

Impact of Retail Business Digital Transformation on Online Purchases in the European Union

Simeonka Petrova^a, Ivan Marinov^b, Zoya Ivanova^c

^a Assoc. Prof., Ph.D., Tsenov Academy of Economics, Svishtov, Bulgaria

E-mail: s.petrova@uni-svishtov.bg

^b Head Assist. Prof., Ph.D., Tsenov Academy of Economics, Svishtov, Bulgaria

E-mail: i.marinov@uni-svishtov.bg

^c Head Assist. Prof., Ph.D., Tsenov Academy of Economics, Svishtov, Bulgaria

E-mail: z.ivanova@uni-svishtov.bg

DOI: <https://doi.org/10.19275/RSEPCONFERENCES224>

Abstract

The accelerating digital transformation is challenging, restructuring and fundamentally changing the retail business models. This transformation is becoming a concept that transforms organizational dynamics and models the next evolutionary level in the way retailers do business. More and more retail companies are reconsidering the potential of digital transformation for generating higher revenue volumes from their physical assets and better market positioning compared to competitors. The main aim of the present study is to interpret some significant manifestations of the impact of retail business digital transformation on online purchases, taking into account the shift in consumer behaviour, and on this basis to derive certain dependencies. In order to explain these dependencies the paper examines various economic theories, opinions and empirical works in the issues being studied. It also examines and characterizes some changes in the absolute volume of the studied phenomenon, specifying the effect of influencing factors. The survey respondents are individuals from the 27 Member States of the European Union. The data on their income and consumption expenditure refer to the period 2016-2021 and are analyzed using the simple linear regression and correlation method. The generalization of the more important findings of the study is a prerequisite for highlighting certain manifestations of the impact of retail business digital transformation on consumers' online shopping behaviour. In this context, relevant conclusions are formulated, based on the analysis and evaluation of the obtained results.

Keywords: digital transformation, retailers, retail business, online purchases of individuals, income and consumption expenditure of individuals.

Jel codes: F14, F18, H31

1. Introduction

Modern retail companies are increasingly changing their business models through digital transformation. This type of transformation brings about a fundamental change in the basic way retailers do business. Digital transformation changes the organizational structure and covers the management and the adopted strategy of the retail company. This transformation is a significant shift in creating value and achieving competitive advantage.

The main aim of the present study is to interpret some significant manifestations of the impact of retail business digital transformation on online purchases, taking into account the shift in consumer behaviour, and on this basis to derive certain dependencies. To achieve this aim, the following research tasks are set: studying and systematizing some conceptual ideas and opinions about the impact of retail business digital transformation on the shift of consumer behaviour and online purchases of goods and services; interpreting empirical aspects of the impact of retail business digital transformation on the online purchases of individuals; formulating some more important conclusions and generalizations regarding the manifested dependencies in the change of the studied phenomenon.

In order to achieve the main aim, the present study adopts the understanding that retail business digital transformation involves creating omnichannelling through the phenomenon of offline and online ordering and buying goods and services. The obtained research results help to make conclusions and generalizations that reveal dependencies and regularities.

2. Literature Review

The COVID-19 pandemic has resonated in an intense transition of some retailers from the classic trading model to business profiles with online and omnichannel requisites. Consumers are increasingly focusing on online shopping, which further accelerates the trend towards retail business transformation through implementing digital technologies, and it favours more and more the omnichannel presence over the physical trading system.

It would hardly be wrong to call the buyer a ‘controlling entity’ in his/her interaction with the sellers of goods. This is because the revenues of commercial enterprises depend on his/her budget and choice of goods. On the other hand, competitiveness is acquired only by innovative retailers who follow the potential and development of information and communication technologies and can maintain customer interest in the company’s brand and products for a long period of time.

Most retailers focus on using internet platforms in order to influence buyer behaviour (Panda & Swar, 2014). In this way, they provide their customers with useful value and realize a positive interaction. In practice, this leads to: emphasizing retail identity; tracking individual customer activity both in terms of products purchased and goods visited and already viewed; achieving competitiveness and efficiency of the overall trading process. Information flows about the characteristics and advantages of goods that online platforms and social networks provide are also important for the selection of buyers. It is important that the informational content intended for customers is also tailored to their personal desires and transferred to them directly through the possibilities of digital marketing (Ziółkowska, 2021).

Owing to the ever-changing customer requirements and the need to quickly adapt to the uncertain and competitive market environment, the success of digital transformation is considered to depend on the corporate strategy (Bollweg, Lackes, Siepermann, & Weber, 2020), which has a fundamental role for the efficiency and sustainability of the elements building the retail business model (Pavlov, 2011). Creating a successful digital transformation strategy requires sector-specific financial resources, leadership and involvement of all company employees (Schwertner, 2017).

