eKool and eVem: Two Example Show-Cases for the NISPAcee e-Government Learning Platform

Ignace Snellen[1] and Ljupčo Todorovski[2]

[1]Erasmus University Rotterdam, Faculty of Social Sciences
P.O. Box 1738, NL-3000 DR Rotterdam, The Netherlands

[2]University of Ljubljana, Faculty of Administration
Gosarjeva 5, SI-1000 Ljubljana, Slovenia

Abstract

The intention of this paper is two-fold. First, we present two examples for the description of show-cases for the NISPAcee e-Government Learning Platform. A learning platform is a virtual learning environment consisting of an integrated set of online services that provides information, tools and resources for developing and sharing insights and facilities for communication and cooperation between members of a community or actors interested in a certain subject or area of activities. (Wikipedia) Members and participants of the NISPAcee working group on e-Government can use the examples to prepare new (or revise existing) show-cases to be included in the platform. Second, we introduce a questionnaire for description and evaluation of the show-cases already included in the learning platform, or candidate show-cases to be added to the learning platform in the future. The introduction of an e-Government Learning Platform may assure the continuity and commonality of the common endeavors of the members of WG e-Government beyond the ad hoc presentation of papers. At the same time it may give more focus to the work of the Working Group on e-Government and facilitate the mutual learning processes.
In the actual situation the eGovernment learning platform can contribute to an exchange of ideas, good practices and problems, to keep focus on best practices in view of ECC conditions, and to draw lessons by teaching others.

1. Introduction

Two years ago, in 2008, during the annual NISPAcee conference in Bratislava, we introduced the idea for establishing an e-government learning platform. The platform was envisioned as a common framework for facilitating a more formal exchange of knowledge, best practices and exemplary cases of innovative use of information and communication technology (ICT) in public administration in NISPAcee countries. Within this framework, we will be able to facilitate, but also monitor, document, and evaluate the transfer of knowledge as well as perform comparative analysis of good practices that would go beyond single country borders. The practices may be exemplary as such whatever the situation in which they are developed, or they may be exemplary in view of the specific situation of the Eastern European Countries.

Public administrations in NISPAcee countries share common problems and issues related mostly to the transition from very rigid bureaucratic administrative practices, commonly used in the times of collectivist economy, to a modern, more flexible, kind of governance. They are also concerned with their ICT readiness, i.e., their level of technological development that allows for implementing e-Government, as well as sophistication of the developed ICT applications, which usually lags behind the similar indicators in other EU countries. The (preparation for the) European Union membership requires “overtaking maneuvers” to be performed by NISPAcee countries with respect to best practices in policy making and policy implementation. NISPAcee countries can learn from each other and ICT and e-government applications may play an essential role in this respect.

The purpose of the platform is not so much to function as a marketing intermediary between countries with respect to showcases, but to change the attitudes towards acceptance of solutions developed by other NISPAcee countries and to create awareness about the commonality of problematic situations.

Despite the fact they are confronted with common problems, outlined above, each country from the region has to solve (or has solved) those problems on its own, neglecting (potentially excellent) problem solutions developed in other countries from the region. Most efforts on establishing common frameworks focus on developing benchmarking systems that allow for comparative analysis of the achievements. However, these common frameworks offer no or very limited support to the enterprise of exchanging best practices and knowledge. The envisioned learning platform is therefore intended to provide a more formal framework or platform that would focus on share and transfer of ICT best practices, applications, knowledge, and innovations in the public administration sector between NISPAcee countries.

The process of establishing the learning platform can be decomposed in several phases. First, the coordinators and members of the WG have to collect an initial set of candidate show-cases to be included in the learning platform. Second, they have to evaluate the candidates and select those that will be included in the learning platform. Prior to being able to evaluate, a set of evaluation criteria have to be established and made available to the contributors (working group members), so they can prepare the appropriate description of candidate show-cases. Finally, after selecting the show-cases, we are able to continue with a comparative analysis of the cases included and also collecting feedback from working group members on experiences with the transfer of knowledge induced by the platform. In this paper, we focus our attention on the first two phases of collecting and evaluating show-cases.

