Decision Support Systems and Simulation Modeling: A Strategic Application

Masood A. Badri

Donald L. Davis

United Arab Emirates University

Southwest Missouri State University

United Arab Emirates

U.S.A.

Donna F. Davis
Southwest Missouri State University
U.S.A.

Abstract

The purpose of this paper is to illustrate how a DSS incorporation simulation models can aid decision makers in selecting an organizational strategy that will enhance the company's competitive advantage. The application consists of a simulation model incorporated as part of the Model Base of the DSS of a manufacturing firm. The model replicates the marketing, manufacturing, and distribution system of the firm allowing management to develop appropriate strategic plans for competitive advantage.

Keywords: Decision Support Systems, Simulation, Strategic Plans, Competitive Advantage, Operations Research.