Decision Support Systems Essay, Research Paper

Decision Support Systems (DSS)

A Decision Support System (DSS) is an information system at the management level of an organization that combines data, analytical tools, and models to support semistructured and unstructured decision-making. A DSS can handle low volume or massive databases optimized for data analysis. DSS has more power than other systems. They are built explicitly with a variety of models to analyze data or they condense large amounts of data into a form where they can be analyzed by decision-makers. DSS are designed so that the user can work with them directly. In the proceeding paragraphs I will give examples of some decision support systems and how they are being used.

Integrated Decision Support Corporation (IDSC) is a company that provides decision support software to the truckload transportation industry. IDSC focuses on providing superior decision making software by creating state of the art optimization algorithms. IDSC released a product called NETWISE 3.0 in response to shippers requesting packaged and conditional bids, carriers having a difficult time selecting the lanes that compliment their current network, and determining the dedicated opportunities within a bid. NETWISE 3.0 are a decision support tool used in the analysis of profitability, pricing, and network balance. Companies were having a problem of having their carriers spend countless hours of manpower responding to single bid. NETWISE 3.0 addresses this issue by providing them with an enterprise software package that provides the with the same opportunities as the shipper. IDSC solved the problem of having the carrier determine how to price a lane so that it appears attractive to the shipper and yet still be profitable. During the bid preparation process, NETWISE utilizes a data correction engine that provides an intelligent search for city names and postal codes. Overall NETWISE provides users with a tool that significantly reduces the amount of time required to process a shipper bid. This allows item to be spent on the strategic issues instead of the monotonous details. NETWISE provides an intelligently discipline to the pricing process, resulting in a excellent solution for responding to shippers bids, or determining appropriate annual or daily pricing action.

Innovative Systems Techniques (Insyte) designs and installs database management and decision support systems using Vision, their object oriented database technology. As both a technology developer and systems implementers, they uniquely offer clients access to their Vision technology and the direct involvement of their Vision TECNOLOGY and the direct involvement of their Vision Vision TECNOLOGY nad of their highly capable staff. Insyte developed Vision, an analytical database technology management trying to apply database technology to solve client s analytical problems. Vision was developed to enable Insyte to build powerful, flexible, and useable information analysis systems for their clients, something no existing database technology was able to do back in 1981. When using vision an object oriented programming language is built into the database engine, providing a single integrated environment for deigning, storing, and analyzing data. By integrating data and programs into one Vision offers users unparalleled analytical power and real world modeling capabilities, complementing the data collection and transactions processing capabilities of relational databases and greatly surpassing the analytical capabilities of other add on. Since installing its firs system over ten years ago, Vision is unequivocally approved technology, running in production in large multi user systems at all of its clients, Insyte claims no other technology can match Vision s capabilities and success as an analytical database management system.

MPSI is a global provider of spatial decision support systems featuring proprietary software and databases, implementation consulting services and information services. Its products and services are designed to meet the business planning needs of its clients. In the past, MPSI has zeroed in primarily on the service to petroleum and convenience food retailers. Huff s MAP 2000 will broaden this focus and reach to a variety of other industries as well as enhance penetration of MPSI S traditional target market. On April 19, 1999 MPSI Systems Incorporated announced the release of Huff s Market Area Planner, or Huff s MAP 2000, A probability model that depicts consumer behavior geographically. The model is expected to be very popular because of its simplicity. Huff s MAP 2000, filled with the latest software technology, will be the ultimate in combing sophisticated inner workings with ease of use, This model s uses include, but are not limited to deriving market shares, estimating market potential, economic impact assessment, location analysis, and retail network optimization. MPSI will license the model as a stand alone product but will also offer other software companies an opportunity to embed Huff s MAP 2000 engine in teir products.

In the proceeding paragraphs I have given examples of different decision support systems. Each of the systems has their own unique purpose and serves a different type of industry. The first DSS I talked about, NETWISE, served the truckload transportation industry. The second one, Vision, serves the computer industry. The third one, Huff s MAP 2000, serves the planning industry. As can be seen from my examples decision support systems are used in many different industries and prove to Bo very helpful.