

UDC 336.72
JEL: L86, L96, P45, P46

**E-COMMERCE AS A FORM OF ECONOMIC
RELATIONSHIPS OF ENTREPRENEURSHIP
SUBJECTS IN THE NETWORK ECONOMY**

Tetiana Neboha

Lecturer,
Odessa National O.S. Popov of
Telecommunications,
Odessa, Ukraine
E-mail: t.neboha@gmail.com
orcid.org/0000-0002-5025-7299

Introduction. In the context of the formation of the information society and the use of ICT, the functioning of the economy is largely provided by the global Internet network, and business transactions become electronic. There is the formation of the so-called "network economy", and as a result of network economic relations, leads to the emergence of new forms of sales of goods – e-commerce, which begins to displace traditional trade. There is a formation of a new form of trade and economic relations of economic entities - e-commerce.

Aim and tasks. The article deals with the role and functions of e-commerce as a new form of economic relations of economic entities in the conditions of formation and development of a network economy.

Research results. As a result of the study, it has been determined that, changing the entire system of economic relations between business entities, e-commerce plays a stimulating role: it increases the innovation of national economies, since such commerce is carried out at the expense of the comprehensive application of ICT; expands the scope of traditional international trade, and attracts more and more consumers; contributes to the development of a new form of economic relations – the economy of general consumption, which has a significant positive external effect for society.

In Ukraine, the e-commerce market is still in the formation stage, showing high growth rates. At the same time, an imperfect legal framework for such a form of economic ties is an obstacle to its further development. Experience in developed countries shows that the economic and social impact of e-commerce development can only be achieved if the competitive and institutional environment is favorable.

Conclusions. Influence of information and communication technologies on global changes in the forms of economic relations is reflected in the processes of informatization and digitalization of all spheres of national economies, including trade and economic relations. There is a new form of trade and economic relations of business entities - the market of e-commerce. This kind of commerce becomes possible under the conditions of functioning of the so-called "network economy", within which the commercial activity is carried out with the use of the global information network - the Internet.

Key words: information and communication technologies, e-commerce market, e-commerce, Internet, network economy, shrinking economy, trade and economic activity.

Received: March, 2018

Accepted: June, 2018

DOI: 10.31520/2616-7107/2018.2.2-5

УДК 336.72
JEL: L86, L96, P45, P46

ЕЛЕКТРОННА КОМЕРЦІЯ ЯК ФОРМА ЕКОНОМІЧНИХ ВІДНОСИН ГОСПОДАРЮЮЧИХ СУБ'ЄКТІВ В УМОВАХ МЕРЕЖЕВОЇ ЕКОНОМІКИ

Тетяна Небога

Викладач,
Одеська національна академія
зв'язку ім. О.С. Попова,
Одеса, Україна
E-mail: t.neboha@gmail.com
orcid.org/0000-0002-5025-7299

Проблема. В умовах формування інформаційного суспільства і використання ІКТ, функціонування економіки в значній мірі забезпечується глобальною мережею Інтернет, а угоди бізнесу стають електронними. Відбувається формування «мережової економіки», та, як наслідок – мережових економічних відносин, призводить до появи нових форм торгово-економічних відносин господарюючих суб'єктів – електронної комерції, яка починає витіснити традиційну торгівлю.

Мета та завдання. У статті розглядаються питання ролі та функцій електронної комерції як нової форми економічних відносин господарюючих суб'єктів в умовах формування та розвитку мережової економіки.

Результати. У результаті дослідження визначено, що, змінюючи всю систему економічних відносин між господарюючими суб'єктами, електронна комерція виконує стимулюючу роль: підвищує інноваційність національних економік, оскільки така комерція здійснюється за рахунок всеохоплюючого застосування ІКТ; розширює рамки традиційної міжнародної торгівлі, та залучає все більше коло споживачів; сприяє розвитку нової форми економічних відносин – економіки спільного споживання, яка має для суспільства значний позитивний зовнішній ефект.

В Україні ринок електронної комерції хоча й знаходиться в стадії формування, показує високі темпи росту. Разом з тим, перешкодою для його подальшого розвитку виступає недосконале правове забезпечення такої форми господарських зв'язків. Як свідчить досвід розвинутих країн, економічний та соціальний ефект від розвитку електронної комерції може бути отримано лише при умові створення сприятливого конкурентного та інституціонального середовища.