The specialized literature abounds in discussions on the evolution, nature and impact of digital transformation on the retail business, as well as its impact on the interaction of end users with Internet trading platforms. Digital transformation is interpreted in different contexts. There are various institutional, corporate and personal views on the nature of digital business transformation, the value it creates for individual users and its impact on the buyer behaviour. In its “European Declaration on Digital Rights and Principles for the Digital Decade”, the European Commission traces the global value of digital transformation as a means of achieving economic growth and sustainability and improving people’s living standards (Commission, 2022). The technology giant Intel defends the position that business transformation through digital technologies is the mandatory condition for achieving efficiency and competitiveness according to the current and future corporate needs.

In the new realities, retailers are faced with multiple challenges mainly related to supply chain, workforce, cash flow, sales, consumer demand and marketing (Donthu & Gustafsson, 2020). According to *M. Fitzgerald, N. Kruschwitz, D. Bonnet and M. Welch* digital transformation is largely associated with the use of new digital technologies, such as: social media, mobile, analytical or embedded devices to implement business initiatives for streamlining operations or creating new business models (Fitzgerald, Kruschwitz, Bonnet, & Welch, 2013). The view of *M. McDonald and A. Rowsell-Jones* is, that digital transformation goes beyond simply digitizing resources and leads to creating value and revenues from digital assets (McDonald & Rowsell-Jones, 2012). In their studies *H. Gimpel and M. Röglinger* refer to the fact that digital transformation leads to the realignment of business models to more effectively engage digital customers at every touchpoint in the customer experience lifecycle (Gimpel & Röglinger, 2015). *A. Martin* defines digital transformation as the creation of fundamentally new opportunities in business, public administration and in the lives of people and society (Martin, 2008). The team of researchers *J. Reis, M. Amorim, N. Melão and P. Matos* define digital transformation as the use of new digital technologies, which enables major business improvements and affects all aspects of customers’ lives (Reis, Amorim, Melão, & Matos, 2018).

Achieving a sustainable business model requires building an investment policy and engaging human resources suitable for achieving internal balance and company productivity (Intel, 2022). There are authors who point that the integration of digital technologies in business is preceded by an increase in public spending, and this move strongly affects the GDP dynamics in a number of economies (Mičić, 2017). According to other researchers, retail digital transformation can be characterized as a process of transforming business through methods and management forms based on digital technologies that improve the collaboration between the micro- and macro-

environment of commercial enterprises (Ianenko, Ianenko, Huhlaev, & Martynenko, 2019). There are also authors who favour the opinion that digital business transformation is complex, not with a limited mission, and integrates digital technologies and processes in a digital economy (Liu, Chen, & Chou, 2011).

Adhering to the theoretical-applied analyses so far, we can conclude *that digital transformation is not a limited tool for improving retail business processes or implementing information technology as an end in itself, but a means for streamlining the entire business of companies and adding customer loyalty to their activity.*

The need for retail business digital transformation is also a matter of discussion. Supporters of its implementation in commercial enterprises believe that it will lead, on the one hand, to revolutionizing the company philosophy and imposing new standards and approaches to doing business. On the other hand, through digital transformation, retailers will be able to respond to changes in the market behaviour of their customers and competitors. In this sense, digital transformation will allow retail businesses to develop a wide range of capabilities that will vary in importance depending on the business context and specific retail strategies and policies (Reis, Amorim, Melão, & Matos, 2018). There are three conditions that determine the existence of digital transformation: the emergence and development of the World Wide Web, the strengthening of global competition and consumer preferences for online shopping (Verhoef, et al., 2021). The above stated makes it clear that e-commerce (USITC, 2014), which according to the USITC definition is “Transactions carried out over the Internet or through Internet technologies”, has a direct relationship with the retail digital development trends, and the volume and structure of consumption of goods can be affected precisely by this process. Recent years (especially during the COVID-19 pandemic) have seen a digital transformation of the retail business due to a change in consumer buying patterns (Boyaci-Gunduz, Ibrahim, Wei, & Galanakis, 2021) (Jung & Jeon, 2021) (Sayyida, Hartini, Gunawan, & Husin, 2021). Most consumers have started ordering essential goods online. They have turned to retailers offering online shopping. As a result, a growing number of retailers have refocused on implementing and improving their online shopping platforms.

Online shopping platforms are rapidly becoming a major tool, providing a continuous cycle of data processing and exchange, through which the participants in the entire commercial transaction receive a unified and integrated information provision (Internet, 2022). According to *M. B. Ribadu and W. N. Rahman* an e-commerce transaction begins when a seller advertises products on a website and customers indicate acceptance, evaluate product features, prices, and delivery options, purchase products of interest, and then leave (Ribadu, M. B., & Rahman, W. N., 2019). The researchers *I. Bruschi, B. Schwarz and R. Schmitt* have a different opinion, emphasizing that an e-commerce transaction not only involves presenting product information, but also cultivates positive relationships with customers by offering them the best shopping experience (i.e. ease of navigation, quality of information, web design, security, etc.), which is fundamental to the long-term success of online retailing (Brusch, Schwarz, & Schmitt, 2019).

