

**E-FACULTY - MANAGEMENT SOFTWARE
SOLUTION FOR PUBLIC
ADMINISTRATION AND MANAGEMENT
FACULTY**

Abstract

Computerization of faculty, is a key strategy, without which the Romanian university system will not meet the demands of increasingly high students, masters, doctoral students and researchers and the environment which it is addressed, taking into account also the limited nature of resources.

With this paper we propose to identify and conceptualize a computer system platform support for e-Faculty. Any picture of a computer system without direct reference to existing systems may be a failure in implementation. So in this paper, first the main features of a collaborative platform and in the second, the basic functions of such a system.

Question remains open whether such a platform will contribute significantly to improving the quality of decision in the Faculty of Administration and Public Management - UES Bucharest.

Keywords: computer system platform support, e-Faculty, management software solution.

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**E-FACULTATE –
PLATFORMA
ELECTRONICĂ SUPORT
PENTRU FACULTEA DE
ADMINISTRAȚIE ȘI
MANAGEMENT PUBLIC**

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Rezumat

În contextul dezbatelor privind protejarea resurselor naturale, informatizarea facultăților poate reprezenta o opțiune strategică prin care învățământul superior din România să poată satisface cerințele tot mai crescute ale studenților, masteranzilor și doctoranzilor.

În prezenta lucrare ne propunem să identificăm și conceptualizăm o platformă electronică suport – eFacultate. Implementarea unui nou sistem informatic poate fi sortită eșecului dacă nu ținem cont de context. Astfel că în acest articol prezentăm mai întâi principalele funcționalități ale platformelor colaborative existente și ulterior stabilim funcționalitățile de bază ale noii platforme.

Rămâne însă deschisă întrebarea dacă o astfel de platformă ar putea contribui în mod semnificativ la creșterea calității deciziilor în Facultatea de Administrație și Management public din cadrul ASE București.

Cuvinte cheie: aplicații de gestiune, e-Facultate, platforme electronice suport.



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1. INTRODUCTION

Modernization generalized training, education and research should focus on the needs of beneficiaries: teachers, students, researchers, businesses. To be truly effective achievements must be available 24 hours a day, 7 days a week (Androniceanu, 2011). Beneficiaries will be able to interact with the collaborative Platform from home, work or during their travels in the country or abroad. This should be viewed in the context in which today's economies are in a process of rapid transition from manufacturing and service-based economy, toward a knowledge-based economy. Alongside these economic changes, sweeping changes are recorded in terms of professional skills required in the labour market, business models and services applied (Popescu & Corboş, 2011, pp. 82-83). Therefore, dissemination of results through collaboration Platform is multi-channel, both traditionally and electronically, in order to allow beneficiaries to choose between them. The services can be provided to recipients to date in electronic form are mainly three types, features offered (Radu and Burlacu, 2007):

- information services that allow retrieval of sorted and classified information on request;
- interactive communication services that allow interaction with individuals or groups of individuals (eg e-mail, discussion lists, etc.);
- transactional services - which allow the transmission of support services to beneficiaries.

2. RESEARCH METHODOLOGY

In technical and professional literature, there are many approaches to the concept of the electronic system of information management and implementation of concrete ways in collaborative platforms. The view of specialists is that a design methodology classic systems can be successfully applied to develop a collaborative platform. This situation is due mainly to the nature and dynamics of objectives, outputs and processes specific information management. It is difficult to know a priori what information will be required, which are groups of people will require or will provide, when and how that information will be used.

The research methodology used was such an unconventional. We have used different laboratory tests currently available platforms such as:

1. eLearning platform. Currently the faculty are implemented and tested two systems:
 - MOODLE - is used in subjects Introduction to research methodology - the first year, licensed day electronic public services, third year, days can be accessed at www.amp.ase.ro/elearning.

Are planned and implemented enhanced functionality for all college courses, bachelor and master cycles. It was successfully tested in the project at the county Professionalism Statistical Institute applicant, recipient UES, available at www.amp.ase.ro/moodle.

