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## IT-TOOLS FOR A MODERN MANAGEMENT

**ABSTRACT.** (up to 300 symbols) The analyzed topic is an actual subject in the framework of the informational systems increasing role in a successful modern organization on the competitive global market. The importance of the researched topic is explained by the fact that the informational system ensures providing the data and information needed for the management and decision making processes.

**KEY WORDS:** (3—5 words) IT-tools, modern management, organization.

### Key findings

**Introduction.** Modern organizations, which according to the new requirements of our society, have to realize processes, sometimes overly complex, using various information systems. Their purpose is to provide support for the efficient management of all activities of a company. Since making decisions that are based on information obtained from processing of activities, management practices of organizations have highlighted the direct link that exists between management itself and the information systems.

Dynamic process management side is the existing quantitative and qualitative information, logically assembled into an information system. Based on a continuous flow of information upwards and downwards it is possible to monitor all economic activity of the economic entity.

**Purpose.** The goal of the paper is to analyse the impact of the informational system implementation in the management process of an organization.

**Results.** In an organization an information system (IS) can have different roles, but always intended to use and its implementation will be for making the organization's activities more effective. The efficiency of management is influenced by the quality and operability

of information collection, processing, transmission and conversion into decision support. Information circulating in one unit can be systematized and classified according to several criteria. Their aim is to systematise and simplify the ordering work of collecting, processing and providing managers on different levels, for use in decision making [1].

The final users of the system, for example, the employees of a company approach the information system as a tool, which comes to help them in their daily work. The client, in this case the beneficiary company, considers the information system as a tool for which the company is able to invest aiming to optimize the work and to increase the profit. A developer of the IS consider it as a set of requirements which he has to implement [2].

Usually organizations, in order to put in an application IS, are based on a business plan that includes future costs and benefits, determining the choice of a successful information system. From the organization perspective, it is a challenge, because of existing a lot of economic measures combinations that can be studied and applied [3].

The management practice within the business units has highlighted the direct link that exists between the management process itself and existing information system. The role of a system within an organization reveals from the benefits it offers to its employees and its decision-makers. Each organization type adapts its categories of information systems based on organizational needs. There are a lot of information systems, such as: information system for documents management; project management; task management; accounting IS; IS for human resources management; systems for key-performance indicators management and measurement; IS for time management etc.

Requirements on which is based an IS within an organization are:

- Business Developments;
- High level of bureaucracy (increased number of paper documents);
- Gradually replacing paper documents with electronic documents;
- The need for structured information within the organization;
- The exponential growth in the volume of information;
- The need to ensure the exchange and access to information;
- Increased need for regulation and control.

Actually, these are also the reasons of an IS within a company. Might be a single one, but usually there are several aspects that determine the implementation of an IS.

## **1. IS «Mantis» implemented within the Information Society Development Institute (ISDI). General characteristics.**

Organizations in all spheres of activity chose the information system for implementation or acquisition to be used indoors, for management, control or other specific facilities. In Moldova, information systems are widely used by private companies and public authorities, which tend to grow that by this means transparency and efficiency of public services delivered to citizens.

The state enterprise «Information Society Development Institute» (ISDI) is founded jointly by the Academy of Sciences of Moldova and Ministry of Information Technology and Communications in 2008.

ISDI is a research institute focused on research and applications for information society development. The Institute is the only the R&D organization which is ISO 9001, ISO 14001, OHSAS 18001 and ISO 27001 certified [4].

IS «MANTIS» is an information system implented wihtin the ISDI from the beginning in 2008. The system was built on the Mantis BT platform that is most often used as a monitoring program sites bag / errors, but the most rational and efficient is used for project/tasks monitoring and instrumentation. During ISDI activity the system was updated periodically based on the institute needs. MANTIS system is an internal tool for a more efficient task management within the institute.

Some of general characteristics of the system are [5]:

- E-mail notifications on all modifications of tasks in which the user is involved. The users have the possibility to specify the type of emails that they want to receive and set filters for reporting type via email.

- RSS channels are available for users that want to control the solved tasks. Additionally, MantisBT is linked with Twitter to allow notifications on Twitter profile.

- Text searching in the system, on words.

- Chronological sequence of audit records containing evidence of data change as a result of system function of a business process.

- Graphic illustration of the relationship between issues.

- Establishing the directions for tasks execution.

- News — information about last news/modifications of the projects or tasks.

- Project management & Time management.

- Possibility to adapt the system to company localization, through applying different communication languages.

Mantis system has 7 roles, from which the most used are 3:

1. **Administrator**
2. **Manager**
3. **Developer**

IS Mantis is accessed on the global Internet network on: [http://task.idsi.md/login\\_page.php](http://task.idsi.md/login_page.php) This fact is convenient for employees that can access and work in the system everywhere not only at the office, but also is convenient for administrator who can follow the activities in the system anytime.

The launching page of the system is presented at Fig.1.

Mantis is used as a tool in the decision making process of the institution. «MANTIS» is approached as a subsystem of the main management institution's system. It plays a big role in all management processes.