3. Data & Methodology

The present study focuses on the interpretation of some more significant manifestations of the impact of retail business digital transformation on the online purchases of individuals. Digital technologies are transforming the retail business environment by giving customers choices in ordering and purchasing goods or services in new ways based on their preferences, gender, age, education level, employment status, income, spatial, temporal and other constraints. The review of the specialized literature shows that in the studies on the impact of retail business digital transformation, the emphasis is on the possibilities of building digital channels and making online purchases is of particular importance for satisfying consumer attitudes and expectations. This provokes our research interest and predetermines the purpose of the present paper.

In order to achieve the main aim, to explain and characterize the changes occurring in the absolute volume of the studied phenomenon, the present study uses methods for analyzing and evaluating the development, specifying the effect of influencing factors. The survey respondents are individuals from the 27 Member States of the European Union. The analysis of their income and consumption expenditure on goods, including those purchased online, refers to the period 2016-2021. The selected period allows to track the emerging trends and regularities in the development of the studied phenomenon. Eurostat is used as the main source of information on the budgets of the individuals in the European Union. It is a sample survey using a two-stage nested selection. The total population from which the sample is formed represents all individuals within the European Union. The unit of the study is any randomly selected individual, regardless of their property and personal situation. The survey of the budgets of individuals from the 27 EU Member States provides reliable and representative data on income, expenditure and consumption, including consumer spending on goods purchased online.

Methodologically, the study of the budgets of individuals in the European Union is based on the application of the simple linear regression and correlation method. The statistical software for computer processing – IBM SPSS Statistics is used to analyze and evaluate the dependence of the annual expenditure of individuals on goods purchased offline and online on the amount of disposable income. The economic factors – disposable income of individuals and consumption expenditure on goods purchased offline and online – are specifically studied. In the proposed model, the second quantity is chosen as a dependent variable.

The comprehensiveness of studying the influence of digital transformation on online purchases of individuals requires that basic limitations are introduced in this process: searching for support in the development of concepts and theories of digital transformation through retail business implementation; accounting for certain factors determining the consumer spending on goods purchased offline and online; taking a research approach to online shopping on the example of individuals in the 27 Member States of the European Union.

On this basis, certain dependencies are specified and derived. Relevant conclusions and generalizations having theoretical and practical significance are formulated.

4. Results and discussion

The data researched show that the behaviour of modern European consumers is changing in terms of increasing the use of Internet and online ordering or purchasing goods or services. The Internet is becoming an extremely useful and significant tool. The published Eurostat data show that in 2021, 74% of Internet users shopped online, i.e. more than 7 out of 10 internet users made online purchases (Eurostat, 2022). Within 2021, 42% of consumers made online purchases for an amount between €100 to less than €500 in the last three months prior to the survey (Eurostat, 2022).

Research on online orders or purchase of goods or services for personal use shows that over the same period, the relative share of online shoppers among the Internet users increased. The highest relative weight is reported in the youngest age group 16-24 years (80%), followed by the age group 25-54 years (79%) and the age group 55-74 years (59%) (Eurostat, 2022). These data are illustrated in Fig. 1. The regularities of the development of the studied phenomenon during the period 2016-2021 are characterized by calculating the average growth rate and specifically the geometric mean growth rate. Based on the data presented in Fig. 1, the geometric mean growth rate of the studied users in the three age groups ranges from 1.03 to 1.05, i.e. online shopping is growing at an average annual rate of over 3.00% to 5.00% across age groups. The youngest age group has the highest relative average growth rate of online purchases, followed by the 25-54 and 55-74 age groups.

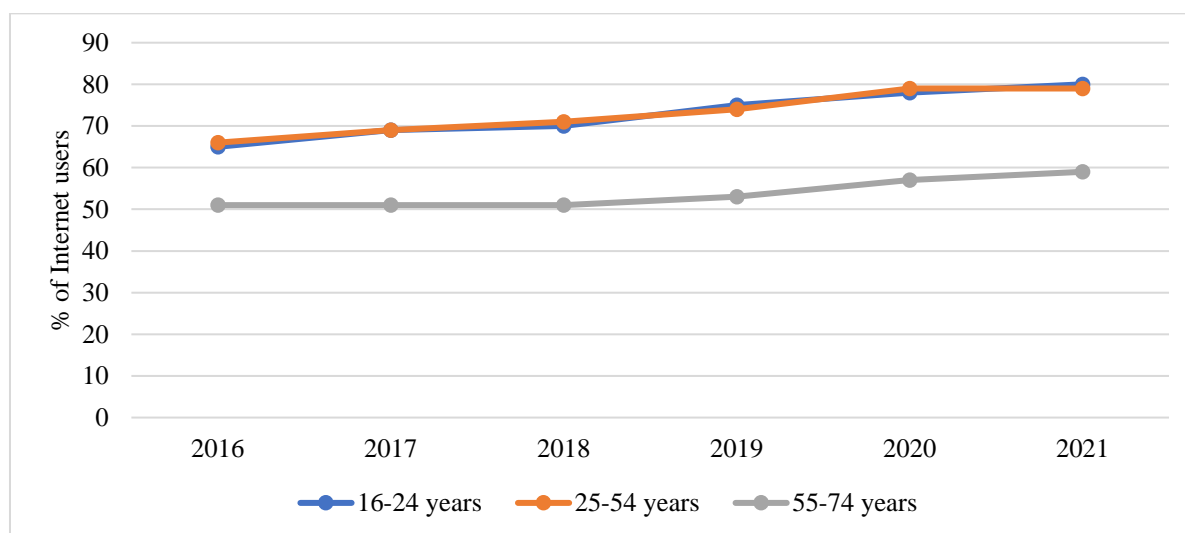


Figure 1. Internet users who bought or ordered goods or services for private use in the previous 12 months by age group, EU-27, 2016-2021 (% of individuals who used internet in the previous 12 months).

