Conclusions from workshop #17 held in Bitola 19-22.04.2012

"eServices for University Management"

The 9th conference CiiT (Conference on Informatics and Information Technology) was held from 19th to 22nd March with 138 participants from universities and companies from Macedonia. The iKnow project organized sessions in 4 days and the iKnow sessions were held in two days – the first day for wider audience and the second board management team meeting.
The first day session was organized for dissemination purposes. Prof. Marjan Gusev gave welcome message and explained project objectives for developing innovative solution for electronic services for students. The following presentations were held:

iKnow Self Evaluation	Prof D-r Dejan Gjorgjevikj, UKIM MK
	Prof D-r Ana Madevska Bogdanova, UKIM MK
	Prof Dr- Ivan Chorbev UKIM MK
Electronic Survey Quality Control	Prof D-r Goce Armenski, UKIM MK
	Prof D-r Ljupco Antovski, UKIM MK
Evaluation of User Intrefaces	Prof D-r Ivan Chorbev UKIM MK
	Ass M.Sc. Sasko Ristov UKIM MK
	Prof D-r Marjan Gusev, UKIM MK
Implementation of Agile Development	Prof D-r Marjan Gusev, UKIM MK
	Prof D-r Ivan Chorbev UKIM MK
FaceBook for Quality Control	Prof D-r Ana Madevska Bogdanova, UKIM MK
	Ass M.Sc. Magdalena Kostoska
	Prof D-r Marjan Gusev, UKIM MK
Social Networks for CRM	Ass M.Sc. Milos Jovanovik
	Ass Ph.D Vladimir Zdraveski
	Prof D-r Marjan Gusev, UKIM MK
Migration issues at EURM	Ass M.Sc. Marko Vuckovik
	Prof D-r Toni Stojanovski, EURM MK
E-Index Implementation at UGD	Prof D-r Zoran Zdravev, UGD MK
iKnow Benefits and SWOT Analysis	Prof D-r Gjorgji Manceski, UKLO MK
	Ass M.Sc. Renata Petrevska Neckoska

Fruitful conversations were held after each presentation and a lot of participants outside the consortium have discussed their experience and solutions for establishing electronic services. The project deliveries were presented to wider scientific and business community.

The second day session was working session of the board management team to discuss details about implementation progress and quality control.
Discussions and brainstorming sessions gave clear directions and recommendations for further activities in order to successfully finalize the project.

The status reports presented and discussed are presented in the following sections.

Progress report for UKIM implementation

Enrollment module

The enrollment module was developed in 2011 and was successfully used for the enrolment of new students in August 2012. Several faculties in the university used it. The Faculty for Computer Science and Engineering (FCSE) relied completely on the iKnow software for enrollment. For example, more than 700 applications were successfully processed, ranked and enrolled in 8 study programs in FCSE. Other faculties either relied on it completely or used it in parallel and achieved the same results. Training sessions for this module were held extensively in July and August 2011.

All problems faced in the software's initial use are being addressed and corrected in the software update of the enrollment module that is worked on at this moment. Experiences and user demands collected in the test run in August 2011 are being implemented in the updated version. The new training sessions for the new version are planned to commence on Monday, April 30th, 2012. Training sessions are planned to be held every Monday during May 2012.

Core module

The core module of iKnow was developed in the fall of 2011. It was deployed in production in December 2011, and was initially used for exam application by freshmen students at the end of December. The test use was extremely successful, resulting in increased use ever since. The FCSE, the Faculty for Natural Sciences, as well as the Faculty for Veterinary Medicine depend completely on the iKnow system for managing the new students, while other faculties run the system in parallel, awaiting the final version and end of the agile development to completely discard legacy systems. Students have used it to enroll in the spring semester of 2012 with ease and without problems.

Training sessions were held every Monday in December 2011 and January 2012. Along with presentations and practical training, the trainees presented their demands and customizations. The requests were accepted by the developers during the period of agile development.

The agile development of the core module has been ongoing, and at this moment the functionalities requested by users during various training sessions have almost all been implemented. The satisfaction of the staff and students in the FCSE with the system has resulted in the decision to migrate all students into the iKnow software, discarding legacy systems. The migration is planned to take place at the end of April 2012. Strict time schedule for the migration has not been set due to several challenges, primarily inconsistencies in the data in the legacy systems.

Reports are the major component of the core module that have not been fully completed yet. Some are functional, and others are being fine-tuned with addition of new filters as well as columns in the grids.

