

Electronic scientific and practical journal

# INTELLECTUALIZATION OF LOGISTICS AND SUPPLY CHAIN MANAGEMENT

#1 (2020)  
May '20



[WWW.SMART-SCM.ORG](http://WWW.SMART-SCM.ORG)

ISSN 2708-3195

[DOI.ORG/10.46783/SMART-SCM/2020-1](https://DOI.ORG/10.46783/SMART-SCM/2020-1)

ISSN 2708-3195



9 772 708 319 005 1



Electronic scientific and practical publication in economic sciences

ISSN 2708-3195

DOI: <https://doi.org/10.46783/smart-scm/2020-1>

Released 6 times a year

№ 1 (2020)

May 2020

Kyiv - 2020

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In 2020, the International Center for Periodicals (ISSN International Center, Paris) included the Electronic Scientific and Practical Edition "Intellectualization of Supply Chain Management" in the international register of periodicals and provided it with a numerical code of international identification: ISSN 2708-3195 (Online).

Recommended for distribution on the Internet by the teaching staff of the Department of Logistics of NAU (№ 3 from February 3, 2020). Produced 6 times a year. References to publications are required. The view of the editors does not always coincide with the view of the authors.

t.me/smart\_scm  
facebook.com/Smart.SCM.org  
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DOI: <https://doi.org/10.46783/smart-scm/2020-1>  
e-mail: [support@smart-scm.org](mailto:support@smart-scm.org)

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## INTRODUCTION

We are happy to invite you to get acquainted with the first issue of the new scientific and practical publication "Intellectualization of Logistics and Supply Chain Management".

We strongly believe that the launch of this magazine indicates the objective need to rethink a wide range of issues related to the development of theory and practice in logistics and supply chain management, awareness of the need to unite the scientific community and logistics practitioners, dissemination of modern knowledge and best practices for innovative development of the logistics services market.

The first issue of the magazine is published at a difficult time. The global coronavirus pandemic and the deep economic crisis have significantly worsened business activity in the world. Currently, global supply chains are collapsing, international trade is declining, and competition between global and regional logistics operators is intensifying. The most common thesis is that the world will never be the same again. Industry experts predict the emergence of new, more flexible and adaptive supply chain management strategies and approaches to logistics business process management. The trend towards collaborations, cooperation and unification of services is emerging, comprehensive proposals for clients are being developed. There is increasing talk about the need to build bimodal supply chains, which involves the development of different decision-making scenarios: the traditional approach - cost-effective efficiency, low risk, high predictability; a new approach "second mode" - rapid recognition of opportunities, adaptability, willingness to solve unexpected problems and look for new opportunities.

Radical transformations of the global and national markets for logistics services require appropriate scientific support. Logistics science has a special role to play in this process. Initiating the emergence of a new journal, we decided to focus on its coverage of problematic aspects of the formation and development of logistics systems at the micro, mezo and macro levels, supply chain management, digitization of logistics, methods and tools for optimizing processes in logistics and supply chains, sociopsychology relations and network interaction of enterprises using cloud technologies, artificial intelligence, e-learning, neural business process management systems, etc.

Therefore, we invite scientists, researchers and business representatives, as well as our colleagues from abroad, to cooperate and present the results of scientific research, to discuss and debate on them, to work together to develop the scientific theory of logistics and promote mutual intellectual enrichment.

We hope that the new scientific publication will become a theoretical guide for young researchers and representatives of other fields.

***HRYHORAK Mariia***  
*Chief Editor*



UDC 339. 656.8

DOI: <https://doi.org/10.46783/smart-scm/2020-1-7>

JEL Classification: L81, L86, L87, R41.

**Received:** 30 May 2020

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## THE IMPACT OF E-COMMERCE DEVELOPMENT ON LOGISTIC SERVICE IN UKRAINE: PERSPECTIVES AND CHALLENGES

**Tetiana Gorokhova, Leila Mamatova.** «*The impact of e-commerce development on logistic service in Ukraine: perspectives and challenges*». The article considers the current state of the world market of logistics services. The main priority areas of using certain types of logistics services in the world and in Ukraine are identified. The object of research is the process of digitalization of logistics services through the influence of e-commerce. Analysis of the current state of logistics services in the world and in Ukraine, revealed a trend of active investment in innovative logistics services and stimulating the need for distribution services is growing much faster than in the current cycle due to demand for goods purchased online, especially food. The article considers the essence and features of the logistics activities of e-commerce. The main components of logistics functions are studied and the main tasks of e-commerce logistics activity are determined. The structure of connectivity of trade and technological process operations in e-commerce enterprises is considered. The strengths, weaknesses, opportunities and risks of the development of electronic commerce of logistics services are also identified. The impact on the development of logistics services through global changes in the world and prospects for development in Ukraine, with an emphasis on marketing tools to promote services. The positive and negative factors influencing the development of e-commerce of Ukrainian enterprises are analyzed and singled out. Authors identified further opportunities for the development of logistics services through the use of e-commerce, namely the development of modern technologies and Internet availability, which will change the consciousness of consumers and the growth of online users, rapid business growth and the formation of new market segments, cost-effectiveness of advertising channels to the target audience. The authors determine that e-commerce in Ukraine is in a state of active development and has great potential. E-commerce has advantages over traditional forms of business, as it provides an opportunity to increase productivity. E-commerce has a low barrier to market entry, including global. As a result, it significantly reduces the cost of the business and increases the efficiency of its management. Authors identified the main trends in the development of e-commerce: increasing the activity of Internet users, their adaptation and loyalty to online shopping, trust in Internet services and resources, which are rapidly expanding their range. Authors determined that the main problem of e-





