Aalto-yliopisto
Perustieteiden
korkeakoulu

Estimating the accuracy of the prediction of production values Introduction

Severi Saastamoinen

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Systeemianalyysin
laboratorio

Background

- A Bachelors Thesis which evaluates the accuracy of predictions for the production of factories in Finland.
- Simple model where estimated output for the month (based on the past) was divided by days.
- Only basic maintenance breaks accounted for within the model

Specific Goal

- The specific goal was to figure out how good the model was at predicting future events and where it was lacking.
- Possible improvement suggestions to the model.
- Nothing involving the function of specific machines or researching bottlenecks in supply chains. Only the material flow coming out of the facilities.
- Research 5 Years of data from 4 facilities.

Sources of information

- Calculus A Complete Course 8th edition
- Operation Research An Introduction 5th edition
- Fundamentals of the Craft Recovery Process
- Management of Economics and Organization
- Tilastotieteen Alkeita
- Introduction to Probability and Statistics
- Operations Management Strategy and Analysis
- Statistical Analysis Using Excel 2007
- Organising and Managing Work
- Reframing Organizations
- Essentials of Management
- Opening Markets for Logistics
- Company Data

Tools and methods

- Excel
- PowerPoint
- Minitab
- Creating daily comparisons between the production and estimate for subgroups by type of material and facility. (excel)
- Analyzing the data groups, creating curves representing the functioning of the model on a larger timespan (Minitab)
- Representing and organizing the Results in PowerPoint

Timetable

- Spring 2020 Research itself conserning the data itself
- Fall 2020 Writing of the Thesis
- Spring 2021 Presentations concerning the Thesis