The intention of this paper is to provide example descriptions of two show-cases, presented in Sections 2 and 3. We have chosen two such examples eKool and eVem. The first is a quite simple, but as far as we know also quite effective and efficient ICT application for schools in Estonia. The second is an One-Stop-Shop portal that provides electronic support for simple and efficient registration of all forms of companies in Slovenia. Both presentations follow the same structure and thus define a template to be further used by working group members when preparing (or revising) their own contributions for inclusion in the platform.

In the last Section, 3, we outline the next steps to be taken for establishing the platform. The first step is molding of the other show-case descriptions in the template introduced in this paper. In the second step, we will work on evaluating the show-cases. To this end, we introduce an evaluation questionnaire to be used in the process of evaluation.

2. eKool

We prepared the description of the eKool show-case using the eKool application for the European Public Sector Award (EPSA, 2007). eKool was one of the "diploma winners" at this occasion.

2.1. Initial Situation before the Show-Case Implementation

eKool deals with several social and policy problems:

- Too many students left school without qualifications thereby risking to become long time unemployed and tending to forms of criminality. This slippery slope started with playing truancy and other forms of absence from school.

- The parents have been separated from the teaching-learning process and the communication between school and home was infrequent.
- On the other side schools needed a tool for organizing essential information and provide easy reporting to local government and Ministry of Education.

2.2. Show-Case Description

eKool is an easy-to-use student information system, connecting parents, students, teachers and school administrators over the Internet, making school information accessible for home and decreasing teachers' and school management's routine work; makes statistical data from school accessible to local government. Parents can access accurate and real-time information about their child's progress: they can easily track grades, attendance, homework and also participate in class or school forums. eKool provides valuable tools for students too, so they always know where they stand and what their next tasks by getting all the homework assignments and evaluating their study performance. The subject teacher, cform-master and the management of the school will have an improved overall picture of the information generated at school and in class along with the option to group such information differently and receive reports. Local government gets needed statistical reports based on teacher's inserted attendance and grade information.

Geographical Scope
eKool is in use over Estonia, in 330 schools (50% of all schools in Estonia).

November 2002, 5 schools started to use eKool in the pilot state. January 2003, 10 schools from Tallinn joined with eKool. September 2006, 230 schools have joined with eKool in Estonia covering more than 75% of all students. 95% of students in Tallinn get their needed information from this web-based Student Information System (SIS).

Today eKool is in a rapid development stage:
1. eKool is developing to other European countries.
2. eKool develops seamless integration of assignments and learning materials.
3. Teachers can upload their e-learning materials and compose exercises. Saved exercises can be easily given as an assignment to pupils.
4. Comprehensive reporting makes it possible to track and evaluate results.
5. Data will be exchanged with the Estonian Education Information System which is administered by the Estonian Ministry of Education and Research.

2.3. Stakeholders

Stakeholders are all those people who in one way or other profit from the services provided by the eKool application. These services consist mainly in forms of registration, information and communication about the presence, participation, obligations and results of the students, teachers, public authorities, etcetera, in connection with the schools. These forms of information and communication enable them to check and keep an overview of what happens inside and in the context of the school, and to bear their responsibilities.

The stakeholders and their stakes in eKool can be specified as follows[1]:
- Students/pupils: an up to date school attendance registration system offers a strict structure, as well as guidance and a feeling of belongingness. They are always well informed about their homework and other obligations.

[1] This list of stakeholders and their stakes is derived from experiences in some Western European countries.

- Teachers/tutors: prevention of school absence, and if necessary, the formation of multidisciplinary teams are facilitated. All users have an improved picture of the information generated at school and in class along with the option to group such information differently and receive reports.
- Parents: open communication relations with the parents, created by the school, not only support the cooperation between the school and the parents, but also their authority with their children, because they are involved and know what happens in the school. The information accessible to them is always up-to-date and contains full description of school lesson – grades, attendance, homework assignments.
- Community workers of the police or welfare organizations: if a bond with local communities is maintained early warning signals provided by the school may improve the effectiveness of preventive measures.
- Managers within the educational system: they receive system level information and immediate feedback about disturbance of its functioning. Local government gets needed statistical reports based on teacher's inserted attendance and grade information.