commerce in Ukraine is inadequate legislative regulation of their activities, incentives and regulations. There is growing competition in online formats where established online sales giants have formed, so not all retailers can easily switch from one format to another, and it is determined that such companies need discounts on rental in the warehouse segment in order to be able to ensure their livelihood.

**Keywords:** logistics, logistics services, E-commerce, business, entrepreneurship, innovation, strategy, trade, digitalization, market.

**Тетяна Горохова, Лейла Маматова. «Вплив розвитку e-commerce на логістичні сервіси в Україні: перспективи та виклики».** У статті розглянуто сучасний стан світового ринку логістичних послуг. Визначено основні пріоритетні напрямки використання певних видів логістичних послуг в світі та Україні. Об'єктом дослідження є процес діджиталізації логістичних сервісів через вплив розвитку e-commerce. Аналіз діяльності сучасного стану логістичних послуг в світі та Україні, дозволив виявити тенденцію активного інвестування в інноваційні логістичні послуги та стимулювання потреб в дистриб'юторських послугах зростає набагато швидшими темпами, ніж в поточному циклі через попит на товари придбані онлайн, особливо продукти харчування. У статті розглянуто сутність та особливості логістичної діяльності підприємства електронної торгівлі. Досліджено основні складові логістичних функцій та визначено основні завдання логістичної діяльності електронної торгівлі. Розглянута структура зв'язності операцій торговельно-технологічного процесу в підприємствах електронної торгівлі. Також визначено сильні, слабкі сторони, можливості та ризики розвитку електронної комерції логістичних послуг. Визначено вплив на розвиток логістичних послуг через глобальні зрушення в світі та перспективи розвитку в Україні, з акцентом на маркетингових інструментах просування послуг. Проаналізовано та виокремлено позитивні та негативні фактори впливу на розвиток електронної торгівлі підприємств України. Визначено подальші можливості розвитку логістичних послуг через використання e-commerce, а саме розвиток сучасних технологій та доступності Інтернету, що впливатиме на зміну свідомості споживачів та відповідно ріст онлайн користувачів, стрімкі темпи зростання бізнесу і відповідне формування нових сегментів ринку, економічна ефективність впливу за допомогою рекламних каналів на цільову аудиторію. Визначено, що основною проблемою електронної торгівлі в Україні є не відповідно законодавче регулювання їх діяльності, стимулюючих та регулюючих нормативно-правових актів. Зазначено зростання конкуренції в онлайн форматах де сформувались уже сталі гіганти онлайн продажів, тому не всі ритейлери можуть легко перейти від одного формату до іншого та визначено, що такі компанії потребують знижок на оренду в складському сегменті, для того, щоб мати змогу забезпечити свою життєдіяльність.

**Ключові слова:** логістика, логістичні послуги, e-commerce, бізнес, підприємництво, інновації, стратегія, торгівля, діджиталізація, ринок.

**Татьяна Горохова, Лейла Маматова. «Влияние развития e-commerce на логистические сервисы в Украине: перспективы и вызовы».** В статье рассмотрено современное состояние мирового рынка логистических услуг. Определены основные приоритетные направления использования определенных видов логистических услуг в мире и Украине. Объектом исследования является процесс диджитализации логистических сервисов из-за влияния развития e-commerce. Анализ деятельности современного состояния логистических услуг в мире и Украине, позволил выявить тенденцию активного инвестирования в инновационные логистические услуги и стимулирование потребностей в дистрибьюторских услугах возрастает гораздо более быстрыми темпами, чем в текущем цикле через спрос на товары, приобретенные онлайн, особенно продукты питания. В статье рассмотрены сущность и особенности логистической деятельности предприятия электронной торговли. Исследованы основные составляющие логистических функций и определены основные задачи логистической деятельности электронной торговли. Рассмотрена структура связности операций торгово-технологического процесса на предприятиях электронной торговли. Также определены сильные, слабые стороны, возможности и риски развития электронной коммерции логистических услуг. Определено влияние на развитие логистических услуг через глобальные сдвиги в мире и перспективы развития в Украине, с акцентом на маркетинговых





*инструментах продвижения услуг. Проанализированы и выделены положительные и отрицательные факторы влияния на развитие электронной торговли предприятий Украины. Определены дальнейшие возможности развития логистических услуг через использование e-commerce, а именно развитие современных технологий и доступности Интернета, который будет влиять на изменение сознания потребителей и соответственно рост активных пользователей, стремительные темпы роста бизнеса и соответствующее формирование новых сегментов рынка, экономическая эффективность воздействия с помощью рекламных каналов на целевую аудиторию. Определено, что основной проблемой электронной торговли в Украине не в соответствии законодательное регулирование их деятельности, стимулирующих и регулирующих нормативно-правовых актов. Указано рост конкуренции в онлайн форматах где сформировались уже стали гиганты онлайн продаж, поэтому не все ритейлеры могут легко перейти от одного формата к другому и определено, что такие компании нуждаются в скидках на аренду в складском сегменте, для того, чтобы иметь возможность обеспечить свою жизнедеятельность.*

**Ключевые слова:** логистика, логистические услуги, e-commerce, бизнес, предпринимательство, инновации, стратегия, торговля, диджитализация, рынок.