Висновки. Вплив інформаційно-комунікаційних технологій на глобальні зміни в формах господарських зв'язків знаходить своє відображення у процесах інформатизації та цифровізації усіх сфер національних економік, у тому числі й торгово-економічні відносини. Виникає нова форма торгово-економічних відносин господарюючих суб'єктів – ринок електронної комерції. Такий вид комерції стає можливим в умовах функціонування так званої «мережової економіки», в межах якої комерційна діяльність здійснюється з застосуванням глобальної інформаційної мережі – Інтернету.

Ключові слова: інформаційно-комунікаційні технології, ринок електронної комерції, електронна комерція, Інтернет, мережева економіка, шерінгова економіка, торгово-економічна діяльність.

Отримано: Березень, 2018
Прийнято: Червень, 2018

DOI: 10.31520/2616-7107/2018.2.2-5

Introduction. The rapid development of information and communication technologies (ICTs) affects global changes in the forms of organization of trade and economic relations of business entities and radically changes traditional economic relations, resulting in the formation of a new socio-economic environment. In place of the industrial society, post-industrial or electronic-digital, the development of which takes place based on the formation of a global information space. At the same time, the processes of informatization and digitalization penetrate all spheres of national economies, including trade and economic relations.

In the context of the formation of the information society and the use of ICT, the functioning of the economy is largely provided by the global Internet network, and business transactions become electronic. There is a formation of the so-called "network economy", and, as a consequence, of network economic relations. Implementation of the process of virtualization and informatization in the economy, global access to the Internet with mobile devices, leads to the emergence of new forms of sales of goods - e-commerce, which begins to displace traditional trade. As a result, the formation of a new form of trade and economic relations of economic entities is taking place - e-commerce.

Analysis of recent researches and publications. The study of e-commerce is devoted to the work of many as domestic and foreign scientists.

Of interest are the works of such domestic scientists as A. Martovyi [1], O. Yudin [2], T. Maksimova [3], I. Khovrak [4], M. Lebedenko [5], O. Melnichuk [6], etc. They examine the essence and main characteristics of e-commerce and Internet marketing, the models of e-business, and identify the peculiarities of the development of the e-commerce market in the structure of the national economy.

Among foreign researchers it is necessary to highlight the work of A. Sammer,

J. Duncan, L. Zabolotsky, S. Yershov, O. Sidorova, which defines the concept of "electronic commerce" as a business process [7, 8], analyzes the problems of the development of Internet- the trade as a direction of the company's trade policy [9], identifies the strategic priorities of e-commerce [10], as well as peculiarities of electronic economic relations and the strategy of state regulation of e-commerce [11]. At the same time, the role and functions of e-commerce as a new form of network economic relations remain incompletely disclosed.

Aim and tasks. Determine the role and functions of e-commerce as a new form of economic relations of business entities in the conditions of formation and development of a network economy.

Results. The global development of ICT has led to a change in the characteristics of the economy of the 21st century: the formation of an electronic economic environment is taking place, and the forms of economic relations between business entities are changing. Defining signs of modern economic relations is a new sphere of their realization - informational or virtual environment. There is a so-called "network economy". According to the European Commission, the ultimate goal of such an economy is to create an environment in which any company or individual located at different points in the economic system can easily contact with minimal costs with any other company or individual to work together for trade, for exchange ideas and know-how or just for fun [12].

The functioning of the "network economy" is characterized by the emergence of a new form of economic relations of business entities - e-commerce. In this form of relationship, trade relations are based on the use of the global Internet and ICT, and the exchange of goods and services takes an electronic form. In place of traditional trade, organizations with the use of commercial and industrial premises come virtual trading

platforms. For example, the global expansion of e-commerce has contributed to the development of such innovative trading platforms as Amazon, Walmart, and others.

Among the main types of e-commerce should be:

- E-commerce sites that have the appearance of websites. As an example, eBay, Amazon, and Walmart are the international e-markets.

- information sales - subscription to the database;

- software rental, that is, the use of its individual elements for a small fee;

- electronic banks that provide a large amount of banking services in comparison with a traditional bank at low prices, which is possible due to relatively low costs and a significant customer base.

The role of e-commerce in the conditions of the existence of a "network economy" is manifested, firstly, in creating new business conditions, when the transition to automation (full or partial) and the virtualization of trade and economic relations takes place, and sales of products and services are carried out with the use of the Internet; and, secondly, in the expansion of international trade and the involvement of an increasing number of business entities in international activities.

