

工程与应用

## 供应链核心企业绩效决策研究

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**摘要** 从知识发现和数据挖掘的角度, 利用粗糙集和BP神经网络的基本理论和方法, 建立基于粗糙集和BP神经网络的核心企业绩效改进决策模型框架结构, 并给出其中的基于分辨矩阵的指标约简方法和基于梯度的BP算法。最后结合一个实例, 首先对其基于平衡记分卡的指标体系进行了约简, 然后将约简的评价指标输入到BP神经网络中进行智能训练, 并与未进行指标约简的训练结果进行了对照分析, 二者结果基本一致。在此基础上, 依据指标的权重, 提出核心企业绩效改进的决策意见和措施。

**关键词** [粗糙集](#) [BP神经网络](#) [约简](#) [分辨矩阵](#) [绩效改进决策模型](#)

分类号

## Research of supply chain core enterprise performance decision making

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### Abstract

A performance improving decision-making model of core enterprise based on rough sets and neural network is set up from knowledge discovery and data mining perspective, and reduction method based on discernable matrix and BP algorithm based on gradient method are used. Then an example is given, firstly its index based on the balanced scorecard system is reduced, secondly the reduction index is input to BP neural network for intelligent training, when compared with the training result of no reduction index, the two training results are identical, finally on the basis of the objective weight, performance improving suggestion of core enterprise is brought forward.

**Key words** [rough sets](#) [BP neural network](#) [reduction](#) [discernable matrix](#) [performance improving decision-making model](#)

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