

11788_ENG**Integration of an information management system of an enterprise with geological project management systems****I. Teslia, *O. Yehorchenkov, Y. Ivanov** (*Taras Shevchenko National University of Kyiv*), **S. Starokadomskiy** (*PLC "Tutkovsky", Kyiv, Ukraine*)**SUMMARY**

The thesis describes the electronic document management system PrimaDoc, which was created to manage the geological projects of the enterprise PLC "Tutkovsky". It is analyzed existing electronic document management systems. It is shown that these systems do not correspond to the specifics of geological projects management. It is emphasized that the electronic document management system PrimaDoc is a system of planning, collecting, storing, processing and controlling electronic information in geological projects management. It is shown that PrimaDoc differ from other document management systems is possibility to manage any information produced by the other information systems of the PAT "Tutkovsky" and used outside of these systems. It is noted that the main purpose of PrimaDoc is the management of the processes of creating and using electronic information in the enterprise. Two client applications of the system (desktop and web) are described, which are used for the users convenience.

Інтеграція системи управління інформацією підприємства з системою управління геологічними проектами**Ю.М. Тесля, *О.В. Єгорченков, Є. Іванов** (*Київський національний університет імені Тараса Шевченка*), **С.В. Старокадомський** (*ПАТ «Тутковський», Київ, Україна*)**РЕЗЮМЕ**

У тезах описано систему електронного документообігу PrimaDoc, яка була створена для управління геологічними проектами підприємства ПАТ "Тутковський". Було проведено аналіз існуючих систем електронного документообігу. Показано, що ці системи не відповідають специфіці управління геологічними проектами. Виділено, що система електронного документообігу PrimaDoc є системою планування, збору, зберігання, обробки і контролю електронної інформації в управлінні геологічними проектами. Показано, що відмінністю від традиційних систем управління документообігом є те, що PrimaDoc управляє будь-якою інформацією, яка виробляється інформаційними системами ПАТ "Тутковський" і використовуваної за межами цих систем. Відзначено, що основне призначення PrimaDoc є управляти процесами створення і використання електронної інформації на підприємстві. Описано дві клієнтські версії системи (desktop і web), які використовуються для зручності користування системою.

Introduction

One of the main problems in management of geological and other projects lies in obtaining the necessary information in the timely manner. It is difficult to imagine a solution of this problem which is not based on usage of special information technologies that help project managers and participants to manage information efficiently. Today the software market offers a large amount of electronic document management systems (DMS) which are deployed and used in the geological industry. The choice of an electronic DMS is an important problem, the solution of which should be directed towards increase of efficiency of geological projects. The complexity of the choice is caused by the fact that an electronic DMS has to satisfy such requirements as integration with other enterprise information systems, taking into account the specifics of the activity of the enterprise, simplicity of usage and deployment, simplicity of configuration. Modern electronic DMS do not satisfy these requirements.

In this work we describe a DMS PrimaDoc developed by the authors, which is used in project management of the enterprise PAT “Tutkovsky”. This enterprise offers services in the search, development and deployment of geological survey technologies, manufacturing of geophysical and geological survey equipment, training and retraining of personnel for service geological survey and extractive companies, performs the corresponding engineering support and consulting [1].

Theory

Currently there are no academic studies of document management systems for the geological industry. The analysis of the existing DMS shows that a number of information systems can be used for geological project management: Microsoft SharePoint Portal Server [2], ZohoDocs [3], CaneaDocuments [4], Laserfiche [5], Document Control [6], LogicalDoc [7].

Despite the advantages of the mentioned systems, they do not take into account the specifics of geological project management.

Practical implementation

The DMS PrimaDoc is a system for planning, collection, storage, processing and management of electronic information in geological project management. Its difference from traditional DMS is that PrimaDoc manages all kinds of information generated by the information systems of PAT “Tutkovsky” that is used outside of them. Its main purpose is management of processes of creation and usage of electronic information of an enterprise.

The PrimaDoc system is not only a traditional DMS, but it also is an information-functional integration of all other systems of PAT “Tutkovsky”. For each user it creates a view of a single information system of an enterprise without the need of knowledge of particular systems such as 1C, MS Outlook, MS Excel, MS Project and so on.

The goal of PrimaDoc is management of all information that is used in project management of PAT “Tutkovsky”. The system not only allows one to direct, readdress, control processing of documents and manage tasks, but also allows one to create and work with electronic archives of documents in the aspects of objects, projects, types. Moreover, thanks to communication with project management systems, PrimaDoc fully manages all project information, assigns and control execution of tasks, administers projects, manages the budget, automatically obtains protocols of meetings and redirects them to employees.

For convenience, the system provides two user interfaces – a desktop application and a web application.

- **The Desktop application** is developed for system administration and is available only to the employees with administrator rights.

