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CONCEPTUAL FOUNDATIONS OF ADAPTIVE BUSINESS MODELS DEVELOPMENT (SERVICE SECTORS CASE)

In the modern conditions the most important priorities for companies deal with the company's ability to adapt to changing environmental conditions, change the way they do business and determine the optimal business model that is effective in a dynamic environment and in the long term. The article is devoted to the issues of transformation of business models as an iterative process aimed not only at studying the existing realities of the industry, but also at identifying the main possible directions for its further development. Based on modern approaches to business models development the steps in a sample business model review framework for the listed potentials are outlined. In the applied context, as an important factor in the adaptability of business models, we note digitalization, which has fully come into its own in a relatively short period of time. It completely changed the architecture of modern business models and required fundamental changes from all market participants. We can conclude that the potential of functional use of websites by enterprises by type of economic activity is not fully used.

Key words: business model, digitalization, adaptation, strategy.

JEL classification: L10, M20

Problem statement. In modern conditions the most important priorities for companies deal with the company's ability to adapt to changing environmental conditions, change the way they do business and determine the optimal business model that is effective in a dynamic environment and in the long term.

In this regard, a comprehensive study and understanding of both industry changes and trends, as well as processes occurring within organizations is necessary in order to ensure the adaptability of the business model.

Analysis of recent researches and publications. At a conceptual level, the concept of a business model is closely related to concepts of dynamics and evolution. According to the approaches of Osterwalder [1] and Teece [2], companies, even those that are successful in the market, risk losing competitiveness if they do not adapt the business model to the changing business landscape. The dynamic view of the nature of the business model combines the two considered points of view on the relationship between the business model and strategy: the concept under study is defined as a constantly evolving system that changes under the influence of the market and strategy, and in turn affects them [3]. Change in business models is considered by many management theorists, using a number of different terms: flexibility (Battistella et al., 2017) [4], evolution (Cavalcante et al., 2011) [5], reconfiguration and redesign of business models (Chesbrough, 2010) [6].

At the same time, the dynamism of the modern business environment, in particular, competition [7], innovations [8; 9], including digitalization [10; 11], requires the development of scientific and methodological approaches

to business modeling within the sustainability [12; 13] and adaptation [14] context.

Under these conditions, it is necessary to clearly understand the existing business model and manage it evolutionarily in order for the organization to be able to profit from market opportunities. It is important that the elements of the business model are integrated into the company's existing management systems, plans and reports.

The article is devoted to the issues of transformation of service industries business models as an iterative process aimed not only at studying the existing realities of the industry, but also at identifying the main possible directions for its further development.

Main material. The business model is an important part of the strategic management of a company. Effective and breakthrough development strategies are made up of intellectual capital, innovation solutions and effective tools. Therefore, the adaptability of the business model is the most important tool for developing a business and determining the key elements of a development strategy.

Development of unique organization's business model involves analyzing the company's interaction with the external environment, optimizing the processes of converting resources into value for customers, as well as comprehensively taking into account the fundamental factors of resource reproduction and profit from current or planned activities.

Within the framework of adaptive management, business models development is a periodic iterative process within the organization, carried out in the form of strategic sessions, during which a simplified business scheme is cre-

ated and the factors that affect profit are analyzed in depth. An important part of this work is building a new or modifying an existing business model that takes into account the results of the analysis and embodies hypotheses that maximize the long-term profitability of the business.

The close relationship between strategy and business model determines the importance of the configuration (reconfiguration) of the business model to achieve the strategic goals of the company. Harvard Business Review experts note that when the business mechanism is aligned with the company's development strategy, the business model can become a source of competitive advantage.

Business model adaptations fit within the context of a more general theoretical apparatus. The study [8] provides an overview of approaches of thought in the direction of business models and identifies seven of them in the development of the concept of business model adaptation:

1. Business model as a system of processes: a business system consists of components, links between them and dynamic development. The business model is considered as the interaction between different elements of the business mechanism that are in development. At the same time, changes in the business model consist in the reconfiguration of the firm's architecture and its relationships with partners.

