

INFORMATIONAL AND ANALYTICAL SUPPLY IN THE MANAGEMENT SYSTEM

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Abstract. This article examines and substantiates the importance of informational and analytical supply in the management system. The research purpose is to substantiate the importance of informational and analytical supply for management, to define the components and principles as well as to formulate proposals for improving information and analytical support in order to increase the efficiency of management. During the writing process were used methods of analysis and synthesis were for detailing the research object; systematization, grouping and generalization of information for the logical sequence of the presentation material and theoretical generalizations of the results. For example, abstract-logical for the formation of generalized conclusions and graphic for a visual representation of research results. The components of the informational and analytical supply system and the principles, the observance of which will ensure the quality and efficiency of the information and analytical process are determined. Proposed ways to improve informational and analytical supply in order to improve management efficiency. The article establishes that Information support is an irreplaceable tool and an important component of the organization's management system. Based on the results of the research, the main aspects of information support in the organization's management system are singled out, namely: support of accurate, timely and necessary information, which makes it possible to avoid errors and reduce the risks of making wrong decisions; supporting decision-making processes allows managers to make informed and effective decisions based on data; increasing the efficiency of organization management and ensuring competitive advantages.

Keywords: informational component, analytical component, informational and analytical supply, management system, information resources.

JEL Classification: L81, L86,

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Introduction. Informational and analytical supply is an important and integral component of the management system, as it is an information basis for making management decisions based on substantiated data. In the management system, informational and analytical supply is used to support various types of management activities. Information and analytical supply in the management system an important element in the decision-making process and ensuring the effective operation of the management system as a whole through constant monitoring and analysis of the state of the organization.

Informational and analytical supply covers the collection, processing and analysis of data that reflect various aspects of the organization's functioning, and allows providing the management system with relevant, timely and reliable information that helps management personnel make effective decisions, exercise control, determine priorities and solve problematic issues, which arise in the course of the organization's activities. The main purpose of informational and analytical supply is to ensure high quality and accuracy of data analysis, which allows for solving important tasks and making the right decisions.

Literature review. Many studies and scientific publications are dedicated to informational and analytical supply in practical and scientific content. Scientists such as L.Voloshchuk, O.Gudzinskyi, G.Kindratska, I.Lazaryshyn, E.Mnykh, P.Popovych, P.Pucenteilo, S.Filippova, A.Sheremet, S.Shkaraban research the fundamental basis of informational and analytical supply for factories and organizations. However, in order to reduce risks in the organization's activities, increase the efficiency of management decision-making and management of the organization based on data obtained as a result of quick and high-quality analysis of information, it is necessary to comply further research related to the improvement of informational and analytical supply.

Aims. The research purpose is to substantiate the importance of informational and analytical supply for management, to define the components and principles as well as to formulate proposals for improving information and analytical support in order to increase the efficiency of management.

Methods. During the writing process were used methods of analysis and synthesis were for detailing the research object; systematization, grouping and generalization of information for the logical sequence of the presentation material and theoretical generalizations of the results. For example, abstract-logical for the formation of generalized conclusions and graphic for a visual representation of research results.

Results. There are different approaches to defining "informational and analytical supply".

According to O.Parkhomenko, information and analytical supply is a system of interconnected methods, measures and means that realize the creation and functioning of the technology of the process of collection, transmission, processing, storage and issuance, as well as the use of information for the purpose of the effective activity in one or another field [1].

I. Lazarishyna believes that informational and analytical supply should objectively reflect the state of the enterprise at any moment in time and with any level of detail, as well as take into account possible threats from the external environment [2].

Y. Pushak interprets informational and analytical support as a set of initial data, indicators and methods of their determination and analytical evaluation, which can be a scientific and methodical prerequisite for making appropriate decisions by regional management bodies when determining effective directions for the development of entrepreneurship [3].

Summarizing the above approaches can be concluded that informational and analytical support is a process of collecting, processing, analyzing, evaluating and systematizing information regarding the relevant object in order to provide data to support effective management decisions and improve management efficiency.

Informational and analytical support is performed in a certain sequence. The main points include:

1. Gathering information involves collecting data from various sources and ensuring the accuracy and reliability of the collected information.
2. Analysis of information including methods and techniques, collecting analyzed information, calculating indicators and revealing tendencies and patterns.
3. Data visualization includes the use of tools to present the results of data analysis in an understandable and accessible form.
4. Decision-making is the use of the obtained results information and analytical supply for management decisions.

