Database Management Systems: An Analysis of Integration

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Database Management System (DBMS) is a set or sequence of instructions involving the use of a computer program that controls the creation, maintenance, and the use of an organized collection of data, typically labeled a database. These programs enable organizations to store, modify, and extract information from a database. There are many different types of DBMSs, ranging from very small systems that may run on personal devices such as phones and laptops to very large systems that run on computer mainframes.

Database marketing involves the organization, management and utilization of the collection of data. This usually consisting of compiling names, addresses and other demographic information related to consumers and organizing the collections in a usable form. Managing and utilization of the database may involve the development and delivery of integrated marketing programs, including promotion and sales offers to the database universe or to appropriate segments or target markets of that database (Masteralexis, Barr & Hums, 2009). For years organizations have utilized a variety of data base resources to investigate and create platforms for measure. These strategies typically integrate communications and logistic measures utilizing XML or other 3-tier application architectures. Data modeling is a procedure often utilized to define and analyze data requirements to support an organization's operation. Through the integration of software engineering conceptual models are then utilized to provide logistical framework for implementation.

This study sought to identify database preferences as well as database and data modeling usage patterns of collegiate athletic programs. The study was conducted within two Midwestern Division I A athletic conferences. Exploratory measures revealed that the majority of the universities in these conferences do not currently utilize any database management system. Though many utilize components of a variety of systems, usage patterns lack consistency and credibility in application. An analysis of descriptive measures further delineated the desire and need for the integration and utilization of such a system by athletic administrators. The outcome measures, as well as information collected via qualitative interview techniques with the institution athletic administrators, will be discussed, presented and compared to current practices of professional sport organizations and their use of databases, i.e., Goldmine, IBMDB2, Microsoft and ACT. Impeding measures, such as cost, and preferred preferences for utilization will also be presented. Usage patterns will be delineated as well as a complete analysis of the results will be provided.