2. Business model as a single process: Based on the theory of dynamic opportunities and resource-based approach, this approach considers the business model as a dynamic process of balancing revenue, costs, organizational architecture and customer value. The business model is perceived as the basis for the functioning of the company, and its adaptation is explained by external changes.

3. Cognitive approach to the definition of a business model: a business model can also be considered as the logic of doing business. This theory defines the concept through the concepts of managerial thinking and managerial behavior, while changes in the business model are considered through the prism of changes in the behavior of entrepreneurs.

4. A technology-driven approach links the business model closely with innovation. This concept is considered as a way to make a profit through the introduction of new technologies.

5. Business model as a strategic choice: A business model is defined as a way to achieve competitive advantage within an organization's strategy. This approach draws on game theory and the concept of competitive advantage and considers business model configuration as a strategic and long-term step, and adaptation as a tactical and short-term decision.

6. Business model as a combination of strategic decisions: the business model in the most comprehensive sense is the answers to the questions "who sells?", "what is sold?", "how is it sold?", "who is sold to?". The evolution of a business model is viewed through the lens of various evolving combinations of answers to these questions.

7. Dualistic approach: Based on the theory of organizational symmetry, the dualistic approach defines a business model as the coexistence of two forms of business organization in one organization and the evolution of their interaction over time.

Thus, various approaches and concepts of business modeling correlate well with the resource concept of stra-

tegic management [12]. The business model is designed to reflect a company's unique set of internal resources and capabilities, and the specific ways in which they combine to generate innovation and create a company's competitive advantage. Internal resources and abilities become the foundation for developing a long-term strategy. They help the company create value for the consumer and survive in a competitive environment. The long-term success in business of many successful companies is due to their desire to use unique resources, develop organizational capabilities, which allows them to quickly adapt to changing environmental conditions.

In study [14] it is noted that the introduction of an adaptation strategy in an enterprise is currently one of the key factors in ensuring long-term sustainable development and survival of a business entity in modern market conditions. In this case, we can consider four main types of adaptation strategies:

1. The strategy of active adaptation provides for the introduction by the enterprise of changes in the environment of its functioning. Practical tools for implementing an active adaptation strategy are reengineering, diversification and restructuring.

2. Passive adaptation involves changing the behavior of the socio-economic system for more efficient functioning in the environment. It is implemented using the mechanisms of modernization, restructuring, reengineering.

3. Preventive adaptation is a change in the functioning of an enterprise based on predictive assessments of environmental changes and intuitive considerations of top managers regarding promising areas of activity. Preventive adaptation provides proactive measures and control, creating conditions for the leadership of the enterprise in the market. The tools for implementing the strategy of preventive adaptation are management based on development impulses and management by weak signals.

4. Compensatory adaptation strategy is such forms of adaptation to environmental conditions that occur due to the mechanism of switching complementary modes of functioning of the subject of adaptation. The tools of such an adaptation strategy are restructuring, reorganization, and modernization.

For each of these strategies, the adaptation of the business model is characterized by a number of specific modifications. In particular, study [7] highlights several factors that can signal a change in the business model:

1) customer potential: the current business model is holding back the potential of the customer base, i.e. there is an opportunity to deliver new value to the customer, thereby either offering new value to existing customers or expanding the customer base.

2) technological potential: the current business model does not use the possibilities of technological potential. The adoption of technology can have a significant impact on customer value or business profitability, including by reducing transaction costs.

3) infrastructure capacity: the current business model does not respond to changes in business infrastructure. The business mechanism must respond to new external factors and correspond to the configuration that is most beneficial in terms of customer value and/or profitability.

4) economic potential: the current business model does not allow to maximize the profit received by the

company. Since the way a business is run determines how a company generates profits, it is reasonable to conclude that the business model may be holding back the cash potential of the business and, if so, needs to be reconfigured.

Table 1 outlines the main steps in a sample business model review framework for the listed potentials.

