# ИНФОРМАЦИОННО ОСИГУРЯВАНЕ НА УПРАВЛЕНИЕТО В ОРГАНИЗАЦИИТЕ
# INFORMATION PROVISION OF MANAGEMENT IN ORGANIZATIONS

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**Sadržaj** - *Целта на авторите с този доклад, е да представят основни въпроси, свързани с информационното осигуряване на управлението в организациите.*
*За постигането на тази цел в доклада са разгледани основните понятия и характеристиките им, свързани с информационното осигуряване: информация (икономическа и управленска); информационен поток; информационен процес; информационен цикъл; информационна система; информационно обслужване; информационно осигуряване; технически средства за обработка на информация. Изясняването на основните понятия и характеристиките им ще бъде използвано при разработването на информационна система за управление в областта на образованието.*
Ключови думи: *основни понятия, информационно осигуряване на управлението, организация.*

**Abstract** - *The purpose of the authors with this report is to present main questions related to the information provision of management in organizations.*
*To achieve this purpose in the report are present the main concepts and characteristics related to information provision of management: information (economic and management); information flow; information process; information cycle; information system; information services; information provision; technical means of processing to the information. Clarifying main concepts and their characteristics will be use in developing information system for management in area of education.*
Key words: *main concepts, information provision of management, organization.*

## INTRODUCTION

In the long history of business, managers, devoting their attention mainly on the management of resources, including - money, materials, machines and people. [7]

The advent of new information systems and technologies in all areas of human activity, requires that managers at all levels of management, to have knowledge about the applications of information technology in management and their potential for managing of different resources in organization.

In modern information society, information has reached a high level of significance for its ability to serve as a means of identification, assessment and use of all other resources. [10]

Perception of information as a resource requires that it managed like any other resources, i.e. the management personnel must take management decisions by which to effectively managed information resource of the organization.

The purpose of the authors with this report is to present main questions related to the information provision of management in organizations.

To achieve this purpose in the report are present the main concepts and characteristics related to information provision of management: information; information flow, process, cycle; information system; information services and provision; technical means of processing to the information.

Clarifying main concepts and their characteristics will be use in developing of information system for management in area of education.

## EXHIBITION

### INFORMATION, USED IN ORGANIZATIONS

The term "information" derived from the latin word "informatio". In different sciences, the concept of information filled with different meanings, depending on context, which is place in it.

Cybernetics, for example, examine the information from the perspective of management, taking into account her role and necessity of processing information for making management decisions.

Informatics, which studies information processes and methods for their automating, primarily interested in structure and format of the information, by means of presenting information, as well as the main information activities. [6]

In different literature sources, is give different definitions of the term information.

According to Y. Velcheva and Alexander Petkov [3], "informatio", translates to form a message that informs about some position, for some activities.

Also, Yuri Todorov [8], says that the term "informatio", literally means a plan, idea, concept.

From the above quoted examples we can see that the concept of "information" has many and different definitions.

Therefore, for this report, the authors adopt the following working definition for information: the information integrates data and information on environment and ongoing processes into it, which have been summarized or processed in a way that allows they are easy for interpretation by any user for making management decisions for achieving the purpose of the organization.

Information and management are two closely related concepts in theory for management of organizations.

In recent years in literature sources when describing the activities in the organization is using two concepts - economic and management information, which by their nature do not overlap.

Under concept "economic information" means information, relating to planning and forecasting processes in the organization and information from accounting, statistical and operational-technical reporting.

Under concept "management information", means information that is need and use in the management of the organization to achieving the purposes, set before it.

Management information incorporates economic, social, political, administrative and other information.

In this report, the authors considered only concepts and characteristics associated with the management information.

The main requirement that is placed before the management information are following:

➢ The sufficiency. The amount of supplied information may be sufficient to making the necessary management decisions.

➢ Timeliness. In the time of making management decision, to have that sufficient amount current information on the questions related to the management of the organization.

➢ High quality. The high quality of received information about the state of the organization is a condition to obtaining a real characteristic of the managed processes and for effective management of the organization.

The listed above requirements, placed to the management information, are mutually conditioned and mutually reinforcing.

Based on the listed above requirements to management information and the experiences of the managers, located on at different management levels can make the following conclusion: in all organizations need to be developed and implemented advanced information systems for management and to be used new technical means of processing of the information.

## QUANTITATIVE AND QUALITATIVE CHARACTERISTICS OF THE MANAGEMENT INFORMATION

To fulfill its purpose – to ensure the substantiated and corresponding best on the placed criteria decision – information should be in the necessary amount and process certain qualities.

The amount of information is an important indicator for the development of information systems and course of information processes in the systems.

To measure the amount of information in computer systems is using the unit bit.

Possibility of quantifying the information, allows on it to apply different methods for arithmetic, logical or other processing on information, using manual technical means or computer technique.

The quality of information is determined as the degree, in which the product serves for the purposes of user.

The possibility for quality measurement of information, gives qualitative characteristics on management processes, facts and events and the doing of evaluation (due to the very broad a definition of quality) is a very complex process.