- eFront - is used in the project "Improving the quality of the masters program in public administration", Babes-Bolyai University of Cluj-Napoca, Romania applicant. The platform is available at www.amp.ase.ro/eFront
2. A electronic questionnaires eSurvey implementation and management, which released the following surveys:
- www.amp.ase.ro/chestionar1 - electronic questionnaire assessing student satisfaction FAMP-UES
 - www.amp.ase.ro/chestionar2 - electronic questionnaire assessing teachers FAMP-UES
 - www.amp.ase.ro/chestionarpractica - electronic questionnaire to identify practical needs of students FAMP-UES

It was tested with good results in the RIES project incubators network of social economy - strategic approach to human resource development, European Association for Human Development applicant www.amp.ase.ro/ries and www.amp.ase.ro/ries2

3. ALUMNI collaborative platform for graduates of the Faculty and specialization of Public Administration and Management Studies, Bucharest. The platform is currently tested at www.alumniamp.ase.ro by third year students in laboratory classes related discipline Electronic Public Services.

Implementation and testing of these platforms we have created an image of the main features. I searched the literature then extended functionality that we have under consideration together with the third year of study students from FAMP.

Main Finding

Information management is a systematic process of collecting, organizing and storing information so that those interested could use in order to increase their work efficiency.

An information management system consists of a set of methods and techniques that becomes operational content management processes, including document retrieval solutions, expertise

databases, discussion lists and retrieval systems by content and technology collaborative filtering (Radu and Burlacu, 2005).

Any information management system must meet two basic requirements:

- to facilitate collaborative work between users involved in information management processes and
- to provide management information from the system.

In order to meet these requirements, the electronic management of information using a range of tools to integrate information as the basis of information or collective memory. Within these, data are structured into units of content that are found usually in the form of documents (articles). Units of content should be structured so as to allow interconnection topology information and the development of type "information tree" and to be related to profile people who will use them.

Moreover, phase information is the result of combining browsing, internalization, socialization and externalization. This dynamic process involves the definition of rules for communication between transmitter and receiver groups. Even if, sometimes, between groups there are different perspectives on the interpretation of information in terms of significance and differences in terminology, communication and resource sharing provides innovative acceleration.

Problem Identification

Given the considerations presented, we consider that the main categories of issues that differentiate information management systems are traditional systems:

- Establish user profiles and their organization in groups. In achieving a classical system is assumed that users are homogeneous in terms of objectives. For this reason, design methodologies use the concept of representative or typical user to establish the system functional requirements, but the concept is limited information for management.
- Define the final objectives of development efforts. The traditional approach, which has the purpose to create an organizational database may not be appropriate for collaborative Plattformen, because of the difficulty of defining the structure pre-requisite information. For example, conventional systems, the data is structured in a conceptual schema often rigid and durable, platforms for collaborative model is one that changes every time and involves low dynamic structuring schemes.

- Operation and system improvement. Another assumption implicit in the classical case is that system design is developed, in fact, a final product. In the context of information management, usually resorting to an evolutionary approach, which involves implementing a platform and then develop a system constant.
- Refresh rate content. Opposed to systems that manage data based on information systems requires more rapid updating of content. For this reason it is necessary that, while implementing collaborative platform, the organization to develop a system to motivate users so they can perform with maximum efficiency actions and combination of keywords and metanotiuni each document or form submissions of data on skills and their personal information.
- Utilization of human resources. Because much of the functionality unuei collaborative platforms involve the use of human operators, it is necessary to ensure an effective mechanism to protect them by: Reducing the number of accesses by users in a given sector through the introduction of sections such as "Frequently Asked Questions", so that human opeatorii be accessed only when there are new cases; The timing of the beneficiaries in the monitoring and real-time servicing requests coming from users; Directing requests so they automatically get the waiting list for the operator who is competent to resolve them; Appointment of a classification and indexing of documents and their distribution in the areas of information.

First Analysis

From consulting the literature and from discussions with students have identified several issues summarized in the following.

