

## THE MODERN MODELS OF E-COMMERCE ORGANIZATION: THEORETICAL ASPECT

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**Formulation of the problem.** E-commerce, with the development of information technology, is the "engine" of business development. This is due to the rapid development of modern information technologies. Therefore, the average person spends about 7 hours online [10]. As a result, at present, this type of e-business is the most interesting, effective tool for promoting goods and doing business.

The analysis of scientific works of modern specialists made it possible to identify two main directions of business development:

- creation of online stores, which is conditioned by the availability of the Internet and helps to increase the number of Internet users who are interested in purchasing goods in this way;
- creation of a separate platform for the sale of goods on the basis of the website of the online store, which not only attracts new customers but also maintains the interest of traditional buyers.

The peculiarity of such areas of business development is that theoretical developments on this problem are not significant and they are happening at the present stage.

**The purpose** of the article is to study the theoretical aspects of the formation of modern e-commerce business models in Ukraine.

**Main part.** Under the influence of the use of modern digital technologies in business, a new direction has emerged in the global system of the world economy – digital economy. The impetus for its development was the Internet. It enables businesses to find their own customers, enter new markets, expand the number of possible sales channels, and serve as a real-time tool for providing a variety of services. This led to the emergence of a new concept of e-commerce.

It should be noted that different experts interpret the essence of this concept differently. Therefore, we have analyzed the existing definitions of this concept (Table 1).

Table 1

### Analysis of the concept of "e-commerce"

"E-commerce" is a form of product delivery in which the selection and ordering of goods is made through computer networks, and the payments between the buyer and the supplier are made using electronic documents and / or means of payment	G. M. Hubaev [7]
"E-commerce" is not only the purchase and sale of goods and services through the Internet for direct profit, but also to support the profit generation, creation of demand for goods and services, implementation after facilitating customer service facilitating interaction between business partners	D. Kozer [2]
"E-commerce" is a technology that provides a complete closed loop of operations, which includes ordering goods (services), making payments, participating in the management of delivery of goods (execution of services), mainly focused on profit as a result of transactions and transactions on the Internet	A. V. Martov [3]
"E-commerce" is a business activity and a type of public relations in the purchase and sale of goods and services, which involves the interaction of parties on the basis of information technology (without direct physical contact).	O. M. Yudin [9]

Source: Generalized by the author [2-3; 7; 9]

Therefore, "e-commerce" is a form of e-business that covers not only the purchase and sale of goods and / or services, but also a tool to create demand for goods / services which requires automation of enterprise management processes.

This has led to the emergence of new e-commerce models used in enterprises (Fig. 1).

Let's take a closer look at them.

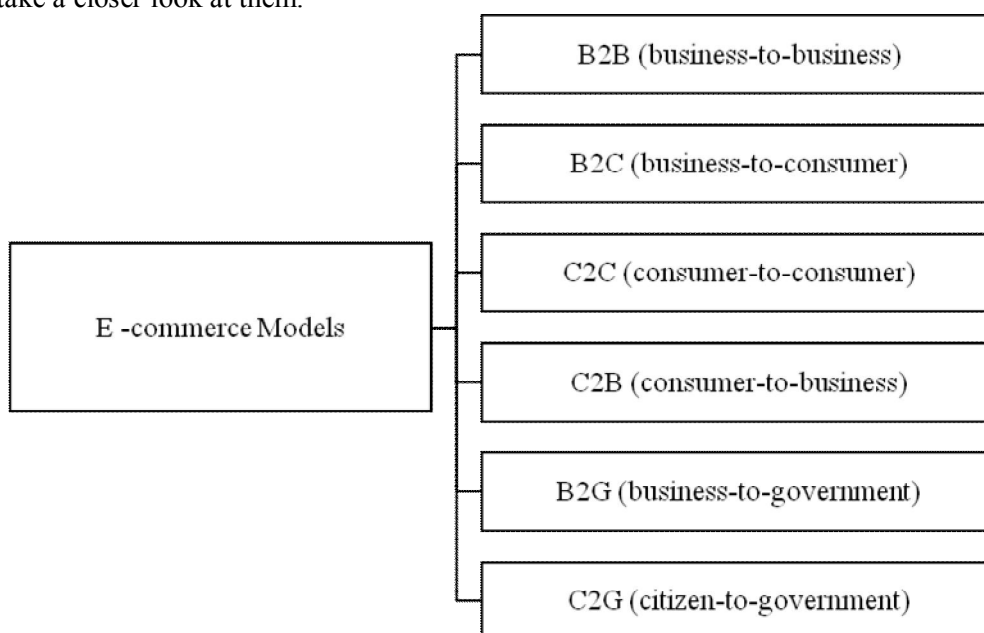


Fig. 1. Types of e-commerce models (organized by author based on [5])

B2B (business-to-business) is the type of business model that focuses on delivering products or services from one business to another.