To achieve the purpose of management, the quality of management information, can be describe by additional characteristics, some of which are:

➢ Place and time of create. The management information is creates in different places and at different time.

➢ Method of registration. For registering information is using different methods and technical means.

➢ Volume of information. Appropriate amount information, sufficient to solve to the placed tasks.

➢ Manner of presentation of output information. Output information, can be presented through different reporting documents, presentations and by using models for studying the condition.

➢ Originality of the information. Information contains previously unknown facts and information.

➢ Ability to transformation of information. The management information lends to transformation into a processing on information and this increases her value and ability for her efficient using in the management process.

➢ Timeliness of information. The availability of current information at the time of take management decision, allows the head of the organization to pick the best solution for achieving the purpose of the organization.

➢ Reliability of information. The availability of reliable information leads to making the qualitatively management decision.

➢ Applicability of the information. The received information (input and output), meet of consumer requirements and can be used for making effective management decisions.

➢ Understandability of information. The information, that is provided, be easily understood and interpretation by consumers.

By the existence of such a wide variety of characteristics of management information, can be conclude, that when developing of information system for management of the organization, should be placed increased requirements on the quality of input and output information.

## INFORMATION CONCEPTS, USED ON THE MANAGEMENT

The dynamic development of information technology and the continuous increase of available management information, led to use in the theories for management in the organization, of concepts such as: information flow, information process, information cycle, information system, information service and information provision.

∗ Information flow

The information flow is a set of information, arising in certain sources and directed to the appropriate recipients.

The information flow contains information of one type or of different type, intended for one or multiple users - inside or outside the organization and carries a certain amount of information.

Each information flow is consisting of three main parts:

1. source of information flow;

2. information channel, in which information flows;

3. recipient of information.

In tracing the circulation of information flows in the system, can identify areas of commonality of several information flows in a powerful flow or places of separating a flow into several, smaller information flows (figure 1).
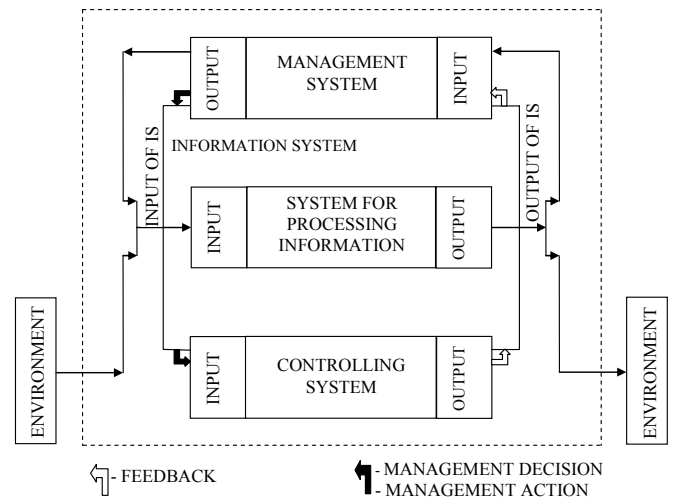


Figure 1. Scheme of information flows
The scheme is a modified by source [5].

All activities related to collection, storage, processing and distribution of information, called information activities.

The interaction between the main information activities is presented in figure 2.
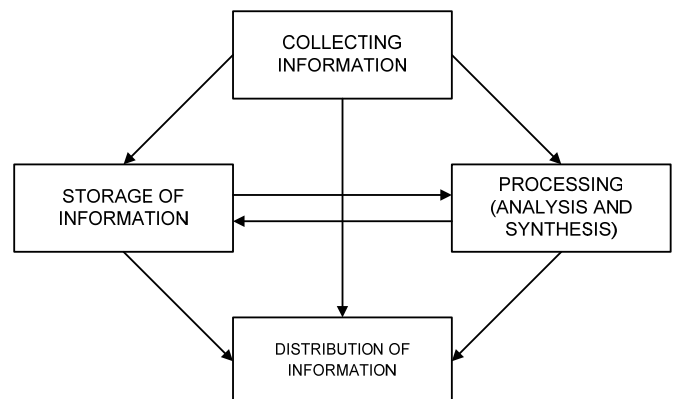


Figure 2. Information activities
The scheme is a modified by source [6].

∗ Information process

Management process has information side and therefore, any process that can present through a series of information activities is call information process.

In close connection with concept "information", is used concept "message".

These concepts are close in meaning, but is accepted the message, to seen as presented in certain way information.

The exchange of information between two or more persons is determined as a communication process.

The stages through which passes communication process and their features described in detail in source [4].

∗ Information cycle

The information cycle in management of organization covers the following activities:

➢ Receiving input information from the external environment of the organization (or create input information of the system);

➢ Conversion of information for purposes of leaders of organization (analysis and synthesis of information, make a decision);

➢ Transmission of information (to the internal elements of the system or to external environment);

➢ Provide feedback (through the new information, obtained by processing or trough received from the external environment information).

