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TRANSFORMATION OF E-COMMERCE BUSINESS MODELS IN THE DIGITAL ECONOMY

Purpose. Research on the transformation of e-commerce business models in the conditions of the digital economy, analysis of the main directions of changes in business processes, as well as the determination of key differences between Internet commerce, e-commerce and online commerce, substantiation of the difference in the sources of generation of added value and identification of the factors that facilitate the transition from traditional e-commerce business models to digital ones.

Methodology. When conducting the research, the trends of the development of electronic commerce and the factors contributing to their transformation in the conditions of the digital economy were revealed by the method of formal analysis.

Findings. This study presents an analysis of trends and factors affecting the development of digital commerce and the transformation of digital commerce business models. The directions of integration of digital technologies into business processes and strategic aspects of the implementation of digital solutions into business practice are substantiated. The key factors that contribute to the transformation of e-commerce business models into digital commerce business models are identified, in particular, in the creation and implementation of new business models that allow for effective adaptation to the conditions of the digital economy. It is found that the economic basis of transformations of business models is the sources of creation of added value. It has been proven that digital technologies, which form the basis of e-business, are carriers and main sources of added value creation, which is reflected in business monetization models. The impact of artificial intelligence on the prospects and further development of digital commerce business models is analyzed.

Originality. The scientific novelty obtained as a result of this research consists in the definition and substantiation of a new factor – added value, which is the main factor influencing the transformation of e-commerce business models into a digital commerce business model, which takes place under the influence of the digital economy. The novelty of the obtained research results in terms of substantiation of added value as a factor of transformation is proven by confirming the hypothesis that the formation of e-commerce business models and their transformation into digital commerce models take place under the influence of digital sources of added value creation.

Practical value. The value is defined in the single directions of obtaining additional value in business models of digital commerce.

Keywords: *business model, digital economy, e-commerce, digital commerce*

Introduction. The development of information and communication technologies and digital tools have become an integral part of economic processes, which has led to the transformation of economic systems and the formation of a digital economy. Electronic commerce has become one of the most dynamic and significant elements of its development, which has fundamentally changed traditional business models, ways of doing business, and interaction between consumers and suppliers. The intensity and spread of e-commerce are constantly growing both in the world and in the UK. This is confirmed by numerous statistical data regarding the growth of e-commerce in geometric progression over the past few years.

Electronic commerce (e-commerce) covers a wide range of activities, starting from online sales of goods and services, to digital platforms and marketplaces that connect millions of sellers and buyers around the world. Since its inception at the end of the *20th* century, e-commerce has shown rapid growth, driven by a number of factors, such as increased Internet availability, the development of mobile technologies, improvements in digital payment systems, and changing consumer preferences.

Today, e-commerce is a key driver of economic growth in many countries, contributing to the creation of new jobs, increasing the efficiency of business processes, and expanding market opportunities. At the same time, it poses new challenges to the economy and society, in particular, in terms of data protection, regulation of digital markets and ensuring cyber security. In addition, the development of the digital economy and the creation of digital ecosystems contributed to the transformation of business models, including e-commerce models. These processes were strengthened by the introduction of artificial intelligence technologies and e-commerce business processes and the development of digital services, tools and business aggregators. All this contributed to the significant transformation of e-commerce business models to the adoption of digital commerce models.

This study presents an analysis of trends and factors influencing the development of digital commerce and the transformation of digital commerce business models. Also, the impact of artificial intelligence on the prospects and further development of digital commerce. Special attention is paid to the integration of digital technologies into business processes, strategic aspects of the implementation of digital solutions in business practice, as well as the socio-economic consequences of the spread of digital commerce.

Today, digital commerce is becoming a modern trend in the development of digital marketing and e-commerce in the digital economy and a driving force for the transformation of business processes and interaction in the market, contributes

to increasing the competitiveness of companies, optimizing costs and creating new business models.

Literature review. Analysis of the latest research in the field of electronic commerce allowed us to conclude that this field has significantly changed the global market and continues to develop thanks to technological advances. Studies in the field of the development of electronic commerce and its business models were of interest to a wide range of scientists, researchers and experts. Among them, the results of scientific research by Nobel Prize laureates, whose works significantly influenced the understanding of economic and technological changes, deserve special attention. So, Alvin Roth and Lloyd Shapley won the Nobel Prize in Economics in 2012 for their work on the theory of markets and mechanisms of distribution. Their contributions include significant advances in the understanding and design of market mechanisms that have direct application in modern market systems, including electronic commerce.

