facility management system

fama

CASE STUDY

The following case study deals with the introduction of facility management processes at the University of Žilina. Described are the different steps beginning with the reasons which led to the decision to introduce software for facility management, to deployment of the system and prerequisite for further development.

Reasons for implementation of space and equipment management project

Due to increasing operational demand of modern buildings the necessary condition for their quality and efficient operation is the existence of relevant and promptly available information about the current state of managed assets. All firms and institutions owning some buildings or property encounter this issue. The need to obtain relevant information is growing, as well as is the pressure on the effective management of the assets growing.

This matter encountered also personnel at the University of Žilina. In their work they had to use several sub-data sources which lacked mutual cohesion. These data were often outdated or incomplete and therefore the administration of assets was expensive and inefficient. In the case of graphic data, those were the construction drawings in digital form, which have not been updated of changes resulting from the construction works carried out. Part of the drawings was available only in paper form. Descriptive part of the documents was created in MS Excel tables with no ties to the graphics part.

Desired outcomes for management were based on the processing of MS Excel spreadsheet and drawing documentation. This procedure was not only time consuming and laborious but brought along number of other problems arising from the above mentioned deficiencies. The data was often outdated, incomplete and lacking an exact description. Orientation in these data was therefore very difficult.

Above described level of asset management did not correspond to increased demands of modern process management in the field of facility management. Therefore the leadership of Univeristy of Žilina required a progress in systematization of normative base of the buildings and wanted also to automate all activities related to complex management of objects and to achieve further savings in the operation of the object.

It was not possible to meet the objective of increasing the quality of management decisions and implement effective asset management without the use of unified high-quality SW support.

To meet the above objectives it was decided at the university at the end of 2005 to implement the information system FaMa+.

Projects implementation

Given the intensity of implementation process the project was divided into several logically integrated units:

Space and equipment management implementation of 4 pilot projects – a pilot solution verification

The purpose of this pilot phase was to verify the solution in practice and to define the setup of basic space and equipment management process. The crucial importance of this stage was to create a clear and uniform identification of the objects. In addition both descriptive as well as graphical data were completed and updated and linked together. Due to out-of-date and non-complex information this stage became unavoidable and provided the university staff as well as the suppliers of valuable experience for the future. The result of the implementation of this stage was to achieve the completion and updating of data base for the pilot objects in both the descriptive and graphical data field, and their mutual links.

Experiences from implementation of this stage are very valuable and can be now applied for other stages, especially for space and equipment data acquisition of other objects of the Žilinský University.

The crucial importance of implementation of this stage can be summarized as follows:

- An uniform and unambiguous identification and localization of space and equipment objects have been created
- An uniform and unambiguous identification and localization of all areas (rooms) in space and equipment objects have been created
- A data base, which forms the basis for possible future expansion of the next agenda, have been created
- Gaining the experience of university's employees in acquisition and space and equipment management data and the use of the system itself. The need to enable wider range of users to access the system data arose based on this practical experience.

Completion of space and equipment management of remaining buildings, extension of technical records

Plan: 2008

Based on the findings during (under) the pilot phase the university will, after the completion of this next stage, obtain a comprehensive and up to date information database of the managed assets, including the up to date drawing documentation of individual objects. Space an equipment management of buildings will be further expanded to technical records not to only provide clear records of the individual sites and equipment but especially to provide an appropriate tool to meet the needs related to issues of revisions administration (see below).

Solution within the university portal

Plan: 2008

The aim of this stage will be to allow a wider range of users (eventually public) a controlled access to selected space and equipment data. Users, on the basis of allocated access rights, will be able to use space and equipment data for the orientation within the university (students, public) as well as for carrying out the tasks arising from the duties of entrusted asset management(university staff).

Extension of selected asset management areas of the system – creation of the complex system of university´s asset administration and maintenance

Plan: 2009

Extension of the system will allow the university staff to effectively plan, implement and evaluate daily activities involving the operation and asset management.

This is essentially an issue of revisions administration, ie. automated generation of revisions and inspections dates, including the notification sending of the impending revision date. This allows the university staff to have up to date information not only on the state of managed assets but also an overview of the future need for investment in its repair and maintenance.

In terms of daily operations and the handling of user requirements the request management is important. Through Internet network (intranet, extranet) also inactive users can submit their application requirements. In practice this will mean that every worker or tenant without the application being installed on his/her computer will be able to enter the request directly into the application via the internet network. At the same time, this link will enable him/her to monitor the execution and monitoring of the requirement as stated in the application under the Work-flow.

In terms of increasing the operation efficiency of individual buildings the energy management is an important area. This agenda will allow responsible personnel to evaluate the energy consumption over time and according to individual objects and their mutual comparison.

Last but not least is the issue of lease management. This agenda deals with both short-term leases (lounges, classrooms, lecture halls) as well as long-term leases (residential or non-residential premises, land).

Solution benefits (achieved in the 1st stage)

- **Consolidation of the normative base**
- **Update and cohesion of descriptive and graphical data**
- **The central source of information about the current state of objects**
- **The central repository of electronic documentation for the individual objects - immediate information.**
- **Quick and efficient creation of passport of the buildings**
- **Removal of the creation of the same data in different systems**
- **The possibility of clearer planning and implementation of preventive maintenance**
- **Building an information base for decision-making and optimisation of the maintenance costs.**

Deployment of the above mentioned IS FaMa+ modules created significant step towards building a software support for the area of all activities falling within the field of economic and technical management of buildings and property at University of Žilina. Basic prerequisites have been created for the gradual deployment of additional modules of FaMa+ system and its further development.

TESCO SW, a. s., Jeremenkova 42, 772 00 Olomouc
tel.: +420 587 333 400 / fax: +420 587 333 885 / e-mail: tesco@tescosw.cz