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ANALYSIS OF THE MAIN GLOBAL TRENDS FOR E-COMMERCE

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Abstract. The article provides an overview of the main current trends in the development of e-commerce in the world and analyzes them. These global trends are grouped into three categories: trends in general, the transformation of the e-market audience and its needs, as well as the convenience of online shopping.

When had considered the general trends, statistical data, and dynamics of the global development of e-commerce are given, the trends formed under the influence of the COVID-19 pandemic are highlighted? Prospects for the development of online retail in the world and in Ukraine are considered, its statistics and features are studied. The advantages of the introduction of omnichannel trade are analyzed and business recommendations for its effective development are given. The advantages of a niche (specialized) online store and the prospects for the development of this trend are studied. Moreover, the role of marketplaces in the development of e-commerce has been established, as well as the fact that marketplaces have become the fastest growing online sales channel in 2020. The influence of mobile commerce on the development of e-commerce, in general, is analyzed and it is highlighted that mobile phones are becoming the center of new ways of buying. The impact of the use of artificial intelligence for personalization and automation of sales, which significantly improves the user experience, has been studied.

The analysis of the transformation of the e-market audience and its needs showed that there was a significant growth of the youth segment and increased support for small and local businesses.

The analysis of the convenience of online shopping has identified the following main trends: the use of augmented reality and the benefits of business from this tool. The effect of reducing the time and cost of delivery of goods and payment diversity on the increase in the number of purchases was also studied. It was found that the additional cost of online order delivery is the most common reason for refusing to purchase. Methods for increasing the possibility of payment when buying online are given.

Key words: e-commerce, e-commerce trends, online retail.



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1. Problem statement.

The development of information technology has led to the occurrence of new branches of business and opportunities for it, so-called e-business. An important, evergrowing part of e-business is e-commerce, which is associated with the sale of goods and services over the Internet.

Therefore, an analysis of current global trends in E-commerce will identify general trends in this area and its prospects. The progress experience of E-commerce in highly developed countries should be used in Ukraine for the development of local e-commerce. Global and regional trends in E-commerce affect both the national economy as a whole and individual businesses. Therefore, it is important and relevant to study the current E-commerce state. Because nowadays E-commerce has a strong impact on the development of the national economy by increasing the number of Internet users, seeking to reduce consumer time to purchase goods they need, and in the COVID-19 pandemic number of social contacts.

2. Analysis of recent research and publications.

Such Ukrainian scientists as Marusei T., Kirsanova V., Kovalova O., Sak T., Sinyavska O., Skrypnyk N., Zosimov V. have been involved in researching the topic of e-commerce development. Among foreign researchers in the field study of trends in e-commerce should be noted Andrienko O, G. Duncan, D. Kozier, K. E Kendall, F. Vittadello, V. Zwass and others. Most of the research is of an applied nature and summarizes the trends in e-commerce in the world and Ukraine.

3. Goal setting.

The goal of the article is to study the current state of world E-commerce. Moreover, highlight the main directions and trends in E-commerce through their analysis, as well as identify the most promising trends in E-commerce, both in the world and in Ukraine.

4. Main material exposition.

We propose to consider the main trends in 3 main categories: trends in general, how the audience is transformed and its needs, as well as the convenience of shopping.

General trends in the development of e-commerce.

1. Rapid growth of e-commerce.

Until 2020, the development of e-commerce was influenced by different subjects. The major of them are an increase in the number of active users, an improvement in their shopping experience, an increase in trust in online stores, and investments of large players in advertising and infrastructure. The pandemic has added to these factors:

restriction on offline purchases,

– the transition to remote work and the associated outflow of the population from large cities,

– increased demand for food delivery.

According to Oberlo [1], the turnover of online sales in the world in 2021 will be 4.9 trillion dollars, and by 2024 - 6.4 trillion dollars (Fig. 1).