Foreign scientists Loudon K. K. and Trevor K. G. studied e-commerce in detail from the point of view of business and society [1]. The author Plunkett J. pays special attention to the research on the e-commerce market and analyzes the experience of leading companies that are successfully engaged in e-commerce [2].

Schwab K., the founder and executive chairman of the World Economic Forum (WEF), has written several influential books on the Fourth Industrial Revolution [3]. His works explore how digital technologies and new innovations are changing business, economy and society in general. Electronic commerce is an important part of these changes [3].

The theoretical-methodological basis of the research is also made up of the work by domestic scientists in this direction, among which the following should be noted. Shrigun Yu. O. [4] and L. L. Neskorozhena. [5] paid much attention to the definition of "electronic commerce". Dergacheva V. V., Koleshnya Y. O., Golyuk V. Ya. [6] studied the development of e-commerce in a changing economic environment and evaluated its impact on the digital economy. Andronik O. L., Voronin A. V. [7] studied the theoretical provisions that reveal the essence of electronic commerce, the role and mechanism of its functioning in the national economy. N. Stezhko, O. Shevchuk [8] identified the main trends in the development of global e-commerce, and also analyzed the structures of the global e-commerce market. Zasenko O. Yu. [9] in his research focused on the problem of Ukraine's integration into the global e-commerce market. Berezovska L., Kyrychenko A. [10] analyze the development of the field of electronic commerce in Ukraine and the EU. Yatsenko O. M., Gryazina A. S. and Shevchyk O. O. [11] consider e-commerce as an element of the global trade system.

More detailed studies were carried out by individual private companies and analytical groups, such as "Statista" [12], "Activate" [13].

The principles of the functioning of electronic commerce, the development of business models, the impact of information and communication technologies on trade relations between business entities are reflected in a number of works by domestic scientists, such as Kraus K., Kraus N. and Manzhura O. [14]. In turn, Yatsenko O. M., Gryazina A. S., Shevchyk O. investigate the essence, characteristic features, advantages and problems of the functioning of electronic commerce as a new form of economic relations of business entities in the conditions of the global trade system [11]. Research by L. V. Oliynyk [15] aimed at considering electronic commerce as a new format of business activity. Aleinikova O. V., et al. [16] see that digital technologies are the cause and tool of influencing the transformation of territory marketing

Thus, these studies created theoretical and applied fundamental foundations for understanding the development of e-commerce, its business models and the evolution of development. They helped identify key factors that influenced the transformation of business processes and provided new perspectives for further research in this dynamic field.

Unsolved aspects of the problem. In the fast-paced environment of today's digital economy, the transition from traditional e-commerce to digital commerce is a paradigm shift that is changing the way we do business, interact with customers, and generate revenue. Despite significant progress in this field, several aspects remain unresolved, in particular, in terms of determining the factors influencing this transition and developing sustainable digital commerce models. This study aims to fill these gaps by examining the critical influencing factors that transform e-commerce patterns towards digital commerce. Study of prospects for the development of new models and their adaptation in the conditions of the digital economy.

The growth of digital commerce has brought a new emphasis on the sale and delivery of digital products and services that can be instantly delivered and consumed using digital technologies, services and ecosystems. This shift allows content creators and service providers to distribute their products without physical limitations, radically changing traditional business models and creating new opportunities for growth and innovation.

The purpose of the article. The purpose of the study is to study and analyze the key factors that contribute to the transformation of e-commerce business models into digital commerce business models, in terms of the creation and implementation of new business models that allow for effective adaptation to the conditions of the digital economy and have new digital sources and ways of creating added value.

Special attention is paid to exploring instant access to digital products and services, as well as content monetization models in a rapidly changing environment, ensuring long-term growth and sustainability of companies. This study is aimed at analyzing the processes of business adaptation to the new conditions of the digital economy and identifying key strategies that can help companies integrate digital technologies to achieve competitive advantages.

Methods. While writing the article by the method of formal analysis, trends in the development of electronic commerce and factors contributing to their transformation in the conditions of the digital economy were revealed. The methodological basis of the research presented in the article is a set of general philosophical and special methods, principles and techniques, the main methodological approaches (systemic, process, situational). The following methods were used: general scientific methods: systematic approach – to substantiate the transformation of electronic commerce models into digital commerce models; analysis and synthesis – to determine tendencies and trends in the development of the e-commerce market and factors contributing to their transformation in the conditions of the digital economy; methods of theoretical generalization – for grouping the factors of structural transformations of electronic commerce models in the conditions of the digital economy; semantic-structural analysis – to clarify the conceptual-categorical apparatus in terms of defining the types of electronic models in the conditions of the digital economy; monographic analysis – to study the transformation of e-commerce models in the conditions of the digital economy; terminological analysis – to identify and clarify terms that reveal the essence of the transformation of e-commerce models in the conditions of the digital economy.