According to experts [13] one of the main reasons why consumers buy goods online is an attractive price. However, with the development of the e-commerce market and the growth of online competition, consumers are attracted by the added benefits of online shopping: the convenience of making purchases; a wide range of goods from all over the world that are not available in traditional shopping malls; delivery to the customer home at the earliest possible time [13].

The essence of any economic form is manifested in the functions it performs. The functions of e-commerce as a form of economic relations of economic entities in the

conditions of formation and development of the network economy should include:

- raising the innovation of the economy;

- increase of efficiency of commercial operations;

- prompt information to market actors about changes in the range of goods and services;

- formation of a competitive environment and strengthening of competition between commercial subjects;

- reduction of transaction costs;

- stimulating the development of logistics companies.

In addition, the stimulating effect of e-commerce on the development of a new form of economic relations - the formation of a common consumption economy or a shrinking economy - should be noted. The economy of common consumption is a manifestation of economic relations that are formed between business entities within the framework of the existence of a network economy. The very economy of the general consumption brings a considerable positive external effect in the form of strengthening processes - globalization, the spread of Internet use, the efficient use of resources and assets, the provision of new types of services and increased supply [14, p. 49].

The world leader in e-commerce is the American company Amazon, which became one of the first Internet platforms selling real goods of mass demand. Covering an ever-growing segment of the online sales market, Amazon, as the founder of Jeff Bezos, the company itself, is "flywheel of Amazon e-commerce." The effectiveness of online sales is confirmed by the financial performance of Amazon. Sales of the company in the 2nd quarter of 2018 increased by 39% compared to the same period last year and amounted to 52.9 billion dollars. Net cash used in operating activities for the year increased by 22% - from 17.8 to 21, 8 billion dollars. A net profit increased year-on-year by 1200%, reaching 2.5 billion dollars [15].

The success of Amazon is due to a special strategy, which is to innovate and focus on the client, not on the competitor. As stated in the press release of the company, published on July 26, 2018, the company is guided by the following principles:

- customer orientation, not competition;
- passion for invention;
- commitment to operational excellence;
- long-term thinking [15].

According to the German research company GfK SE, Amazon has entered the top three foreign e-commerce sites favored by Ukrainian consumers (except AliExpress and eBay). In 2017, the international mail delivered goods worth 20.5 million dollars, which is 10 times more than in 2016 [16].

The economic and social impact of the development of e-commerce can be obtained in the context of creating a favorable competitive and institutional environment. The latter includes a perfect legislative framework that is designed to regulate the economic relations of business entities in a network economy, and must include legal acts on the protection of intellectual property

rights, the protection of personal data, the protection of consumers' rights, etc.

In Ukraine, the Law on e-commerce was adopted in 2015 [17], however, it did not find postulates on all types and models of e-commerce, which negatively reflected on the development of such models as Consumer-Consumer -to-Consumer or C2S), and State-to-Business (G2B). At the same time, the C2C model is an important sector, which is designed to combine customer-users of one or another web site. This sector is one of the main types of e-commerce - an e-store. The G2B model provides information interaction between government agencies and commercial entities for the development and maintenance of e-commerce through information websites of government agencies, e-procurement systems, online auctions, and more.

At the same time, in the absence of perfect legal support for the e-commerce market, this form of economic relations in Ukraine is rapidly developing. So, in 2017, the Ukrainian e-commerce market grew by 35 percent compared to 2016, and compared to 2014, it rose to 142.1. (fig. 1).