The new or updated business model can represent a detailed vision of the company adaptation, which is why it is so important to link the implementation of the business model with the implementation of the strategy.

In the applied context, as an important factor in the adaptability of business models, we note digitalization, which has fully come into its own in a relatively short period of time. It completely changed the architecture of modern business models and required fundamental changes from all market participants.

Within the framework of the approach [10], to illustrate the impact of digitalization on business models, the concepts of digital erosion and digital transformation are considered.

Digital erosion should be understood as not always noticeable, at first glance, but significant in its possible consequences, the redistribution of the existing market, which occurs due to the use of innovative, often inexpensive, but, importantly, digital technologies of direct contact that are attractive to the client (interception and retention of the client).

By digital transformation we mean the process of changing the business model of an enterprise where, in its objective function, strategic and tactical business decisions are made on the basis of interrelated data analytics «client – product – production», and the responsiveness of the model to the decisions made is achieved through optimal virtualization of the main assets and informed employee engagement.

Based on this, the goals of digital transformation within this approach are:

1. Satisfy the interest of owners in an efficient and transparent business, at least protected from losses caused by «digital erosion», and at the most able to aggressively develop with the help of deep analytics of the nature of decisions made by the client.

2. Provide managers with information to make decisions on the strategy and tactics of business development in accordance with the changing texture (needs and competitive threats) of the market.

3. Implement a digitalization business model that supports the demand (monetization) of the root portfolio of products and services, effectively identifies new customer needs and converts them in a timely manner into a competitive (additional to the root) portfolio of products and services or a partner ecosystem.

We will analyze the features of the digital transformation of the services sector of Ukraine on the basis of data of State Statistics Service of Ukraine on the use of information and communication technologies in enterprises.

Figure 1 summarizes information on the share of enterprises that used computers and the share of employees who used computers in 2019.

Presented in Fig. 1 data show that the level of computer use in the economy is relatively the same (approximately 90%), while the share of workers who use computers varies greatly by type of economic activity.

In particular, in the field of information and telecommunications the share of employees who use computers is 78.6%, in the field of professional, scientific and technical activities – 67.5%, in the field of computer repair services and communication equipment – 77.3%. In general, the presented data show that models of digital services, in particular in the format of "product as a service", are not yet gaining significant popularity due to the low level of digitalization of labor.

Figure 2 shows information on the share of enterprises that had access to the Internet and the average number of employees who used a computer with Internet access, by type of economic activity, in 2019.

Table 1 – Stages of adaptive business model development

State	Content
Identification of customer needs and forecast changes in their behavior	Building a Customer Journey key customer based on an analysis of global and local behavioral trends allows you to determine the role of the company at each stage of the value chain and predict the next steps: What value are you creating today? In what directions should be developed to create a comprehensive product / service? How to get into a long-term relationship with your customers and stay relevant?
Analysis of best practice	Identification of critical areas of development and promising business models of both world leaders and companies that are developing rapidly in the market, sources of financial efficiency. Our focus is on both your industry and related, whose players form innovative and comprehensive value proposals for the client.
Modification of the business core	The business core is system-forming products / services that provide uniqueness, generate a significant part of profits, which act as drivers to expand the range and increase the customer base. Core diagnostics allows us to determine the optimal configuration of the business model to achieve growth targets and margins.
Business process and structure modeling	The business process model should focus on the value you create for your customers, it is the link between the vision and the ability to achieve it. Having a clear approach that links processes to strategy will increase the company's ability to succeed. Processes need to be flexible so that they can adapt quickly to changing circumstances, seize business opportunities, and reduce key risks.
Financial modeling	Financial diagnostics and providing the recommendations on financial and investment model, reporting forms and indicators, which allows you to make informed decisions when creating a business model.
Implementation to achieve results	Designing implementation plans and preparing the team, launching critical initiatives, building teamwork and implementing implementation using effective tools that increase team engagement.

