

INFORMATION SYSTEM OF THE ENTERPRISE: THE APPROACHES, COMPONENTS, CONSTITUENTS, ELEMENTS

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In the article, the approaches to formation of the informative system of enterprise are explored and the functional purpose approach is selected. Components and elements of the enterprise information system are defined. The complimentary scheme of the procedure of creation and functioning of the enterprise information system is given. The classification of information systems is provided.

Keywords: information system of the enterprise, approaches, components, constituents, elements.

Introduction. Modern information system of the Enterprise, region, and country is experiencing a period of intense transformation due to the use of modern information technologies, influencing on all spheres of society. This period is characterized by the functioning of the information systems that have the appropriate approaches, components and elements.

Analysis of the recent researches. Information enterprise system (IS) is designed to improve business efficiency, reduce costs and make the business more sustainable and competitive. It is a qualitatively new level of business and business management. To the problems of enterprise information systems functioning, information technology development are devoted a lot of scientific works of economists. Butynets F. F., Brozek L. L., Davidyuk T. V., Evdokimov V. V., Legency S. V., Pushkar M.S. are exploring the importance of information systems in enterprise management, security, preconditions and principles of creation. Butova R. K., Zhuravleva I. V., Nazarova G. N., Pavlenko L. A., Ponomarenko V. S., Pushkar O. I. are examining the nature of information systems in the economy, consider the information process as an automation object [1-5]. However, the modern market transformations in society create the new conditions for businesses, which require the appropriate approaches, components, components and elements of modern enterprise information systems.

The aim of this article is to define the approaches, component, components, and elements of modern enterprise information systems.

The results of the researches. In the theory and practice of information systems creation there are three main approaches: local, global, and system. The essence of the local approach is that the information systems are consistent capacity problems which are solved on the principles of the use of modern computer technology.

It provides the unlimited development of information systems and therefore each of them is impossible to know in general. In addition, the project of the system creation in terms of completeness is not considered and lost the ability to scientifically justify the choice and assess the direction of the information system development, the complex of technical means as well as to build a model of it. The positive sides of this approach are the following: relatively quick results, clarity of tasks, the possibility of developing small groups, relative ease of management systems. The disadvantages of this approach are the following: the inability of rational organization of complex tasks, duplicating, constant rearrangement of programs and the organization of new tasks which leads to the discrediting of the very idea of creating an information system. In the global approach, firstly the project of fully completed system is developing and then im-

plements it. Typically, this approach leads to moral obsolescence of the information system or its components before implementation because the time of its development may exceed the period of equipment updating, software and other tools used in the development process [6, p. 143].

A systematic approach to the creation of the enterprise information system is a comprehensive economic study of the object as one whole with its parts as purposeful systems and the study of these systems and the relationships between them. In systemic approach, the company is considered as a set of interrelated elements of one complex dynamic system that is in a state of constant change under the influence of many internal and external factors involved in conversion process of the information resources input set in other information resources source.

The system approach has the following principles: 1) the ultimate is the goal of absolute priority final (main) objectives; (2) unity is considering the system as a whole and the totality of the parts (elements); 3) connectivity is consideration of any part together with relationship to the environment; 4) modular construction is useful to distinguish the modules in the system and to consider it as a set of modules; 5) the hierarchy is advisable introduce a hierarchy of parts (elements) and their ranking; 6) functionality is the joint consideration of the structure and functions priority functions over the structure; 7) development is accounting system changes, its ability to develop, extension, replacement parts, accumulation of information; 8) decentralization is a combination of decisions, and management of centralization and decentralization; 9) uncertainty is the uncertainty and randomness in the system [7, p. 352].

The characteristic features of the system are the following: simultaneous coverage of the large number tasks design; the maximum typification and standardization of solutions; many faceted understanding of the information system structure as a system consisting of several components, and relative Autonomous development; the key role of databases; local implementation and increased functional tasks. The task of a systematic approach to the creation of an information system is the totality development of the methodological and socio-economic means of the systems various types examination. Methodological quality system approach is based on the ideas of integrity, purposefulness, organization of the objects that are studied, their internal activity and dynamism [8, p. 201].

Analysis of modern approaches to the creation and efficient operation of information systems has shown the majority of scientists inherent in functionally-oriented approach which is reflected in the following algorithm (Pic. 1).

The complementary good is the properties of two structures correspond to each other in a special way [9, p. 149]. An algorithm of any information system creation supplemented by 7 and 8 p. and the principle of complementary which ensures stable connection of the information system formation stages with functionally-oriented approach. Thus at the stage of identifying the information needs and selection of information sources the field of information systems implementation is analyzed, define the main goal and purpose of its creation, the main tasks and methods of their implementation, mark a list of existing and possible sources of the necessary information, form stable cause and serial communications.

The next stage is the collection and technical information processing characterized by the presence and possibility of information system technical support. The problems of the current state of information systems development are made directly in the field of technical software which is integral to the financial possibilities. This step is the most costly step and always requires careful preparation and economic justification.

Further steps consist of the organization's use of information its provision to consumers or transmitting to another system, development of baseline information and feedback. This process should occur in close connection with the providing organization information system.