Source: Eurostat. https://ec.europa.eu/eurostat/statistics-explained/index.php?title=E-commerce_statistics_for_individuals#General_overview

The study of the online purchases of individuals within the 27 EU Member States is reason to synthesize that significant variations occur. Thus, for example, the relative share of Internet users in the Netherlands who made online purchases in 2021 amounts to 94%, while in Bulgaria this percentage is 42%, and in Romania – 44% (Eurostat, 2022). Evaluating the online purchases of all individuals aged 16-74 in the European Union shows that the relative share of shoppers in this age group is 66%, with Denmark having the highest share at 91% (Eurostat, 2022). The study of the frequency of online shopping shows that in a certain quarter of 2021, 33% of Internet users, i.e. a third shopped once or twice, another third – three to five times, with only 16% saying they shopped six to ten times (Eurostat, 2022).

At the same time, such factors as gender, age, level of education and employment status should be considered as the main ones influencing the change in online purchases: See Fig. 2. This figure clearly shows that the relative weight of online shoppers is 1.00% higher for men than for women – 75% and 74%, respectively. Individuals aged 25 to 34 are more active online shoppers (86% of Internet users) compared to the other age groups. The relative share of Internet users with a higher level of education shopping online is 88%. Therefore, almost nine out of ten consumers with a higher level of education shop online. The comparative analysis shows that the percentage thus reported is almost 32% higher than that of Internet users with a lower level of education. Employees and self-employed, who make up 81% of internet users, and also students – 80%, shop online much more than the unemployed – 65%, or the retired and individuals who are not in the labour force – 57%.

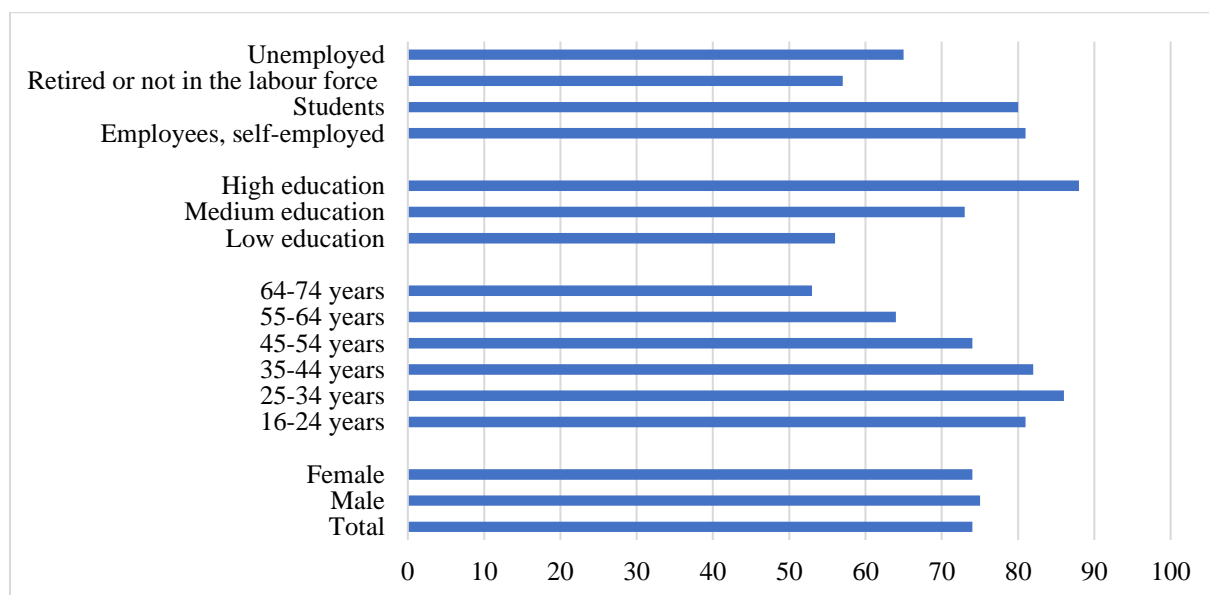


Figure 2. Internet users who bought or ordered goods or services for private use in the previous 12 months, EU-27, 2021 (% of individuals who used internet in the previous 12 months).

Source: Eurostat. https://ec.europa.eu/eurostat/statistics-explained/index.php?title=E-commerce_statistics_for_individuals#General_overview

By its nature, the study of online purchases by individuals from the 27 EU Member States allows certain generalizations to be made regarding the preferred product groups in this type of shopping. The next Fig. 3 illustrates data for 15 product groups.

