A Model for Make-or-Buy Decisions in Engineering Design Services Sector: A Case Study from Turkey

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Make-or-buy decision is an important factor affecting the probability of the terms in all sectors. The goal of this study is to propose a model for firms in engineering design services sector for make-or-buy decisions. A survey was conducted to determine the importance percentages given in an engineering company in make-or-buy decisions and a model was developed. The results of the case study show intriguing clusters of company personnel.

As the lack of consensus among company managers and personnel may inhibit the successful implementation of the developed strategy, we use K-Means Clustering to determine the different perspectives of different groups of employees (managers, senior engineers, junior engineers, technical and administrative support personnel) which may contribute to the understanding of social dynamics of decision making within the company. 4-cluster and 5-cluster analysis results indicate the need for further study on the dynamics of cluster membership.