Results. The study of the main trends in the development of e-commerce allowed us to conclude that this field continues to develop rapidly all over the world, transforming the ways and methods of doing business. In 2024, the level of development of e-commerce showed significant growth [17].

As can be seen from statistics [12], the Asia-Pacific region shows rapid growth in B2B e-commerce and holds the largest market share due to rapid digitalization and a large number of Internet users. North America remains a stable player, actively adopting technology to improve business processes and sup-

port growth in B2B trade volumes. Europe has a relatively stable market share, but faces certain regulatory barriers that can slow down growth.

The COVID-19 pandemic has accelerated the adoption of e-commerce, as companies are forced to adapt to new conditions and move to digital platforms. Innovations in technologies such as artificial intelligence and blockchain are driving the growth of the e-commerce market in all regions.

Globalization and increased cross-border trade are driving GMV growth by providing access to new markets. In general, the global e-commerce market continues to grow, giving companies the opportunity to gain a competitive advantage through the implementation of digital solutions.

In recent years, the term "digital commerce" has become more common in the digital economy [18, 19]. The development of digital commerce in the digital ecosystem reflects the general trend towards digital transformation in various industries and contributes to the improvement of economic activity [20].

Let us define the differences between electronic and digital commerce.

The definition of e-commerce in accordance with the Law of Ukraine "On Electronic Commerce" discloses its content in the following context: "Electronic commerce – relations aimed at obtaining profit, which arise during the execution of transactions related to the acquisition, change or termination of civil rights and obligations, carried out remotely using information and communication systems, as a result of which the participants of such relations have rights and obligations of a property nature" (Law of Ukraine "On Electronic Commerce" dated September 3, 2015, No. 675-VIII) [21].

One of the definitions of electronic commerce, which is set out in the Law of Ukraine "On Electronic Commerce", is as follows: "Electronic commerce – economic activity in the field of electronic purchase and sale, sale of goods remotely to the buyer by making electronic transactions using information – communication systems" [21].

According to the legislation of Ukraine, e-commerce actually refers to the process of buying and selling goods and services via the Internet. This also includes physical goods and services sold through online platforms. The main emphasis is on sales of physical goods and traditional services through online stores, marketplaces and other platforms. The main goals of e-commerce development are to increase sales of physical goods and services through online platforms and to expand market opportunities and reach a wider audience.

Digital commerce is a type of electronic commerce related to the sale of digital products or services, software, mobile applications, online courses, e-books, streaming media, etc.

The main difference between digital commerce and e-commerce is the emphasis on the sale and delivery of digital products and services that can be instantly accessed and consumed over the Internet. Thus, digital commerce facilitates the sale of digital products. This allows content producers to sell and distribute their own products without physical restrictions. The main goals of the development of digital commerce are the following: providing instant access to digital products and services and expanding opportunities for monetization of digital content and services.

Before looking at digital commerce in detail, let us define the terms "digital product" and "digital service".

A digital product is a product that consists of digital elements and is provided or used by means of electronic devices and computer systems. This can be software, media content (video, music, photos), e-books, mobile applications, game or any other digital information. A digital product may be downloaded, transmitted over a network, or distributed by electronic means.

Digital products may be produced, sold, or made available through the Internet or other electronic communication channels. They are usually characterized by quick availability, ease of distribution and the possibility of updating through the network.

A digital service is a virtual or intangible service that is provided using digital technologies. A digital service can include various services, such as: cloud computing, virtual hosting, online consulting, e-mail, social networks, etc. Digital services are often provided over the Internet and provide convenient access to users.

The main difference between a digital product and a digital service is that the former defines a specific object or material that can be digital, while the latter indicates an intangible service or function that uses digital technology to provide users with a con-specific opportunities or advantages.

Thus, digital commerce is a key direction of the digital economy, which contributes to business development, market expansion and improvement of interaction between enterprises and consumers.

Let us define the main differences between e-commerce and digital commerce based on the following components:

1. Type of product: e-commerce involves the sale of physical goods and traditional services, while digital commerce focuses on the sale of digital products and services.

2. Delivery: in e-commerce, the product is delivered physically, while in digital commerce, the product is delivered over the Internet instantaneously, through digital communication channels.

3. Infrastructure: e-commerce requires a logistics infrastructure for the physical delivery of goods, while digital commerce requires a technological infrastructure for uploading and streaming content.

4. Platforms: e-commerce includes online stores for physical goods (e.g. Amazon, eBay, Alibaba) and digital commerce includes platforms for digital products (e. g. App Store, Google Play, Netflix, Coursera, Udemy, Spotify).

