

AUTOMATION TECHNOLOGIES IN TRANSPORT*Tahiiieva A. R., Skrypnyk N. S.,**Kharkiv National Automobile and Highway University*

Modern transport management is characterized by the use of automated and information systems and the increased use of cognitive technologies. Along with information systems for transport management widely used, there are information technologies divided into technologies of management and technologies of management support. There is also the direction of information management distinguished, which includes information management technologies and management methods designed to work in the field of information. Information technologies of management (ITM) occupy a place between automated and intelligent control. IT management is not limited to the use of information technologies and information systems. They rely on a set of specific principles, techniques and an informational approach.

These methods include the creation and use of a number of special information models: information situation, information position, information structure, information units, information uncertainty, situational information management, multipurpose management. The need to improve transport management is an urgent problem that constantly exists and will exist for time. The solution to this problem necessitates the study of IT management in transport. IT Transport management encompasses mobile asset management and transport infrastructure management. Currently, information technologies of management are one of the key means of improving the efficiency of transport management. They organically flow into intelligent management technologies and are the basis for the formation of intelligent management and risk reduction. The need to improve information management technologies requires constant analysis. Such an analysis is possible on the basis of studying the practice and experience of already existing information technologies of management both in the field of transport and in other areas.

Information technologies in transport management and in other areas have

many forms of implementation. This requires grouping and group analysis. It is necessary to distinguish between the uses of three information components in management: information systems, information technology and information models in transport management. In addition, information design and information modelling are applied in all components as well.

A general description of information technology of management can be given using the paradigm that is used in monitoring: “observation; analysis; forecast; control”. The analysis makes it possible to single out “groups of management technologies”. These groups include: the formation and use of databases; communication, knowledge transfer, facility management; personnel management, accumulation of experience, etc.

Modern management is impossible without the use of computer control technologies based on modern software solutions, which allows streamlining information flows, providing access to up-to-date data and providing the necessary means to support the adoption of informed management decisions. One of the ways to improve the efficiency of managing the activities of a transport company is information technology of management, made from a systemic standpoint.

In real practice, there is a kind of information management technology as a means of technological processes based on specialized software. Such management is problem-oriented and it is connected to software and specialized information systems. These technologies can be characterized as “specialized” information management technologies. An important feature of information management technologies is the creation of conditions for the integration of different technologies and methods into a single environment. This feature creates an integrated management environment. The property of integration, along with the property of emergence, is a systemic property of complex control systems and creates a qualitative advantage in the management and analysis of systems and management technologies.

Transport management information technologies can reduce the problem of “big data”. They allow working with large amounts of information, applying semi-

structured information, increasing the efficiency of decision-making, and integrating various types of data into a single system. Management information technologies include not only direct management technologies, but also numerous management support or decision support technologies. The use of information technologies of management is a mandatory factor in the development of transport management. Such management support includes not only information management technologies, but technologies for retraining specialists. The use of information management technologies creates a systematic approach to transport management.

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