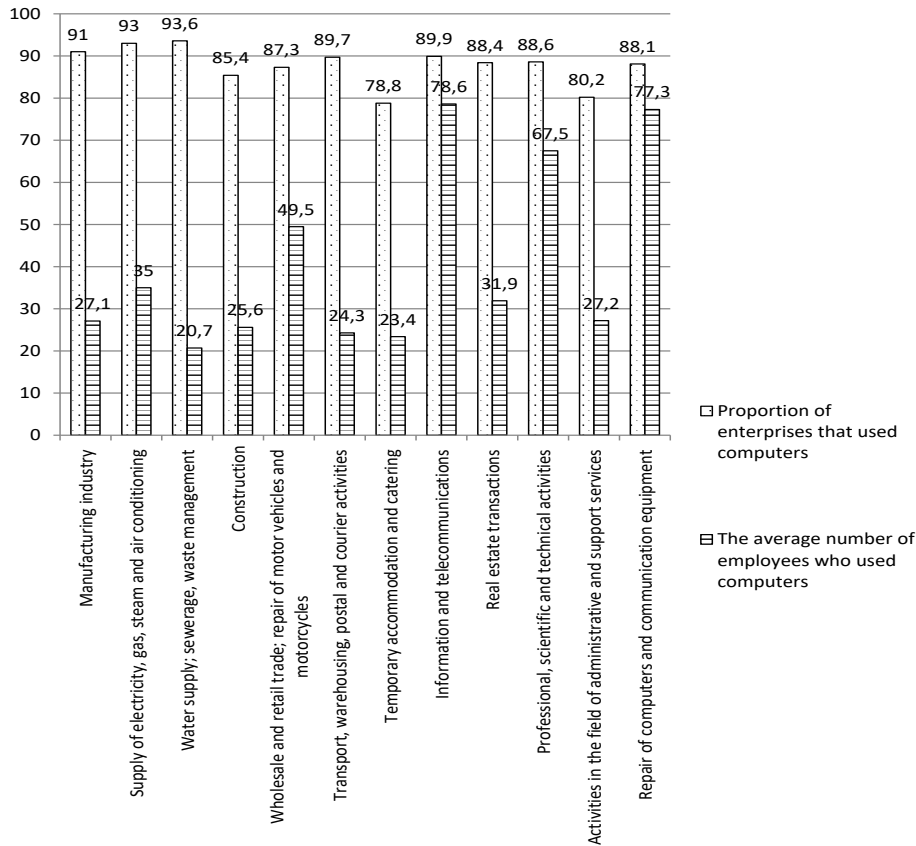


Figure 1 – Information on the share of enterprises that used computers and the share of employees who used computers in 2019, %

Source: author's generalization according to the data of State Statistics Committee of Ukraine