The last two blocks of the algorithm arise from the necessity, in our view, the control and correction of the so-called input information and monitoring evaluation of the information system functioning. This will allow effective monitoring and correction of information flows in the context of socio-political and economic conditions of the information system functioning, the need for monitoring of performance and evaluation of alternative decisions and actions in accordance with the main tasks of the regions development and the country as a whole.

Many varieties of existing information systems regardless of architecture and their scope include the same set of components: functional, data processing systems, organizational [10, p. 99]. Thus the functional component contains functional subsystems, functional tasks, models and algorithms. The system components are comprised of the information, software, technical support, legal (licensed) software. Organizational component consists of the organizational structure of management, qualified personnel. The practice of

creating information systems suggests that the choice and justification of a functional tasks set is one of the most important problems of their creation. Analysis of scientific literature shows that the formulation and implementation of functional tasks in the information systems of multivariate and can be implemented by various methods, mathematical models and algorithms. However, almost all of the system processing, accumulation, storage and transmission of data contain the same set of components: software, technical, legal and organizational support. Thus many researchers pay attention to the problem of the database formation: the selection of indicators, their relevance, and the possibility of comparison with foreign counterparts, the quality of the content, information load, and the period of validity [11, p. 198].

The development of information technology is inextricably linked with the development of enterprise information systems which are used for different tasks. The problem of information systems is the production of information that is needed to ensure effective management of the implementation process of all your resources tasks, building technical information environment.

Information technologies are the ways of transforming information that are implemented within the information system. Information technology is inherently broader than the information system and can exist outside of it. Modern practice indicates the use of the same information technology in various from the point of achieving view, the goals and objectives, information systems. This is quite a positive factor that allows you to create advanced and integrated information system, provides the capability to integrate and use available databases to develop joint programs and development strategies.

Information space (eng. information space) is a concept that does not have unambiguous interpretation. Scientists propose to analyze from the view point of three main approaches: geopolitical – when space is denoted by allocated a certain subject according to some criterion where information resources, information sources, technological systems of collection, processing, dissemination of information and users of information resources within the jurisdiction of the legislation in force in that territory; interactionist – when space is indicated by the area information of interactions, different subjects of information interaction; social – within which the information space is seen as the sphere of relations between individuals and social community about the information [12, p. 33].

Statistics is the basis of an enterprise information system. Making managerial decision is based on the use of the information resource. The correctness and value of managerial decisions depends in large part on information support of the process management, use of modern information systems of different levels that includes all phases of their operation.

Each stage of the management process provides with certain information which becomes the basis for the operation of the decision making next stage. Thus this process definitely needs feedback that ensures the transfer of information about the reaction of the controlled object on the previous control action or about the changes in the state of observed system over time. Generally the developed information system of the region includes the following

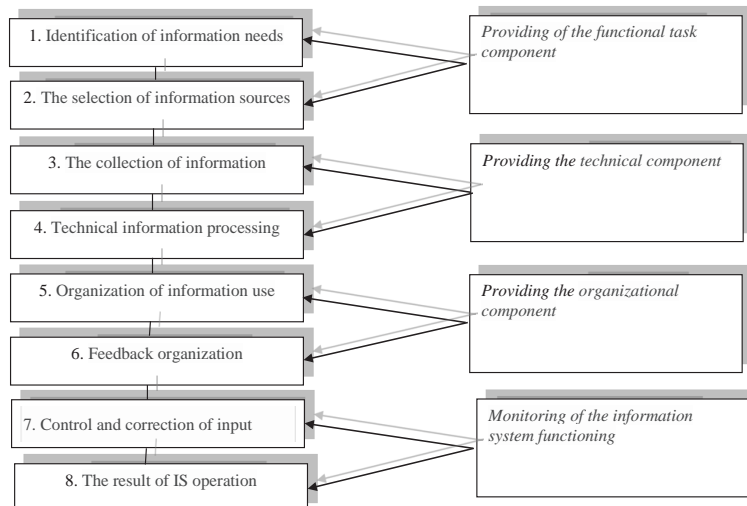


Fig. 1. Complementary scheme of the establishment and operation general algorithm of the enterprise information system

subsystems: internal information, external information and information specific segments. In practice these subsystems are often viewed as independent information systems [13, p. 76]. Internal information includes a set of data that arise at the enterprise in the form of statistical reporting, operational and current production, social and scientific and technical information. The external information system combines the information about state of the external environment, external markets and their infrastructure, estimates, forecasts and the state of the region, country and abroad development. System information of the specific segments formed in accordance with the specialization of the enterprise.

It is known that the category of «element» means a component of a complex whole and determines its functioning. The individual elements contain the basis of the information system functional components of the enterprise and contribute to its development. For example, the element «software» is an integral technical component of the enterprise information system. The elements of an enterprise information system can be divided into technological and organizational. Technological elements include software elements (logical), application software; resource items: fixed assets, equipment, information (as a resource); the communication channels of an information network.

Organizational elements include the following elements: the organization of staff work, obtaining the information resource, organization of network service and organization of the information transmission continuity process [14, p. 201].

