

Association for Information Systems AIS Electronic Library (AISeL)

AMCIS 1998 Proceedings

Americas Conference on Information Systems
(AMCIS)

December 1998

Data Mining for Decision Support

Balaji Rajagopalan
Illinois State University

Ravi Krovi
North Carolina A and T University

Rathindra Sarathy
Illinois State University

Follow this and additional works at: <http://aisel.aisnet.org/amcis1998>

Recommended Citation

Rajagopalan, Balaji; Krovi, Ravi; and Sarathy, Rathindra, "Data Mining for Decision Support" (1998). *AMCIS 1998 Proceedings*. 70.
<http://aisel.aisnet.org/amcis1998/70>

This material is brought to you by the Americas Conference on Information Systems (AMCIS) at AIS Electronic Library (AISeL). It has been accepted for inclusion in AMCIS 1998 Proceedings by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact elibrary@aisnet.org.

Data Mining for Decision Support

Balaji Rajagopalan

Rathindra Sarathy

Department of Accounting

Illinois State University

Ravindra Krovi

North Carolina A&T University

Abstract¹

The amount of data collected by businesses today is phenomenal. The analysis of this data is critical as more and more businesses are using this data to analyze their competition, product or market. Data mining is the process of digging through this mass of data to discover information (patterns or new knowledge) that can be critical to decision making in organizations. Data mining has added importance as organizations begin to rely more heavily on this information to make critical decisions. The need for using the right data mining tools effectively to support decision making cannot be overemphasized.

Of late, there has been a proliferation of data mining tools to assist in the analysis of massive data collected by organizations. The tools could range anywhere from being generic to domain-specific aimed at supporting tasks in a particular domain. Decision tree, Neural-network, Rule-induction and Example-based are illustrative of the generic tools. Opportunity Explorer, IBM Advanced Scout and AT&T's Interactive Data Exploration and Analysis (IDEA) system are examples of domain-specific tools. With this list of tools available for the decision maker increasing, the decision maker is faced with the task of applying the right tools to reap the benefits. Moreover, applying the tools inappropriately may not only reduce the benefits that can accrue but has the potential to cause financial disasters for the organization.

It is evident from the preceding discussion that it is critical for organizations to choose the right data mining tool and apply it effectively to benefit from it. In this vein, we provide a guiding framework that can assist decision makers in choosing the right data mining tool(s) for analyzing the enormous data.

¹A complete version of this paper is available from Balaji Rajagopalan at brajag@odin.cmp.ilstu.edu.