

UNIVERSITY DECISION SUPPORT SYSTEM: STUDY OF THE IMPLEMENTATION

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The study process management at contemporary university is based on actual information using different criteria with a set of limitations and additional requirements. Today there is opportunity to get information from centralized university's databases by predefined reports. From the other side controlled study process is sufficiently stable and inertial. These features allow using different statistical models based on huge historical data sets.

Any actual university management system shares management functions between university departments and partially forwards separate functions to the upper management level (faculties, chairs). Targets and tasks for each management level are different. Therefore in order to obtain the required level of management decisions it is necessary to perform specific data analyses on each management level.

Information preparation for decision making consists of source data collection and following data analysis. It is clear that collection and storage of this huge information amount is possible only by using one or several university wide Information Systems. In the process of getting information two problems are to be solved: information consolidation from different systems and support of common information multiple classifications.

The paper describes implementation of preliminary data selection for the appropriate tasks performance on the proper management level (data cleaning, data marts, OLAP cubes, export files, information updating) and further data consolidation and multiple classifications at Riga Transport and Telecommunication Institute (TTI).

Existing TTI Information System was initially designed by using OLTP model for collection, storage, searching and retrieval of actual information. This system successfully supports university study process with all tools required for its routine management: classes scheduling, students' enrolment, session results recording etc.

For effective use of the collected information a special complex with the analytical system FAS was created. FAS system was primarily developed by "Info-Lux" Company (Minsk, Byelorussia) and later implemented as a part of TTI Information system in Riga. FAS system has its own database, which allows sharing processors loading between Information System (data input and current data maintenance) and FAS analytical system (data analyses). FAS system has also a special Master for reports generation and graphical data representation.

The paper describes also several numerical examples of successful FAS system implementation within TTI Information System.