This cycle of action, is repeat continuously, as of each next level providing input information, reflecting the new status of the organization and/or her environment (figure 3).
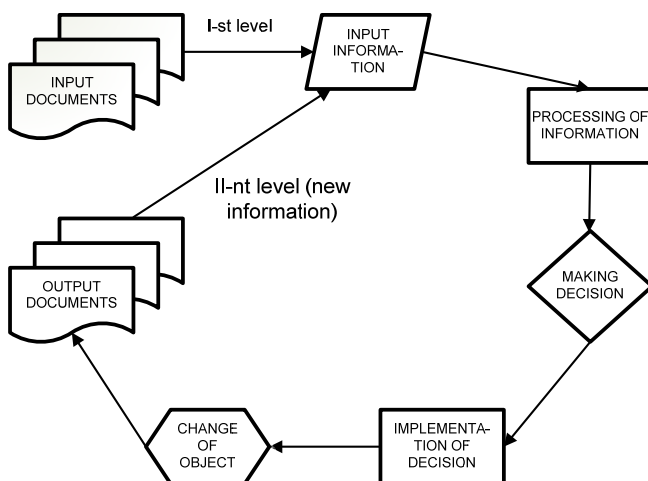


Figure 3. Information cycle
The scheme is a modified by source [2].

∗ Information system
Information system can be defined as: a set of interconnected components, operating together for the collection, extraction, processing, storage and distribution of information.

The information system of the organization is interface between managing and controlling systems. It satisfies the information needs of managers associated with making decisions, also with implementation of management influence and the assessment their effectiveness.

Each successful functioning information system is link with the organizational and human dimensions, also and with technical and technological aspects of the used technical means.

The information system of the organization exists to meet the specific needs of the organization, and also the requirements of the external environment in which operates the organization.

∗ Information service

Information services of organization represents providing of information from specialized for this units, to many users, who may have different requirements to information.

In the process of information services is a clear boundary, between the people, creating the information and people who using information, which is obtained.

∗ Information provision

Information provision covers all stages of activities of the organization and is a part of the system for management of organization, which provides data on the status of the organization at the time and for the external conditions, in which operates the organization.

Information provision of management, must to meet all the needs of varied, current and reliable information, which is necessary for making effective management decisions. Therefore, the criteria, which placed to use information, are much larger.

Due to the increased requirements, that are place on information systems for management in organizations, and information, which is use in them, the information systems, which being develop characterized by an increased number of functions they perform.

This increased number of functions is necessary for providing current information to managers at different levels of management, with the purpose to making effective decisions to manage all resources of the organization.

**TECHNICAL MEANS FOR PROCESSING INFORMATION AND MANAGEMENT**

Now it is impossible to imagine management personnel and other specialist, without modern technical means, which essentially are his tools and which variety increasing continuously.

By technical means for processing of information and management, are streamline the management process, enhances the effectiveness of management work, expand and enrich management methods, improve procedures for making management decisions.

There is currently no complete classification of technical means for processing of information and management, which are use in different activities carried in the organization.

In the literature has accepted the technical means, can be divided into two main groups – organizational-technical and information-computational technical means.

A. Organizational-technical tools. They are extremely various and can divide in the following groups:

➢ Means for furniture. These are classic and inevitably means used: chairs, desks, cabinets and other.

➢ Means of documenting. These are the typewriters of different types, automatic recorders, copying and reproduction technique and other.

➢ Means for recording, storing, searching and use of documentation and information. This group includes different types of files and media (paper, different types of disk media).

➢ Means of communication and control. This is a large group of modern management and information technique, that including: means of communication (phone, Internet); internal transport; means for mechanical and automatic control and other.

➢ Means for primary processing of information. This may include: postage-franking machines; means for shaping the documentation and other.

B. Information-computational technical means. The variety of technical means in this group is extremely larger. They constantly upgrade and open new possibilities for mechanization and automation of the information and management processes.

The most often used technical means, of this group are:

➢ Computer-keyboard technical means - include different types of calculators.

➢ Personal computers. Each manager uses a computer for: to receive and send different types of information; to search information in the global information space; to using different software products that serve as processing of information. The use of computers allows streamlining the management activities, and increasing the speed, quality, scope and effectiveness of the taken management decisions.

In the modern conditions of rapidly evolving information society, increasing importance is given to reliability and rapid and qualitative processing of the available management information.

This trend required to use more a new technical means and to implement the latest achievements of information technology for managing of different resources in organization.

## CONCLUSION

Considering specificity of the questions, related to the information provision of management in organizations, can make the following **conclusions**:

1. The existence of such a wide variety of characteristics of management information, mean, that when developing of

information system for management of the organization, should be placed increased requirements on the quality of input and output information.

2. The information system for management has for main task achieving of high efficiency of operation of the controlling system, and this requires a well-organized internal-information connections.

3. Information provision of management, must to meet all the needs of varied, current and reliable information, which is necessary for making effective management decisions for manage all resources of the organization and therefore, the information systems, which being developed, are characterized by an increased number of functions they perform.

4. To ensure the speed, quality and effectiveness of the taken management decisions, is necessary, to use new technical means and to implement the latest achievements of information technology for managing of different resources in organization.

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