This model is characterized by a more complex structure and target market, a longer sales cycle, the purchase of goods / services is based on valid solutions rather than emotions or impulsive actions, has less price sensitivity and higher sales revenue [8].

A B2B business model website sells its products to an intermediate buyer, who then sells the product to the end buyer. As an example, a wholesaler places an order on the company's website and, after receiving a batch of goods, sells the goods to the end buyer who comes to buy the goods at one of their outlets (Fig. 2).

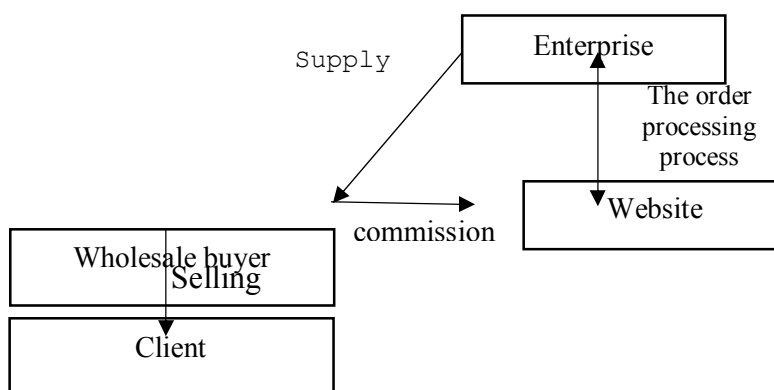


Fig. 2. B2B E-commerce Scheme (copyright development)

B2C (business-to-consumer) – a business model characterized by the process of interaction between an enterprise (legal entity) and an end consumer seeking to acquire a product, service or information. This model is most common for small businesses and e-commerce startups.

B2C characterized by ease of understanding, clarity of the target market, short sales cycle, a large number of spontaneous purchases, mass marketing strategy, price sensitivity of consumers.

In our opinion, the main feature of this model is the short sales cycle; unlike the B2B model, where businesses need a lot of time to make a decision to buy a product and allocate a budget for it. B2C customers

can make quick purchasing decisions. The consumer's solution may take a few minutes to convert from interest to purchase. With a short sales cycle, a B2C company should be able to respond quickly to customer questions, think about ways to pay for goods, and refund if a customer is left unsatisfied with a product. The business must also create a platform or site that can maintain a good level of customer service. The marketing strategy should be focused on understanding consumer behavior. What's more, unlike B2B, B2C businesses always spend more time promoting goods through social networks. This is because potential B2C clients spend more time with them than B2B clients.

It's important to remember that consumer preferences can also vary between B2B and B2C. Consider price sensitivity as a prime example. While most large companies can afford the cost of an expensive product, individual buyers may refuse to buy the product at high prices at a later time.

A B2C-compliant website sells its products directly to the customer. The customer can view the products displayed on the website. The customer can choose the product and order the same. Then the website will send a notification to the business organization by email and the organization will send the product to the customer (fig. 3).

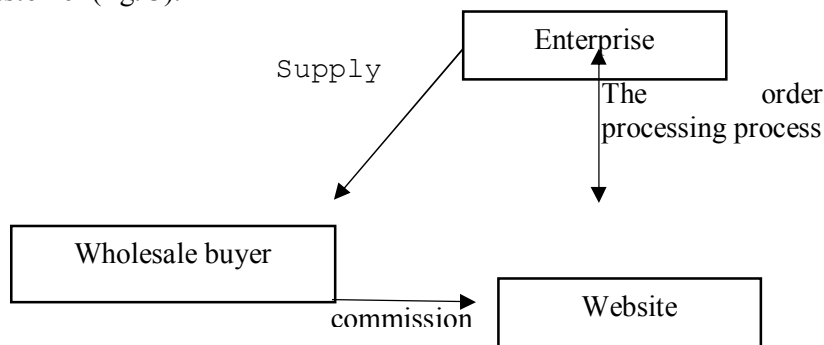


Fig. 3. B2C E-commerce Scheme (copyright development)

C2C (consumer-to-consumer) – user interaction to share business information, experience, auctioning between individuals across sites and apps [4]. The peculiarity of this model is that users of the platform are both sellers and buyers of other goods at the same time. The most famous examples of C2C models are OLX, Uber, Airbnb, Kickstarter, eBay. The main source of their income is commissions on the value of the product / service and advertising.

