

## THE CONCEPT OF INFORMATION-COMMUNICATION MANAGEMENT: DOMESTIC AND FOREIGN EXPERIENCE

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### ANNOTATION

This article analyzes the concept of information-communication management highlighting the trends of society and knowledge economy development, the necessary changes in the innovation, the importance of lifelong learning, information networks creation and partnership in exchange of knowledge. Information-communication management is analyzed in terms of economic, analytical, organizational and systematic approach. Information-communication management development trends peculiar to the Ukraine are highlighted. Based on the analysis of scientific articles, comparative insights into foreign states' experience and information-communication management solutions for the introduction of information technologies that predetermine the development of the information society are presented there. The article summarizes the national (Ukrainian) and foreign authors' research results, the information-communication management development trends are set as well as information-communication management development solutions are provided.

**Keywords:** information-communication management, information society, informatization of society, information resources.

### INTRODUCTION

**The relevance of the research** of the transition to the new information age and knowledge economy consists of the following. At first, such transition can be characterized like the social technocratic project (projects), which is based on several innovative lines of locomotive nature. Besides, the actual scientific developments correspond with the technological structure of production and management system, based on information and communication technologies in cases of continuous mass transformation of everyday knowledge. Moreover, the intellectual potential of society has an important function associated with the opposition to destructive processes of social consciousness.

**Formulation of the problem.** The transition to the society of "knowledge economy" is long-lasting. It is based on the development of the innovations, the lifelong education, the partnerships, the knowledge sharing through the information networks, the involving into active social life, which are the primary components of the formation of the economy based on knowledge (Aks'onova, 2013). The **object** of the research is information-communication management and the **aim** was to summarize the information-communication management problems analyzed in national and foreign authors' studies, to identify the key characteristics and development trends.

**Research methods.** Information-communication management peculiarities are disclosed by doing the qualitative analysis of scientific literature content. The article aims to reveal the attitude of different authors, and the potential trends of information-communication management development. General scientific research methods – scientific literature logical analysis and synthesis were used for carrying out the theoretical study.

## RESEARCH METHODS

Information-communication management peculiarities are disclosed by doing the qualitative analysis of scientific literature content. The article aims to reveal the attitude of different authors, and the potential trends of information-communication management development. General scientific research methods – scientific literature logical analysis and synthesis were used for carrying out the theoretical study.

The results of fundamental research of the information-communication management are presented in the works of such scientists as R. Abdyeyeva, V. Andrushchenko, D. Bell, N. Wiener, V. Voronkova (2016 a, 2016 b), O. Bazaluk, S. Gnatyuk, V. Glushkov, B. Hershunskyj, V. Danil'jan O. Dzjoban', Yu. Doroshenko, D. Dubov, W. Ashby, M. Zhaldak, N. Zhukov, K. Colin, W. Mel'nyk, V. Kremen', S. Kurdyumov, M. Ozhevan, L. Petrushenko, K. Popper, I. Prygozhyn, O. Punchenko (2016), S. Savchenko, O. Sosnin, A. Ursula, R. Fischer, H. Haken, H. Hartley, K. Shannon.

The analysis shows that certain measures should be taken to change the meaning and the understanding of the information society development in Ukraine as well as further mechanical technologization of the problems of the information society development, the creation of the appropriate conditions for the formation of the society based on knowledge.

To analyze the concept of information-communication management the following approaches should be used: 1) the economic approach that considers the attraction of new information, based on the concepts of utility and cost; 2) the analytical approach based on an analysis of the needs of information and communication; 3) the organizational approach that considers the information technologies in the context of their impact on the organizational aspects; 4) the systematic approach that considers the processing of the information based on a holistic, system-oriented, comprehensive information processing in the organization, which pays great attention to the optimization of communication channels, information, material means, working methods and costs.

## RESEARCH RESULTS AND DISCUSSION

There are different interpretations of the term “information-communication management”: sometimes it seems to be as a synonym to the internal organizational management data; in the other cases it is identified with communication and information processes of the organization, which is associated with a wider interpretation of the information as a resource and an independent factor of production that is the basis of decision-making. The system approach application emphasizes that information-communication management includes planning, organization, coordination and control of information activities and processes as well as the communications within the organization to improve its functioning. Information-communication management concerns all management functions of modern organizations and processes of communication and decision-making. Information-communication management provides the application of a common methodology to processing of the information in the management structure. Since the document is the main carrier of information management, the conclusion has to be the following: the methodology of information-

communication management can be fully applied to the document management in the organization (Alekseeva, 1999).

The transition of mankind to a new phase of civilization development has brought the new optimistic forecasts that were typical to the population and the scientists from developed countries, where the dissemination of the modern information and communication technologies has strengthened their economic leadership as well as their market globalization in the world economy.