**Problem statement.** Existing tasks of economic growth in the country require not only increasing the competitiveness of domestic goods in international markets, taking into account price and quality, but also ensuring effective interaction of domestic enterprises with foreign partners in global and regional supply chains, creating conditions for barrier-free movement of goods in international logistics corridors, development of cross-border cooperation and search for opportunities to obtain a synergy effect by increasing the added consumer value and reducing the total costs of participants in network cooperation, global partnerships, geoeconomic alliances and networks.

That is why, the availability of possible logistics systems in the country stimulates decision-making in accordance with the investment of infrastructure facilities at the national, regional and local levels in order to ensure their sustainable socio-economic development.

**Analysis of recent studies and publications.** The research of logistics, logistics flow management processes are devoted to the work of such scientists as V. Kozlov, P. Levkovets, M. Moroz, V. Nikolaychuk, M. Aucklander, A. Laughter, Yu Wu, M. Go, K.-H. Jan, S.-H. Huang. The works of scientists are devoted to the issue of

electronic commerce of logistics processes as P. Voronova, P. Duz, V.O. Lazareva, M.E., Ponomareva, B. Martin, R. Becker, M. Keenan, and others.

At the same time, the issues of digitalization implementation and development of e-commerce model on the development of logistics services and analysis of the situation in Ukraine and the world are not given due attention, and the logistics potential of Ukraine from the point of view of e-commerce is not enough research.

**The research aim** is to analyze the current state and development trends of the global market of logistics services, the impact on the development of global changes in the world and prospects for development in Ukraine with an emphasis on marketing tools to promote services.

**Research objectives:**

The processes of globalization and intensification of changes in the world, the growing impact of variability of environmental factors encourage businesses to seek more effective tools to operate in order to increase profitability, taking into account social levers. One of such directions is logistic service. The main task of logistics is to ensure the timely execution of orders and meet the needs of all stakeholders. The tool for the rational use of logistics elements is its marketing component, ie a set of measures to



promote these services. The objective importance of e-commerce, as a factor influencing the sustainable development of logistics services through a large area and extremely long transport communications, is gaining momentum in the world. The processes of European integration of Ukraine and the introduction of world standards in the economic sphere require the country to meet modern consumer needs at a qualitatively new level, so it is important to research and implement in the logistics system more effective and modern strategic solutions to promote logistics services, including e-commerce as one of the potentially influential components of Ukraine's economy.

In 2017, global logistics spending amounted to 8.2 trillion dollars USA (according to studies of 190 countries) [2]. According to experts, the projected annual growth in the capacity of the global market for logistics services in 2018 is (4.1-5)% due to the acceleration of world trade. Political uncertainty in a number of regions of the world and the continuation of trade protectionism policy are the risks that accompany development of the logistics services market in 2018 [1]. The global 3PL services market annually shows positive growth dynamics. If in 2014 the capacity of the 3PL services market increased by 157 billion dollars US compared to 2013 and amounted to 750 billion dollars USA, then in 2016 and in 2018 the global revenue of 3PL reached 902.2 billion dollars. The annual growth rate of the 3PL global market is expected to be up to 5% by 2024. In particular, in 2020 the global market capacity of 3PL is planned to exceed \$ 962 billion, and by 2024 the capacity of the 3PL market will reach about 1 billion US dollars [2].

It should be noted that in the period 2010-2014, Ukraine rose in the ranking of the development of logistics flows from 102 place

to 61. However, from 2014 to 2018, it lost 5 steps. Experts mostly attribute this fall with the occupation of Crimea and the war in Donbass.

From the main indicators of the rating from 2014 to 2018, Ukraine worsened its position in terms of customs work quality - loss of 20 positions, quality and development of infrastructure - loss of 48 positions, in international maritime transport - loss of 1 position. The improvement was observed only in the field of logistics services quality - Ukraine rose by 11 positions [3].

In 2018, according Logistics Performance Index by World Bank, Ukraine ranked 66th out of 160 countries, gaining 2.83 points and rising 14 places in the overall standings. Ukraine is located in the rating between Serbia and Egypt, and in the post-Soviet space was third after Estonia (3.31 points and 36th place) and Lithuania (3.02 points and 54th place). In total, the ranking includes five areas in which research has been conducted. In the section "customs procedures" Ukraine scored 2.49 points, on infrastructure - 2.22 points, on international transportation of goods - 2.83 points, on logistics competence - 2.84 points, on cargo tracking - 3.11 points, on delivery time - 3.42 points.