2.4. Obstacles and Problems Encountered

The implementation of eKool has been relatively painless, but as schools are relatively underfinanced and conservative institutions, some obstacles were encountered. The easiest of them has been technological readiness of the schools (e.g. internet connection and computers for teachers) as the technological barrier to start using eKool is relatively low (the school does not need dedicated servers or large internet bandwidth). One internet enabled computer for each 5-6 teachers will be needed to implement eKool.
Although the first reactions were pretty distrustful, the curiosity woke up after hands-on training, resulting that teachers have started to use computers not only for eKool but in other areas too.

Probably the most critical factor is the school's readiness to redefine and optimize many operational level processes, abandon paper grade books etc. In most cases it is up to the discretion of the principal, but it is often convenient to delay such radical decisions.

It is very easy to order the schools to use some software for reporting etc., but if the client is the local municipality or the state, the true needs of the teachers are not well understood. By responding to the needs of the teaching community, the system is kept alive.

2.5. Problem-Solving Approaches

eKool contains data connected with the learning process. Validated data entry ensures consistency and accuracy. eKool is secure since user authentication procedures guarantee that everyone can only view the information designated to him/her. Every school administrator can operate in eKool only in the capacity of their school's roles and users. Whether a user has accounts in other schools is not visible to the administrator and therefore nothing can be done about it. eKool uses industry standard SSL encryption to protect the data from unauthorized access and supports smart-card, password or internet banks for user authorization. All the data is back-upped twice a day into two separate physical locations.

It is very easy to order the schools to use some software for reporting etc, but if the client is local municipality or state, they do not understand true needs of teachers. eKool created model, where every school has voluntarily joined and also participates to drive

the development (as the school is paying client and feels responsibility). So by responding teaching community needs, the system is kept alive.

It's school's decision to join. Schools are paying small monthly fee ranging from EUR 30 to EUR 60 for using eKool. It covers initial training, application hosting, development and user support. Large user base also ensures quick answers for questions through web based mailing lists, forums and knowledge bases. There is a contact person from each school, who has phone, e-mail and Helpdesk contact with support team. School's administrator helps teachers and school management for using eKool and gives their proposals for development and improvement to eKool team.

eKool offers a variety of training classes both on and offsite. For eKool support persons a training program is offered, providing basic information on eKool's functions and its system administration. They gain hands on experience in many specific areas. To solve current problems and enter proposals for additional functions and reports schools use helpdesk and get support via phone or e-mail.

2.6. Results

Every joined school enables a lot of potential users, but the number of schools using eKool is not enough to measure success. The project can truly called successful, if eKool's service will reach to every teacher (providing up-to-date content) and the majority of students and parents will use eKool on a daily basis as a first source of their learning information.

However, when they started with the eKool application, only a handful of Estonian schools had computers and a small number of teachers were using computers every day. But eKool (as the main tool for them) has created demand (and finances) for infrastructure, also in 4 years almost every teacher who has been involved with eKool (about 80% of Estonian teachers) have started to use Internet more widely.

eKool represents high customer satisfaction, correlating highly with up-to-date information availability (by schools). This brings us to the fact that keeping teachers happy provides more accurate and fresh information, keeping students and parents happy.

- Students attendance information will appear to reports only few seconds after teacher has entered the missing students
- Home, teachers and administrators get up to date information about what happens in school and student participation of schoolwork
- The teacher will have the opportunity to enter information wherever he/she is, the only thing he/she needs is a computer with sufficiently fast Internet connection.

The school has become a more open organization, parents trust more to teachers and also to their children; there are more open and better relations between school and home. Teachers feel real interest from parents to their children results and have got better possibilities to avoid problems. There has been a big influence to attendance and less drop-out cases from schools. School management has better overview about grades and attendance.

94% of all users are parents and students. They benefit most from eKool. The information accessible by them is always up-to-date and contains full description of school lesson - grades, attendance, homework assignments; all users have an improved

overall picture of the information generated at school and in class along with the option to group such information differently and receive reports.

The habit of using IT (culture) develops or appears at school – important data (student lists, data about teachers, syllabuses, etc.) are stored digitally, teachers are more motivated to use the computer to prepare for the classes, computers are more extensively used in different classes, etc.