A website that fits in with the C2C business model helps consumers sell their assets, such as residential real estate, cars, motorcycles, etc., or rent a property by posting their information on the website. Another consumer may decide to purchase the first consumer's product by viewing the publication / advertisement on the website (Fig. 3).

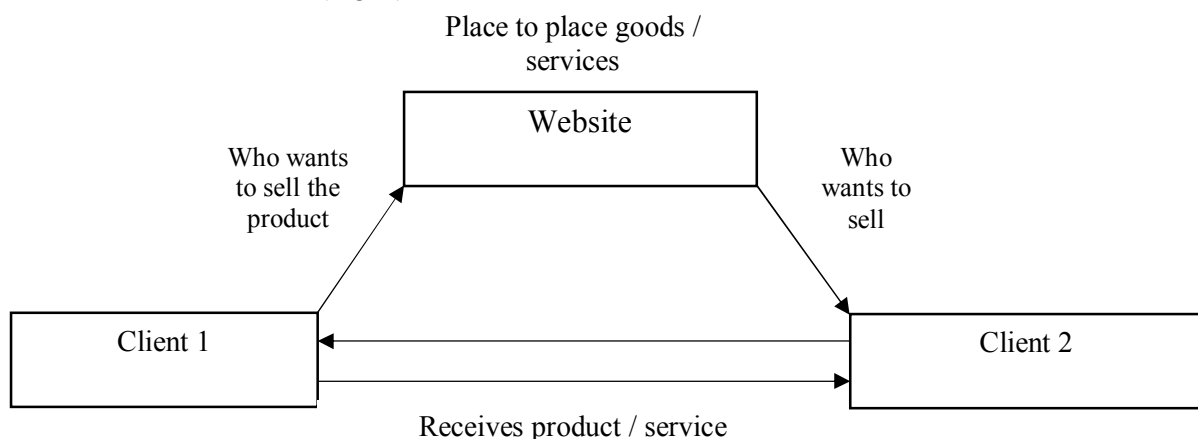


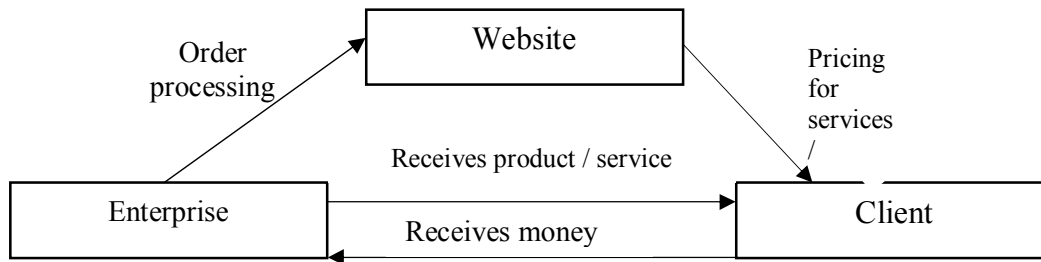
Fig.4. C2C E – commerce Scheme (copyright development)

C2B (consumer-to-business) is a model that offers the consumer the opportunity to set a price for the various goods and services offered by businesses. The only thing that sets C2B apart from other business models is that consumers create value for their own products / services. The model also meets the needs of freelancers working on client tasks. This type of e-commerce is the least developed compared to others. In

this model, the consumer navigates to a website displaying several businesses for a particular service. The consumer sets out the amount he wants to spend on a particular service.

For example, car rentals or airline tickets are provided by various companies through websites.

An enterprise that fulfills the requirements of the consumer within the defined budget approaches the customer and provides him with the order of services (fig. 5).