The effects of implementing an information management system on the processes of training, education and research are difficult to quantify. Considering that, in general, experience plays an important role in the educational process-innovation, the benefits of collaborative platforms is growing as its use by beneficiaries. So long as teachers and beneficiaries and (studeți, researchers, businesses) will expand the dissemination of experience, that getting and using information not only explicit, but those gentlemen, who require more effort for access. Another effect is that, by frequent use of the system, the beneficiaries will gain skills in the use of information whenever necessary.

Considering the above arguments, we conclude that the use of collaborative platforms can lead to both positive and negative. An organization can gain efficiency in the short term by standardizing procedures for accessing information, but gradually may lose the ability to innovate. Therefore, effective

management of information is providing a balance between operational processes the information and the exploration of new solutions.

Implementing an information management system must start from the location information, depending on who determines whether a user will be directed to a document or by contacting a researcher, and the definition of the organization of information, which provides translation problem in a form that meets a certain logical structure. Depending on how these two dimensions are addressed, experts estimate that information management tools can be grouped into four categories (Table no.1).

TABLE O. 1. INFORMATION MANAGEMENT TOOLS

		Location of Information	
		Documents	Individual Memory
Level of Structuring	Structured	1. Document retrieval tools and management information bases Provides management information located in documents or structured databases by defining a labeling with keywords.	2. Database management tools for experts and expertise Provides structure based schemes, the information that resides in memory of individuals. Content expertise database is updated, usually by filling in forms in which the specific information of each expert.
	Unstructured	3. Collaborative filtering tools and search unstructured information Ensure capture of information in documents, but without using a predefined format. Information retrieval is performed using an indexing system based on expressions contained. This category includes, for example, search by keyword or location solutions based on previous requests for access similar information.	4. Interactive tools for dynamic transfer of information Allow access to other people able to provide information, but not to have a database of researchers. The main tools in this category are interactive forums and dialogues through which the interpersonal contact, transfer and sharing information.

Effective information management systems is dependent on how collaborative tools to ensure the above, so how to structure and indexing of information to meet the specific needs of users. Another important aspect in the choice of instruments used in programming and development collaboration platform is the size and diversity of user groups. Thus, if the number of users is small, the instruments of categories 3 and 4 (table no.1) is very unlikely to find the answer to a question, and if the system is too rich in content runs the risk of information overload. Number of users can be beneficial when using tools in classes 1 and 2 (table no.1), but provided that the scheme be a proper structure.

Second Analysis

After testing electronic platforms mentioned in this article we have reached the following considerations.

In general, collaborative platforms have a distributed architecture, the key is the intelligent agents. They ensure the elimination of problems caused by database size and allow content filtering irrelevant information by building a profile of each user and channel sampling of transmitting the information. Intelligent agents perform several functions such as: explicit content contained each context, identifying similarities and differences between contexts, directing requests to other agents, etc..

Transformation systems based processing systems based on information processing means, first, a series of changes at organizational level. In this context, we appreciate that integrates information management concepts from other areas of science and management: rganizational culture, organizational memory, strategic management, artificial intelligence, etc.

Viewed through the practical tools used, information management integrates technologies including:

- Internet infrastructure that provides functionality for data transmission network for sharing resources and their accessing large groups of users, regardless of their physical location;
- Document management systems that allow manipulation of electronic documents throughout their life cycle;
- Systems management workflow describing the procedures defined in the organization and follow their progress;
- Artificial intelligence tools that provide facilities for generating and managing user profiles and manage all analytical processes;
- Visualization tools that serve to represent the existing relationships between information, people and processes;
- Groupware platforms that provide support for working time management and research development circles as "workshops";
- e-Learning systems that execute the learning process so remote electronic.

In general, the functions provided by the above technologies with applications in the area of management information can be grouped into three categories: integrative, interrogative and liaison (Table 2).