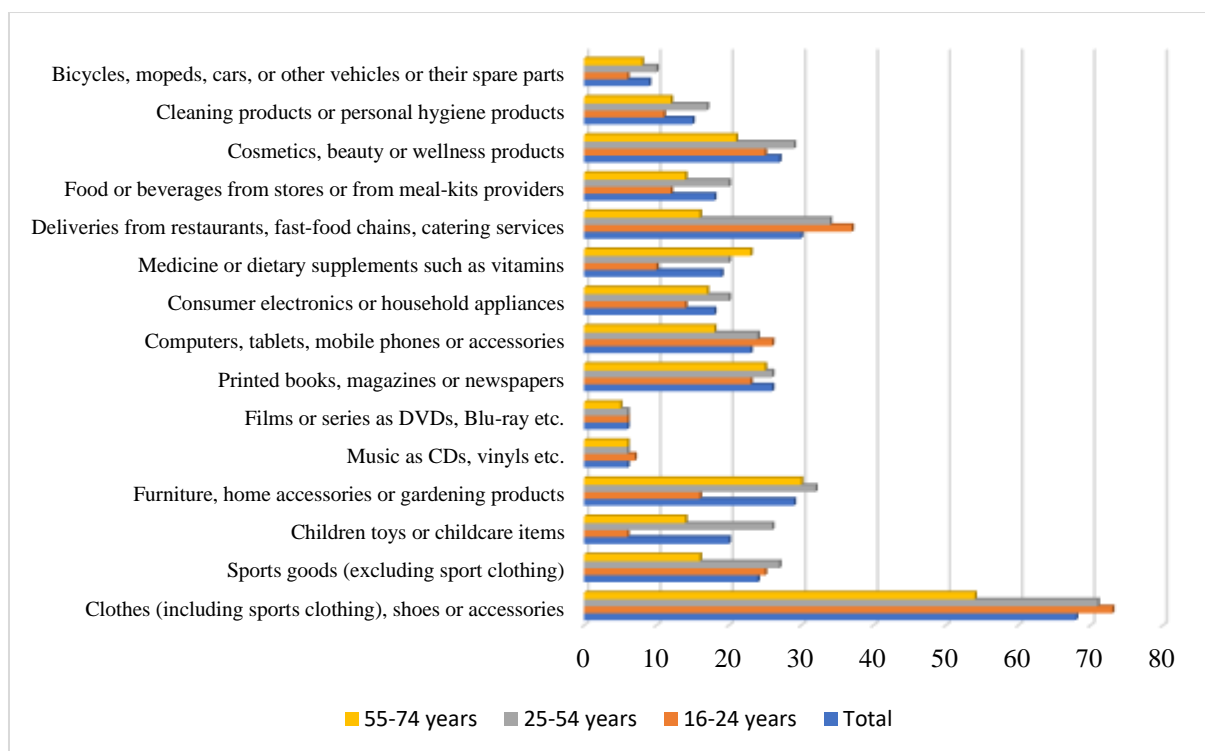


Figure 3. Online purchases of goods, EU-27, 2021 (% of individuals who purchased online in the last 3 months).

Source: Eurostat. https://ec.europa.eu/eurostat/statistics-explained/index.php?title=E-commerce_statistics_for_individuals#General_overview

As shown by the data in Fig. 3, the highest relative share of online purchases is occupied by clothing, including sportswear, shoes or accessories – 68% of the individuals who shopped online. The next product groups, which have a high relative share of online purchases, are as follows: deliveries from restaurants, fast food chains, catering services – 30%; furniture, home accessories or gardening products – 29%; cosmetics, beauty or health products – 27%; printed books, magazines or newspapers – 26%, and sports goods, excluding sportswear – 24%.

At the same time, the 16-24 age group has the highest relative share of online shoppers who buy clothes, including sportswear, shoes or accessories – 73%, deliveries from restaurants, fast food chains, catering services – 37%, computers, tablets, mobile phones or accessories – 26%, cosmetics, beauty or health products – 25%, and sports goods, excluding sportswear – 25%. The second age group studied, covering European consumers aged 25 to 54, also shop online for clothing, including sportswear, shoes or accessories – 71%, deliveries from restaurants, fast food chains, catering services – 34%, furniture, home accessories or garden products – 32%, followed by cosmetics, beauty or health products – 21%.

The data presented so far prove that individuals from the 27 EU Member States appreciate the advantages, convenience and practicality of shopping online, as well as having access to a wide range of goods or services. Consumers specifically emphasize the convenience of being able to shop anytime, anywhere. According to Eurostat data, overall online purchases by Internet users have increased by nearly 20% over the last ten years, i.e. in 2021 compared to 2011 (Eurostat, 2022). The reported result shows a significant change in consumer behaviour.