Global E-commerce Sales between 2019 and 2025



The forecast by website Oberlo [1] is next. In 2021 the global e-commerce sales are expected to total \$4.921 trillion worldwide. In the perspective of the next few years, that total number is expected to increase. This fact proves that e-commerce, in general, is becoming an increasingly profitable option for businesses. Moreover, the rate of expectation of income from online purchases is 19.6 percent for total global retail sales in 2021. It means nearly 20 percent of every spent \$1 on retail goods this year will be done over the internet. It is clear to see that online sales are going to increase and be more substantial. It is estimated that world retail e-commerce sales amount will exceed near \$7 trillion by 2025. To sum up, the overall ecommerce share of retail sales will hit 24-25 percent.

2. Manufacturers become retailers.

D2C (direct to consumer) - sale to the end consumer, without intermediaries and dealers. It is a global trend that started comparatively recently in Ukraine and is just developing. One of the main reasons for this becoming more popular is a wish to make cheaper purchases and earn the biggest amount of profit at non-arbitrage conditions for European as well as American style options.

Top ten retail of e-commerce in COVID-19 pandemic is below (Table 1) [3].

Table 1. Top retail e-commerce websites in COVID-19 pandemic		
Sr.no	Retail website	Millions
1	Amazon.com	4059M
2	Ebay.com	1227M
3	Rakuten.co.jp	804M
4	Samsung.com	648M
5	Walmart.com	614M
6	Appel.com	562M
7	Aliexpress.com	532M
8	Etsy.com	395M
9	Homedepot.com	292M
10	Allegro.pl	272M

Source: [3]

Analysis of general e-commerce trends allowed to draw conclusions and recommendations for Ukrainian online businesses in the near future. First of all, you should pay attention to the development of online retail for manufacturers of goods. Since according to forecasts, the future of the market will be in a direct struggle for the buyer without intermediaries. Therefore, it is important to know your customer, control all stages of interaction with him, communicate directly and strengthen the emotional connection.

3. Narrowing the niche.

Today you can already find specialized online stores. Since today's consumer wants information about the possibilities of new products, make a choice. The sales funnel should include stages of familiarizing consumers with products, so you need to know your assortment thoroughly.

Benefits of a niche online store:

– easier to maintain the quality of the assortment;

– you can carefully study and understand the target audience, introduce personalization;

 it is easier to provide a good shopping experience - in addition to providing comprehensive information about the products, you can implement important functionality for the audience;

 higher customer loyalty due to a wide range of certain products and the possibility of getting expert advice;

- profitable from the point of view of marketing - it is cheaper to promote one thing;

 it is easier to compete - in a narrow niche you can position yourself as a market leader;

– it is easier to advance in search engines for long niche phrases.

– Conclusion: shortly, more and more online stores will become niche.

4. Development of mobile commerce.

The rise in e-commerce is driven in part by an increase in the use of mobile devices. Customers are increasingly making purchases from smartphones or tablets. Oberlo predicts global sales through mobile devices to grow to \$ 3.79 trillion [1].

Mobile is at the center of the new purchasing paths. That said, according to the eCommerce B2C Observatory of the Politecnico di Milano, in Italy, as much as 51 percent of online purchases were completed via smartphone.[2] For the user experience, a great deal of work still needs to be done on mobile platforms, to evolve what are often sites that can be consulted from smartphones and tablets into truly mobile-friendly and, above all, responsive sites.

According to Statista [10], by the end of 2021, about 73% of the world's purchases will be made from mobile devices.

Conclusion: As the confidence in online shopping grows, so does the confidence in orders from mobile devices. Mobile commerce is also developing by increasing the number of young consumers. Mobile devices are used to study products and reviews, even if you plan to purchase from a stationary device.

5. Development of omnichannel trade.

Buyers are characterized by ROPO behavior (Research Online Purchase Offline) searching on the Internet and then buying offline and vice versa. It is important not only to provide the audience with the maximum points of contact with the brand but also to synchronize the channels with each other, maintaining the unity of communication, combining different channels into one system for a continuous shopping experience.

