THE USE OF INFORMATION TECHNOLOGIES IN BA SCHOOL OF BUSINESS AND FINANCE – INNER WEB PORTAL

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Abstract. Nowadays universities are using more and more IT in teaching, process, study process planning and management, and internal communication. An internal web portal is tool, with assistance of which universities could organize information flow and offer wide range of information services. An internal portal could be considered as a tool for effective study process management and knowledge management inside organization. The article provides information about the experience of BA School of Business and Finance in the field of an internal portal creation and its further development opportunities. The article describes several further aspects of using IT in the study process - its integration in various subjects. The main conclusion of the article states that for successful development of higher school it is necessary to incorporate IT possibilities in all higher school activities.

Keywords: Internal web portal, knowledge management, study process management, higher education.

Short title of the paper. Use of Information Technologies.

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Introduction

Nowadays, when a relevant emphasis is placed on knowledge and wide use of Information Technologies (IT), higher education institutions are changing their traditional teaching methods and styles. Currently, higher schools consider IT as their strategic partners; they use various possibilities of applying IT. These days, higher schools can create their environment like a modern company and they can use corresponding programme provisions for the acquisition of the study course – to use corresponding programme provisions, for instance, for teaching accounting, project management etc.

BA School of Business and Finance* has also involved employers in the elaboration of the study course. As it could be judged from the questionnaires of the employers, our students have good IT knowledge, and the employers have acknowledged that the role of this knowledge will become more prominent in the future.
Another way how BA School of Business and Finance has been integrating the possibilities of IT is the use of internal portal which serves both as digital environment as well as the management tool. The portal and its contents such as BA documents, study course descriptions, teaching materials etc. are used both by the academic staff as well as by students who consider that this portal has essentially improved the study process quality.

The aim of this paper is to introduce with the experience of IT using in everyday study process activities.

1. Main part. The creation of internal portal in BA School of Business and Finance

A School of Business and Finance (BA) was founded in 1992 as Latvian Banking College and has gone through several steps of development. Today, it is known for its professional study programs incorporating business and finance education graduating with master's degree and bachelor's degree. The mission of BA summarizes the will of striving for leadership in the Latvian market by offering quality study programs in business and finance education. The mission of this higher education institution is stated as follows - BA School of Business and Finance is a financially stable organization based on motivated staff, quality management and high reputation. We ensure excellent international business and finance education for creative personalities [1]. According to numerous public opinion study polls, BA School of Business and Finance takes the top position in the higher educational institution rating lists. One of the reasons of BA success lies in its effort to provide the highest possible quality of education. On the one hand, the Latvian higher educational institutions have become part of the Bologna Process [2]. On the other hand, BA is a higher educational institution that offers tuition-based education; therefore, it needs to maintain competitiveness.

One of the approaches that will help BA to implement its mission consists of accepting IT as a strategic partner. First, the mastering of IT should be included in the study courses. Second, BA should create a *state-of-the-art* digital environment, providing the accessibility and quick exchange of information at all levels of study process. The BA created project team from 4 members, bought new Microsoft Windows Server 2003, as programming tool was used MS Visual Studio 2005, Visual Basic.Net and

Crystal reports. As data base management system was used Microsoft SQL Server.

Beginning with the year 2004, BA embarked on developing its internal portal to speed up the information exchange, provide efficient working conditions and operative access to information, as well as make the processing of information easy. The following registers and software have been developed and are available for use:

i) the BA register of academic and administrative staff, including its maintenance tools;
ii) the BA student register, including its maintenance tools;
iii) the study course register;
iv) the study program register, comprising the study programs that are licensed, accredited and relevant for the specific academic year;
v) the student admissions module;
vi) the software for preparing different statistical reports;
vii) the student flow directions register, including their processing tools;
viii) the issuing of standardized statements and notices of all kinds, for example, on studying at BA;
ix) the class planning module, including the class planning for a semester, their management and the printing of different reports;
x) publishing on the homepage of BAIS, different perspectives of its representation.

In September 2004, the students and the staff got access to the BA informative system homepage at https://bais.ba.lv (see Fig. 1). It is constantly improved and updated. Presently, at the homepage students can find the following information:

i) their class schedule with current changes;
ii) the class schedules of other academic groups;
iii) the faculty class schedules;
iv) the examination period schedule (tests, exams, consultations);
v) the study schedule (i.e., the periods of classes, examinations, holidays, internship etc. during the academic year);
vi) their personal data (if necessary, the contact information can be changed by sending a request);
vii) the faculty consultation schedules;
viii) the lists of academic groups;
ix) other documents related to the student life that are not intended for placing in publicly accessible websites.

