: What Data Warehouse software and configurations are used in universities?

The best source for finding information on this topic is on the Higher Education Data Warehouse Configurations page at http://www.georgetown.edu/users/allanr/dwconfig/. Ron Allen maintains the Web page for the EDUCAUSE Decision Support/Data Warehouse Constituency group. Some of the information is out-of-date, but the site policy is to post the date when information was entered.

I'll summarize the data warehouse configurations for 40 U.S. Universities that were posted at the Georgetown Web site in November 2000.

Databases: Oracle is the dominant database in use for university datawarehouses. More than half of the universities reporting had some version of Oracle. The most recent version in use is Oracle 8i (at only 2 universities). IBM's DB2 was the next most popular database with 5 installations. Sybase, Microsoft SQL Server 7.0 and NCR Teradata are used at 2 universities each.

Data Modeling Tools: Most universities are not using data modeling tools. ERWin is used by DW teams at 4 universities. Query Tool: Brio and the Microsoft products (Access and Excel) are the most commonly used query and analysis tools. Fifteen universities report using a Brio product. Only one seems to have implemented Brio Insight accessed through the Brio Portal. Single universities are using Crystal Reports, Hyperion, Cognos' Impromptu, Hummingbird BI/Query, MicroStrategy, Business Objects, SPSS, and SAS products. A few universities have plans to migrate to Cognos products.

File Configurations to Users: A Star Schema is the most common file configuration reported. Some schools more generally indicate they are using denormalized tables and summary files. Systems Covered: The most common systems included in the university data warehouse are financial, human resource, courses and students. Some schools have other systems in the warehouse like financial aid, student fees, research, property, alumni development, admissions, and purchasing. Some schools claim to have integrated the data in the warehouse.

Ron Allen reported in a recent email (Thu, 26 Oct 2000) that Georgetown is at the "dawn" of implementing their datawarehouse. He said we are "just beginning to build our production marts after developing successful prototypes". He notes Georgetown has one manager, "one systems analyst, one programmer, ½ data base administrator and we are recruiting a data administrator" assigned to the DW projects.

So what is the big picture on data warehousing in universities. The 40 universities that reported data are in various stages of warehouse development and the sophistication of the technology varies enormously. Universities seem behind U.S. Fortune 2000 companies in implementing data warehouses/OLAP and especially Web-Based DSS.

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Author: Daniel Power
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