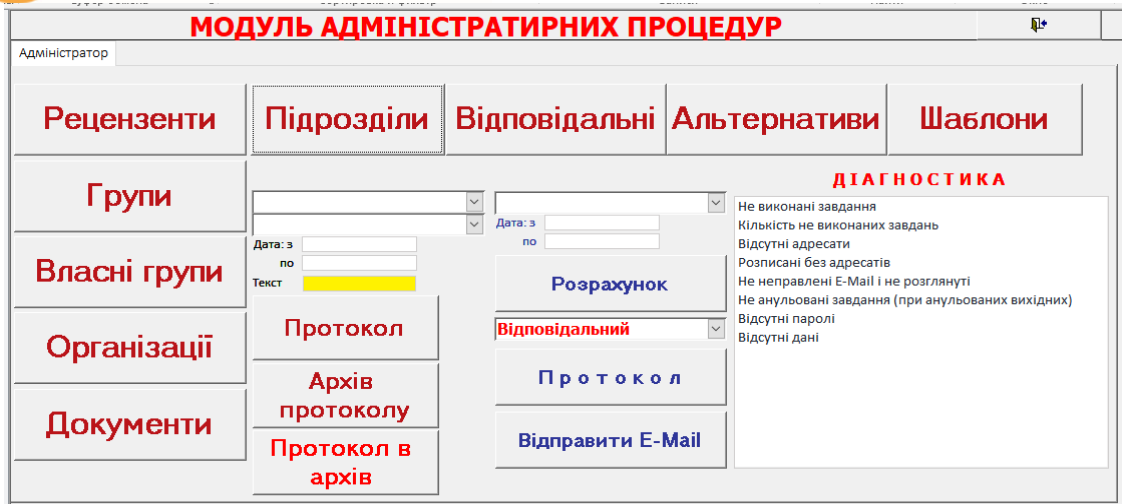


Figure 1 Desktop application

The main administrative functions of the system are:

1. Maintenance of reviewers - users of the system. Add new users, modify and delete the existing ones.
2. Maintenance of business departments. The user's access level to the information depends on the user's relation to the department.
3. Maintenance of the list of responsible persons.
4. Maintenance of the list of user's deputies.
5. Maintenance of document templates.
6. Maintenance of groups of users.
7. Maintenance of the list of organizations with which the enterprise interacts.
8. Changing technical parameters of the system.
9. Viewing of the user activities report.
10. Diagnosis of logical errors in the system.

Also, the desktop application has full functionality of the web application.

- **Web application** is developed for ordinary users of the system. It is a web application running in a browser. Its main function is the management of PAT "Tutkovsky" documents and viewing documents content.

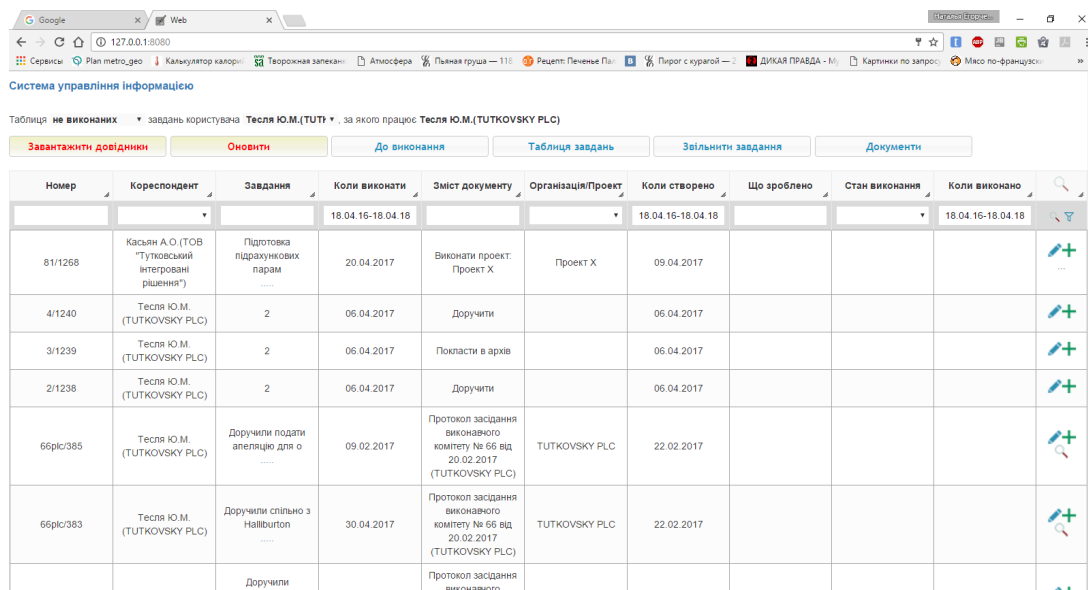


Figure 2 Web application

Conclusions

The choice of a document management system is not just a technological or engineering task. The choice is connected with the overall strategy of geological projects development of the enterprise. The PrimaDoc system has proved itself as an effective tool of information management in geological projects. The implementation of PrimaDoc has opened great prospects for the development of the enterprise, for speeding up and qualitative improvement of work with documents in geological projects. The advantages of using PrimaDoc are determined by the reduction of the time of processing of documents, control of task execution, concentration of documents in one place, and simplification of access to the necessary documents.

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