Besides, there is information concerning the student's study results (tests, exams) (see Fig. 2) and financial obligations (tuition fees, their payment terms and sums, outstanding payments, fees for repeatedly taken tests, library loans etc.).

Slightly different information is offered to the staff. They can find the following information, namely:

i) the class schedules with current changes;
ii) the class schedules of other professors;
iii) the academic group class schedules;
iv) the list of tests, exams, and consultations related to

*The official name of our school in Latvian is „Banku augstkola" (Higher School for Banks), and in Latvian abbreviation BA is well known as „BA School of Business and Finance"

the study courses they teach;
v) the study schedules;
vi) the academic group lists;
vii) the faculty consultation lists;
viii) the personal data (if necessary, the contact information can be changed by sending a request).

The faculty members have an opportunity to place their course materials, such as presentations, reading lists, and course descriptions in the information portal.

All the information placed on this portal is open only to the authorized users of the system and is encrypted using 128-bit SSL encryption technology, ensuring a communication channel between the system end user and BA, which is secure and prevents leakage of information. When the idea of creating an internal portal originated, there were quite many ideas how to develop it, but only a few Latvian higher educational institutions started developing similar portals at that time. Visits to other Latvian higher educational institutions and brainstorm sessions at BA were useful for developing its own internal portal. At the beginning, the portal contained only the class schedules, the faculty consultation schedules and the study material section, whereas today it serves as both an effective administration and knowledge management tool both for the academic personnel and students.

As a matter of fact, one may say that the portal, if operated by knowledgeable users, will make it possible to implement knowledge management principles at BA. „Knowledge is information that changes something or somebody — either by becoming grounds for actions, or by making an individual (or an institution) capable of different or more effective action"[3].

People are an essential element to successful knowledge management. At BA, the users of internal portal are students, academic staff and administration. The using of internal web portal can facilitate such processes as channeling, gathering, or dissemination of information; however, the final burden is on the users to transform this information into actionable knowledge depending on acute understanding of higher education process [4]. Therefore, using the knowledge brings additional value to BA in its ability to enhance performance, solve problems, and stimulate innovation.

Each faculty member has an opportunity to place in the system their course descriptions, lecture material presentations, instructions for implementing independent studies, bibliographies required for courses etc. In fact, all of the student respondents gave the highest rates to this section. Very often, students come to lectures having studied the materials placed in the portal beforehand. In this case, an active dialogue between the professor and students can take place during the lecture. In addition, to a certain extent, the school administration can assess the work of faculty members, because the system provides the statistics for the materials published by each faculty member. For this reason, it is essential that the academic personnel improve their IT competence, so that they would be able to prepare the study materials for placing on the portal. The administration of BA is fostering the IT skills improvement of its academic personnel.

The survey how students evaluate inner portal was made in 2006/2007 academic year. The participants of this survey were 182 4th year students, because they started to study before the school started to use this portal. We asked the students to evaluate the benefits of system:

1) the on-line lecture schedule: 182 votes – 100%;
2) the using of online study materials repository: 182 votes – 100%;
3) information about exam results: 168 votes- 92%;
4) information about work-placement opportunities: 81 votes - 45%;
5) information about payment schedule: 168 votes- 92%;
6) possibility to communicate with lecturers and staff: 142 votes -78%;
7) possibility to use school's library online catalogue: 102 votes - 56%;
8) information about Erasmus study and work placement possibilities: 73 votes – 40%.

41 faculty members were surveyed during the development discussions at the end of 2006/2007 academic year One of the questions was how the faculty members assess their written communication skills, such as the drawing up of documents in accordance with the requirements of record keeping, the usage of electronic communications tools. The responses were as follows:

i) it is able to draw up the documents on a PC and communicate via e-mail – 3 responses;
ii) uses a computer for everyday work, uses e-mail, is able to make use of the computer skills for the academic work – 20 responses;
iii) makes active use of the computer skills for the academic work, a skilled user, – 12 responses;
iv) has outstanding computer skills – 4 responses;

The administration of BA has always actively facilitated the improvement of competences of its academic personnel. On-site computer training courses are provided for the academic personnel every year. In the academic year 2006/2007, by attracting the European Structural Fund resources for the project called „Improvement of BA Academic Personnel Competencies in the Areas of Foreign Language and Information Technologies", 15 faculty members could attend the MS Excel Specialist courses, 8 – MS Excel Expert, 18 – MS Word Specialist, 29 – MS PowerPoint, 4 – MS Project courses. Another project of the European Structural Funds has been initiated this year, providing the mastering of statistical data processing program SPPS and its integration in the study program.

