INFORMATION TECHNOLOGY
AND THE FORMULA FOR CHANGE MANAGEMENT

Change management lies in defining and implementing new technology, values, norms and behavior style within the organization which sustain new ways of working and overcome resistance to changes; achieving compromise between consumers and stakeholders on certain changes which were made for better satisfaction of their needs; planning, testing and implementing all aspects of the transition from one organizational structure or business process to another. Change management can be presented as a combination of basic functions of management. Information technology used in organization management consists of a systemic organized combination of methods and techniques employed for searching, processing, storing, transmitting and protecting information and knowledge for solving management tasks on the basis of developed software, computing and telecommunication tools. Organizational change processes touch upon all the spheres of organizational life and penetrate all organization’s components, internal organizational processes and inter-organizational interaction.

Change management is based on the knowledge of economic science, management, information technology management, organizational theory, strategic management, methods of organizational diagnosis and organizational behavior.

The aim of this article is to analyze models and methods of organizational changes, and the efficient technology for their management, as well as to substantiate the change management process based on the analysis of existing information technology.

Modern information technology for enterprise management has the following functions: search, collection, processing and storage of necessary data, development of new information, solving certain optimization tasks. Hereby, the task is not only to select and automate time-consuming, routine operations of processing a big amount of
data, but also to obtain principally new information necessary for efficient managerial decision-making.

The main principles of using information technology for change management are the following:

– principle of operative management;
– principle of end-to-end-flow management;
– principles of adaptive management;
– principle of network management.

The main reasons for the emergence of changes, which necessitate the change of management structure, are the following: obsolescence of production, techniques and technology of the enterprise, reduction in organizational productivity, failures of previous transformations, increase in dissatisfaction of employees with the work environment, reduction in efficiency indicators caused by economic situation and government regulation, changes of law and other regulators of management activity, the level of market competitiveness, consumer purchasing power, the need for new suppliers.

Among different approaches to change management are the following:

– processive approach – viewing change management as execution of management functions (planning, organization of interaction, motivation and control);

– systemic approach – creation of enterprise links with the environment;

– situational approach – awareness and ability of managers to forecast positive and negative impacts of changes in a concrete managerial situation;

– behavioral approach – unity of employees in the process of change implementation;

– contextual approach – analysis of external and internal organizational context which determines opportunities and directions for making changes in the enterprise;

– competence approach – engagement of employees with necessary professional abilities and skills in achieving set goals and objectives of changes;

– adaptive approach – enterprise adaptation to changes and dynamics of the environment.
When making changes, three types of risks referring to three aspects of changes can be highlighted, namely a risk of the contextual effect, related to making a correct choice of the desirable final status; a transition risk, related to the process of changes; and a risk of returning to the previous system status, related to forming new habits. The scale of each risk depends on the situation. Existing approaches to increasing labor productivity of managers should be based on modern information technology. The main directions for the formation of factors stipulated by information technology are the need for organization of users and the presence of technical tools. The organization’s status is greatly influenced by information technology whose development can be named the most unpredictable and changeable. The most competent assessment in the information technology industry can be given only by specialists. Personnel should be trained in advance and, as a rule, during a continuous period of time, the development and use of almost any information systems usually take several years. These facts require detailed planning in time and resource aspects, taking into consideration functional requirements.

Mechanisms for change management of the most part of national enterprises don’t correspond to market needs. This situation causes management inefficiency and, as a result, enterprises find themselves in a crisis situation – they become unprofitable and bankrupt. Any change is made under conditions of problematic, life-changing or crisis events. Change management is a process of constant adjustment of activity directions of the enterprise, renovation of its structure and search for new opportunities. Expert elaboration of tendencies for information technology development should first of all be directed to solving staffing issues concerning the engagement of new specialists or retraining of involved ones in order to initiate upgrading of their educational levels. Such activity will promote the enlargement of information technology competence of internal users.

The competition formula, important factors of its success and adherent information possibilities are important for information systems used for competition management. Building a modern information system should allow both institutions and citizens to have access to versatile information services and to create conditions for
citizen involvement in the processes of public economic policy formulation and implementation.