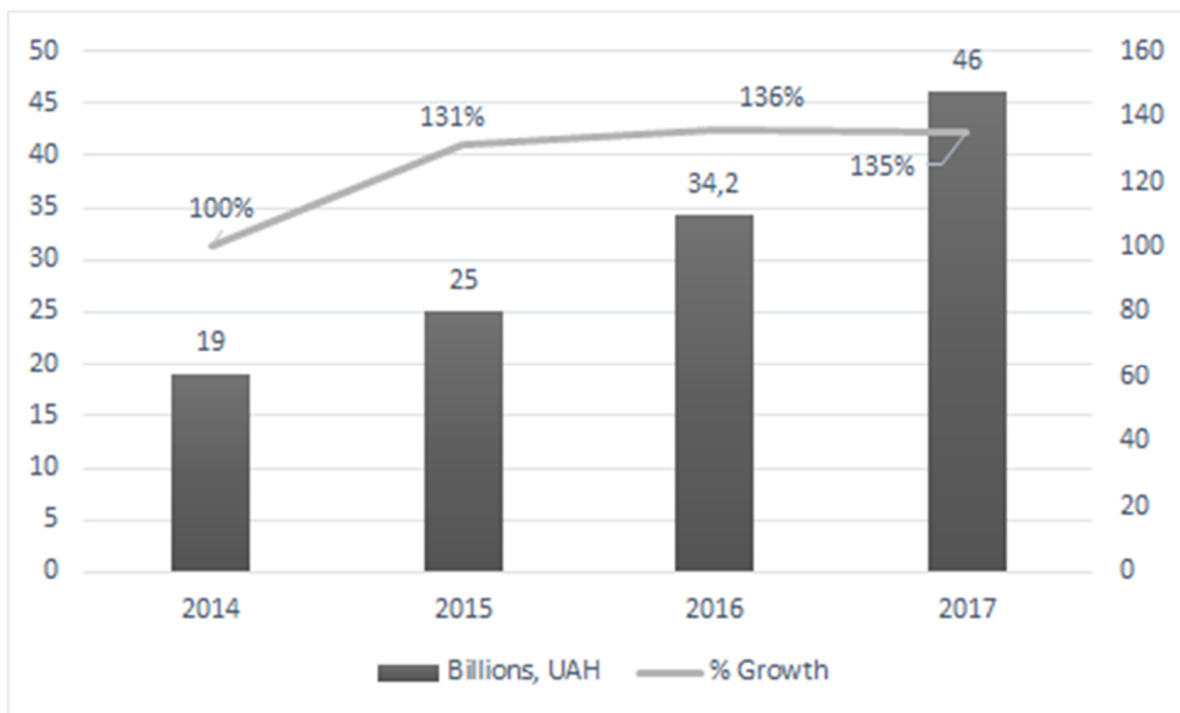


Fig.1. Development of e-commerce in Ukraine, bln.

Source: author's development based on [18].

Occupying only 3.5 percent of the country's total trade turnover, e-commerce shows a dynamic growth rate. Ukrainians are increasingly spending their money on online purchases. According to the data of EVO, one of the leaders of the e-commerce market in Ukraine, during the year 2017, Ukrainians spent \$ 14.2 billion on the Prom.ua, Bigl.ua, Crafta.ua and Shafa.ua marketplaces, which is by 68 percent more comparable with the last year [19].

E-commerce changes the system of economic relations in the direction of their virtualization, while the infrastructure of the market also changes - new and existing logistic companies are emerging and further developing dynamically. Yes, Ukrposhta introduces a service of online registration of items in the personal office, works as a chat bot, and Ukrposhta SmartBox service for the simplified process of registration of small and medium sized items in e-commerce. New Mail introduced a mobile application that allows individuals or online stores to manage deliveries.

The scope of the relationship of the participants in the e-commerce market is regulated by the state. Such regulation by developed countries is carried out in order to regulate the relationship between the state and market participants. It is interesting to note the experience of the United States, where in 1996 the basic principles of e-commerce, which are relevant today and which are adhered to in Europe and Asia:

- The privilege of the private sector.
- Minimum state interference, as far as legislation allows.
- The state authorities do not apply the prohibition or coercion, except in exceptional cases.
- Public authorities must take into account the unique features of the Internet.
- E-commerce should evolve globally.

The e-commerce market is formed in the conditions of the "networked economy" as a system of economic relations that form in the

sphere of the infocommunication environment of the Internet. The global nature of the Internet network complicates the process of state regulation of e-commerce. Cross-border information flows leave the borders of an individual state, which makes it impossible to apply normative and legislative acts of individual states. In this connection, there is a need to develop a system for the international regulation of such relations. But regulation of the e-commerce market should begin with the development of appropriate legislation at the level of individual states.

In the world there were several approaches to state regulation of mutual relations of managing subjects in the conditions of network economy. So, the United States and other countries, which are world technological leaders, apply a policy of non-interference, or minimal interference in the functioning of the e-commerce market. Moreover, there is a ban on the establishment of taxation of this type of activity in order to obtain the maximum profit from the operation of the Internet for these countries.

Another strategy is applied by the states of the European Union. It is based on the concept of active state intervention in the sphere of relations between the subjects of the e-commerce market, and e-commerce itself is regarded as one of the articles of replenishment of the state treasury, and, therefore, is subject to taxation.