One of the aspects ensuring competitive capacity is the quality of the study program. It goes without saying that the students of business and finance study program should also possess excellent computer skills as well as abilities to adopt themselves in the business environment, which often uses specialized programs from simple accounting to complex business management programs. Hence, besides the basic computer skills taught in the first-year Informatics course, the other courses also require the use of IT. When studying accountancy, students are acquainted with UVIS – an accounting program popular in the Latvian market. Records management classes also take place at the

computer room. Similarly, the competences of MS Excel and data analysis are used for courses related to financial management and financial analysis. Traditionally, most higher educational institutions, which prepare Business Administration bachelors and masters, have the course „Management Information Systems". This course is also included in the study program of BA.

Collaboration with employers has always played the essential role in the work of BA. A place of internship is guaranteed to each student, and this place often becomes first workplace for the student. Every year, a survey of the internship providers is carried out, and we would like to briefly present the result of the most recent one, organized in the academic year 2006/2007. To admit, only 23 questionnaires were received from 50 questionnaires sent. The internship providers were asked both to evaluate the student skills and to give their opinion on the relevance of the specific skills for the future. The IT skills were evaluated as good (4 in the 5-grade system), and all the surveyed employees stated that these skills are crucial for the future (4 in the 4-grade system).

Current students believe that their IT skills will influence their competitive capacity in the labor market; therefore, the students express their desire that courses would have not only theoretical content but also opportunities to master the basic principles of working with some business management program. Unfortunately, legal acquisition of such programs requires significant financial resources. Accordingly, the administrations and faculties of higher educational institutions have to find alternative solutions how to enhance their study courses. One option, already employed by many higher educational institutions, is the use of open source software. Presently, BA has experience with the usage of open source software. After mastering the MS Office software skills provided by the study program, the students have been asked to carry out certain tasks that have to be completed using some open source software at the student's choice. The students download the selected software by themselves, complete the work, and submit or present the results. Such an approach facilitates the development of general computer skills, as the students have to master new software by knowing the operation principles of a similar program that they have already used. The next step would be the implementation of open code solutions in such study courses as personnel management, finance management, customer relationship management, and others.

Of course, the use of open code software might cause certain difficulties to those professors whose basic education is not related to information technologies. Another potential problem could be the lack of technical support. Currently, the big software companies also begin to offer their programs to higher educational institutions for use in the study process. At present, preparation works are taking place at BA in order to take advantage of the opportunities offered by Microsoft Dynamics Academic Alliance in the future.

2. Results and further discussion

Right now, the most important issue is the evaluation of everyday usage of BA internal portal. For students and lecturers, it is no problem to use this system. Currently, the system administrator reports that system each day has approximately 1700 unique users. The number of students of BA is approximately 2400 and BA staff – 80 persons. These numbers show that the students and staff have found the system useful indeed. Such university systems as the BA inner portal should be similar modern enterprise digital environment where great part of all communications is performed by means of IT and almost all data bases are available online.[5,6] In the future such system could be considered not only as information portal but university enterprise resource planning (ERP) tool as well [7].

Traditionally, such systems use one local language interface. Each year BA has some 50 incoming Erasmus exchange students and approximately 15 foreign guest lecturers and this number will probably increase. The problem with the foreign students and staff is that they cannot use the inner portal because it is in Latvian. The task for next year is to create a multi-language interface. Another task for next year is creation of automatic application system for applicants. This module will allow the applicants to fill their application forms and see their progress. And of course we should evaluate quality evaluation system for our internal portal.