Leadership in the ranking in Germany with a total LPI Score of 4.2 points. It is followed by Sweden, Belgium, Austria and Japan. The second five are opened by the Netherlands, followed by Singapore, Denmark, Great Britain and Finland [4].

Thus, the presence of these trends in the development of logistics services indicates the need for comprehensive support and opportunities for further development of logistics priority components in each region, given certain strong positions in the country, as evidenced by the growth of the global logistics market (Fig. 1, Fig. 2).

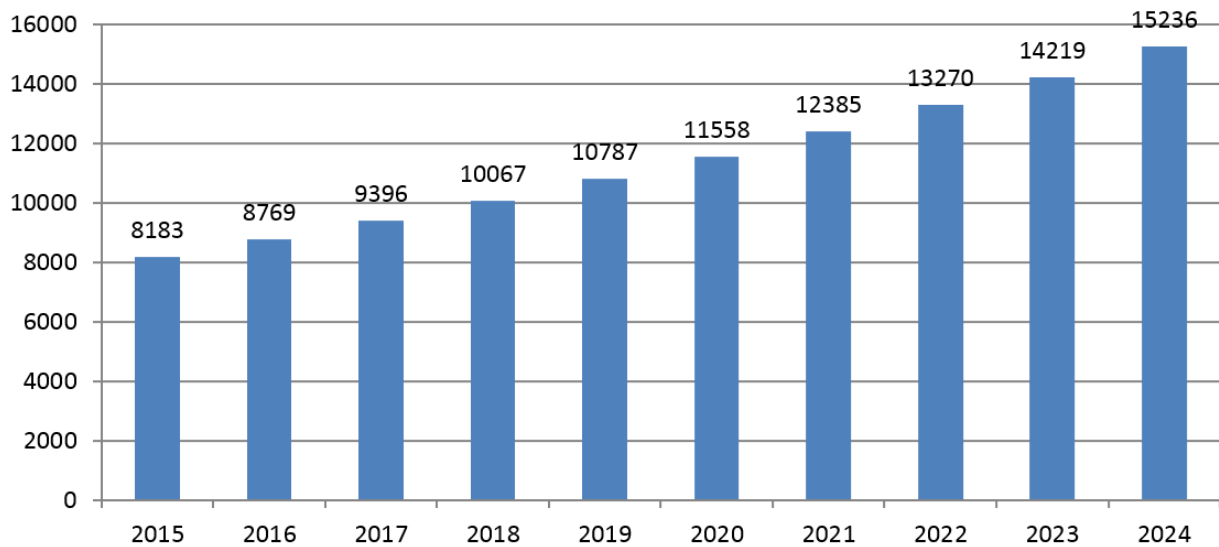


Figure 1. World logistics market, billion dollars  
(Source: Trade Market Group)

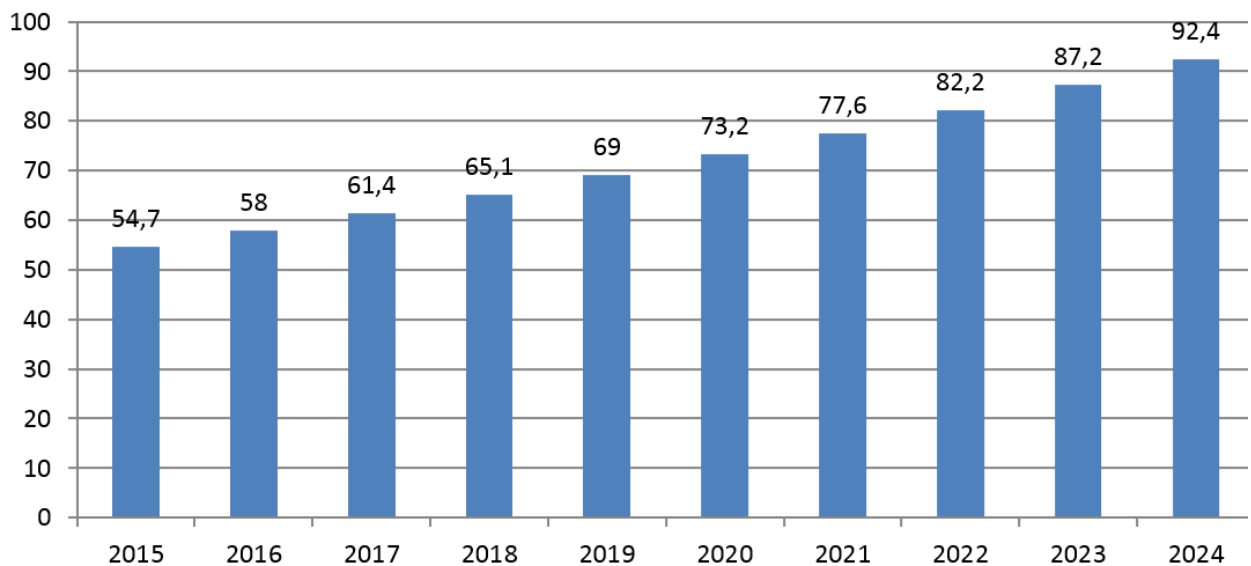


Figure 2. World logistics market, billion tons  
(Source: Trade Market Group)

An important factor in the growth of demand for logistics services was the development of e-commerce. In the last decade, e-commerce has become a real engine of development, both in the world and in Ukraine, and e-commerce and improved new digital models will give additional work to logistics companies otherwise, it is hoped that e-commerce will keep the same orders.