The increasing of information volume in the information system, the need for expediting the processing necessitate of the decomposition components of the system to replace outdated elements to more modern, the progressive and fast-acting element both technological and organizational. In the world a lot of attention paid for information systems. Information systems are considered as a significant public projects: the scale, growth rate cost of material, financial and labor resources, as well as the degree of influence on the management process. The most common are the following classification grouping information systems. By the level of activity there are state, (regional) national. By the sphere of activity there are

industry, unions, technological processes, public. By the degree of management processes automation there are information retrieval, information and referral, guidance, systems of decision support, intelligent. According to the degree of centralization there are centralized, decentralized, information systems of collective use. By the degree of functions integration there are integrated in functions, multi-level integration at the management level. The central place in the network of the state information systems belongs to the automated system of state statistics, the role and place of which is determined by the fact that it is the main source of statistical information necessary for the functioning of all state and regional information systems.

Analyzing the enterprise information system you can define the main types of structures, different types of elements and relationships between them: function (elements, components, functions, tasks, information communications), technical (elements-devices, equipment, systems, lines, and channels of communication), organizational (elements-groups of people, performers, experts, singing discipline, interaction), software (elements, software modules, software, software products), informational (elements-form and presentation of information in the system, the operation of converting the information in the system), algorithmic (elements-algorithms), documentary (elements-documents, indivisible components) [15, p. 101].

Therefore in the theory and practice of information systems creation there are three main approaches: local, global and system but most scientists have noted a functionally-oriented approach. Many varieties of existing information systems regardless of architecture and their sphere contain a set of components: functional, data-processing system, organizational. Almost all of the system processing, accumulation, storage and transmission of data contain a set of components: software, technical, legal and organizational support. Elements of an enterprise information system can be divided into technological and organizational. Elements of an enterprise information system can be divided into technological and organizational. Defined in article the approaches, components and elements characterize the modern enterprise information systems.

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ІНФОРМАЦІЙНА СИСТЕМА ПІДПРИЄМСТВА: ПІДХОДИ, КОМПОНЕНТИ, СКЛАДОВІ, ЕЛЕМЕНТИ

Анотація

У статті досліджено підходи до формування інформаційної системи підприємства та виокремлено функціонально-цільовий підхід. Визначено компоненти, складові та елементи інформаційної системи підприємства. Наведено компліментарну схему процедури створення та функціонування інформаційної системи підприємства. Надано класифікацію інформаційних систем.

Ключові слова: інформаційна система підприємства, підходи, компоненти, складові, елементи.

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Аннотация

В статье исследованы подходы к формированию информационной системы предприятия и выделен функционально-целевой подход. Определены компоненты, составляющие и элементы информационной системы предприятия. Показана комплементарная схема процедуры создания и функционирования информационной системы предприятия. Предоставлена классификация информационных систем.

Ключевые слова: информационная система предприятия, подходы, компоненты, составные, элементы.

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ІНТЕГРОВАНІ МАРКЕТИНГОВІ КОМУНІКАЦІЇ ПІДПРИЄМСТВ ТОРГІВЛІ УКРАЇНИ

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У статті розглянуто практичний аспект впровадження концепції інтегрованих маркетингових комунікацій (ІМК) на вітчизняних підприємствах торгівлі. Автором досліджено особливості планування, реалізації, координації та контролю ІМК підприємств торгівлі. Визначено основні стратегічні цілі та об'єкти маркетингових комунікацій підприємств торгівлі України. Досліджено принципи формування комунікаційного бюджету та форми участі постачальників у комунікативній діяльності роздрібних підприємств торгівлі. Запропоновано модель управління інтегрованими маркетинговими комунікаціями.

Ключові слова: інтегровані маркетингові комунікації, маркетингові комунікаційні цілі, комунікаційний бюджет, модель управління ІМК, підприємство торгівлі.

Постановка проблеми. Посилення ролі комунікацій у боротьбі за покупця обумовлено особливостями маркетингового середовища сучасного вітчизняного ринку. Найбільш гостро ця проблема постає у сфері торгівлі. По-перше, спостерігається зростання фінансової спроможності багатьох українських підприємств та їх прагнення охоплювати більш широке коло ринкових сегментів. Це примушує їх проводити агресивну комунікаційну політику та збільшувати власні витрати на комплекс просування. По-друге, постійно зростають розміри іноземних інвестицій у національну економіку, зумовлюючи підключення до конкуренції зарубіжних

компаній з великим досвідом ведення бізнесу та значними бюджетами на рекламу, стимулювання та інші інструменти просування. По-третє, посилюється вплив науково-технічного прогресу на сферу маркетингових комунікацій, що призводить до появи нових носіїв та засобів передачі комунікаційних повідомлень підприємства, таких як Інтернет, мобільний зв'язок тощо. Все це призводить до суттєвого збільшення комунікаційного навантаження на споживача. За таких ринкових умов існуючі підходи до формування комплексу маркетингових комунікацій перестають бути ефективними, що зумовлює послаблення конкурентних позицій багатьох