**Fig. 5. C2B E - commerce Scheme (copyright development)**

B2G (business-to-government) is a joint collaboration between companies and government agencies. That is, this category includes business connections of legal entities with government bodies, local and international organizations [6]. Feature of the B2G model is:

- complex and multi-step decision-making mechanism;
- tender system - the company that offered the lowest price in the market;
- specificity and complexity of financial conditions, as well as mechanisms of procurement;
- sustainability in the relationship between government agencies and the companies providing their services;
- involvement of administrative resources in all processes of interaction; possibility of imposing penalties for non-compliance with the terms or terms of the contract.

Governments use the websites of B2G models to reach out to business organizations. Such websites support the functions of auctions, tenders and bidding (Fig 6). An example of this model in the Ukrainian market is ProZorro (prozorro.gov.ua).



**Fig. 6. B2G E-commerce Scheme (copyright development)**

C2G (citizen-to-government) is a business model of interaction between citizens of the country and authorities in e-government through information technology (Fig. 7). This is an interaction that is connected both with citizens' initiatives in the sphere of relations with the authorities and vice versa.

The main actions in the C2G include: taxes and payments required to obtain public services; forms and information required by the authorities for the provision of certain public services; fines and other payments; services used by citizens in emergency situations; suggestions and recommendations regarding openness and optimization of the management process and citizen participation in the decision-making process [1].



**Fig. 7. C2G E-commerce Scheme (copyright development)**

In our view, interaction in the C2G sector is an effective tool for creating a communication channel between government and citizens. This model creates an opportunity for citizens to participate in the development of local, regional and state strategies, as well as in decision-making. These circumstances

create the potential to stimulate partnerships between citizens and authorities. Through the C2G model, the government is better able to understand what citizens want in the service sector, their quality and the achievement of an effective level of management.

Thus, it is also advisable to systematize the disadvantages and benefits of e-commerce for all e-commerce participants (Table 1).

**Table 1.**

**The disadvantages and benefits of e-commerce for the major e-commerce players  
[generalized based on 11]**

The main participants	preferences	objections
User	<p>low price (compared to the price in the store);</p> <p>availability of information about products, services in online stores in real time around the clock;</p> <p>possibility to buy elite, rare goods in foreign shops, at auctions, to reserve places in hotels of different countries;</p> <p>the ability to make confidential purchases;</p> <p>reducing the likelihood of making a transaction with dishonest, inexperienced sellers;</p> <p>an opportunity to receive fast, simple free samples and take advantage of branded delivery of goods from the manufacturer;</p> <p>digital products, intangible goods can be delivered immediately to the consumer via network channels;</p> <p>the ability to share reviews of products and services, as well as search them through social networks, communities, blogs, and more.</p>	<p>through means of identification of the person of the user it is possible to exercise control over it, to check its activity;</p> <p>the segment of the population that does not have access to the network remains unaffected, and not all types of goods are represented on the network;</p> <p>consumers cannot verify the quality of a product or service until it is received;</p> <p>the need to pay in full or in part the purchase price;</p> <p>complicated order of return of goods in case of client's desire to return the purchase;</p> <p>chaos, confusion and cumbersome Internet;</p> <p>lack of motivation to visit shops not directly related to the purchase;</p> <p>phishing.</p>
Manufacturer	<p>decrease in initial investment in business;</p> <p>reducing the number of staff and payroll;</p> <p>shortening of production and sales cycle, support of online business processes;</p> <p>convenience of marketing researches;</p> <p>great potential of system development with clients;</p> <p>provision of new services and development of new market segments, global access to world markets;</p> <p>equality of access to the market for both large corporations and small enterprises;</p> <p>direct impact on the consumer segment through customized electronic communications;</p> <p>the ability to work in the mode of round-the-clock access and interactive communication with the consumer;</p> <p>preferential terms of taxation and payment of customs duties;</p> <p>increasing the level of consumer commitment to the brand.</p>	<p>increased competition between manufacturers;</p> <p>the need to provide a strong technological foundation for e-commerce to function and to constantly update it requires significant investment of financial resources;</p> <p>pricing problems, as producers cannot overstate prices due to openness of information;</p> <p>the complexity of organizing the activities and development of online storefronts (high cost, the need to coordinate the work of the sales department, bookkeeping, automation of processing bank cards and electronic money);</p> <p>because of openness of information, the likelihood of infringement of intellectual property rights, plagiarism and financial fraud is increasing, so the problem of information security arises;</p> <p>uncertainty and complexity of accounting organization, internal control, reorientation of information flows from traditional paper to electronic form, which in the case of ignorance of employees may complicate management decisions;</p> <p>lack of awareness of employees with modern information technologies and systems, and highly qualified personnel usually require considerable labor costs;</p> <p>the need to involve specialists who will administer the site, update the content of the information resource.</p>
Business counterparties	<p>prompt receipt of information, including in international operations;</p>	<p>disappearance of intermediaries;</p> <p>the need for increased trust between partners, financial</p>