The Table shows a comparative analysis of the tools of commercial activity of Internet commerce, electronic commerce and digital commerce.

In the materials of the European Commission in ESPRIT [22], in the program of the European Community for the development and acceleration of research on the use of information technologies, 11 models of electronic commerce are defined.

The European Commission, as part of the ESPRIT program (European Strategic Program for Research and Development in Information Technology), identified 11 key e-commerce models that were implemented and researched in the European Union. The ESPRIT program was aimed at supporting research and development in the field of information technology, including electronic commerce [22].

Below are the 11 main models of e-commerce that have been identified and investigated within ESPRIT [22]:

1. B2B (Business-to-Business) model. Internet trade between companies. Includes exchanges of information, agreements and transactions between businesses without the involvement of end consumers.

2. B2C (Business-to-Consumer) model. Direct sale of goods and services from companies to consumers through online stores and platforms.

3. B2G (Business-to-Government) model. Business-to-government transactions and exchanges, including the submission of reports, applications or tenders.

4. C2C (Consumer-to-Consumer) model. Exchange of goods and services between consumers through online platforms, such as auctions or exchange platforms.

5. C2B (Consumer-to-Business) model. Consumers offer their products or services to businesses, usually through specialized platforms or exchanges.

6. G2B (Government-to-Business) model. Government bodies provide services or information to businesses, for example, through electronic registration platforms or other tools.

7. G2C (Government-to-Consumer) model. Government bodies provide services or information to consumers, such as tax services, electronic passports and other services.

8. Model of Mobile Commerce (M-Commerce). Use of mobile devices for commercial transactions, including purchases through mobile applications and platforms.

9. Model of Social Commerce (S-Commerce). Use of social networks to promote and sell goods and services, as well as interaction with potential buyers through social media platforms.

10. Model of Electronic Markets (Electronic Marketplaces). Online marketplaces that connect sellers and buyers to make deals, such as Amazon or eBay.

11. Model of Internet trade (E-trading). Sale of goods through online stores, which ensure the purchase process from product review to ordering and delivery.

Table

Comparative analysis of business processes in various types of commerce

Internet commerce	E-commerce	Digital commerce
Impact on target audience		
Online + Offline Retail audience	Online + Offline Retail audience + business	Online Business-oriented
Communication tool with the audience		
Website: development and management of websites for showcasing products and services	Online Store: development and management of online stores for selling products and services via the Internet	Mobile App: development and use of mobile applications for convenient access and purchases
Promotion channels		
Online Channels + Social Media	Online Channels + Social Media	All Types of Digital Channels (Internet, Mobile Apps, Gaming Consoles, Social Media) Omnichannel Sales
Social interaction		
Social Media: utilizing social media platforms to promote products and engage with customers	Social Media: utilizing social media platforms for product promotion and customer communication	Social Media + Analytics, Big Data, Artificial Intelligence
Customer connection		
Email: sending promotional offers, news, and special deals via email	CRM systems: using customer relationship management systems for interacting with buyers and maintaining data about them	Internet of Things (IoT), Artificial Intelligence: Internet of Things (IoT) applying IoT technologies to create «smart» products to enhance customer service. Artificial Intelligence: Using AI for personalizing offers and implementing chatbots for convenient customer communication
Sales technologies		
Focus on standard electronic sales methods	Sales technologies in e-commerce include tools such as automated marketing platforms, customer relationship management (CRM) systems, and advanced analytics. These technologies enhance the efficiency of sales processes, enable personalized customer interactions, and drive data-driven decision-making	Application of Augmented Reality (AR) and Virtual Reality (VR) technologies to create unique and innovative virtual interactions with consumers
Payment systems		
The main focus is on credit and debit cards, bank transfers, electronic wallets, and online payment platforms	Various types are used, such as cryptocurrencies, mobile payments, payment gateways, and electronic wallets	PayPal, Apple Pay, Google Pay, and cryptocurrencies for transactions
Sources of added value creation		
The sources of added value in Internet commerce are mainly focused on creating a convenient and attractive experience for users through effective platforms, product promotion, communication with customers, secure payment systems and detailed data analysis. Together, these elements form a comprehensive approach to maximizing competitive advantage and improving business performance in the online environment. Implementation and optimization of these aspects allow businesses to expand their presence on the market, improve interaction with clients and provide a high level of service. They focus on creating user-friendliness through websites and effective promotion. Traditional sources of creation of added value in the presence of classical factors of its creation	Sources of added value in e-commerce are focused on optimization of online sales and interaction with customers through online stores, promotion in online channels and social media, use of CRM systems, integration of modern payment systems, and detailed analysis data. Together, these elements ensure business efficiency in the electronic environment, promote market expansion, improve customer service, and increase overall business productivity. They focus on a comprehensive approach to online sales, customer relationship management and the use of various payment solutions. Traditional sources of added value, accompanied by the formation of client-oriented management systems and decentralized payment systems	Sources of added value in digital commerce focus on the integration of digital technologies to improve user experience and business processes. Mobile applications, digital channels, social networks, IoT and artificial intelligence, as well as innovative payment systems contribute to improving customer service, expanding sales markets and increasing business efficiency. These elements allow businesses to provide competitive advantages, adapt to the rapidly changing digital environment and achieve high results in sales and customer service. They focus on the integration of digital technologies and platforms to maximize interaction and efficiency of business processes. Availability of digital sources of added value using mostly decentralized payment systems and sources of profit generation