Today eKool is in rapid development stage:

1. First schools testing eKool abroad
2. Learning materials - eKool develops seamless integration of assignments and learning materials. Teachers can upload their e-learning materials (pieces), share them with other teachers and compose them into their personal or shared exercises. Saved exercises can be easily given as an assignment for students or classes and comprehensive reporting makes possible to track and evaluate results.
3. Testing on the Web

2.7. Innovative Aspects

The project's most innovative elements are:

- One time data entry makes information more accurate and up to date;
- Simple data collection of parents and students information, because they are able to update the necessary information by themselves
- School administrators can benefit from real time reporting tools. Number of off the shelf reports grows accordingly to school proposals.
- Class and students grade-books are accessible for viewing and also filling virtually from everywhere in real time, 7 days a week and 24 hours a day. Data can only be shown to those who have the right to view it; everyone has a control over a data collected about them.

What has made the project particularly successful is the cooperation between different roles. If the teacher has not filled in the homework assignments then students will push teacher to fill it. If the list of pupils in the class will contain wrong names, the teachers will demand proper and actual list at once otherwise they can't work. The parents are a significant driving force to demand eKool use in school, the districts and school management will collect statistics etc. So eKool has created self-controlled environment to keep data up-to-date.

2.8. Success Factors

Apart from the innovative aspects mentioned in the former section, we can identify three main reasons eKool has enjoyed success:

1. The system was initiated from bottom up, so there were already motivated users who described early stage functionality.
2. Schools were identified as clients instead of the districts' educational departments or Ministry of Education.
3. No public money was used in the process, allowing to build up feasible business model in the long run.

Every school has made the decision to join with eKool by themselves, also this approach requires much more effort from developer and ASP to guarantee that the service will please end users and gives them necessary tools and resources to cover planning, teaching and learning process in more enjoyable way.

Attachment

In Appendix 1, at the end of this paper, find the assessment of the eKool project by a (former) Policy Advisor ICT and Head Student Tracking System of the Dutch Institute for Vocational Training.

3. eVem

We prepared the description of the eVem show-case using the eVem application for the United Nations Public Service Award (UNPSA, 2007). Parts of the description were later revised based on an interview with Teja Batagelj, one of the projects executive leaders, performed in March 2010.

3.1. Initial Situation before the Show-Case Implementation

eVem was implemented to deal with the problem of a highly time-consuming procedure for registering an enterprise in Slovenia. Registration of companies in Slovenia, before eVem, took on average 60 days, and it required several contacts with different public administration institutions (e.g., tax office, chamber of commerce, health insurance institute, to name a few) and notaries. About 90% of applications for registering enterprise were incomplete. Costs for registration were high, typically in a range from 250 to 600 EUR. There was an extreme need for renovation of the system of submitting applications to court register, which was obsolete and would not allow use of ICT.

On the positive side, the initial version of eVem was in place (for more than three years) that provided citizens with a OneStopShop system for registering small (sole trader) enterprises. It allowed for a very efficient registration of a sole trader in few hours. Thus, the goal for eVem was to extend its scope to any kind of an enterprise (all kinds of, not only LTDs) in four days and free of charge.

In the time of recession consequences the system is encouraging for new start ups because it enables free of charge registration and that gives the opportunity to earn money.

3.2. Show-Case Description

eVem is a comprehensive and simple OneStopShop system that allows future entrepreneurs to register any kind of enterprise in Slovenia, ranging from small, sole-trader enterprises to larger limited liability companies or partnerships and corporations. In addition to registration, eVem provides integrated access to related services, such as registration of employees. Along with the Web access to the OneStopShop syste, eVem provides to potential users a variety of alternative delivery channels at the number of different public administration institutions and notaries in Slovenia (see the list of stakeholders below).

3.3. Stakeholders

The project leader has been Ministry of Public Administration of the Republic of Slovenia. They based the solution on the previous successfully implemented OneStopShop solution for registering a small (sole trader) enterprise. The project team involved the representatives of following institutions:

- Ministry of Public Administration, project leader
- Ministry of the Interior, holder of Central register of population where the system gets the data about member of companies
- Ministry of the Economy, holder of the Companies Act