	improvement of business contacts (e-commerce - B2B), possibility of cooperation with partners regardless of geographical borders.	and other guarantees, since the real existence of the counterparty is uncertain; counterparties' lack of knowledge of the rules of doing foreign business, lack of uniform standards of network interaction can lead to misunderstandings and conflicts; the complexity of coordinating the economic relationships that form in the virtual market with the material aspects of those relationships.
State and society	a wide range of goods and services provided to the population in various fields; increasing the capacity of the national economy, investment, infrastructure, science and technology, raising the standard of living, reducing the digital divide; creation of new jobs; improving national security; reducing CO <sup>2</sup> missions into the environment; other types of business are developing (mail, rail, etc.).	uneven development of e-commerce in different regions, industries and in different links of production; requires investments in the development of science, technology, infrastructure; the monopolization of markets, since the small business sector cannot always withstand the challenges of a competitive environment; due to complications in the control of commodity-cash flows in the network, legal uncertainty, favorable conditions for the emergence of new types of fraud are created.

**Conclusions.** The research made it possible to analyze and explore approaches to the essence of the concept of "e-commerce", and also identified its key models. We see that over time, e-commerce will grow at a faster pace and capture the benefits of more that are used by users and users. These circumstances are conditioned by convenience, speed, accessibility for both business and consumers, the ability to enter new markets, promptness in obtaining new information, etc. Thus, in our opinion, this segment of the Ukrainian economy is quite promising and interesting for further research.

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дефіцій дозволив встановити, що «електронна комерція» - це форма електронного бізнесу, яка охоплює не тільки операції з купівлі-продажу товарів та/або послуг, а також є інструментом фактором створення попиту на продукцію/послуги, що обумовлює автоматизацію процесів адміністрування на підприємстві. Це обумовило формування нових моделей електронної комерції, які впроваджуються і використовуються у практиці господарювання. Проаналізовано основні моделі, що використовуються в електронній комерції, а саме: B2B (business-to-business), B2C (business-to-consumer), C2C (consumer-to-consumer), C2B (consumer-to-business), B2G (business-to-government), C2G (citizen-to-government). Кожна модель має свої особливості реалізації і дозволяє забезпечувати реалізацію послуг електронної комерції. Їх розвиток та поширення зумовлені процесами глобалізації та швидкого розвитку інформаційних технологій. Це дозволяє диверсифікувати бізнес та підвищити прибутковість на сучасному етапі. Визначено недоліки та переваги електронної комерції для всіх стейкхолдерів (споживачів, виробників, ділових контрагентів, держави та суспільства).

**Ключові слова:** електронна комерція, модель, комерція, сайт, Інтернет.

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**Нлієбова А.**, PhD (Economics), Associate Professor. **Зозуля А.**, Master student. National University «Yuri Kondratyuk Poltava Polytechnic». **The modern models of e-commerce organization: theoretical aspect.** The article explores the essence of the concept of "e-commerce". The basic models used in e-commerce are analyzed. Their development and dissemination are due to processes of globalization and rapid development of information technologies. This allows diversifying the business and increasing profitability at the current stage. The authors identify the disadvantages and benefits inherent to the major e-commerce participants.

**Keywords:** e-commerce, model, commerce, site, internet.

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**Глебова А.**, кандидат экономических наук, доцент. **Зозуля А.**, магистр. Национальный университет «Полтавская политехника имени Юрия Кондратюка». **Современные модели организации электронной коммерции: теоретический аспект.** В статье раскрывается сущность понятия «электронная коммерция». Анализируются основные модели, используемые в электронной коммерции. Их развитие и распространение обусловлены процессами глобализации и быстрого развития информационных технологий. Это позволяет диверсифицировать бизнес и повысить прибыльность на современном этапе. Выделены недостатки и преимущества, присущие основным участникам электронной коммерции.

**Ключевые слова:** электронная коммерция, модель, коммерция, сайт, интернет.