TABLE 2 FUNCTIONS OF MANAGEMENT INFORMATION SYSTEMS

Category	Set	Function
1. Integrative Functions Provides asynchronous transfer of information between participants	1.1. Search functions and presenting the information	1.1.1. Search by keyword 1.1.2. Presentation of list of documents found 1.1.3. Submission of electronic publications 1.1.4. Indexing by meta-data 1.1.5. Navigating in the information 1.1.6. Use predefined filters or the user-defined 1.1.7. Archiving items of information
	1.2. Functions to acquire, publish and organize of the information	1.2.1. Importing data / external information 1.2.2. Indexing / integration of data base content 1.2.3. Image links in the content published 1.2.4. Content structuring system 1.2.5. Generating elements of information from internal sources 1.2.6. Statistical analysis of data 1.2.7. Connections between elements of information 1.2.8. Strengthening the of data
	1.3. Functions for Computer Aided	1.3.1. Generating content for training 1.3.2. Computer Aided 1.3.3. Assisted assessment 1.3.4. Establish the levels of training attained
	1.4. Management functions	1.4.1. Generating reports 1.4.2. Analysis reports by benchmarking techniques 1.4.3. Archiving reports
2. Interactive Features Provides direct data exchange between suppliers and recipients of information	2.1. Communication and collaboration functions	2.1.1. Asynchronous e-mail private 2.1.2. Asynchronous public through forums and blogs 2.1.3. Asynchronously through video presentations 2.1.4. Synchronously through videoconferencing 2.1.5. Synchronous electronic chat or messaging
	2.2. Functions for distance learning and advertising	2.2.1. Broadcasting 2.2.2. Cloud computing
	2.3. Management functions	2.3.1. Generating reports from participants 2.3.2. Creating reports on the activities 2.3.3. Generating schedules with further action
3. Related functions Connects the elements of information and information networks	3.1. Information retrieval functions	3.1.1. Using intelligent agents 3.1.2. Making the connection between elements by data and database experts 3.1.3. Generating statistics about access to data elements 3.1.4. Use data maps
	3.2. Translation functions of information	3.2.1. Making feedback from users and experts 3.2.2. Defining the roles of participants 3.2.3. Automatic notification to users of the types by data of interest to them
	3.3. Management functions	3.3.1. Setting user access rights 3.3.2. Customizing the user interface

Because usually, organizations have the hardware necessary to implement an information management system, much of the above functions are already available. However, many times, they are not used

intensively, due to technical reasons (lack of a tape drive fast enough, the lack of multimedia components, etc.) Or organizational (lack of privileges for users of the them stimulate them to actively participate in the system, the existence of individual barriers, insufficient delegation of responsibilities for activities in the field of information management, etc.

Implementations usually focus mainly highlights a collaborative platform for integrative functions of the System in Information Management. Regarding the interactive component, organizations usually use two basic functions, e-mail or e-mail address lists custom. An effective information management is to combine the three categories of functions ensuring the performance of semantic analysis, dynamic links between information, classification and their structuring.

3. CONCLUSION

Given the issues outlined above, we believe that developing a eFacultate platforms can structure considering the next phase of implementation progress:

1. Development by making the basic functionality for Internet and Groupware platforms which provide support for the integrative and interactive functions with intensive use.
2. Developing integration functions that provide facilities for coding, searching, organizing, structuring and relocation information.
3. Development of interactive functions that provide opportunities for communication, collaboration and tracking of researchers, making the virtual meeting space communities with common interests or modern instruments of e-Learning.
4. Development related functions that enable connections between providers and recipients of information, finding common interests or users with information based on content filtering custom.

In conclusion, we found that, at present, almost all large organizations have access to the Internet, together with extensions and specific tools, provide the basic functionality of collaborative platforms such as easy sharing and access of electronic documents in real time information. Also, some organizations have developed such Groupware platform that facilitates team work and efficient organization of collaborative activities.

Many functions of information management systems are already implemented as components of Internet architecture or specific solutions such as the CRM (Customer Relationship Management). In

these conditions, the implementation of collaborative platforms requires increased use of existing functions and developing new features.

Regarding the phrase collaborative platform, it is quite confusing and dynamic due to the fact that currently there is no standard solution with a high level of interoperability. Moreover, buying a standard package could lead to loss of competitive advantage due to the low level of satisfaction of requirements. Therefore, usually, organizations resort to their own development capacity. Another problem is the integration of collaborative platforms with other applications such as document management and workflow. A technical solution to making use of more companies is the development of information portals that can facilitate data integration by using intelligent features in the handling of information.

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