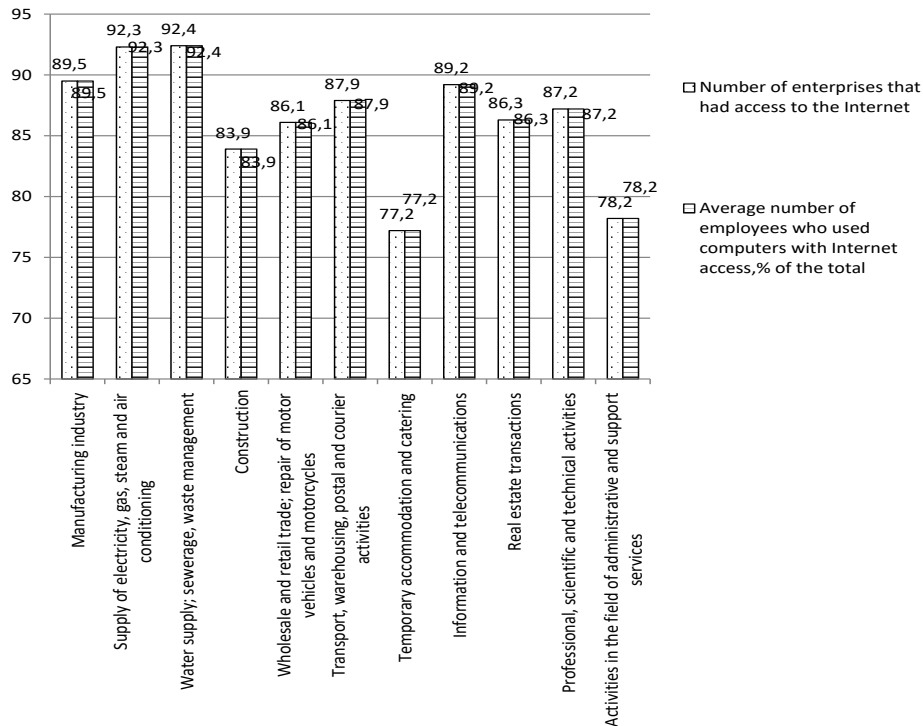


Figure 2 – Number of enterprises that had access to the Internet and the average number of employees who used a computer with Internet access, by type of economic activity, % in 2019

Source: author's generalization according to the data of State Statistics Committee of Ukraine

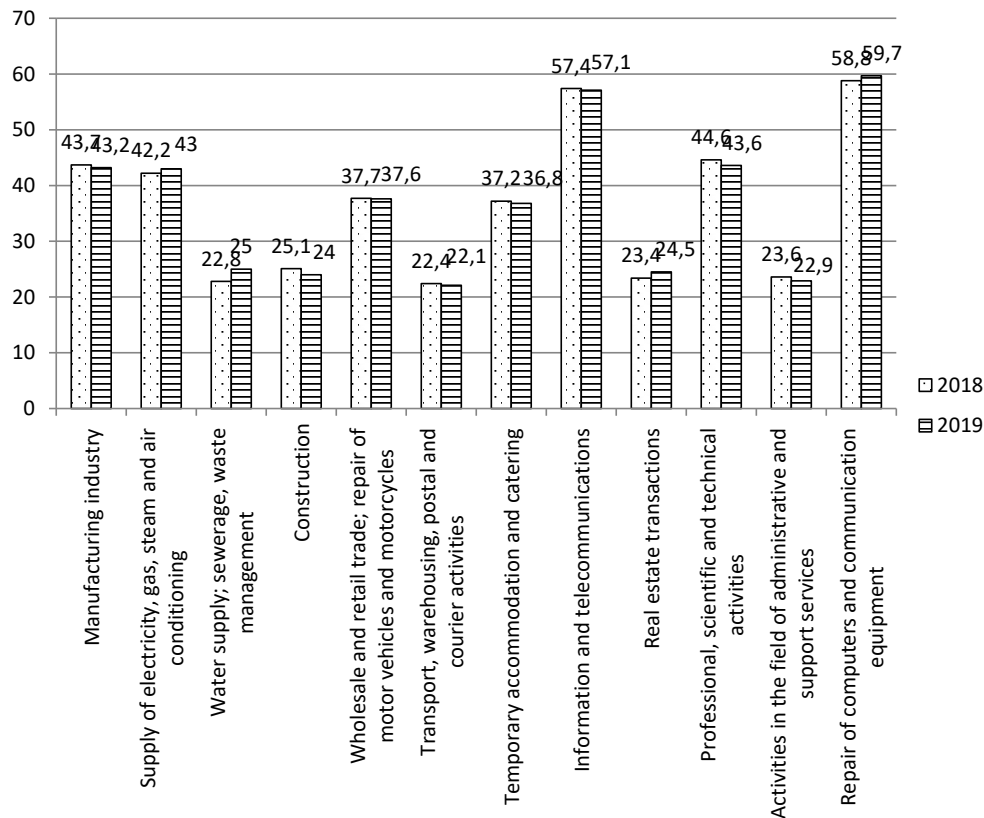


Figure 3 – Share of enterprises that had a website, by type of economic activity, % of the total number, 2018–2019

Source: author's generalization according to the data of State Statistics Committee of Ukraine

Figure 2 shows that the service sector lags behind industry and related sectors in terms of Internet access (89.9% in industry) and the number of employees who used a computer with Internet access (89.5% in industry), except for the information and telecommunications sector, where the corresponding figures are 89.2%.

