

**Zubko Karolina**

**Bulukh Artem**

Kyiv National University of Technologies and Design (Kyiv)

**Language and scientific supervisor – Senior Lecturer Liudmyla Roienko**

## **THE DEVELOPMENT OF INFORMATION TECHNOLOGIES IN MARKETING**

In the area of enterprise management and marketing technologies have been used for a certain period of time. Technology is a complex of scientific and engineering knowledge implemented in work methods, sets of material, technical, energy, labor factors of production, ways of combining them to create a product or service that meets certain requirements. Therefore, technology is closely related to the mechanization of production or non-production process, primarily the management process. Any technology, including marketing, contains methods, techniques, work regimes, sequence of operations, and procedures. In addition, it is closely related to the use of specific tools, equipment, instruments, and materials provided by the respective technology. Modern technologies are based on scientific and technical progress and aimed at the production of a product: material technology creates a material product, information technology (IT) creates an information product.

The quality of management and marketing decision-making is directly related to the availability of complete, relevant, and reliable information about the market, demand for goods, consumer preferences, market prices, competitor actions, etc., as well as information about the performance indicators the management object. Significant amounts of information, the urgent need for prompt calculations, search and provision of relevant information to marketers for decision-making, require the use of computer technology and information technologies.

The main direction of improving marketing management is the creation of marketing information systems (MIS) based on modern hardware and software tools, information technologies, distributed data processing in networks, the use of economic-mathematical methods and models, and decision support systems.

The automation of marketing activities of companies, as well as the choice of a specific software product or set of software tools for solving marketing tasks, depends on the nature of business, infrastructure, scope of activity, and the scale of the enterprise.

The functional structure of marketing information systems is formed based on the needs of a specific automation object, but it is possible to identify the main functions of the marketing department, which find software implementation in domestic and foreign software products.

Corporate information systems (CIS) enable comprehensive automation of the activities of enterprises, financial institutions, and organizations. Corporate information systems have a number of significant features determined by the basic principles or concept of their construction.

Specialized software products can be divided based on functional features. These software products allow automating the following functions:

- marketing research;
- market state modeling;
- Decision-making support for individual marketing events.

Programs that automate marketing research functions include software that provides market analysis, product analysis, and survey data processing.

Market state modeling is a new direction for creating software products for marketing. Special interest is given to software products that describe a dynamic market model, that is, a system for evaluating qualitative and quantitative market parameters and their interrelationships. Such models include a range of parameters that link individual market components into a single analytical framework, as well as

have several subordinate variables that describe a time series (Oksanych et al., 2018, 112).

Therefore, there are two approaches to creating software today: creating programs as marketing tools for individual analysis methods or programs that model the market situation based on one or several connected parameters. The use of programs with a marketing component in marketing management is rather popular in business. This class of programs includes business planning programs, financial analytical programs, accounting programs, and programs for management automation. Such programs include Project Expert, "FRANT", DeloPro, "Office 2000", "Trade and Warehouse" ("1C"), "Management and Marketing" ("Parus"), and others.

A very interesting and rapidly developing direction of information marketing is the geolocation marketing of information systems. Geolocation marketing is one of the disciplines of modern marketing analysis, a decision-making technology using spatial data in the planning and implementation of activities in the field of product sales, management of spatially distributed objects that characterize the consumer, competitive situation, and infrastructure of the territory. Geolocation marketing research is a form of marketing research that allows to present a visual analysis of external and internal indicators of a company, various aspects of its past, current, and future activities, including infrastructure and competitive environment in relation to its geographical location.

Another direction of development of information technology in marketing is the development of marketing intelligence tools and marketing automation. Marketing automation is the use of software platforms in the marketing departments of companies to solve typical marketing tasks. Marketing professionals specify the criteria and results of marketing processes, which are then processed, interpreted, and stored based on the appropriate software. This approach significantly increases the efficiency of marketing activities and reduces the impact of the human factor.

The development of marketing technologies has been happening at a fast pace in recent years, which has led to the creation of a large number of rules and technologies. The proper application of marketing technologies provides invaluable assistance in promoting and selling goods, which in turn promotes effective trade, strengthens the market, and stabilizes the economy as a whole. These technologies are diverse, but their goal is the same - to increase the competitiveness of the economic entity in the conditions of market economy.

#### СПИСОК ЛІТЕРАТУРИ

1. Лебеденко М.С. Інформаційні технології в маркетингових дослідженнях. [Електронний ресурс] Вилучено з:  
<https://ela.kpi.ua/bitstream/123456789/3080/1/54.pdf>
2. Оксанич А. П., Петренко В. Р., Костенко О. П. (2018) Інформаційні системи і технології маркетингу. К. : «Видавничий дім «Професіонал». 320 с.
3. Пінчук Н. С., Галузинський Г. П. (2016) Інформаційні системи і технології в маркетингу: навч.посібник. К. : КНЕУ. 328 с.