. (2019). *Factors Affecting Customers' Purchasing Behavior in Online Shopping*. Retrieved from:https://ssrn.com/abstract=3377148.
28. Stafford, T.F., & Gonier, D. (2004). What Americans like about being online. *Communications of the ACM, 47(11)*, 107-112.
29. Upadhyay, T., Vidhani, A., & Dadhich, V. (2016). Customer profiling and segmentation using data mining techniques. *International Journal of Computer Science & Communication JCSC,7(2)*, 65–67.
30. Volvenkins, S., Sloka, B., & Cipane, K. (2019). Main problems customers face when shopping online: findings by a recent survey. *Humanities and Social Sciences: Latvia, 27(2)*, 101–114.
31. Wiedmann, K. (2001). Customer profiling in e-commerce: methodological aspects and challenges. *Journal of Database Marketing, 9(2)*, 170–184.