

## Секція 4

# НОВІТНІ ІНФОРМАЦІЙНІ ТЕХНОЛОГІЇ ТА ЦИФРОВІ РІШЕННЯ УПРАВЛІННЯ БІЗНЕС-ПРОЦЕСАМИ ПІДПРИЄМСТВА



**UDK 768.12.144.07.22**

**E.I. Veliyev**, doctor of physical and mathematical sciences, professor (*STU, Istanbul*)

**V.A. Velieva**, candidate of economic sciences, associate professor (*SBTU, Kharkiv*)

### **THE LATEST INFORMATION TECHNOLOGIES IN THE MANAGEMENT OF THE ENTERPRISE'S BUSINESS PROCESSES**

In a competitive digital economy, modern enterprises need the implementation of effective technologies and innovations to ensure their rational functioning and sustainable long-term market advantages.

The sustainability and competitiveness of enterprises is formed thanks to the use of digital technologies, the application of a unified information management system, which is directly related to the transformation of existing business processes in accordance with new digital models of economic activity.

Enterprises, using modern information and communication technologies, have given a new meaning information as a resource for their development, increased the value of the intellectual potential of the staff, which is reflected in the products associated with them, provides positive changes and creates benefits. Digital technologies change not only the value chain of products and services, but also strategic decisions participants in business processes, so their implementation should be preceded by an analysis of the company's activities, detection weaknesses and threats to be corrected and avoided, and opportunities to be exploited. It needs optimization and reengineering of the enterprise's business processes.

In the classical understanding of process management of an enterprise, we consider the business process as a set of various types of activities (works, operations), organized in time and space, within the

framework of which "at the entrance" resources are used, as a result of this activity at the "output" a product is created, which represents value for the consumer – external and internal. Ground lever, which contributes to the increase efficiency of business operation, there is business process management (BPM) – a systematic approach that gives an opportunity for the enterprise to define its processes, organize their implementation, and improve the quality of the results processes, as well as the stages of their implementation, which contributes to the achievement of the main goal: bringing processes into compliance with business purposes.

Business process management cycle (process definition – modeling – execution – monitoring – optimization) follows the principles of continuous improvement. When the organization formalizes the processes, then by the same contributes to the growth of their productivity and quality, which simplifies and optimizes their implementation, as a result of which the company's activity as a whole is being improved. Digital transformation of business processes contributes creating a personalized offer and delivering it to the external consumer and the internal client conveniently for them in a way made possible by artificial intelligence technologies, cloud computing and platforms for working with data, mobile technologies, robotics. Together, they allow you to track and analyze the client's experience at all points of presence and interaction with the company.

Modern enterprises to ensure their sustainable development and implementation of individual business processes various information products and technologies are used, there is a large selection of information systems business process management. BPA and RPA systems are a way of automating enterprise management. Business Process Automation (BPA) is digital solutions that help to improve the efficiency of the daily routine functions of the personnel for the purpose of systematization and unification specific business processes, including placing an order, sending an order, calling customers, collection feedback (reviews), etc.

Robotization of business processes (Robotic Process Automation, or RPA) is a more technological form of automation business processes using such approaches and tools as machine learning, data mining and chatbots, that "robotizes" most simple repetitive tasks: filling out documentation, creating reports, mailing e-mails, drawing up schedules/schedules, reminders about meetings and calls, consultations, communication with customers through a chatbot; that is, repetitive standard staff functions are transmitted to the computer which performed by a bot through applications imitating human actions in various IT systems.

Because today there is a problem of integrating all the aforementioned software products into a single system management of the

enterprise, then we consider the use of RPA technologies as a way of such implementation, which gives the following advantages: always reliable and operational information and the ability to analyze it at the right time formaking correct management decisions; transparency of operations and minimization of the "human factor"; saving funds due to optimization of business processes and prevention of resource wastage; preventing loss of income due to effective management of activities, exclusion of unprofitable products and/or unprofitable units; regulation of relations with clients; possibility of remote business management.

The use of digital technologies significantly contributes to the expansion of the possibilities of conducting deep analysis, optimization of the enterprise's business processes and increasing the efficiency of business activities.

The start-up community and innovators-scientists are also focusing their attention on the creation of new technologies the direct users of technology are the government and the business industry. The main purpose of use digital tools is to simplify the management process and achieve maximum efficiency through making informed decisions.

Digital transformation is the introduction of modern technologies into the business processes of an enterprise. Language it is about the transformation of technologies, data, processes and the structure of organizations. This approach assumes no not only the installation of modern equipment or software, but also fundamental changes in approaches to management, corporate structure, external communications. This gives a geometric result at all levels, increases the productivity of each employee and the level of customer satisfaction, and only then does the company acquire progressive and reliable reputation.

At the time of digitalization, economists-managers of a modern company must look at the future from an angle strategic thinking. Management should be adapted to modern challenges and a new philosophy, transformed functions of analysis, planning, organization, motivation and control of the enterprise. When conducting the analysis external and internal environment of the organization, managers can use some tools blockchain based on foresight forecasting. Then they can plan the activities of their company to build from the future to the present, in this case it is necessary to answer the question: "what must be done now in order to achieve what is desired in the future".

At the management level, the key to successful digitalization of an enterprise is the development of its strategy. The company's management must be clearly aware of the need to transition to the "digital path" and understand what benefits will result from this process. Implementation of

digital technologies in the company's activities gives a number of advantages, namely: increased production flexibility due to active changes in characteristics production process and ensuring information integration.

Digital transformation brings qualitative improvement business processes of the enterprise due to the introduction of innovations and adaptation of business models to modern conditions digital economy. But you need to remember that digitization is an irreversible process that requires a serious and thorough approach, and its implementation should be guided by a strategy developed in advance.

**УДК 323.17**

**О.Б. Андрищенко**, канд. наук держ. упр., доц. (*УІПА, Харків*)

**Д.В. Баскаков**, здоб. ОС «магістр» (*УІПА, Харків*)

## **ЦИФРОВІ ТЕХНОЛОГІЇ ЯК ОСНОВА ОПТИМІЗАЦІЇ БІЗНЕС-ПРОЦЕСІВ**

В умовах глобальної цифрової трансформації та зростаючої конкуренції, компанії вимушені оптимізувати свої внутрішні бізнес-процеси для підвищення ефективності, скорочення витрат та пришвидшення виведення продуктів на ринок. На перший план виходять інструменти, які забезпечують прямий зв'язок споживача та виробника: SMM-технології, штучний інтелект та інші.

Уявіть, що ви можете поговорити з комп'ютером або зі своїм мобільним пристроєм, як з людиною, і отримати від нього корисну інформацію, пораду або розвагу. Уявіть, що ви можете замовити товар або послугу за допомогою голосового або текстового діалогу з програмою, яка розуміє ваші потреби та побажання. Уявіть, що ви можете покращити свої навички, здоров'я або настрої за допомогою персоналізованих рекомендацій від інтелектуального помічника. Це не фантастика, а реальність сучасного світу, де штучний інтелект (ШІ) стає все більш присутнім та впливовим у різних сферах життя.

Штучний інтелект – це метод змусити комп'ютер чи програмне забезпечення «мислити» як людський мозок. Це досягається шляхом вивчення закономірностей роботи людського мозку та аналізу когнітивних процесів. За деякими прогнозами до 2035 року ШІ принесе світовій економіці 15,7 трильйона доларів [1]. Оскільки технології штучного інтелекту нестримно розвиваються, обсяг приватних інвестицій у цю сферу з року в рік зростає, за винятком