- Ministry of Justice, holder of Law on Court register-the law set the deadline
- Tax Administration Office, holder of Tax register where the system gets the data about foreign members of companies and One stop shop system is connected to their system for submitting tax data
- Supreme Court, district courts are users of the system and they decide about entries of companies into court register (that was joined with business register) and they are substantively competent for making these decisions
- Agency for Public Legal Records and Related Services, technological holder of merger of business and court register, holder of the business register
- Statistical Office, competent for database of Standard activities that is connected to the system
- Surveying and Mapping Authority, competent for Register of special units that is connected for controlling typed in addresses
- Health Insurance Institute; OneStopShop system is connected to their system for procedures regarding the social insurance
- Pension and Disability Insurance Institute, all the decisions from health Insurance Institute are send through OneStopShop system to the Pension Insurance Institute
- Chamber of Notaries, since notaries are users of the system
- Chamber of Commerce and Industry, one group of OneStopShop contact points are contact points of Chamber of Commerce and Industry
- Chamber of Craft, OneStopShop system is connected via web services to their system for submitting application for acquiring a craft permit with Craft Chamber of Slovenia and district chambers of craft are OneStopShop contact points
- Employment Service, OneStopShop system is connected to their system for publication of a free post with Employment Service

Another stakeholder involved in the project includes some commercial banks in oreder to support online opening of a temporary bank account for the enterprise.

Each stakeholder had to develop his subsystem to be able to communicate with OneStopShop system and all civil servants using the system had to be trained for its use.

3.4. Obstacles and Problems Encountered

One of the main obstacles in the first phase of the project was obviously the large number and the diversity of the stakeholders involved. The project involves executive and judicial branch and notaries, who lost a notaries certification of memorandum of association for simple ltd companies. From the technological point of view the difficulty was to integrate six databases and six different (already existing and working) subsystems. All stakeholders in the project had to finish their work by the pre-set deadline. Note also that introducing a law for implementing eVem enforced a strict deadline, which could not be (easily) moved to a later date.

The technological problems are related to eVem complexity. The OneStopShop system has 80 code tables, runs on 16 servers, it is connected to 6 registers. In order to function properly, the portal requires access to external databases. Access methods vary, as they are dependent on the administrators of individual databases. Data from the business and court register are obtained by calling a web service and with the appropriate parsing of XML files received. Data from register of spatial units and the central register of population are obtained with the help of JDBC calls. The OneStopShop integrator, which is responsible for the correct flow of documents, represents the second segment of the application. Similar to the portal part of the application, the integrator was

development using java technology. The integrator is connected to external systems with regard to their enterprise resource planning (ERP) systems (web services and PGP encrypted e-mail). The integrator records the status of an application, and thus coordinates the entire application process. The system communicates with systems of 6 other institutions. They have their own rules. Data, received from one institution are transmitted to another system and aforementioned features of the system are a reason why integration on technical level was very demanding in the phase of system development. Only highly technologically educated civil servants and contractors were involved in the project.

Communication among the numerous project members was sometimes critical due to time pressure. Project had its milestones and in case some institution did not reach the goals, the failure result in nervous communication. So the role of the project leader was crucial at those phases to know how to calm down the situation. Many times, it was not possible to have meetings with all stakeholders, therefore the correspondence was performed using e-mail, which often brought misunderstanding of written words, especially for people not used to the pace and demands of the project. The goals and activities did not allow any delay and for each activity was clearly defined who a responsible person for the activity is. So good project plan helped. However, towards the end it was difficult to maintain high level of attention, because so called "finish" lasted for whole four months and it demanded that people over-fulfill their human capabilities. In those circumstances the choice of correct words for describing mistakes and needed additional actions was very important.

Regarding the wide knowledge of different areas of pubic administration that civil servants had to learn and assess during the project, we had to organize regular training sessions, so no particular problems were encountered in this sense.

3.5. Problem-Solving Approaches

Ministry of Public Administration (MPA) prepared the main concept of the system, which was based on the already existing OneStopShop system for sole traders, which has been in production since July 2005. The eVem concepts are however much more complex and, since eVem supports many more electronic procedures and connects a larger number and greater variety of public administration institutions.

The project had great support within the management of the MPA and within the Government of the Republic of Slovenia in general. The management of the other institutions involved in eVem also strongly supported the project. However, they followed their priorities and; aligning them with the eVem concept and priorities required full-time involvement of the team members.