E-commerce is a concept that characterizes the process of buying, selling or exchanging products, services and information through the global computer

network Internet. Currently, e-commerce is present in almost all types of commercial activities. An example of e-commerce or e-trade can be a business process that uses mobile devices and communication tools, e-publishing, consulting, etc. The content of e-commerce, by definition, characterizes the transactions between business partners. Some experts believe that this definition is narrow and does not fully describe the essence. Therefore, we have defined the concept of "E-business", which is more general and broad. E-business, according to



experts, covers not only the purchase and sale of goods and services, but also customer service, cooperation with business partners, transactions within the organization.

Fulfillment also plays an important role in this system. It is convenient for the owner of the goods to use the services of a remote warehouse, from where it is possible to send the formed set to the address of the end consumer at any time by the command from the marketplace. This service is becoming even more popular as the number of small sellers who can not physically be present in warehouses, picking and sending orders, etc. is growing. They do not need to buy goods from manufacturers in trucks to fully operate in the market.

Finally, modern online business requires an international customer delivery service (cross-board). We are talking about the ability to send parcels to end customers just from abroad.

Here in the chain involved several logistics:

- the first to form orders and send them, for example, from China.

- then the goods pass through the Ukrainian customs and, finally, go through Ukraine, until the customer picks up the parcel at a post office or receives a courier from the delivery service at the last mile. However, we have reduced the threshold value of goods for import without paying duty (from 150 to 100 euros). But this fact is unlikely to stop the development of the service. Over the last year, the volume of cross-border purchases has increased more than 10 times.

In the modern e-commerce you can't work without additional services. Order tracking is a must service in e-commerce process. Most customers want to know where

his product is and how the order is fulfilled. Thus, if it is possible to track the movement of parcels in real time, it significantly improves the quality of service. According to statistics, 42% of buyers refused to receive the goods or canceled the order if the delivery time was, in their opinion, too long. 60% of customers want to know the date of receipt of the parcel in advance. And as many as 75% of buyers consider it possible to track the execution of an order online.

The global e-Commerce market in 2019 grew to \$ 3.5 trillion, online retail sales in 2016-2019 grew by an average of 20% per year, while retail sales increased by only 3.5% per year. Accordingly, the market is growing due to online commerce, while the share of online sales in retail will increase from 10.5% in 2016 to 16.4% in 2019.

If this trend continues, the volume of the global e-Commerce market will exceed the volume of traditional retail by 2036. As consumers gain confidence that they will have a good online shopping experience, they search the Internet for higher quality products at lower prices. Already, more than 50% of online shoppers in the Middle East, Africa, Europe and Latin America choose products on foreign sites, according to a PayPal survey (Fig.3).

For example, North America's 1,000 largest online stores sell \$ 143 billion worth of merchants outside the United States. At the same time, Amazon's share in these international sales was 44%. 67% of retailers believe that cross-border e-commerce is the most important source of future growth for their company. 52% agree with the statement that international e-commerce "suits them because it gives a lot of international customers" [5].

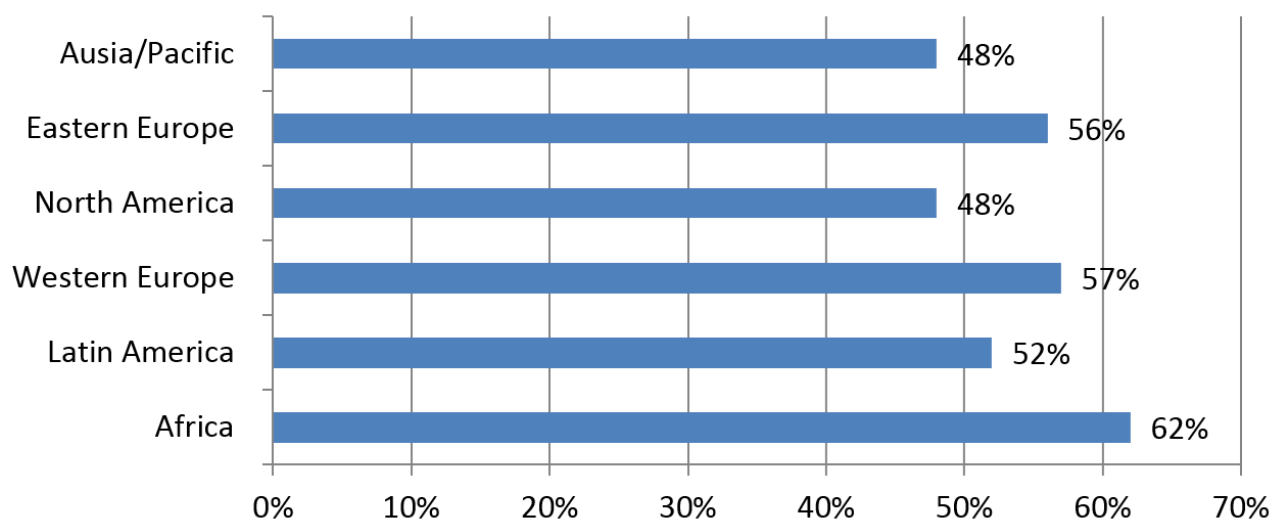


Figure 3. Portion of consumer shopping on retail websites outside of their country  
(Source: Internet Retailer research)