In the near future, omnichannel sales will gain momentum - despite the fact that many projects are avoiding them. It is not easy to manage such sales, but they provide a competitive advantage, increase awareness and loyalty, and help to increase conversions and revenue.

Omnichannel marketing has become the norm in the customer journey and, according

to various research projects, consumers use an average of six touchpoints before finalizing their purchase. The tendency of past years to search for product information on the web before going to the store to buy (so-called webrooming) is even more popular, during this era of restrictions, except the final purchase is online instead of in-store [2].

6. Growth in the popularity of marketplaces.

Many buyers find it more convenient to make purchases on marketplaces - they can order goods of different brands in one place, get them quickly, and, if necessary, do a free return. Not every online store can deliver this value to consumers.

Marketplaces have become the fastest growing online sales channel in 2020, according to Data Insight research. Nine out of ten sellers have increased their sales on marketplaces in a year.

The evolution of eCommerce sees an increasingly important role of marketplaces, places of purchase, that are in fact the digital equivalent of department stores," said Federico Vittadello, Kipcast Business Development Director.[2] Kipcast has developed a platform used by more than 200 brands to integrate different data sources in order to increase the sales of e-commerce sites. "Marketplaces are standing out for their ability to attract users and offer services that many brands alone would not be able to support," he continued. "Today, 50 percent of eCommerce revenue from the sale of products is generated through marketplaces. Food, design, home furnishings, and fashion are the most active sectors on these platforms, with the use not only of generalist online stores but also niche marketplaces that, especially in the world of luxury and fashion, are having great success".

7. Artificial Intelligence Applications for Personalization and Sales Automation.

Artificial intelligence in an online store is replacing the sales assistant by offering customers personalized recommendations based on purchase history and website behavior. A personalized experience is important to 71% of shoppers - it's a great opportunity to retain them.[4] Lack of personalization leads to a poor shopping experience, in which case most users will not return to the site.

Previously, product recommendations were hand-picked and were often irrelevant. Now recommendations are made automatically and they are most relevant to the client's preferences (brands, color, budget, and other factors). It is beneficial for everyone - buyers find what they want easier, and retailers get more sales.

In addition to recommendations, modern tools can predict the desires of new customers based on the preferences of similar users, personalize entire pages of the site. It helps build long-term relationships. Artificial intelligence helps you track inventory, optimize marketing strategies, and improve service and communications.

Over time, artificial intelligence will become more useful, and its popularity will grow. By 2022, retail spending on artificial intelligence is expected to quadruple to \$ 7.3 billion [5]. To keep up with the competition, get started with personalization services like Retail Rocket, Mindbox, or Criteo.

The transformation of the e-market audience and its needs.

8. Focus on the younger generation.

Over half of consumers (54 %) shifted more of their spending to online shopping since the pandemic was declared, compared to earlier this year. [6] Young consumers led the trend, with 67% shifting more of their spending to online shopping compared to earlier this year, ahead of older age groups (57 % for consumers 35-54, and 41 % for 55+).

To ensure online sales, you need to focus on the younger generation in optimizing the online store and strengthen marketing on social networks, where young consumers spend a lot of time, use new channels for communication – messengers and chatbots.

9. Support for small and local businesses.

During the pandemic, consumers have changed their purchasing habits and preferences for brands. According to Shopify [6], 57 % of consumers are willing to buy from new and local

brands because of a desire to support, interest in unique products (mostly in-house made), and good service. Even if you work abroad, do not forget about the development in your region - tell the brand's story, how it is with the location, why the brand was born here. That kind of soulfulness brings you closer to your customers and gives you an edge over the e-commerce giants.

Convenience of shopping.

10. Augmented reality application.

Augmented reality (AR) improves the shopping experience. It improves the shopping experience and reduces the number of returns. This is because shoppers can make a better decision by trying on a product in a virtual fitting room. Refunds are a real headache for retailers. According to forecasts, by 2023 the amount of annual damage will be \$ 348 billion. No wonder 120,000 stores will be using AR technology by 2022 [7]. Augmented reality will have a particular impact on the fashion and home goods niches.

