Application of Integer Linear Programming Model in Vendor Selection

A. John Rajan
Department of Mechanical and Production Engineering
Sathyabama University, Chennai, India

K. Ganesh Senior consultant (Supply Chain), IBM, Mumbai, India

> K.V. Narayanan Controller of Examinations Sathyabama University, Chennai, India

Abstract

Contemporary companies rely on outsourcing for success in today's competitive marketplace, and selecting a vendor is now as important a process as developing new products. Vendor selection is one of the most important decisions of purchasing function. As organizations become more dependent on vendors, the direct and the indirect consequences of poor decision-making become more severe. Literature shows many vendor evaluation models. In this paper we have proposed a vendor evaluation model using integer Linear Programming Model. The model is validated with a case study done in Agricultural equipments whole sale company.

Keywords

Vendor Selection, Integer Linear Programming Model, Supply Chain, Vendor Evaluation.