An interesting experience is the organization and regulation of e-commerce in China, which is one of the leaders in the pace of development of such business. The state takes an active regulatory position, stimulates and promotes the development of the e-commerce market. The Chinese government has developed a comprehensive system of legislative, financial and tax environment for the development of e-commerce, its promotion among business and consumers, the improvement of the technical and information infrastructure of electronic commerce, and the development of international cooperation.

Conclusions. Comprehensive informatization of economic processes becomes the main trend of the development of national economies, and the use of information and communication technologies in all spheres of social activity leads to the emergence of new forms of trade and economic relations - the market of e-commerce.

E-commerce became possible under the conditions of functioning of the so-called "network economy", within which commercial activity is carried out with the use of the global information network - the Internet. That is, trade and economic relations: procurement, sales, implementation of marketing strategies of companies - occur with information and communication technologies and computer networks.

Changing the entire system of economic relations between business entities, e-commerce has a stimulating role:

1. raises the innovation of national economies, since such commerce is carried out at the expense of the comprehensive application of ICT;

2. Expands the scope of traditional international trade and attracts more and more consumers.

3. Promotes the development of a new form of economic relations - the economy of general consumption, which has a significant positive external effect for society.

E-commerce shows high annual growth rates, and already has a high share in the economy of developed countries. Global trends are also characteristic of Ukraine. Ukrainian e-commerce market, although it is in the formation stage, shows high growth rates. At the same time, an imperfect legal framework for such a form of economic ties is an obstacle to its further development.

The growth of e-commerce will be facilitated by the rapid development of global ICTs. As shown in [13] the power of the Internet as a trading space will grow further both nationally and internationally.

Further research of the problems of the development of e-commerce as a form of economic relations of business entities in the conditions of functioning of the network economy should lie in the analysis of institutional regulation of e-commerce by the state and the formation of information infrastructure of the country to provide electronic transactions.

REFERENCES

1. Martovoi, A. V. (2004). The essence and main characteristics of e-business, e-commerce, electronic and Internet marketing. *Kultura narodov Prychernomia*, 1(56). – 146–152. [in Russian].
2. Yudin, O. M. & Makarova, M. V. & Lavreniuk, R. M. (2011). E-commerce systems: creation, advancement and development. Poltava: RVV PUET. [in Ukrainian].
3. Maksymova, T. S. & Sorochan, D. V. (2010). E-commerce use by retailers. *Torhivlia i rynok Ukrainy*, 29, 273–279. [in Ukrainian].
4. Khovrak, I. V. (2013). E-Commerce in Ukraine: Advantages and Disadvantages. *Ekonomika. Finansy. Pravo.* (4), 16-20. [in Ukrainian].
5. Lebedenko, M. S. (2014). Basic concepts and models of e-business *Efektivna ekonomika*, 12. Retrieved from: <http://www.economy.nayka.com.ua/?op=1&z=3836> [in Ukrainian]
6. Melnychuk, O. S. (2015). The hourly stand is especially concerned with the development of electronic commerce in the structures of the national economy. *Hlobalni ta natsionalni problemy ekonomiky.* (4), 217-221 [in Ukrainian].
7. Summer, A. & Dunkan, Gr. (1999). E-Commerce. New York: NYH Publishing.
8. Zwass, V. (1996). Electronic Commerce: Structures and Issues. *International Journal of Electronic Commerce.* 1 (1), 3–23. DOI: 10.1080/10864415.1996.11518273.
9. Zabolotskikh, L.Yu. (2016). Internet Commerce as the Direction of Trade Policy of the Company. *Russian Journal of Retail Management*, 3(3), 205–222. doi: 10.18334/tezh.3.3.36811 [in Russian].
10. Ershov, S.F. (2012). Innovative development management of e-commerce enterprise on the basis of information system development. *Creative economy*, 11, 65–69 [in Russian].
11. Sidorova, O.V. (2011). State control of electronic commerce: foreign practice. *Creative economy*, 6, 108–114 [in Russian].
12. Status Report on European Telework: Telework. (1997). European Comissin Report.
13. Pilik, M., Juříčková, E., & Kwarteng, M. A. (2017). On-line shopping behaviour in the Czech Republic under the digital transformation of economy. *Economic Annals-XXI*, 165 (5-6), 119-123.
14. Neboha, T.V. (2018). The economy of joint participation as a form of resource sharing. *Materialy I Mizhnarodnoi naukovo-praktychnoi konferentsii "Innovatsii i suchasni biznes-tekhnologii v ekonomitsi ta upravlinni (soiuz nauky i praktyky)"* (pp. 47-50). Sumy: SumDPU imeni A. S. Makarenka [in Ukrainian].
15. SEATTLE- (BUSINESS WIRE) (2018). Amazon.com, Inc. (NASDAQ: AMZN). Retrived from: <http://phx.corporate-ir.net/phoenix.zhtml?c=176060&p=irol-newsArticle&ID=2360353>.
16. GfK Group (2018). Retrived from: <https://www.gfk.com>.
17. Pro elektronnu komertsiiu: Zakon Ukrainy 03.09.2015 № 675-VIII. Retrived from: <http://zakon3.rada.gov.ua/laws/show/675-19> [in Ukrainian].
18. Elektronna komertsiiia v Ukraini. Statystyka za 2015–2016 rokyhttp Retrived from: <http://nuigde.biz/uk/blog/elektronnaya-kommerciya-v-ukraine-statistika-za-2015-2016-goda.html> [in Ukrainian].
19. EVO (2018). Retrived from: <https://evo.company/> [in Russian].