Figure 3 shows information on the share of enterprises that had a website, broken down by type of economic activity.

From Figure 3 we see that service enterprises are generally ahead of industry and related industries in terms of representation on the Internet. The maximum share of companies that have a website is in the information and telecommunications sector (57.1% in 2019). At the same time, the share of enterprises with their own website is minimal in the field of services – transport, warehousing, postal and courier activities – 22.1% in 2019 and activities in the field of administrative and support services – 22.9% in 2019, which is lower than in industry (43.2% in 2019).

In Figure 4 information about the functional use of websites by enterprises by type of economic activity is shown.

Based on Figure 4 we can conclude that the potential of functional use of websites by enterprises by type of economic activity is not fully used. At the same time, this fact can be considered as prospects for the development of business models.

It should be noted that presented in Figures 1–4 statistics related to the pre-pandemic period and the growing

importance of long-distance communications for business, but in certain trends we can find reasons for a significant decline in economic activity in services in 2020 – early 2021, as a significant proportion of enterprises was "isolated" from customers and partners.

This case demonstrates that business models are not adapted to the digital economy that underpins Industry 4.0.

Conclusions. In today's economy and the multiplicity of channels for delivering value to consumers, there is no one-size-fits-all business model that everyone should strive for. In the field of business model building, there is always room for innovation both in creating value for consumers and in the way that value is delivered.

The business model allows you to systematize the resources that bring profit to the organization, and move from individual elements to an interconnected, systematized and managed reflection of the processes of obtaining profit from existing or future market opportunities. An adaptive approach to building business models allows companies to make a qualitative leap from the perception of a business as a set of assets to an interconnected visualization of the relationships between them and value transfer streams. This approach allows you to move to business models that contain information about managed business objects and their interactions, which, together, create value for the consumer and generate value for shareholders. Dynamic business modeling allows entrepreneurs and managers to find truly innovative solutions in ways to