The e-commerce models defined in ESPRIT [20] reflect the variety of ways in which businesses and consumers interact in the digital environment These models emphasize the importance of adapting to a flexible technological landscape and the need for effective e-commerce solutions.

However, given the rapid development of technology and changing consumer preferences, e-commerce is undergoing significant changes. These transformations not only modernize existing business models, but also create new opportunities for integration and innovation.

The transition from traditional e-commerce models to new digital models is especially relevant, allowing businesses to respond more effectively to rapid changes in the market and technological progress. Note that this transition is accompanied not only by the improvement of existing models, but also by the introduction of completely new concepts that meet the needs of the modern digital environment.

One of the essential differences between business models of digital commerce is the sources of creating and obtaining added value. Added value has traditionally been associated with the production of goods and services, but new business models in the digital economy challenge this paradigm. Digitization makes entirely new ways of creating value possible.

"In the new business models of the digital economy, two new and relevant drivers are increasingly stimulating value creation: platformization and monetization of the rapidly growing volume of digital data" [23].

Thus, the problem of creating added value in the conditions of a new paradigm of development of the concept of management in the digital economy is becoming a key issue for researchers and scientists. When forming and using certain business models that operate in the digital economy, monetization models are taken into account, which are a channel for the formation of added value. In contrast to the models that were used in e-commerce, where the methods for obtaining added value were significantly limited.

Let us consider the impact of digital transformations on the transformation of e-commerce models into digital models and business processes, strategies and innovations, and what are the key factors and markers of this transition.

Business models of digital commerce. Digital commerce creates conditions for the development of new business models in the digital economy thanks to innovative approaches to the sale and consumption of digital products and services. It allows companies to quickly adapt to changing market conditions and implement new monetization models such as subscription, freemium and advertising model. Digital commerce also facilitates the globalization of business by providing access to international markets without the need for a physical presence. The use of big data and analytics makes it possible to more accurately predict customer needs and offer personalized products and services. As a result, digital commerce drives innovation and helps create new opportunities for entrepreneurs in the digital economy.

Let us determine the factors that contribute to the transformation of e-commerce business models in the direction of digital commerce:

1. Technological innovations:

- use of artificial intelligence to automate data processing processes, predict consumer needs and personalize offers. This includes chatbots, recommender systems and algorithms for optimizing marketing campaigns;

- application of machine learning to analyze large volumes of data to identify patterns and trends, which allows businesses to adapt their strategies and improve customer service;

- the development of blockchain technology to ensure the security and transparency of transactions, reduce the risk of fraud and improve the management of supply chains.

2. Development of digital platforms:

- the development of digital marketplaces, such as Amazon, eBay, Alibaba, which unite buyers and sellers, providing convenient access to a huge range of goods and services;

- integration of shopping opportunities directly into social networks such as Facebook, Instagram and TikTok, which allows brands to sell products directly through the platforms where their customers are.

3. Changes in consumer preferences:

- demand for instant access to digital products and services via the Internet, which encourages businesses to adapt their offers to ensure prompt delivery of content;

- the rise in popularity of digital goods such as software, e-books, streaming video and music, which reduces dependence on physical goods and changes the way business is conducted.

4. Impact of mobile technologies:

- development of mobile applications and e-commerce solutions that allow you to make purchases and interact with content from anywhere.

5. Changes in regulatory policy:

- adaptation to new data protection and privacy standards, such as GDPR, which necessitate the introduction of new practices in the field of personal data collection and processing.

6. Development of digital payment systems:

- introduction of cryptocurrencies as alternative means of payment, which ensures faster and cheaper transactions, reduces dependence on traditional financial systems;

- the development of digital wallets, such as Apple Pay, Google Wallet and other payment platforms, which simplifies shopping and transaction processes for consumers.