Information and analytical supply function taking into account information and analytical components.

The informational component of information and analytical supply is a set of resources that are used to analyze information from various sources in order to obtain the necessary data for decision-making. This component includes various databases, information resources, analytical tools, software tools and methods used for information processing.

The informational component of information and analytical support allows for comprehensive analysis of data from various sources. This gives the possibility of quick and accurate analyzing information and identifying tendencies, which contributes to more accurate and effective decision-making.

Moreover, the informational component of information and analytical supply includes data visualization tools, which allows for presenting the results of the analysis in a convenient and understandable format. These can be graphs, charts, tables and other data visualization tools that help to understand complex information and make more reasonable decisions. All these elements of the information component interact with each other and allow effective analysis of information, which in turn contributes to the adoption of reasoned decisions. Information is used as a resource for performing official functions, as well as a means of official communications since the latter is implemented in the process of transmitting various information [4].

The main aspects of the analytical component are the analysis of data by using methods of analysis, modeling and forecasting.

Analytics provides managers with the necessary and sufficient information for making timely and effective management decisions, diagnoses, and forecasts. It protects managers against threats and risks, helps to avoid crisis situations in the economy and politics, by obtaining relevant information and reduces the information load on persons making managerial decisions due to filtering of information flows [5].

The analytical component allows for making effective and well-founded management decisions based on objective information. In addition, analytics helps identify potential threats and opportunities, makes predictions regarding future development, monitors activity results, identifies problems and shortcomings, and adjusts actions if necessary to ensure effective management of the organization in general.

Analytical information is currently the most valuable product on the information market [6].

The organization uses analytical information for three main purposes:

- to reduce risk and uncertainty;
- to obtain power and means of influencing others;
- to control and evaluate the productivity and efficiency of the organization [7, p. 20].

Informational and analytical supply is provided on the basis of certain types of analysis.

1. Strategic analysis. It is carried out with the help of determining and implementing measures to influence future costs in order to increase the size of positive results. It includes analytical procedures for identifying strategic problems and counting the results of the study of the organization's internal resources and capabilities.

2. Attributive analysis. It is determined through the analysis of temporary changes and examines the impact of individual attributes of the process in order to identify the possibility of improving the efficiency of these processes.

3. Operational analysis. It is aimed at improving the current results in the main types of activities due to research and evaluation using the capacities of the industrial enterprise.

4. Comparative analysis. It allows for diagnosis and identifying potential opportunities for the development of the enterprise due to the comparison of planned and actual performance indicators.

5. Financial-economic analysis. Assesses financial requirements and examines the level of security of the management system of relevant resources, taking into account the developed plans [8].

Information and analytical supply is a complete system consisting of a set of interconnected and interdependent components (Fig. 1).

These components can be interconnected and interdependent, which allows for the efficient operation of the entire system. However, they can function separately

and be used in different areas of activity, depending on the needs and tasks of the users.

The data collection and processing system provides information gathering from various sources, both internal and external, which is subject to further processing and analysis.

