

# Structure of University Database System and Data Analysis

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*Abstract*— This paper describes the state of research and development of data structure for university data, especially, Japanese university basic survey data and its application for business intelligence analysis. Our research and development are aimed for university data reporting and comparative analysis on the data with consideration on general university information structure. Institutional data of university, college, or college of technology are substantially important for data analysis or knowledge discovery in the higher education management field. However, university institutional data are not necessarily standardized and compiled, so it is difficult to integrate their information for various reporting and data analysis. In the past decade, a number of investigations of the integrated university database have been done to deal with various kinds of university institutional information including university survey or school basic survey data by considering the structured university data. This paper describes the state of our research and development of structure of university database and data analysis system, which are effectively utilized for data reporting and university comparative analysis. We explain (i) development of various data reporting and analysis system of university database system, and (ii) proposal of generalized layered university database structure based on Link-based data set.

*Keyword*— Business intelligence , Data structure, Link base, School basic survey, XBRL.



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