Together, these factors are transforming e-commerce models towards digital commerce, providing new opportunities for innovation, expanding markets and improving customer experience.

Let us consider the business models of digital commerce in more detail:

1. Sale of digital products and services. B2C (business-to-consumer) model: selling goods or services directly to consumers through online stores, marketplaces, etc. B2C models are used by Amazon and Etsy. Companies Amazon, Etsy use the B2C (business-to-consumer) model, selling goods directly to consumers through their own online platform.

The strengths of the B2C model are: direct access to consumers; wide audience; shopping convenience. Weaknesses are: high competition; high marketing costs; dependence on the platform for sale.

B2B (business-to-business) model: selling goods or services to other businesses through online platforms or electronic catalogs. B2B models are used by Alibaba and Grainger. Alibaba, Grainger use a B2B (business-to-business) model, selling goods and services to other businesses through their online platforms.

The strengths of the B2B model are: large volumes of sales due to agreements between companies; the possibility of establishing long-term partnership relations. Weaknesses are: long sales cycle; dependence on economic conditions; high customer acquisition costs.

2. Subscription model (content subscription). Under this model, users pay regular fees to access certain content or services, such as streaming video, music, news, etc. Companies Netflix, Spotify, Adobe Creative Cloud use the subscription model (subscription for content). Netflix is a video streaming platform that offers movies, series and original content on a subscription basis. Netflix users pay a monthly subscription fee for uninterrupted access to the content library. Spotify is a music streaming service that provides access to a large number of songs, albums and playlists through subscription. Users can choose between a free version with ads and a paid subscription without ads and with additional features. Adobe Creative Cloud is a suite of software for creative professionals, including Photoshop, Illustrator, Premiere Pro and other tools. Users subscribe to access to all Adobe programs on a monthly or annual basis. These examples illustrate different ways to use

the subscription model to access content or services, providing regular revenue for companies and constant access to new and updated content for users.

The strengths of the subscription model (content subscription) are: regular payments from customers; subscribers are usually more loyal and long-term customers, which lowers the cost of keeping them. Weaknesses are: high cost of customer retention; the growing number of subscription services, which increases competition for a paying audience.

3. Freemium model. Free access to the basic functionality, but users have to pay for additional functions, advanced features or removal of restrictions. Many companies such as Spotify, Zoom, Trello, LinkedIn, Slack, Telegram, Duolingvo, ChatGPT use the Freemium model. These companies demonstrate how the Freemium model allows you to attract a large user base for free, and then convert a portion of users into paid customers for additional features and capabilities.

4. Partner model/Integration model/Transactional model. Earning commissions from selling or driving traffic to products or services of other companies.

An affiliate model means working with other companies or individuals to promote products or services in exchange for sales commissions. An example is Amazon Associates: Amazon's affiliate program that allows websites and bloggers to earn commissions for selling products through referral links. Shopify Affiliate Program: An affiliate program to promote the Shopify e-commerce platform.

The integration model focuses on the integration of various services and applications to create more powerful or automated solutions. An example is the Salesforce AppExchange: a platform for expanding the capabilities of the Salesforce CRM system through integration with additional applications and solutions.

The transactional model means receiving income from commissions or fees for transactions passing through the platform or service. An example is PayPal: a payment system that allows users to make and receive payments online. PayPal charges a fee for transactions made through their platform, including international transfers and payments for goods and services. An example is Uber: it earns revenue from every ride organized through their platform. The drivers who provide the transportation services receive the majority of the payment, but Uber keeps a certain percentage as a commission for using the platform.

The strengths of the Partnership/Transaction/Integration model are: low transaction costs; fast scalability; passive income from partners; flexibility and adaptability. Weaknesses are: competition among partners; dependence on partners; complexity of integration.

5. Advertising model. Use of advertising in the product. Making a profit from advertising costs. Companies display ads on their website or add-on, and they get paid for each view, click, or conversion. Or users buy the Premium version to avoid seeing ads (like Youtube Premium). YouTube makes money from ads that appear before videos (video ads) or while you are watching (banner ads). Users can subscribe to YouTube Premium to watch videos without ads, and companies pay for views, clicks or conversions through the YouTube Ads advertising platform. Facebook (Meta) uses an advertising model to generate revenue, allowing companies to place targeted ads in news feeds and sidebars. Advertisers pay for ad impressions or clicks. Facebook provides detailed targeting based on the interests and demographics of users. The advertising model allows companies to earn revenue from advertising expenses by displaying ads on their platforms. This can be in the form of banner ads, video ads, or sponsored content.