So, in the future, the use of augmented reality will become the standard in certain ecommerce segments. In the meantime, such technologies are not widespread in Ukrainian stores, so their implementation will set you apart from competitors, help increase conversion and reduce returns.

If you don't have the funds to develop a custom application, use simple solutions to gradually implement AR: virtual fitting using masks on Instagram - jewelry, lipsticks, scarves; creation of 3D models that will be opened by the QR code in the product card; online fitting room based on the client's photo (clothes, interior items).

11. Reducing delivery time and cost.

Delivery of goods is the most important process and decision-making factor in ecommerce. For many buyers, delivery terms are no less important than the cost of the goods. Finances Online [8] claims that additional shipping costs are the most common reason for abandoning a purchase.

Conclusion: How to accommodate this e-commerce trend:

 minimize waiting for the goods as much as possible, connect fulfillment - place warehouses as close to customers as possible;

 display information about the delivery in the product card and strictly adhere to the promises;

 make the delivery process as flexible as possible - practice delivery on time or narrow the interval as much as possible;

- if you deliver during the day, make the process convenient for the consumer - warn about delivery an hour in advance, send the courier's contacts or implement the functionality of tracking his location, let's postpone delivery;

– if you not able to make delivery fast and convenient, make it free (at least as part of a premium subscription) or offer a bonus.

12. Payment variety.

If the buyer does not find a convenient payment method, there is a high risk that he will not make a purchase. Ease of payments and the availability of the best way to pay for the goods can be one of the determining factors in choosing an online store. Therefore, payment variety options have a highly competitive advantage. There is a way to increase conversions and reduce the percentage of abandoned carts. Of course, payment diversity remains an e-commerce trend.

Mainly to ensure that you can:

– pay for goods using digital wallets - Apple Pay, Google Pay, PayPal;

– instantly pay for the order using the link during a video consultation, communication in messengers, by e-mail;

 pay for goods with cryptocurrency - since 2020, the number of payments with bitcoins has been growing, thanks to low commissions and transfer speed [9]; - pay for the order using a QR code - for this, the retailer only needs to connect to the fast payment system and receive a unique QR code. The solution reduces the cost of accepting payments and helps to increase conversion - the client will need a phone camera or an application with a scanner to pay;

- save billing information on the site for the quick placing of the next order.

Additionally, retailers need to strike a balance between the convenience of payments and the protection of their security due to the growth of fraud.

5. Conclusions and recommendations for further researches.

A study of the main trends in global e-commerce has shown that in the coming years there will be further growth in online sales. According to forecasts, the total share of ecommerce in retail sales by 2025 will be 24-25 percent. The same trend for the growth of ecommerce will be in Ukraine, which requires well-thought-out steps for its effective development. The actions of Ukrainian e-market participants must respond to the fast changes in the world, the ever-growing needs and expectations of the audience. The COVID-19 pandemic added to the existing factors restrictions on offline shopping, the transition of a significant proportion of the audience to remote work, increased demand for delivery of goods.

Analysis of general e-commerce trends allowed to draw conclusions and recommendations for Ukrainian online businesses in the near future. First of all, you should pay attention to the development of online retail for manufacturers of goods. Since according to forecasts, the future of the market will be in a direct struggle for the buyer without intermediaries. Therefore, it is important to know your customer, control all stages of interaction with him, communicate directly and strengthen the emotional connection. Creating niche online stores also meets the expectations of customers and should include stages of an acquaintance of consumers with the products.

Second, as trust in online shopping increases, so does trust in mobile purchases. The development of mobile commerce is accelerating the increase in the number of young consumers. By the end of 2021, about 73% of the world's purchases are expected to come from mobile devices.

The next important trend in global e-commerce is the development of omnichannel sales. They provide competitive advantages, increase visibility and loyalty, help increase conversions and revenue. Therefore, online businesses need to study their customers and create a presence in the channels they visit (retail and wholesale sales through online stores, social networks, marketplaces, offline outlets, and other sites) and combine all channels into one system. Particular attention should be paid to marketplaces, which have become the fastest growing online sales channel in 2020.