Nowadays the United States of America, Japan, Singapore, China, Taiwan, Hong Kong, South Korea are among those countries that have successfully followed the information society. These countries could be characterized as the countries with advanced donor-communications and intensive development of information systems that occurs in production, distribution, exchange and consumption of information and data. In underdeveloped countries the network of information channels is poor, and access level is very low (less than 10%). The information system of Ukraine at the present stage could be attributed to the recipient-systems.

The display of the information reception is the prevalence of import of the information goods and services over their exports. One of the most important factors of their achievements are significant costs on scientific research and development, high priority of the information and communication technologies in solving the problems of social and economic development of the countries (Mel'nyk, 2012; Osypenko, 2013; Maksymenyuk, 2015). The so-called model of economic cooperation between the state and the market caused the information development of "Asian Tigers" (South Korea, Taiwan, Singapore and Hong Kong). The intensive development of information-communication technologies (ICT) is governed by the state strategic programs. Among the objectives of the strategic plans of Singapore there could be noted the country's transformation into a leading Asia-Pacific information and communication center that delivers information services to the global market and the acceleration of the socio-economic development. The continuing and steady growth of the information industry' segment takes place in the US economy, the countries of Northern Europe, South Korea, Taiwan, China, Japan, Hong Kong and Singapore. The role of the service sector is constantly growing so that its share in developed countries has already reached 40–60% and its growth by 10–15% is expected in the near future. Ukraine is only attempting to implement rapidly the information technologies and to development intensively the information society under conditions of globalization and information civilization (Voronkova et al., 2016 a).

According to D. Bell, the informatization of the society takes place under overall transition from industrial to post-industrial era. G. Virzih considers information-communication management as the integration of information and communication, which includes the three aspects of information management that give it some technocratic features: 1) communication management; 2) resource management; 3) management of information processing. J. Hentse and and A. Hayneke determine the information-communication management as a set of rules, equipment and systems (systematic planning, organization and coordination of information and control activities and processes as well as communication within the organization) that define the information and communication structure of the organization, setting out the purposeful use of information as a resource (Voronkova, 2016 b). American specialist M. Attindger introduces the concept of "integrated information-communication

management”, which refers to the creation of such informational structure, in which all the “particles” of information provide the required level of compliance of all information components. G. Wolfram considers information-communication management as an ancillary function of business management, oriented to resources, relating to its content the task of information providing and of the information systems development in the information and technical aspects. E. Vogel introduces the concept of “information resources management” as a synonym of information-communication management with the main task to coordinate information processing (Kastel’s, 2000).

According to J. Herhetom, the central point of information-communication management is the postulate that information should be considered as one of the most important resources of business activity. Information is an important economic resource factor of production and a crucial factor of competitiveness which requires purposeful coordination. Information-communication management becomes a critical business problem and represents a significant factor in the success of business activities. J. Herhet also notes that the nature of information and communication management is reduced to the coordination of business information infrastructure by solving of three problems of information-communication management: 1) formation (building information systems – people, information resources, information and communication technologies); 2) management (management information processes); 3) development (permanent ability to adapt information systems to the fluid environment) (Kastel’s, 1995; Maksymenyuk, 2015).

The purpose of information-communication management is to support in the optimal way all business-processes and thus to ensure the competitiveness of business strategy. J. Herhet concludes that the scope of information and communication management includes several items of information: 1) information; 2) information and communication technologies; 3) individual consumer information. Their integration through information systems and technologies is the main objective of information-communication management. So, information-communication management as a new methodology and purpose of the concept is fundamental to the organization and has significant potential integrated in existing needs of development in Ukraine (Mel’nyk, 2012).

The main features of information-communication management are the following: 1) the conversion of information on the most important economic resource, which has global features and provides efficiency with the increasing the competitiveness and innovative development entities; 2) the growing influence of information on all the areas of human activity, turning it in terms of public consumption of the population; 3) the formation of an information intensive sector which occupies the dominant position in the new society; 4) the converting of the information sphere on the foundation and the basis of all economic activities. Intelligence, information and knowledge become more important resource in the XXI century (Osypenko, 2013). In the 80’s of the XX century the western scholars began to focus our attention not only on the increasing role and the importance of information, but also on the priority of knowledge and intellectual activity, i.e. information that is assimilated by man.

As the social and philosophical analysis show, according to the classification of the IMF, only 33 countries are classified as developed economies, being home to 15% of the population, having at the same time above 60% of world GNP and up to 66% of world exports of goods and services that

means the development of informational society (Kastel's, 2000). The basis of attribution, functional concepts of information, concepts of the important sign, theoretical models of information (R. Hartley, A. Kolmogorov, K. Shannon, L. Boltzmann) allowed to find out that the concept of "information" is defined as a general scientific information-communication management that characterizes the physical objects and their interaction at all levels of organization of the matter and underlines the management processes of self-organization and self-regulation in wildlife and society (Punchenko, 2013). Any kind of information has three basic settings (content, quantity, quality). Moreover, information is correlated with the time factor because it is determined at some point, so that it makes sense in the past, present and future time. The theoretical analysis of the genesis and relationship types of information in chronological order (physical, biological, social) allowed us to generalize and to specify the most important features of information-communication management, the main components of which determine its specificity: the independence of the information from the media; the quantitative determination; the subjective information as a result of intellectual activity of the subject; the possibility of the multiple use of its entities; creation, saving, copying, reproducing and storage of data; the recording of the information both by its transmitter and its user; the proof that the properties of information are related to its content, because it reflects its validity, objectivity, truthfulness, reliability; the overcoming of the threats associated with information and communications security (Punchenko, 2013).