In 2018 the Ukrainian e-commerce market grew by 30%, showing the second result in Europe in terms of growth, and in 2019, according to the EVO group analyse, which combines marketplaces Prom, Bigl and a number of other projects, the e-commerce market grew by 17% to UAH 76 billion (data for 11 months). The size of the average check of one purchase decreased by 7-10%, and the cost of delivery increased to 5-15% of the value of the goods.

In 2020, EVO Group experts expect even less growth: by about 15% - up to UAH 87.2 billion.

2019 was marked by the active actions of major players in online retail to open their offline outlets. The largest international online retailer AliExpress has opened the first "brick" store outside China in Madrid's Intu Xanadu shopping center. The point of sale works on the principle of combining physical and online sales. The company opened the store together with D.Phone, a Chinese seller of mobile phones and accessories. The store has an area of 740 square meters and was divided into five different zones, where you can buy about 1,000 products from more than 60 brands.

In Ukraine, on November 2019, Rozetka opened its 10th store, a new offline outlet of Ukraine's leading online supermarket - and

the first in Brovary. There are six outlets in the retailer's offline network in Kyiv (Main Post Office, Smart Plaza Politech, Stepana Bandera Avenue, Kyoto Street, Dekabristov Street, Aladdin Shopping Center), and three more in Odessa. In addition to traditional shops and mobile distribution points, Rozetka together with the postal operator Justin began to develop a network of mini-offices, where you can also pick up the goods ordered in the online supermarket, as well as receive a number of additional services. Currently, there are 26 mini-branches of this format: in all cities with a population of millions, as well as in Chernihiv. You can read more about the features of the partner offices of Rozetka and Justin here.

It is worth noting that the new for our market service for the selection of tours Rozetka Travel also received its physical representation. In late December, the first such point appeared in the Kiev store Rozetka, which is located near the metro station "Pochayna". In the future, it is planned to open offline outlets in other Rozetka stores.

On November 2019, the marketplace of Ukrainian brands Shoppingmall.com.ua also opened its first offline store under the Love & Live brand on the ground floor of Lavina Mall. On an area of 84 square meters. m presented more than 500 models of Ukrainian brands of





fashion clothing and footwear Love & Live and Katarina Ivanenko. The opening of the facility was made possible by the company's investment of \$ 400,000, which is aimed at increasing online sales and opening an offline store. In early October, the book online store Yakaboo opened its first offline store in the Main Post Office at vul. Khreshchatyk, 22, created for the 15th anniversary of the company. According to the Yakaboo blog, in the store you can buy top sales and new Yakaboo, as well as pick up your order from the site yakaboo.ua.

In 2019, food delivery services developed rapidly in Ukraine. On February 2019, Uber officially announced the launch of its Uber Eats food order in the Ukrainian capital. Later, the service became available in Lviv, and in December Uber Eats started working in Odessa.

By 2022, 67% of all online shopping in the world is projected to be through marketplaces. Over the last three years in Ukraine, all market leaders have become partially or completely marketplaces; every fifth of the top twenty e-commerce storefronts.

For example, the share of Kasta marketplace sales reached 40% of the company's total turnover after the company changed its business model in 2017-18, adding a marketplace and introducing a permanent catalog on the site. In parallel with the launch of the marketplace, the company also developed other areas, building a holistic eco-system. Already now Kasta unites two fulfillment centers, which process about 25,000 orders a day, a courier service with more than 100 branches in the 41st settlement of the country, the financial company KastaPay (payments, loans, CashBack), contact-center (50+ operators), production and other areas.

Another clear trend in 2019 was the increase in logistics capacity by companies. As

the market develops, the speed of delivery of goods to the final consumer, control of the supply chain and reduction of logistics costs can play a key role in competition.

Analyzing the data of RETAILERS COMPANY, a rating of the most visited online platforms in Ukraine is formed (the company counts the number of unique users who visited the e-shop site at least once a month). According to RETAILERS COMPANY (table. 1), Rozetka remains the undisputed market leader among online platforms. In second place - Allo, which bypassed Citrus. Analyzing the dynamics of 2018-2019, we can see a decrease in the growth rate of the e-commerce market. This tendency is associated with an increase in the cost of delivery. But for 4 months of 2020, we see a sharp increase in visits to online pharmacies, this is due to demand against the background of the COVID19 pandemic, as well as the seasonal increase in respiratory diseases. The projected decline in online selling in 4 months in 2020 compared with the analog period of 2019 is also due to a decline in the purchasing power of the population due to quarantine measures.