The COVID-19 pandemic can be cited as one of the factors with a significant impact on the evaluated change in consumer behaviour. In this regard, according to a report by the consulting company Global Consumer Insights Pulse Survey, the shift of consumers to digital channels will remain even after the COVID-19 pandemic (Forum, 2021). Another important conclusion in the report related to the shift to digital consumption is that consumers do not think they will go back to their old ways of shopping once the pandemic is over. The next Fig. 4 illustrates the responses of more than 8,600 users from 22 countries, including from Europe, who took part in the survey of the above cited company (Forum, 2021). These users answer the question how often in the last 12 months, i.e. in 2021, they bought clothes, books and electronics using different shopping channels: physical stores; online via mobile

phone or smartphone; online via tablet; online via personal computer; online via smart home voice assistants, e.g. Amazon Echo, Google Home, Samsung SmartThings.

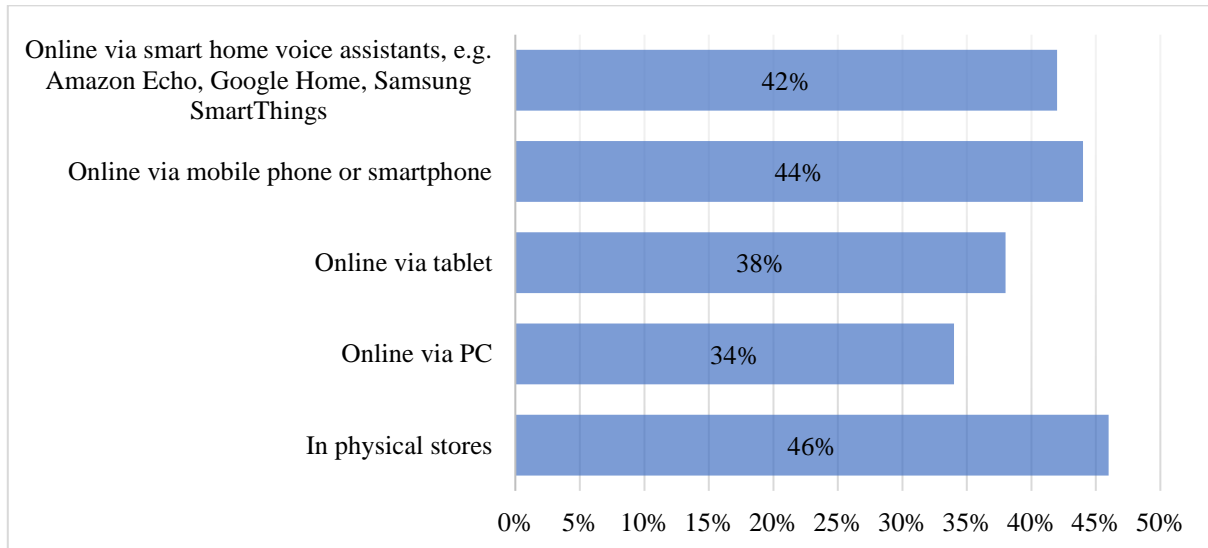


Figure 4. Profiling consumers according to their transition to digital shopping, 2021.

Source: World Economic Forum. <https://www.weforum.org/agenda/2021/07/global-consumer-behaviour-trends-online-shopping/>

The presented Fig. 4 visualizes the responses of the surveyed consumers and shows the shift to digital shopping channels through connected devices such as: smartphones, tablets and smart voice assistants such as Amazon Echo, Google Home and Samsung SmartThings. More than 50% of the global consumers who participated in the 2021 survey responded that they use digital devices more often than the previous year.

In response and reflection to the growing online shopping and the demands made by online consumers, retailers are moving towards seeking and implementing business models based on digital transformation. The process of retail business digital transformation is accompanied by a number of challenges, including difficulties. In this regard, as experts confirm, digital transformation is expected to have a profound impact on both retailers and consumer behaviour (Deloitte, 2019). The development of retail companies is becoming more and more closely related to refining the opportunities offered for increasing consumer involvement and improving the overall shopping model, both offline and online. Findings made by experts show that retail companies have a long way to go before reaching the desired level of effective implementation of omnichannel strategies and digital platforms. Observing the results of a global survey by the technology corporation IBM, made among 1,900 leaders in retailing and manufacturing companies, conducted in 23 countries of the world, allows to specify that in 2021 (Orckestra, 2021): about 85% of the surveyed retailers stated intentions to plan to use intelligent automation in order to achieve a better digital construction of the entire supply chain; nearly 79% of surveyed companies expect to use smart automation designed for smart users; more than 67% of respondents expect and forecast sales revenue growth of more than 10% as a result of future use of digital technologies in their business. These data are visualized in the next Fig. 5.