One of characteristics of IS Mantis is the option of documents attaching at each task from the system. The advantage of this function is that executors involved in different projects can execute their parts of the task, but at the same time have access to all documents attached to the task, to have a general view of the project. This fact allows a quickly data exchange and a team work, a good document versioning.

Through an authorized access of the system even at the distance, not only on the PC from the office, enables efficient management of storage resources on each client computer. It is also increases security and personalization data for each user.

Because of the system, the top management can monitor and control all activities without a direct and physical presence and dialogue with the executants.

The system is permanently updated based on internal regulation of the institution to ensure an efficient management.



Login	
Username	<input type="text"/>
Password	<input type="password"/>
Save Login	<input type="checkbox"/>
<input type="button" value="Login"/>	

Fig. 1. Each ISDI employee receives individual access data: login and password

Also, the system is linked with the Control-Access system which enables the time management for each employee. In Mantis are available all data concerning the access in the building. Daily the employees fulfil within the system for each task they have spent time and what have done during the working day. The manager can see if the presence time at the office coincides with the time registered in the system, at tasks. This function allows observing the delays but also the transparent analyse of the time vs. work/ results.

The information that can be collected from a time recording system is a valuable tool for management for a more efficient and effective use of available resources.

ISDI uses some other more information systems for internal management, all linked.

The institute's email, each employee has an official email address on which receives notifications from Mantis system on each task he/she is involved. Another IS system is electronic document management system, within which are registered and circulated all documents/ letters of entrance and for exit. Twiki is an internal library or organizational repository where are uploaded all documents templates, studies, publications, report, presentations for internal use and interest. It is a system developed on the Twiki platform and allows download of documents, the access is authorized through login and password. The general dissemination platform of ISDI activity and results it is the web page: [www.idsi.md](http://www.idsi.md) where are published all public information. If Mantis is a system for primary data generation and the Twiki is the knowledge management system, then the web page is the next link of the chain. This mechanism of processing and filtering of data and later — the information, has a major contribution to ISDI decisional transparency process, and increase the visibility of the organization.

All information systems are useful for internal management as well as for service delivering by the institution. For e.g. Mantis can be used for communication with clients. The manager can create an account for the delegated person from client side. Within the system the service provider indicate regularly the time executed for the client issues. In this way monthly/periodically or even permanently the client can by themselves to check the service providing process. This ensures a very transparent mechanism of time-management and a correct payment.

## **2. The benefits of the information system within an organization**

IS Mantis has become a very useful tool for the entire organization system of the ISDI as well as a part of the organizational culture of the

institute. Employees consider it as an electronical agenda and the management — a easy but transparent way to monitor and evaluate the performances. Its implementation halve the activities performed recording for a day's work, and note the time of access — up to 99.9 %, becoming fully automated processes.

The system allows to follow the execution of each task and project. A project includes several task classified in categories, for e.g.: meetings; coordination; research; business trips; interviews with potential employees and so on. The system can generate a time-report per day, days/period, month, year. It is very convenient for periodical internal reports.

Yearly the institute has an action plan with different actions per period/month/weeks. All these actions can be found in the IS Mantis as tasks for concrete responsible from ISDI with set deadline. These make more efficient all internal processes.

**Conclusions.** The impact of an informational system in an organization depends very much on the approach of the top management and the employees-users of the system.

An information system should correspond to a set of predefined quality attributes: reliability, availability, maintainability, usability, instability, functionality, performance, affordability, scalability, and other criteria. A good system is that that satisfies all stakeholders involved in work with the IS.

To remain competitive, big industrial companies, banks, government institutions, IT companies, media, Internet providers or companies with offices distributed in the territory require seamless integration of various branches and deposits with central offices. A major investment in information technology and communications infrastructure increases performance indicators that measure profits, labour efficiency, return on investment and service quality. Integrating different production centres within the organization to reduce the total costs of maintenance and improvement of accounting and systematization of resources lead to improved market position [6].

In conclusion, information and communication technology, in general, and information systems, in particular, are the tools that have become widely used by organizations today. Companies use advocating mechanisms to optimize their business in the existing competitive environment. Management processes combined with information systems support a prominent role for decision-making and execution.

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## УПРАВЛІННЯ ІНВЕСТИЦІЙНОЮ ПОВЕДІНКОЮ ТНК У ГЛОБАЛЬНОМУ ТУРБУЛЕНТНОМУ СЕРЕДОВИЩІ

АНОТАЦІЯ. Дослідження присвячено сучасним і майбутнім тенденціям у інвестиційній поведінці ТНК, яка виникає у глобальному турбулентному середовищі. Проаналізовано, що з кожним роком перед суб'єктами міжнародних економічних відносин постає важливість розгляду основних напрямків інвестування, а також вивчення нові конкурентні переваги на світовому ринку товарів і послуг.

КЛЮЧОВІ СЛОВА: інвестиційна поведінка, глобалізація, інновації, альтернативні інвестиції.

## MANAGEMENT OF MNC'S` INVESTMENT BEHAVIOUR IN THE GLOBAL TURBULENT ENVIRONMENT

ABSTRACT. Research is dedicated to the current and future trends in investment behavior of TNCs, which occurs in a turbulent global environment. Analyzes that the importance of addressing the main areas of investment raises for the subjects of international economic