ЛІТЕРАТУРА

1. Мартовой А. В. Сущность и основные характеристики электронного бизнеса, электронной коммерции, электронного и интернет-маркетинга. *Культура народов Причерноморья*. 2004. № 56(1). С. 146-152.
2. Юдін О. М. Системи електронної комерції: створення, просування і розвиток: монографія . Полтава: РВВ ПУЕТ, 2011. С. 201.
3. Максимова Т. С. Використання електронної комерції роздрібними торговельними підприємствами: зб. наук. пр. *Торгівля і ринок України*. 2010. № 29. С. 273–279.
4. Ховрак І. В. Електронна комерція в Україні: переваги та недоліки. *Економіка. Фінанси. Право*. 2013. № 4. С. 16–20.
5. Лебеденко М. С. Основні поняття та моделі електронного бізнесу. *Ефективна економіка*. 2014. № 12. URL : <http://www.economy.nayka.com.ua/?op=1&z=3836>
6. Мельничук О. С. Сучасний стан та особливості розвитку ринку електронної комерції у структурі національної економіки . *Глобальні та національні проблеми економіки*. 2015. №4. С. 217-221.
7. Summer, A. *E-Commerce*. New York: NYH Publishing. 1999. 263 p.
8. Zwass, V. *Electronic Commerce: Structures and Issues*. *International Journal of Electronic Commerce*. 1996. Vol. 1, Issue 1. P. 3–23.
9. Заболотских Л. Ю. Интернет-торговля как направление торговой политики компании. *Торгово-экономический журнал*. 2016. № 3(3). С.205–222.
10. Ершов С.А. Управление инновационным развитием предприятия электронной коммерции на основе информатизации. *Креативная экономика*. 2012. № 11. С.65–69.
11. Сидорова О. В. Государственное регулирование электронной коммерции: зарубежная практика. *Креативная экономика*. 2011. № 6. С. 108–114.
12. Status Report on European Telework: Telework 1997, European Comissin Report. 1997. p.18.
13. Pilik, M., Juříčková, E., & Kwarteng, M. A.. *Economic Annals-XXI*. 2017. №165(5-6). P. 119-123.
14. Небога Т.В. Економіка спільної участі як форма спільного використання ресурсів. Матеріали I Міжнародної науково-практичної конференції "Інновації і сучасні бізнес-технології в економіці та управлінні (союз науки і практики)". Суми: СумДПУ імені А. С. Макаренка, 2018. С. 47-50.
15. СИЭТЛ- (BUSINESS WIRE) - июль. 26, 2018 - Amazon.com, Inc. (NASDAQ: AMZN). URL : <http://phx.corporate-ir.net/phoenix.zhtml?c=176060&p=irol-newsArticle&ID=2360353>
16. GfK Group. URL : <https://www.gfk.com/>
17. Про електронну комерцію: Закон України від 03.09.2015 № 675-VIII. URL : <http://zakon3.rada.gov.ua/laws/show/675-19>
18. Електронна комерція в Україні. Статистика за 2015–2016 роки. URL : <http://nuigde.biz/uk/blog/elektronnaya-kommerciya-v-ukraine-statistika-za-2015-2016-goda.html>
19. EVO. URL : <https://evo.company/>