The three main goals of eVem:

- to enable fast (four days long), simple and free of charge registration of a company
- to perform all other obligatory procedures for start up at one stop shop contact point or online
- to support other (most frequent) services for businesses at one stop shop contact point or online

At the same time eVem provided support for other (higher level) goals of MPA:

- Transparency: all applications can be monitored by status
- Accessibility: the services are available 24 hours online or at One stop shop contact points and notaries

- Responsiveness: the system supports completed forms and fast decisions of the institutions

MPA as a project leader is in charge for e-government development in Slovenia. The Ministry is not competent for any procedure that can be done through OneStopShop system and is regarding the procedure competence the only actor in the project that has no competence for deciding in procedures. That makes the project leader independent. Other included institutions in the project are:

- holders of the procedures that can be done through One stop shop portal
- holders of the registers that are connected with One stop shop system
- OneStopShop entry points that are contact points for companies and are users of the system
- holders of the legislation that is base for procedures that can be carried out at OneStopShop Web portal.

The base for the project was the legislation. Some of it already existing and some, which had to be changed before the eVem was implemented and brought into the production phase. The amendments of the legislation were done in parallel with preparation of the specifications of the system, so that there is no difference between the legislation and its implementation within the system.

3.6. Results

The system is used (since February 1st) by companies (over 50000 in Slovenia), One stop shop contact points (180 in Republic of Slovenia), notaries (90) and district court (only for entries under compulsory power). Together over 700 civil servants are using the system. What is very important for public administration is, that the system is used at public administration for registration of civil servants at obligatory social insurance online.

3.7. Innovative Aspects

To be further discussed and clarified.

3.8. Success Factors and Lessons Learned

The project is successful due to fact that is constantly run by independent institution that coordinates other institutions and users. All institutions have their own interest to cooperate. Therefore the cooperation of the institution is good. The project is co financed by European Union and that allows constant development and training of civil servants.

Technological solution enables OneStopShop concept. That means that when a user sends and application for registration into the system, he can at the same time send other applications. Those applications wait in the system until the system receives the information that the company has been registered in court/business register. At that time the systems sends all other data (tax, health insurance etc.) to competent institutions together with the data about now already existing company.

Technical and legal experts, lecturers work together on the project and that enables fast development and effective training.

Users of the system has wide substantively and technical support for using the system.

Lessons leaned:

1. Appropriate and on-time communication, understanding the problems of each stakeholder involved and providing appropriate motivation can solve most of the issues and problems. If they are not made explicit, they pose bigger threat to the project as they would if exposed early enough. Encouragement (not punishment) of project members is necessary. Attacking and blaming each other for the mistakes and problems does not really bring a progress, realizing that it can happen to anyone is a gain.
2. All stakeholders in such integration system must be taken as equal despite good (or bad) prior experience with some of them. In our project the strongest stakeholder by our best conviction in the beginning of the project and even all to the production demonstrated as the stakeholder where we should put more attention to its development.
3. Without strong support of the highest level of the Government, strong budget, experienced contractors and team members with strong affiliation to the project, success of so strong integrated project with so many possible conflict points is impossible.

4. Further Steps towards the NISPAcee e-Government Learning Platform

As a conclusion, we provide here the vision for the further steps to be taken towards the NISPAcee e-Government Learning Platform.

4.1. Collection and Revision of Show-Case Descriptions

As the first step, we are going, in collaboration with the show-case providers, to mold the existing show-case description into the template introduced in this paper. In addition, we are going to continue our efforts within the NISPAcee working group on e-government to solicit new interesting show-cases from the countries in the NISPAcee region of interest. The revised and new show-case descriptions are going to be published at the learning platform Web-site at http://daisy.fu.uni-lj.si/nispacee-wiki/.

4.2. Evaluating Show-Cases

In addition to preparing new show-cases, we will also start discussion within the working group on evaluating the cases included in the learning platform. To facilitate the evaluation process, we present here a brief description of the evaluation questionnaire to be used and the aims thereof. We are going to use this questionnaire during the conference to evaluate the eKool and eVem show-cases, presented in the Sections 2 and 3 of this paper.