Conclusions

Every higher educational institution is involved in the formation process of the knowledge society to a great extent. Changes within labor market and society, as well as in technologies, come about at a remarkable pace, and the offered education should live up to the labor market demands. A higher educational institution should also itself create a up-to-date study environment that provides both rapid circulation of information and its widest accessibility, facilitate the processes of knowledge management, as well as use the presently available information technologies for the study process improvement. BA School of Business and Finance has started to create inner portal with the purpose to improve information exchange, study process and planning. The qualified staff, who can use the advantages of IT in teaching process, also creates additional value to universities. Although many higher educational institutions have a limited budget for the acquisition of information technologies, they should use the presently available additional resources, such as partnership with IT companies that distribute software, the usage of open code software, and the European Union fund resources.
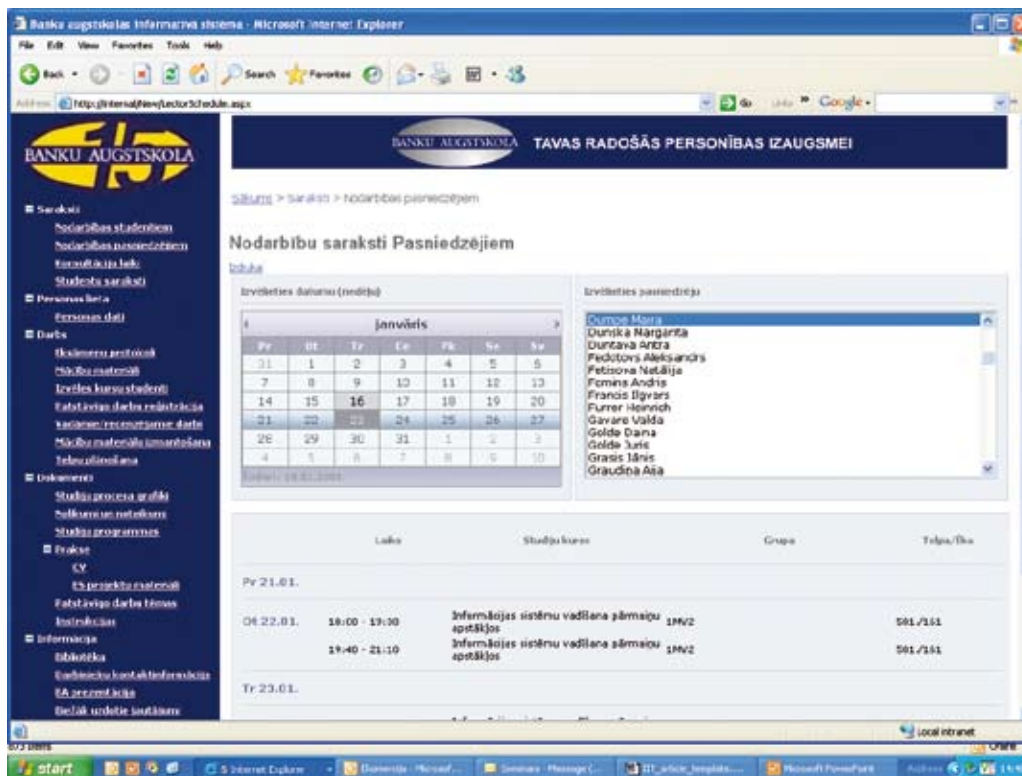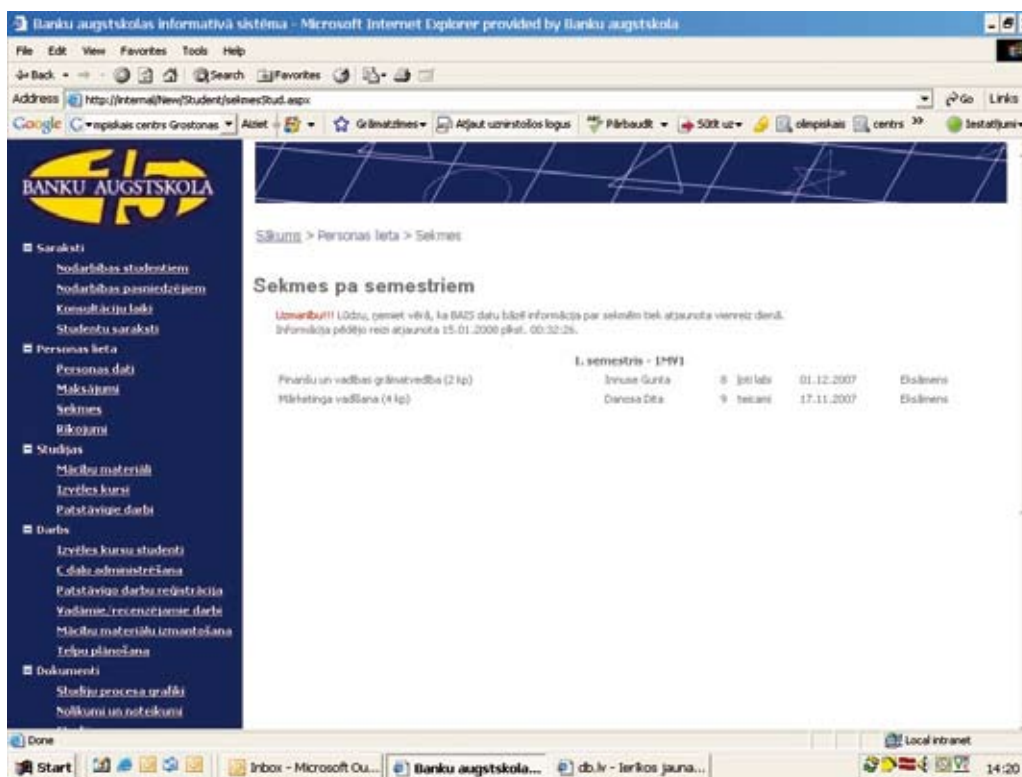
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Fig. 1. BA internal portal – lecture schedule.

Fig. 2. BA internal portal – student marks.

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