Thus, we should highlight the most popular definition of information-communication management: management of social communication; information security in the broadest sense of the word; information resources and information infrastructure, as well as their development and management; information services and business information; information systems, their technical support and management; organization of scientific information; formation of information and communication culture; information processing and analysis; office management; strategic planning and management in the organization as a complex social system; the impact of information and communication on the development process in terms of scholastic economy. We believe that the most necessary to the head of information and communication management determinations are: 1) information management that includes the information flows and information resources, i.e. the formation of automated data processing technologies in a particular subject area; 2) management by means of information, that is the use of such management technologies, that are associated to the use of the term and management science (strategic crisis, anti-crisis management, management of organization) that requires the formation of information-oriented type of characteristic of the type of information and communication society. Therefore, the information-communication management is a kind of meta-conception of the information society.

## **CONCLUSIONS**

1. The main features of information-communication management are the following: 1) the conversion of information on the most important economic resource, which has global features and provides efficiency with the increasing the competitiveness and innovative development entities; 2) the growing influence of information on all the areas of human activity, turning it in terms of public

consumption of the population; 3) the formation of an information intensive sector which occupies the dominant position in the new society; 4) the converting of the information sphere on the foundation and the basis of all economic activities.

2. To solve these problems a fundamental theoretical basis of the concept of information-communication management has to be formed as well as the conditions for its implementation in the existing society have to be created.

3. In modern scientific literature on information and communication management there is felt a lack of methodological reflection methods, techniques and methods of its implementation, institutional impact of the organizations on information processes and their implementation options in life.

4. There is also a cognitive problem associated with deficiency of theoretical and practical reflection of the information and communication society and information-communication management. It contributes to the deepening of the basis for the analysis of cultural, economic and political factors of informatization.

5. The solution of the specified problems require systemic solutions and development of the appropriate theoretical and conceptual approaches to this highly innovative discipline and new scientific field that affects many problems of the axiological, epistemological and ontological dimensions.

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### ABSTRACT

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**Research background.** To analyze the concept of information-communication management the following approaches should be used: 1) the economic approach that considers the attraction of new information, based on the concepts of utility and cost; 2) the analytical approach based on an analysis of the needs of information and communication; 3) the organizational approach that considers the information technologies in the context of their impact on the organizational aspects; 4) the systematic approach that considers the processing of the information based on a holistic, system-oriented, comprehensive information processing in the organization, which pays great attention to the optimization of communication channels, information, material means, working methods and costs.

**Research aim** was to summarize the information-communication management problems analyzed in national and foreign authors' studies, to identify the key characteristics and development trends.

**Methods.** Information-communication management peculiarities are disclosed by doing the qualitative analysis of scientific literature content. The article aims to reveal the attitude of different authors, and the potential trends of information-communication management development. General scientific research methods – scientific literature logical analysis and synthesis were used for carrying out the theoretical study.

**Results.** The main features of information-communication management are the following: 1) the conversion of information on the most important economic resource, which has global features and provides efficiency with the increasing the competitiveness and innovative development entities; 2) the growing influence of information on all the areas of human activity, turning it in terms of public consumption of the population; 3) the formation of an information intensive sector which occupies the dominant position in the new society; 4) the converting of the information sphere on the foundation and the basis of all economic activities. Intelligence, information and knowledge become more important resource in the XXI century (Osypenko, 2013).

**Conclusions.** The main features of information-communication management are the following: the conversion of information on the most important economic resource, which has global features and provides efficiency with the increasing the competitiveness and innovative development entities; the growing influence of information on all the areas of human activity, turning it in terms of public consumption of the population; the formation of an information intensive sector which occupies the dominant position in the new society; the converting of the information sphere on the foundation and the basis of all economic activities.

To solve these problems a fundamental theoretical basis of the concept of information-communication management has to be formed as well as the conditions for its implementation in the existing society have to be created. In modern scientific literature on information and communication management there is felt a lack of methodological reflection methods, techniques and methods of its implementation, institutional impact of the organizations on information processes and their implementation options in life. There is also a cognitive problem associated with deficiency of theoretical and practical reflection of the information and communication society and information-communication management. It contributes to the deepening of the basis for the analysis of cultural, economic and political factors of informatization. The solution of the specified problems require systemic solutions and development of the appropriate theoretical and conceptual approaches to this highly innovative discipline and new scientific field that affects many problems of the axiological, epistemological and ontological dimensions.

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