

PROJECT OF CREATION SYSTEM "ELECTRONIC UNIVERSITY"

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Recently in work of higher educational institutions of Azerbaijan there have been many changes. The quantity and structure of specialties have changed as well as, the number of the high schools which have joined Bologna process grows. The present stage of the economy and society development gives for higher school a problem of preparation of experts of principally new level. In this connection there were new requirements to methods and management forms. Creation of the control system which guarantees achievement of necessary quality of technological processes in the university and level of competence of graduates, corresponding to environment requirements, became actual.

Efficiency of administration managerial control by such complex object as a higher educational institution, and functioning of a control system by the educational process quality can be provided only through a special information system "Electronic University" (E-University).

For achievement of practical response from application of information technologies, as more as possible careful developing the concept and project E-University is important. "Electronic University" it not simply electronic or remote training. It should be created as a virtual equivalent high-grade School with preservation of all its purposes, functions and problems that need to be solved.

All fields of activity of University from educational and scientific to financial and economic are required to be included in information network. For this purpose it is necessary to use technology which will allow to connect in a uniform complex diverse on the problems and functions information systems of faculties, chairs, dean's offices, postgraduate studies, remote training, accounts department, a staff department, library, etc., and as well as E-University should be coordinated to adjacent information and operating systems.

The system should include:

- the databases integrating the necessary information, concerning various aspects of activity of university;
- a set of the program applications providing support of performance of concrete local functional problems workplaces in departments;
- organizational and program-technical means providing effective functioning of system, its service and development.

All information should be placed in to the uniform corporate database located on one or several servers. Information processing in system is carried out in a mode "client-server". This allows to raise the efficiency of its work, to avoid information duplication at input, to support integrity and consistency of data, to provide their reliable protection.

The creation of following applied subsystems should be provided in system. Each of subsystems is responsible for separate information process in University by automating work:

- University managements - "Electronic administration";
- faculty dean's offices - "Electronic dean's office";
- University chairs - "Electronic chair";
- on office-work conducting - "Electronic office";
- managements of educational process - "the Electronic teaching department";
- employees and readers of library - "Electronic library";
- under the account of students - "the Contingent of students";
- on studying by students of separate subjects in a remote mode - "Electronic training systems";

- on carrying out of examinations in the test form - "Electronic carrying out of examinations";
- on class schedule creating - "the Electronic class schedule";
- on management of scientific process - "Electronic scientific process";
- on conducting personal cards of employees - "the Electronic staff department";
- on accounting - "Electronic accounting".

The important component of "Electronic University" is the system of remote training. The number of functions of system includes formation of educational programs, creation of library of electronic educational resources, in need of attached to courses of this or that educational program; formation of educational groups; drawing up of lesson schedules, monitoring of progress of pupils; monitoring of efficiency of educational programs, modification of system of questioning of pupils, and also generation of statistical reports by results of questioning.

The workplace of the teacher allows to support a continuous communication with students by means of a forum, chat, systems of personal messages or e-mail; to fill up library of electronic educational resources, to check out student's registers as well as to leave on a site the necessary information.

To make access to the resources stored in databases of integrated information system, simple and convenient, creation of an educational portal of a higher educational institution is provided. By means of its users operative access to a uniform information field of an educational institution through the web-interface and performance possibility in this space of certain functions according to their place in a control system of University is given.

The University portal should provide to all users (to teachers, students and employees) a convenient workplace (a personal point of an input), access to the integrated data, appendices and communicative possibilities by means of a Web-browser, integrating in itself (and through itself) all existing programs and the systems necessary for educational, research-and-production and administrative processes.

The general structure of a portal is resulted on fig. 1.

One more element of this scheme are users who share on two groups:

- The authorized users - employees, teachers and students of an educational institution;
- Not authorized users - foreign visitors of a portal ("visitors") who are not employees or students of the given educational institution.

The system "Electronic University" should respond to changing needs and requirements of the educational environment. The architecture of construction of system should be opened, by providing possibility of its development and perfection. In the system designing it is necessary to realize principles of complexity and availability. The availability of the system and relative independence of its applied components allows to carry out their modernization and, if necessary, replacement not disturbing other system's components. In connecting new functions and their components into it, high degree of stability of system should be provided.

We developed the project of creation system "Electronic University" (on the base of the Azerbaijan State Oil Academy)".

In terms of the project, requirements to functional, information, technical and mathematical maintenance are developed and basic decisions of the problems which arise at creation of corporate systems are presented. Separate sections of the project in the form of subsystems, an automated workplace are developed and continued to be developed.

To our opinion, for better and effective performance of the project realization Customer to be interested at the state level is required.

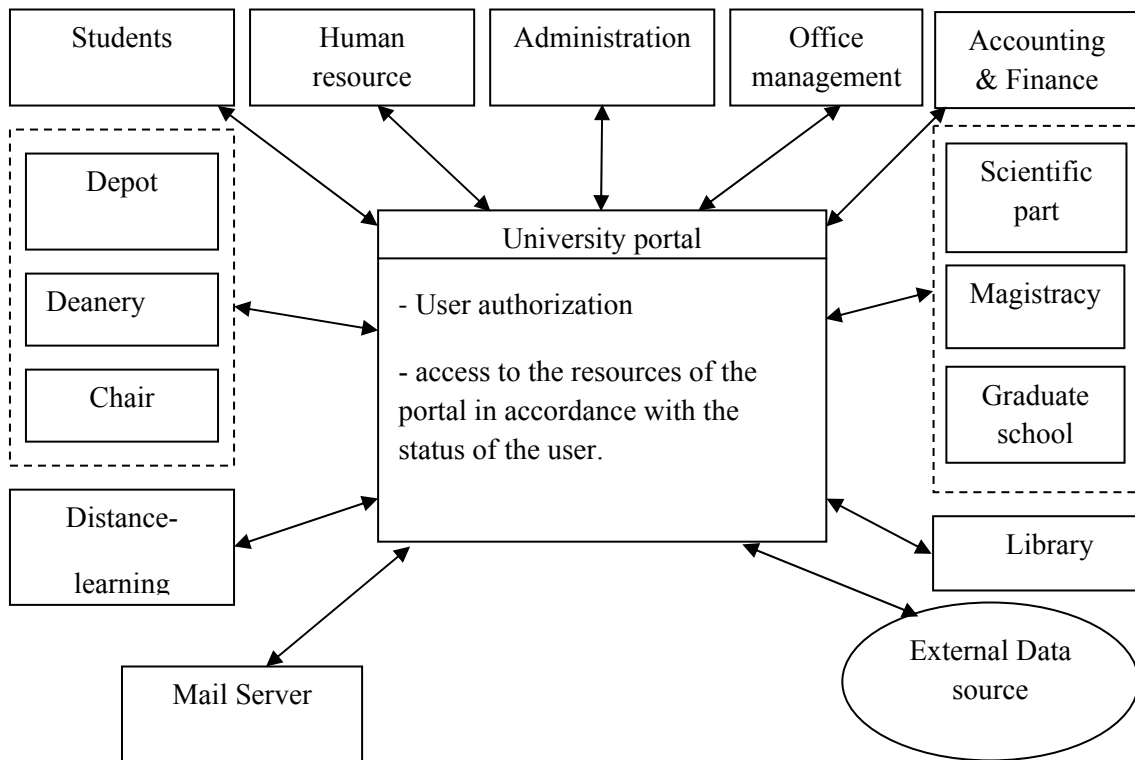


Fig.1

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