Due to the rapid development of e-commerce in Ukraine, according to the Kyiv Warehouse Market Report, the main trend in the capital market can be considered increased demand for flexible warehouses (storage and maintenance). In addition, the demand for warehouse real estate was caused mainly by the growth of retail sales, which in turn gave impetus to the growth of the number of omnichannel stores.

In particular, the new logistics service Justin, which has been developing the Fozzy Group since mid-2018, began to master the direction of international delivery from Amazon, eBay, Aliexpress and other online stores. As part of this project, Justin plans to work closely with logistics giants: American UPS, Chinese SF Express and Polish InPost [6].





Table 1

Rating of visits top Ukrainian online markets for the period 2018-2020

Online market	Number of visits, million people		
	2018	2019	4 months of 2020
rozetka.com.ua	572.12	700.48	160.13
allo.ua	101.58	137.5	6.38
citrus.ua	78.78	115.59	3.16
comfy.ua	68.78	87.72	4.65
makeup.com.ua	84.06	86.27	6.94
foxtrot.com.ua	51.75	51.75	4.33
kasta.ua	53.03	64.45	1.69
f.ua	49.93	52.74	2.61
moyo.ua	39.83	39.11	2.86
epicentrk.ua	72.5	57.24	29.18
apteka911	41.0	21.68	24.76

Source: developed by the authors based on data of RETAILERS COMPANY

Similarly, in 2019, a network of mini-branches Meest Express was developed, which began operating in retail chains Cosmo, ECO Market, ATB and others. In June alone, 163 branches were opened and 27 post offices were installed. As of July 2019, the network had 2,736 points for receiving and sending parcels, including 131 branches, 2,049 mini-branches and 556 post offices. The geography of network coverage continues to expand. In this project, Meest also cooperates with well-known consumer networks Podorozhnyk, ZhZHUK, PlusMarket, KF.UA, Ukrtelecom service centers, as well as with OKKO gas stations.

Nova Poshta Group of Companies, which manages approximately 5,700 branches across Ukraine, plans to open another 1,000 branches in 2020. And build 6 more innovative terminals in five years. Currently, such terminals are in Kyiv, Khmelnytsky and Lviv. In 2020, automatic processing of parcels will start in Kharkiv and Dnipro [6].

In addition, in 2020 the company is going to launch direct air delivery from Lviv to Kyiv. It will be recalled that on October 10, the company launched a new service for commercial use - "Air Delivery" on the route Lviv-Dnipro-Lviv.

Nova Poshta also became a partner of Ukrainian online retailer Rozetka for delivery to Moldova. Delivery abroad is provided by Nova Poshta Moldova. Goods are delivered

from warehouses in Kiev, so the cost of the order starts from 156 lei (8 euros), delivery time - from three working days [6].

Finally, the logistics operator Zammler Group has opened an office at Boryspil Airport to provide more flexible and efficient freight management for its customers. This is a new stage in the implementation of the strategy of the international logistics operator for the development and intensification of air cargo, to all countries of the world, and above all, in the United States, China, the UAE, India and Germany. Now the company can quickly process additional customer requests, prepare cargo for shipment and respond quickly to various unplanned situations [6, 14].

The COVID-19 was also the impetus for the development of logistics services, as well as an interconnected element of warehousing services. Many representatives of the industrial real estate sector have taken a wait-and-see attitude, which is likely to mean a reduction in rental activity and an increase in vacancies in 2020. However, the probability of negative absorption in the industrial market is minimal. Warehousing services are now more in demand than ever before, which will allow most logistics and warehousing operators to stay afloat throughout the crisis. The main factor determining the high vacancy is the new proposal, which must be put into operation by 2021.



In Ukraine, under quarantine, the consumer market is being reformatted towards online shopping. Currently, the greatest demand is recorded in companies in the areas of grocery retail, pharmaceutical distribution and e-commerce. So, today grocery retail and its logistics are now experiencing a "peak" of sales, which according to market players, 40% - 50% higher than sales in the New Year season, which is usually peak (it is predicted that this trend will decline, after all, the consumer's purchasing power will decline in a crisis and the consumer basket will become more budget-friendly). Segments such as HoReCa and retailers, which sell most of their sales offline (mostly fashion retailers), are experiencing a sharp drop in sales today. Due to quarantine measures and the closure of the mall, such companies suffer significant losses. Stores that generate their sales in physical locations try to redirect the consumer to their websites for online shopping. It is worth noting that in online formats there is a lot of competition, where already established giants of online sales have formed, so not all retailers can easily switch from one format to another. Such companies need discounts on rent in the warehouse segment, in order to be able to ensure their livelihood.

Today there is an additional demand from grocery retailers, pharmaceutical companies and e-commerce. Such companies are looking for additional space for the next 6-12 months. For example, the Art Factory "Platform" provided free online retailer Rozetka with an area of 10,000 square meters for their use as warehouse space. In addition, e-commerce operators generally do not need large areas, as goods in warehouses are not delayed for long-term storage, but are packaged to order for home delivery to consumers. In addition, there is a growing demand for the services of logistics operators serving all of the above sectors.

