

SVEUČILIŠTE U ZAGREBU
FAKULTET ELEKTROTEHNIKE I RAČUNARSTVA

SEMINAR

Sustav potpore odlučivanju za predviđanje i optimalnu nabavu

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Sustav potpore odlučivanju za predviđanje i optimalnu nabavu

Sažetak

Optimalna nabava u većini industrija uključuje predviđanje dviju veličina: cijene sirovina i potražnje. Cilj ovoga rada je ujediniti predviđanje u model planiranja proizvodnje sa ciljem minimiziranja cjelokupne nabave, troškova skladištenja i proizvodnje uz zadovoljenje potražnje. Sustav potpore odlučivanju treba omogućiti donositelju odluke integraciju kvalitativne nestrukturirane informacije kroz jednostavno sučelje, odabir scenarija i profinjenje rješenja.

Ključne riječi: planiranje nabave, stohastička potražnja, optimalna količina nabave, Model dinamičke ekonomske količine nabave

A decision support system for forecasting and optimal procurement

Abstract

Optimal procurement in most industries involves forecasting of two quantities: prices of raw materials and customer's demand. The aim of this work is to integrate forecasts into production planning models, with the aim of minimizing overall procurement, holding and production costs under demand satisfaction constraints. The decision support system should allow the decision maker to integrate qualitative, unstructured information through a simple interface, for scenario selection and solution refinement. **Keywords:** procurement planning, dynamic lot sizing model, stochastic demands

1. Introduction

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2. Related work

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3. Model description

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4. Experimental results

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5. Conclusion and further work

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6. Bibliography

- [1] V. Boža, B. Brejová, and T. Vinař. DeepNano: Deep Recurrent Neural Networks for Base Calling in MinION Nanopore Reads. *ArXiv e-prints*, March 2016.