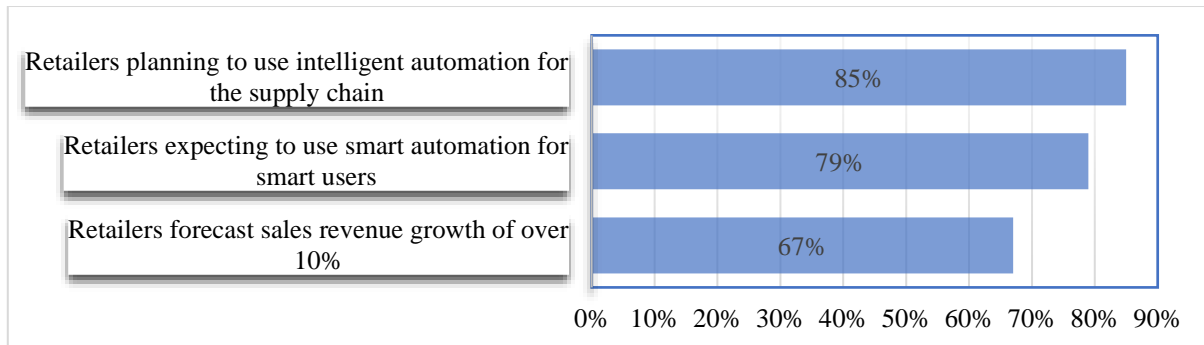


Figure 5. Opportunities for retail companies to plan and use intelligent automation, 2021.

Source: https://www.orchestra.com/en/resources/ebook-white-paper/10_trends_changing_omnichannel_retailing_in_2021

The data visualized in Fig. 5, lead to the conclusion that the differences and distinctions between individual retail companies according to the criteria of importance of using digital technologies and degree of their actual application in business are substantial. The lack of appropriate digital technology becomes one of the key issues for creating an omnichannel strategy that includes building both offline and online channels to reach end users.

Retail companies follow policies of using digital tools, including messaging apps, digital payments and visual builders, artificial intelligence, security, which aim to support e-commerce with various goods or services. As confirmed by the data in Fig. 5, a significant part of the retailers do not have a reliable strategy and sufficient financing of the digitalization transformation process. Retailers are digitizing the environment for ordering and purchasing goods or services, taking into account consumer demands and the emerging changes in consumer behaviour. The technological advances and the ability of retailers to invest in online shopping infrastructure help to increase the speed of delivery and create convenience for end users.

Achieving effective market solutions necessitates the need for retailers to know in detail the specific characteristics of end users, as well as the consumption patterns perceived and followed by them. In this aspect, the analysis of consumption patterns can be based on the budgets of European consumers. The research emphasis on consumption, including online consumption, rests on the conviction that describing, explaining and interpreting changes in an economy, in this case the European economy, is of paramount importance. In terms of this research, the theory of J. Keynes argues the opinion that consumption is a very important element of any macroeconomic model (Keynes, 1993).

The online purchases of individuals within the 27 Member States of the European Union can be analyzed by means of the amount of consumer spending on goods purchased both offline and online, and also by means of the amount of disposable income. Such a methodological approach allows for an assessment of the economically related phenomenon, which finds expression in: “consumer spending on goods purchased offline and online – disposable income” of individuals within the European Union.

The obtained results of the study on the dependence between the income of individuals in the EU-27 and their expenditure on goods purchased through offline and online channels are visualized in the following three tables and one figure. Table 1 presents the values of the correlation and determination coefficients.

Table 1. Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
0.534	0.286	0.107	237952.770
The independent variable is Disposable income.			

Source: Eurostat. https://ec.europa.eu/eurostat/databrowser/view/nama_10_co3_p3/default/table?lang=en;
https://ec.europa.eu/eurostat/databrowser/view/nasa_10_nf_tr/default/table?lang=en

Table 2 presents data allowing for an analysis and evaluation of variance to be made.

Table 2. Anova

	Sum of Squares	df	Mean Square	F	Sig.
Regression	90516042022.718	1	90516042022.718	1.599	0.275
Residual	226486082972.457	4	56621520743.114		
Total	317002124995.175	5			

The independent variable is Disposable income.

Source: Eurostat. https://ec.europa.eu/eurostat/databrowser/view/nama_10_co3_p3/default/table?lang=en;
https://ec.europa.eu/eurostat/databrowser/view/nasa_10_nf_tr/default/table?lang=en

The data visualized in Table 3 determine the analysis of the calculated coefficients.

Table 3. Coefficients

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
Disposable income	0.313	0.248	0.534	1.264	0.275
(Constant)	4436220.676	2025212.440		2.190	0.094

Source: Eurostat. https://ec.europa.eu/eurostat/databrowser/view/nama_10_co3_p3/default/table?lang=en;
https://ec.europa.eu/eurostat/databrowser/view/nasa_10_nf_tr/default/table?lang=en

Fig. 6 illustrates the relationship between the consumption expenditure on goods purchased offline and online by individuals from the 27 EU Member States, on the one hand, and their disposable income, on the other hand.