An overview of the use of the system at UKIM can be seen on the table giving the amount of imported data in the system:

Faculty	Plans	Programs	Teachers	Students
Архитектонски факултет	1	89	36	126
Градежен факултет	6	470	56	0
Економски факултет	8	798	68	1184
Машински факултет	14	154	80	299

Медицински факултет	5	0	0	0
Педагошки факултет „Св. Климент Охридски“	7	0	39	313
Правен факултет „Јустинијан Први“	4	0	0	0
Природно-математички факултет	42	329	129	447
Стоматолошки факултет	3	152	89	128
Технолошко-металуршки факултет	7	105	53	101
Факултет за ветеринарна медицина	1	119	43	30
Факултет за дизајн и технологии на мебел и ентериер	2	100	23	17
Факултет за драмски уметности	3	240	34	32
Факултет за електротехника и информациски технологии	10	144	97	225
Факултет за земјоделски науки и храна	36	614	63	2
Факултет за информатички науки и компјутерско инженерство	31	1378	88	666
Факултет за ликовни уметности	16	1284	21	52
Факултет за музичка уметност	38	3362	60	87
Факултет за физичка култура	24	359	26	140
Фармацевтски факултет	2	2	44	0
Филозофски факултет	16	873	123	20
Филолошки факултет „Блаже Конески“	36	313	101	1
Шумарски факултет	2	28	17	0
Total	314	10913	1290	3870

Implementation at UKLO

By the end of 2011, all the necessary hardware equipment has already been purchased an installed at the premises of the Rectorate of the University. The UKLO implementation team is in continuous communication with the development team from the software vendor side, working on software debugging and implementation of new functionalities, specific to the workflow and document management procedures acquired at the University. All the organizational units of the University, as well as all the study programs that they offer, have been entered in the database. Each user received an account that suits his/her role whether he/she is a teacher, an administrator or a manager.

For testing purposes, a copy of the software system has been installed and configured at a backup platform, located at the Faculty of Technical Sciences in Bitola. In the testing phase, the Faculty of Technical Sciences in Bitola, the Faculty of Economics in Prilep, and the Medical School in Bitola, expressed their willingness to actively participate even in the earliest stages of software testing and evaluation.

One dissemination event has been organized in early February 2012, as an awareness raising activity, with representatives from eleven organizational units of the University, including IT administrators, heads of student services, and vice-deans for educational affairs.

E-Index Implementation at UGD

E-Index office is established with total 7 employees:
4 ICT experts (2 engineers and 2 assistants) and 3 administrative officers are employed
All students' data are migrated, total 15827 students records.
Starting from September 2011, professors and assistants can mark all students' activities in E-index (points from assessments, tests, attendance etc.)
Starting from January 2012, students from last 3 generation are applying online (thru E-index) for exams
In February 2012 are received 44159 applications for exams
From February Students can pay tax for exams thru E-index

Implementation at FON

FON University has its own software team that develops the system for student services. All of the iKnow deliveries were used for some new ideas in this system and compatibility issues with iKnow.
FON University has around 4000 students in total for all faculties. The migration of the student data from the legacy system covered 3150 students. The others are students that belong to some specific categories: disputed, repeaters and the ones should graduate this year.
The biggest lack of the legacy system at FON is that it didn't cover the financial part. So, the biggest problem in the migration of the data was the lack of financial data.
At FON University was provided financial software from the third party. The student services system is integrated with this software and in this moment it works well.
In September 2011 the system was deployed and the administrative staff was trained to use the new environment. In February 2012 the student's role was deployed and for the first time the system was opened for wider population. In April 2012 the portal for the teachers was deployed and the automatic data flow was completely established.
In all exam sessions where students were allowed to access their electronic file, additional lists with students with problems were prepared manually. This is a normal situation when we had to enter the financial data semi-manually from some legacy systems, so the chances for mistakes were high. In February, around 1600 student files were successfully established with all necessary data. In April colloquia session this number was increased by 350, and now, at the end of April, we have around 2200 "cleaned" files. We expect to achieve around 90% from the migrated data until September 2012, which will be very satisfactory to the FON Management.
At FON a lot of processes should be reviewed, especially in the financial data. There are a lot of financial models offered to the prospective students. This number should be reduced for the next generation, because the problematic files are mostly in this status because of this data.

Implementation at EURM

EURM's iKnow team took active part in meetings in Skopje, London, Dortmund, and Bitola. Data migration from legacy application to the iKnow database is under way. Numerous issues have been discovered related to data inconsistencies, missing or incorrect data, and differences in data schemes.

University's management, Chancellor and Deans have been continuously informed on the project during the meetings of the Chancellor's Council.
iKnow has been installed on an existing server at EURM.
Technical staff from EURM attended a 1-day iKnow training from Neocom in January 2012.
Tendering procedure for the purchase of servers and other hardware was finished in April 2012.