The spread of COVID-19 and related quarantine measures will increase the share of

e-commerce in the overall structure of commercial real estate. As in the last ten years, e-commerce will once again become a catalyst for demand and lead to shifts and changes in the warehouse real estate market over the next cycle. E-commerce will stimulate demand for the format of so-called incity warehouses, urban warehouses. During 2020, agreements may be concluded for the acquisition of former industrial facilities in the city for conversion into warehouses, as there are already several examples on the market of the acquisition of such facilities for warehouse redevelopment. As for the existing warehousing projects at the development stage, the construction has not been canceled yet, and the planned new proposal should enter the market in the announced timeframe [7].

Also, authors assume that market players will try to use the moment of panic and deteriorating economic situation to purchase land for the development of their built-to-suit projects at more favorable or reduced prices.

Demand for goods purchased online, especially food, will stimulate the need for distribution services at a much faster rate than in the current cycle. For example, over the past few weeks, supplies from abroad to Ukraine have not stopped, but have risen significantly. We are seeing a trend where retailers are trying to fill their warehouses with imported goods at the "old" purchase price due to rising exchange rates. At the same time, some companies have found themselves in a difficult situation precisely because of the closure of public services responsible for obtaining the appropriate licenses, uninterrupted work at the state customs border and other services.

The authors analyzed and identified positive and negative factors influencing the development of electronic commerce of enterprises and logistics structures of Ukraine (table 2).



Table 2

Positive and negative factors influencing the development of electronic commerce of enterprises and logistics structures of Ukraine

Opportunities 1	Threats 2	Advantages 3	Disadvantages 4
<ul style="list-style-type: none"> <li>- growth of online customers;</li> <li>- development of modern technologies and availability of the Internet affects the change of consumer consciousness;</li> <li>- development of new market segments;</li> <li>- a rapid growth of business;</li> <li>- impact on the target audience through advertising channels is more cost-effective.</li> </ul>	<ul style="list-style-type: none"> <li>- rivalry</li> <li>- high level of competition in the market. The company competes globally, unlimited in space and time limits;</li> <li>- insufficient information security for information storage;</li> <li>- influence of macrofactors: economic, political and cultural environment;</li> <li>- unfair competition. Companies that do not play by the rules of the market can negatively affect the development of e-commerce in general</li> </ul>	<ul style="list-style-type: none"> <li>- development of e-commerce without material restrictions (does not require a certain territory);</li> <li>- ordering and selling an online resource reduces the time and physical movement of market participants;</li> <li>- e-commerce has no time limits (availability of information at any time and in any place);</li> <li>- availability of information;</li> <li>- e-commerce leads to the speed of information</li> </ul>	<ul style="list-style-type: none"> <li>- safety of activity. Regulatory and legal support of e-commerce is in a state of development, security is becoming a problem for the seller and consumer;</li> <li>- the lack of direct physical connection between the consumer and the seller reduces the possibility of receiving discounts;</li> <li>- significant delivery times. E-commerce companies do not have their own logistics system and cooperate with transport companies that work on their own schedule and do not take into account the approximate dates of the</li> </ul>
	<p>due to the possibility of losing the credibility of consumers.</p>	<ul style="list-style-type: none"> <li>processing, ordering and delivery;</li> <li>- fast communication between supplier and consumer;</li> <li>- flexible market segmentation;</li> <li>- availability of goods or services.</li> </ul>	<p>companies. In this case, delivery is carried out from several days to several weeks and the agreed delivery dates between the company and the end consumer are violated;</p> <ul style="list-style-type: none"> <li>- limit of marketing tools for advertising these services;</li> <li>- lack of opportunity to motivate the client to choose, due to limited personal contact.</li> </ul>

*Source: developed by the authors*

**Summary.** The research of the logistics services current state on the world market and in Ukraine, allowed to determine the main priority areas of use of certain types of logistics services, and the trend of active investment in innovative logistics services. The priority of logistics services is to stimulate the need for distribution services, which is growing much faster due to the demand for goods purchased online, especially food.

The development of modern technologies and the availability of the Internet affects the consciousness of consumers and, accordingly, forms an increase in the number of online users, forms a platform for rapid business growth and the formation of new market segments, cost-

effectiveness of advertising channels to the target audience.

Omnichannel logistics is an integrated channel for collecting and ensuring an increase in the number of orders, a perfect management process, improving trade efficiency. The development of E-commerce is the main priority of inclusion in the supply chain of large online stores in the world, the use of warehousing and transport capacity of the country in the process of express delivery from China to Europe and the CIS.

E-commerce of Ukraine is in a state of active development and has great potential for its development. E-business has advantages over traditional forms of business, as it provides an opportunity to increase productivity. E-commerce has a low barrier to



market entry, including global. As a result, it significantly reduces the cost of business and increases the efficiency of its management. Thus, e-commerce in Ukraine is actively developing and gaining momentum. Among the main trends in the development of e-commerce are: increasing the activity of Internet users, their adaptation and loyalty to online shopping, trust in Internet services and resources, which are rapidly expanding their

range. However, the main problem of e-commerce in Ukraine is an urgent problem in the legislative regulation of their activities, incentives and regulations. At present, the main task of the state is to adapt the legal framework to world standards in order to increase the efficiency of not only e-trade but also e-commerce in general.

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