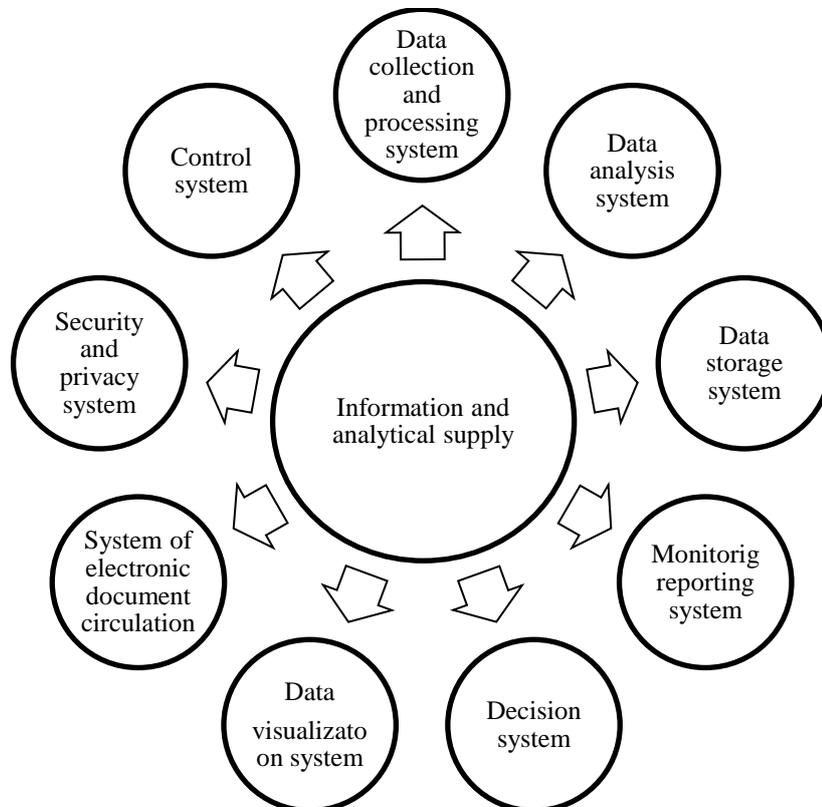


Figure 1. Component systems of informational and analytical supply

Sources: created by the authors

Data analysis systems allow analyzing received data in order to identify patterns and trends, forecast the development of events, etc.

Data storage systems provide storage of information about the activities of the organization and its customers. These can be databases, cloud storage systems and other data storage facilities.

Reporting and monitoring systems provide the formation of reports and analytical documentation based on collected and processed data.

A decision system is a software used to make decisions that help managers analyze data and make strategic choices.

Data visualization systems allow the presentation of the results and data analysis in an easy-to-understand form such as graphs, charts, maps, etc.

Systems of electronic document circulation provide for the automation of the document exchange process in the organization and ensure fast and efficient circulation of information.

Data security and privacy systems ensure data protection against unauthorized access and misuse.

The control system is the implementation of control over the implementation of assigned tasks and the organization's strategy.

All these components allow the creation of a complete system of information and analytical support, which helps to make informed management decisions based on reliable and up-to-date information.

Successful management requires high-quality, reliable and timely information about all processes that take place inside and outside the organization, therefore it is important to observe the principles of information and analytical support, which help ensure high quality and efficiency of the information and analytical process.

The main principles of information and analytical supply are:

Purposefulness – informational and analytical supply should be aimed at solving specific tasks and goals of the organization.

Systematicity – informational and analytical support is based on a systematic approach to information analysis. This means that the information product must include all factors that affect the organization, as well as all the correlations between them.

Objectivity – information and analytical support should be based on objective data and facts, information products should be confirmed by a documentary base, analytical calculations and statistical data.

Complexity means providing a comprehensive approach to information analysis and management. The information product should include all necessary components reflecting various aspects of the organization's functioning.

Relevance – timely and relevant information provision. Information products should be relevant and reflect current tendencies.

Effectiveness – analytical results should be effective and meet the requirements of users.

Controllability – analytical activity should be organized in such a way that it is possible to control the quality of information and analysis.

Confidentiality – the analysis must ensure the confidentiality and protection of the information used.

Information and analytical supply should ensure the use of the latest technologies should be based on innovativeness.

Discussion. Information and analytical supply is an important element of management, as it depends on making informed decisions based on accurate and reliable information, therefore the information and analytical process needs constant improvement to increase the effectiveness of the organization's management.

1. Improvement of analytical tools. To analyze data needed to use special analytical tools that allow for performing various analyzes and modeling situations.

2. The use of innovative technologies will allow the automation of many processes, which significantly increases the efficiency of management.

3. Improvement of data analysis methods. The using of new methods and algorithms of data analysis will allow identifying dependencies and regularities that can be useful for making management decisions.

4. Development of information culture. For the effective use of information and analytical supply, it is necessary to have qualified specialists who can understand and analyze data, use analytical tools and develop new methods of data analysis.

Management is effective if its employees know how to work with information and how to ensure its security. Therefore, it is important to involve employees in training and seminars on information culture.

Conclusions. Information supply is an indispensable tool and an important component of the organization's management system. The importance of information supply in the management system of the organization consists in the following aspects:

- supporting accurate, timely and necessary information, which makes it possible to avoid errors and reduces the risks of making wrong decisions;
- supporting decision-making processes allows managers to make informed and effective decisions based on data;
- increasing the efficiency of organization management and ensuring competitive advantages.

Informational and analytical supply allows for drawing a reasonable conclusion about various aspects of the organization's activities. With it possible to identify problems and challenges facing the organization and find optimal solutions to solve them. In addition, it allows for monitoring tendencies and forecasting future changes in the market environment, which allows the organization to be ready for changes and respond to them quickly and efficiently. Informational and analytical supply helps ensure the successful functioning and development of the organization in a dynamic and competitive environment.

Author contributions. The authors contributed equally.

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