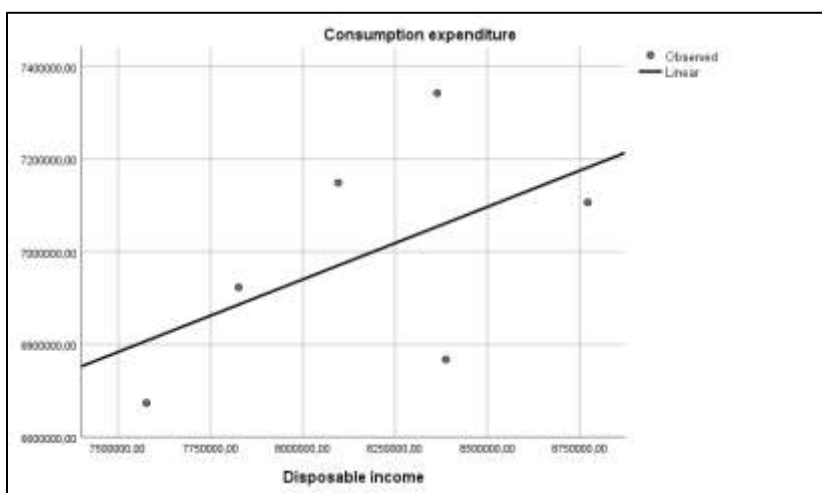


Figure 6. Relationship between consumption expenditure and disposable income of EU-27.

Source: Eurostat. https://ec.europa.eu/eurostat/databrowser/view/nama_10_co3_p3/default/table?lang=en;
https://ec.europa.eu/eurostat/databrowser/view/nasa_10_nf_tr/default/table?lang=en

In an analytical aspect, the main measures of dependence that have informative value are the coefficients of regression, correlation and determination. By its nature, the regression coefficient measures and represents the average change in the outcome variables for a unit increase in the factor variable. As shown by the data in Table 3, this coefficient assumes the value 0.313 and it can be assumed that with an increase in the disposable income of individuals by 1 euro, there is an average increase in the consumer spending on goods purchased offline and online by about 0.313. According to the data in Table 1, the correlation coefficient is as follows: $R = 0.534$. This coefficient is defined as a measure of the degree of dependence, which is also called the “strength of the relationship” between the two studied variables. The review of specialized literature allows to specify that at $0.3 < R \leq 0.7$, there is an average dependence, i.e. moderate degree of dependence or moderate correlation. The thus specified value of the measured correlation coefficient allows to identify an average degree of dependence between the disposable income of individuals from the 27 Member States of the European Union and their spending on goods purchased offline and online. The third calculated coefficient is that of determination. This coefficient measures the relative weight of the variation in the consumer spending on goods. This variation is explained and interpreted through the change in the disposable income of individuals. According to the data from Table 1, the analyzed coefficient of determination has a value as follows: $R^2 = 0.286$. The obtained result allows to estimate that nearly 29% of the differences between European consumers in terms of their consumption expenditure on goods – offline and online, are associated with the differences between them in terms of disposable income.

Figure 6 clearly shows that the values of the disposable income are plotted on the abscissa axis, and the values of the consumption expenditure by individuals on goods purchased offline and online are plotted on the ordinate. The existence of a dependence between the two quantities is a basis for formulating the statement that the actual values of consumption expenditure tend to be distributed around or close to the regression line.

By their nature, the results obtained in the context of this research allow to interpret the more significant manifestations of the retail business digital transformation on the online purchases of individuals. In this regard, there are opportunities for discussion and comparison of results of other researchers within the identified problem area. For example, researchers L. Pasinetti and P. Leon identified an interaction between E. Engel’s Law and technological processes in clarifying the process of efficient and sustainable economic development (Leon, 1967). A special contribution of the two authors is the determination of key factors affecting economic growth and structural changes (Pasinetti, 1981). Theoreticians emphasize that current real income is one of the most important determinants of consumption in the short run. Therefore, consumption depends on the amount of disposable income. In this way, the cited authors prioritize the income factor compared to other factors that can influence consumption. At the same time, more recent research carried out by R. Evins traces the state and changes in the retail business digitalization and highlights significant factors exerting their impact. In this aspect, the changing attitudes and behaviour of consumers, technological progress and increasing competitive pressure are taken into account. Thus, the change in consumer behaviour – convenience and speed, together with the advance of technology, cloud computing, mobility systems and large database analyses are determined as basic for the retail business digital transformation (Evins, 2017).

On the part of retail companies, the main result of the transformation to a digital business is generating economic benefits, occupying a better market position, creating a competitive advantage and improving the ability to engage and satisfy the consumer. Therefore, the above stated views show that it is the consumer who is defined as one of the centres in the digital transformation process, setting the direction of the change in the way retail companies do business.

5. Conclusions

The research thus conducted allows for the conclusion that, at its core, digital transformation is revolutionizing the way goods and services are designed, produced and delivered to consumers. This process has huge consequences and impacts for the value chain. Digital shopping and the shift in the EU consumer behaviour rely on the opportunities to create consumer value. Of particular importance is the consideration of influencing factors, such as preferences of consumers, their gender, age, education level, employment status, income, spatial, temporal and other constraints.

Retail companies, applying the possibilities of digital technologies, should have detailed and comprehensive knowledge of the market situation and market demand. European consumers are changing their behaviour towards increasing their expectations and attitudes for variety of offer through physical and digital channels. In this analytical aspect, the study on the online purchases of individuals from the 27 Member States of the European

Union allows for certain generalizations to be made regarding the changes that retailers should make in order to respond accordingly.

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