The use of artificial intelligence in online sales is becoming more effective because its use allows you to build long-term relationships with customers. This modern tool can predict the desires of new customers based on the preferences of similar users, personalize the pages of the site, provide automatically compiled recommendations that are most relevant to customer preferences (brands, color, budget, and other factors). Over time, the popularity of artificial intelligence will grow. By 2022, online retailers' artificial intelligence spending is expected to quadruple to \$ 7.3 billion.

The study of the transformation of the e-market audience and its needs showed that there was a significant growth of the youth segment. To ensure online sales, you need to focus on the younger generation in optimizing the online store and strengthen marketing on social networks, where young consumers spend a lot of time, use new channels for communication - messengers and chatbots. Also, during the COVID-19 pandemic, consumers' shopping habits and brand preferences changed. Most (57% of consumers) are willing to buy from new and local brands due to the desire to support, interest in unique products (mostly own

production), and good service.

The analysis of trends in the convenience of online shopping revealed that the use of augmented reality will have a special impact on the niche of fashion and home goods. Thus, the use of augmented reality will become the standard in the future in certain segments of ecommerce. A study of the impact of reduced delivery time and cost on increasing online purchases found that e-commerce delivery is a significant decision-making factor, and the additional cost of delivering an online order is the most common reason for refusing to buy. Another major trend in e-commerce is the variety of payments. Because the ease of payment and the availability of the best way to pay for the goods is one of the determining factors when buying online.

Therefore, the development of e-commerce in Ukraine should take into account the main trends of global e-commerce. A promising area of e-commerce research is the study of the impact of social commerce and the trend on environmental friendliness and environmental protection.

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Анотація. У статті подано огляд основних сучасних трендів розвитку електронної комерції у світі та проведено їх аналіз. Дані світові тренди згруповано у три категорії: тенденції в цілому, трансформація аудиторії електронного ринку та її потреб, а також зручність здійснення покупок онлайн.

При розгляді загальних тенденцій наведено статистичні дані та динаміку світового розвитку електронної комерції, виділено тренди, що сформувалися під впливом пандемії COVID-19. Розглянуто перспективи розвитку онлайн-ритейлу у світі та в Україні, досліджено його статистику та особливості. Проаналізовано переваги впровадження омніканальної торгівлі та надано рекомендації бізнесу для її ефективного розвитку. Досліджено переваги нішевого (спеціалізованого) інтернет-магазину і перспективи розвитку цього тренду. Встановлено роль маркетплейсів у розвитку електронної торгівлі, а також що саме маркетплейси стали найбільш швидкозростаючим онлайн-каналом продажів у 2020 році. Проаналізовано вплив мобільної комерції на розвиток е-комерції в цілому та виділено, що мобільні телефони стають центром нових шляхів покупки. Досліджено вплив від застосування штучного інтелекту для персоналізації та автоматизації продажів, що значно покращує користувацький досвід.

Аналіз трансформації аудиторії електронного ринку та її потреб показав, що відбулося значне зростання молодіжного сегменту та посилилася підтримка малого й місцевого бізнесу.

Аналіз за зручністю здійснення покупок он-лайн дозволив виділити наступні основні тренди: застосування доповненої реальності та вигоди бізнесу від цього інструменту. Також було досліджено вплив зниження термінів і вартості доставки товарів та платіжної різноманітності на збільшення кількості покупок. Виявлено, що додаткові витрати на доставку онлайн-замовлення є найпоширенішою причиною відмови від покупки. Наведено методи для збільшення можливості оплати при купівлі он-лайн.

Ключові слова: електронна комерція, тренди е-комерції, онлайн-ритейл.

Appendix A. Supplementary material

Supplementary data associated with this article can be found, in the online version, at http://sepd.tntu.edu.ua/images/stories/pdf/2021/21koatek.pdf

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