- What was the problem situation for which the exemplary approach was developed? Is it shared by other NISPAcee or Western European countries?
- Were opportunities (e.g. developed by other countries) recognized/not recognized, or missed (e.g. because of a “not-invented here” attitude)?
- Describe the exemplary case, its geographical scope, its starting and finishing dates and its budget, when available.
- What obstacles were encountered: technical problems, financial problems, human resource problems, legal problems and forms of mistrust?
- Which problem solving approaches were chosen, such as training classes, help desk, instructions for middlemen, support teams, etcetera?
- What results are achieved in terms of satisfaction of stakeholders: public authorities, clients, customers, citizens, employees, the public at large etcetera?

- Which are the success factors behind the project? Cooperation of different roles and correction mechanisms within the system as a consequence thereof? Bottom up spontaneous initiatives? A problem centered instead of a government centric approach? No public money involved etcetera?
- Which are the dominating innovative aspects of the exemplary case? The products, services, markets, operational or supporting processes? The intensity of the innovation: radical or incremental? The locus of the original initiative: internal (from within), external (from stakeholders) or both? The orientation of the innovation: administrative process or citizen service orientation? The scale of the innovation: large scale or small scale?

References

EPSA (2010) EPSA: European Public Sector Awards. http://www.epsa2009.eu/; http://www.epsa-projects.eu/. Visited: April 2010.

UNPSA (2010) UNPSA: United Nations Public Service Awards. http://www.unpan.org/dpepa_psaward.asp. Visited: April 2010.

Appendix 1: Assessment of the eKool Project

eKool is a central student tracking system that is in different languages on the Internet, and that is used extensively. Users are schools, students, teachers and public authorities.

The information system is developed from practice and – after a period of 10 years - looks mature.

eKool is a platform-independent web application, accessible via larger web browsers and operating systems.

eKool uses industry standards, such as SSL-encrypting to protect data against unauthorized persons. It supports smart card provisions and e-banking.

Two times a day a backup is made of the data on two different locations.

Schools take a subscription and pay a monthly fee. The system is free for teachers, parents and students.

eKool hosts the data that are imputed by the different parties. Through these data a real time picture can be obtaibed of the students, such as the absence behavior, the study progress as well as statistical material for policy making and budgeting.

A privacy regulation is available.

After registration subscription is possible without any form of installation of other software. A web browser and internet connection suffice. New schools, which subscribe to eKool, receive an initial (users) course for free.

Learning and teaching are processes which not only are followed in schools. Lessons can be prepared and tested at home. Home work has to be made at home anyway. Therefore eKool is always (24/7) available and within reach. Apart from that it can be consulted independent from time and place.

The international use and the poly linguistic support make it likely that the system is extensive, robust and complex. It is not possible to get a concrete picture of the real content (business model/ information model/data model), as well as of the platform on which it is developed and is working. That is the reason I cannot give an opinion about the physical situation, inclusive safeguards and other safety risks.

I could inspect some absence reports that are made in cooperation with GP-Untis, an Austrian application for absence registration. They were clear and informative.

Approach

The system is developed through a long time process of practicing and on the basis of teaching practices. It is not clear whether this product, which is grown in the course of time, later on is completely newly refitted. It could be that invading inconsistencies in functionalities and data model/business model/ information model are streamlined. The intensive use indicates that this is important. I don't know whether the system is successful by lack of competing products or that it is good anyway.

Transferability

eKool is used internationally while educational processes may be interpreted differently. When this product is to the satisfaction of customers broadly applicable, then it is very strong (or maybe very basic and generally applicable). I don't, however, have indications for this last possibility.

Innovative content

Innovation is time dependent. Innovation certainly has taken place, because the system must have brought development in a technical/organizational sense. This is true, even internationally, considering the countries, which use the system, and the large number of schools in Estonia, which do apply it. A further degree of innovation will be included in the improvements and expansions of the system.

Finally

I don't have insight in the content of the system and I don't have an opportunity to get it. Neither can I give a considered opinion whether the information need of the users is covered. It is not clear whether a user's team or users association exists, which regularly monitors and makes propositions to improve or to update the system.

Summarizing

eKool seems to fill a need. It is not possible to determine – on the basis of the data available to me – how and to which degree this is the case. Neither is it possible to say something about the satisfaction of the users. To know more about this, it would be necessary to subject the information system to an audit.

Leiderdorp, 11th of February 2010

BG