The strengths of the Advertising model are: free access to content that attracts a wide audience; source of stable income; allows you to use different advertising formats, such as banners, videos and sponsored content, which allows companies to adapt their strategy depending on the needs of the market. Weaknesses are: an excessive amount of advertising can negatively affect the user experience; a decrease in interest from advertisers or changes in market conditions may negatively affect the revenues of the company using the advertising model; high competition; short duration of campaigns.

6. Crowdfunding model. Fundraising from the community to finance projects or product development. Kickstarter uses a crowdfunding model. A crowdfunding platform that helps projects raise funds from supporters to implement ideas. Projects on Kickstarter can include innovative products, art projects, technology startups, and more. For example, successful campaigns include funding for new gadgets, board games and books.

The strengths of the model are: providing enterprises with the opportunity to receive financing without the need to involve traditional investors, which is especially important for startups and small businesses; validation of the idea; flexibility in financing. Weaknesses of the model are: high competition; uncertainty in financing; legal and ethical risks.

7. Dropshipping model. Sale of goods without the need to maintain one's own inventory or warehouse space. Goods are sent directly from the supplier to the client. The main idea of dropshipping is that the seller cooperates with suppliers who directly send goods to customers. An important advantage is that the seller does not have to keep goods in stock and pay for them in advance. An important part of a successful dropshipping business is the selection of reliable suppliers, effective management of the online store and high-quality customer service. AliExpress is an example. An e-commerce platform that allows entrepreneurs to use dropshipping, buying goods directly from Chinese suppliers. through the AliExpress platform, stores can sell a wide range of goods without having to have their own warehouse, since the goods are sent directly from the supplier to the buyer. The dropshipping model allows entrepreneurs to launch online stores without the need to keep goods in stock or manage logistics. Instead, goods are shipped directly from suppliers to end consumers. Companies and platforms like Shopify with Oberlo, AliExpress, Printful, Spocket, Doba, SaleHoo, and Wholesale2B provide tools and resources to easily implement this model.

The strengths of the dropshipping model are: low on-time costs; flexibility in conducting business; ease of starting a business. Weaknesses of the model are: low profit margin; problems with quality control; delivery delays; limited inventory control; high level of competition.

8. The SAAS (Software as a Service) model is popular with companies that provide software over the Internet as a service. In this model, users pay to access software that is deployed on remote servers and accessed through a web browser or mobile app. Users do not install the software on their own devices or servers, but instead subscribe to a service that allows them to access the software remotely. Microsoft's Power BI is a great example of a SAAS monetization model. Power BI demonstrates how SAAS monetization models can be effectively implemented to provide access to powerful analytical tools through subscriptions and a combination of free and paid versions of the product.

The strengths of the SAAS model are: ease of access; no need for installation; scalability; regular updates. Weaknesses of the model are: dependence on the Internet; security issues; limited data control; integration problems.

These business models can be used separately or combined to create complex strategies depending on the type of product or service, the target audience and the specific goals of the company.

The research shows that the most promising models in modern conditions are subscription models, Software as a Service (SAAS). Freemium, advertising and crowdfunding models, thanks to their ability to adapt to the needs of modern consumers and provide stable income. Subscription models and the SAAS model remain among the most promising due to their ability to provide stable income and a high level of cus-

tomer retention. Both models allow companies to receive regular payments, which contributes to long-term forecasting of financial flows. In addition, the SAAS model is actively developing in the context of the digital transformation of businesses, which makes it even more attractive for enterprises of various industries. The SAAS model, according to research by Statista [12], will achieve market growth of 20 % in the next three years, which confirms its prospects due to stable revenues and high user satisfaction. The dropshipping model also has great prospects for entrepreneurs who seek to minimize initial costs and risks. For the successful implementation of these models, enterprises need to carefully analyze the market, choosing models that meet their needs, resources and long-term goals.

From the conducted research, we will determine further trends in the development of the studied models:

1. Omnichannel approach. An omnichannel approach involves the integration of online and offline sales channels, which allows consumers to seamlessly move between different channels and provides a unified user experience.

An omnichannel approach creates a seamless and convenient customer experience, allowing them to start and finish shopping on any channel, whether it is a website, mobile app or physical store. This increases customer satisfaction and promotes loyalty. Omnichannel allows you to adapt offers and communications to the individual preferences of consumers on all platforms. For example, a customer can receive personalized recommendations in an online store based on their purchases in a physical store.

2. Development of social commerce. Social commerce includes the use of social networks as channels for the sale of goods and services. This is not only about promoting products through social platforms, but also selling directly through these channels.