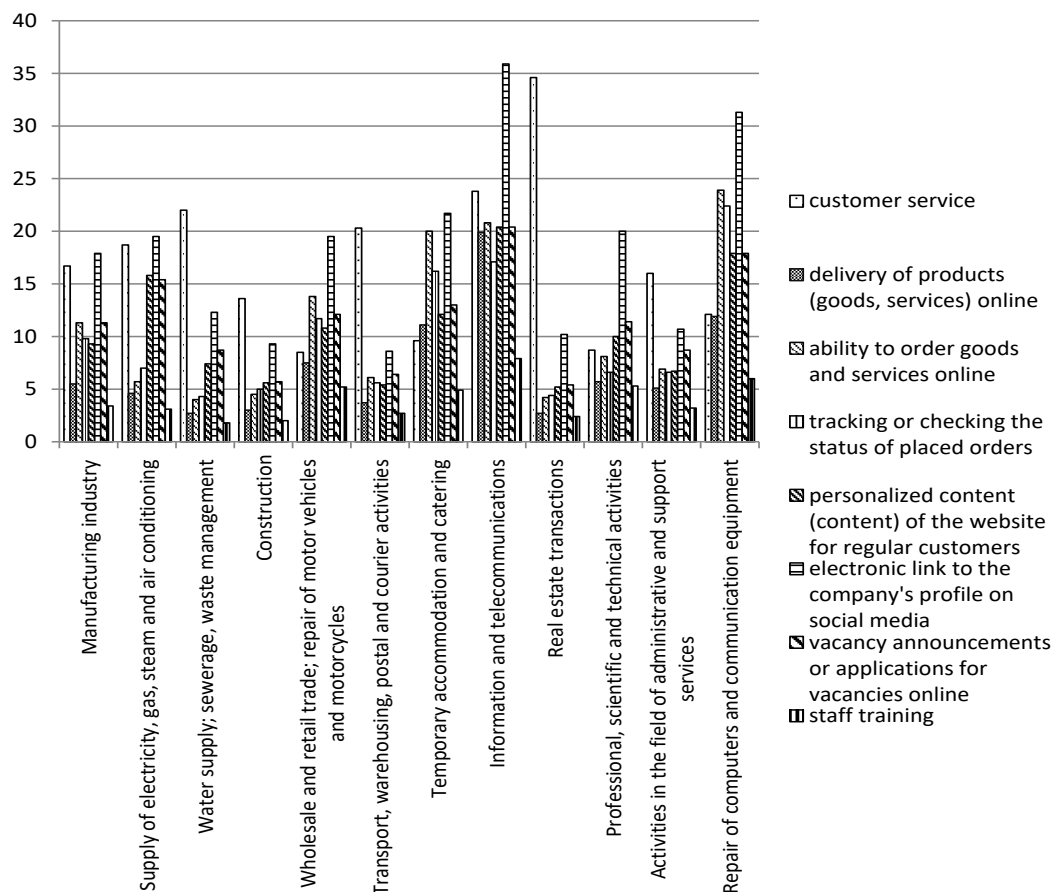


Figure 4 – Functional use of websites by enterprises by type of economic activity

Source: author's generalization according to the data of State Statistics Committee of Ukraine

extract economic profits and allows you to generate new concepts for exploiting market opportunities.

For further researches, it is necessary to develop specific business model performance indicators, taking into

account industry specifics and key value creation factors. This makes it possible to proactively identify opportunities, problems and negative trends in business and adapt their activities and strategies as necessary.

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КОНЦЕПТУАЛЬНІ ОСНОВИ ПОБУДОВИ АДАПТИВНИХ БІЗНЕС-МОДЕЛЕЙ (КЕЙС СЕРВІСНИХ ІНДУСТРІЙ)

У сучасних умовах найважливішими пріоритетами для компаній є здатність адаптуватися до мінливих умов зовнішнього середовища, змінювати спосіб ведення бізнесу та визначати оптимальну бізнес-модель, ефективну в динамічному середовищі та в довгостроковій перспективі. У зв'язку з цим необхідним є всебічне вивчення та розуміння галузевих змін і тенденцій, а також процесів, що відбуваються всередині організації, щоб забезпечити адаптивність бізнес-моделі. За цих умов необхідно чітко розуміти існуючу бізнес-модель і еволюційно управляти нею, щоб організація могла отримувати прибуток від ринкових можливостей. Важливо, щоб елементи бізнес-моделі були інтегровані в існуючі в компанії системи управління, плани та звіти. Стаття присвячена питанням трансформації бізнес-моделей як ітераційного процесу, спрямованого не лише на вивчення існуючих реалій галузі, а й на визначення основних можливих напрямків її подальшого розвитку. Бізнес-модель є важливою частиною стратегічного управління компанією. Ефективні та проривні стратегії розвитку складаються з інтелектуального капіталу, інноваційних рішень та ефективних інструментів. Адаптивність бізнес-моделі є найважливішим інструментом розвитку бізнесу та визначення ключових елементів стратегії розвитку. Тісний взаємозв'язок стратегії та бізнес-моделі визначає важливість конфігурації (реконфігурації) бізнес-моделі для досягнення стратегічних цілей компанії. На основі сучасних підходів до розробки бізнес-моделей окреслено етапи зміни бізнес-моделі для перерахованих потенціалів. У прикладному контексті в якості важливого фактору адаптивності бізнес-моделей відзначено цифровізацію, яка набула суттєвого значення за відносно короткий період часу. Це повністю змінило архітектуру сучасних бізнес-моделей і вимагає кардинальних змін від усіх учасників ринку. Проаналізовано особливості цифрової трансформації сфери послуг України на основі даних Державної служби статистики України щодо використання інформаційно-комунікаційних технологій на підприємствах. Зроблено висновок, що потенціал функціонального використання цифровізації підприємствами за видами економічної діяльності використовується не повністю. Водночас цей факт можна розглядати як перспективу розвитку бізнес-моделей.

Ключові слова: бізнес-модель, цифровізація, адаптація, стратегія.