Social platforms such as Instagram, Facebook and TikTok are implementing features for direct sales of goods. Users can browse products, read reviews, view content and make purchases without leaving the platform. Influencers and bloggers play an important role in social commerce, as their recommendations and reviews can significantly influence buyers' decisions. This creates new opportunities for brands to reach their target audience through trusted sources. Engaging with brands through comments, likes and shares helps create a sense of community and increases consumer engagement.

3. Using artificial intelligence (AI) and data analytics to personalize offers, optimize business processes and improve customer interaction.

AI makes it possible to create personalized recommendations for users based on their behavior and preferences. Data analytics allows businesses to better understand consumer behavior, their needs and preferences. This allows you to forecast trends and adjust strategies in real time. AI can automate a number of business processes, such as processing customer inquiries through chatbots, managing inventory and adapting marketing campaigns, which increases efficiency and reduces costs. According to data, personalized recommendations can increase sales by 30 % or more.

These trends show how businesses are adapting to today's technological conditions and changing their e-commerce models to improve interaction with customers and increase competitiveness.

Conclusions. The article defines the main directions of transformation of e-commerce business models. It is substantiated that the economic basis of transformations in business models are the sources of creation of added value. In the context of the emergence of digital technologies, which form the basis of e-business, the main sources of added value are business monetization models. A comparative analysis of business processes and tools of Internet commerce, electronic and digital commerce was carried out. The key differences between e-commerce and digital commerce and the elements of the business models that underlie them have been identified. The strengths and weaknesses of digital commerce business models are identified, including the following: B2C (business-to-consumer) sales models of digital products and services; subscription models (content subscription); Freemium models; partnership model/integration model/transaction model; advertising model; crowdfunding models; dropshipping models; SAAS (Software as a Service) models.

The article substantiates a new factor in the transformation of e-commerce business models into a digital commerce business model – added value, the sources of which are formed under the influence of the digital economy. Considerable attention is paid to subscription models, as the main methods and sources of obtaining digital added value.

The trends in the development of e-commerce and the main directions of its transformation into digital commerce are analyzed. Trends in the further development of payment models in the digital economy are substantiated.

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Трансформація бізнес-моделей електронної комерції в цифровій економіці

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Мета. Дослідження трансформації бізнес-моделей електронної комерції в умовах цифрової економіки, аналіз основних напрямів змін у бізнес-процесах, а також визначення ключових відмінностей між інтернет-комерцією, електронною комерцією та цифровою комерцією, обґрунтування відмінності у джерелах генерації доданої вартості та ідентифікація факторів, що сприяють переходу від традиційних бізнес-моделей електронної комерції до цифрових.

Методика. При виконанні досліджень методом формального аналізу були виявлені тенденції розвитку електронної комерції та фактори, що сприяють їх трансформації в умовах цифрової економіки.

Результати. У цьому дослідженні представлено аналіз тенденцій і факторів, що впливають на розвиток цифрової комерції та трансформацію бізнес-моделей цифрової комерції. Обґрунтовані напрями інтеграції цифрових технологій у бізнес-процеси та стратегічні аспекти впровадження цифрових рішень у бізнес-практику. Визначені ключові фактори, що сприяють трансформації бізнес-моделей електронної комерції в бізнес-моделі цифрової комерції, зокрема у створенні та впровадженні нових бізнес-моделей, які дозволяють ефективно адаптуватися до умов цифрової економіки. Встановлено, що економічною основою трансформацій бізнес-моделей є джерела створення доданої вартості. Доведено, що цифрові технології, які складають основу електронного бізнесу, є носіями та основними джерелами створення доданої вартості, що відображено в моделях монетизації бізнесу. Проаналізовано вплив штучного інтелекту на перспективи й подальший розвиток бізнес-моделей цифрової комерції.

Наукова новизна. Наукова новизна, отримана в результаті проведення даного дослідження, полягає у визначенні та обґрунтуванні нового чинника – доданої вартості, який є основним чинником впливу на трансформацію бізнес-моделей електронної комерції в бізнес-моделі цифрової комерції, що відбувається під впливом цифрової економіки. Новизна отриманих результатів дослідження в частині обґрунтування доданої вартості, як чинника трансформації, доведена шляхом підтвердження гіпотези про те, що формування бізнес-моделей електронної комерції та їх трансформація в моделі цифрової комерції відбувається під впливом цифрових джерел створення доданої вартості.

Практична значимість. Визначена в єдиних напрямах отримання додаткової вартості в бізнес-моделях цифрової комерції.

Ключові слова: *бізнес-модель, цифрова економіка, електронна комерція, цифрова комерція*

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