

Application Landscape Design for Supply and Demand Planning

Development of an Application Landscape Design Process

Diplomand

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Problemstellung: Application landscapes used for the supply and demand process consists of a multitude of systems which interact dynamically.

There is currently a lack of methods which would support the selection of a generic type of application. While the selection, evaluation, and introduction of applications has been widely researched for the different applications, none of the methods has focused on the application landscape as a whole.

Ziel der Arbeit: The goal of this project was to develop a set of rules which can be used in application landscape design along with a structured process to support the application landscape design for the supply and demand process.

The developed rules and the process were then applied at the industrial partner to propose a future application landscape

Ergebnis: This master thesis has five main results:

- Five generic rules for application landscape design
- A process for application landscape design
- An in-depth analysis of the current state of the supply and demand process of the industrial partner.
- A recommendation for the future application landscape of the industrial partner
- A high-level roadmap describing the required steps to implement the proposed future application landscape.

The design of an application landscape requires a lot of experience and is a highly company specific task. It requires an in-depth understanding of the available applications, the applied processes, the business model as well as the company culture.

The developed process and rules help to break down this complex task.

The results have been proven to be suitable for industrial

application. The proposed application landscape is suitable to fulfill the industrial partners requirements.

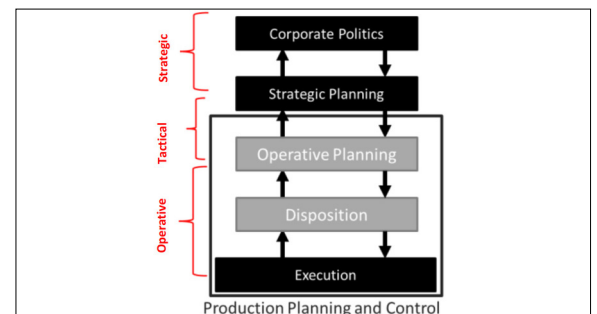
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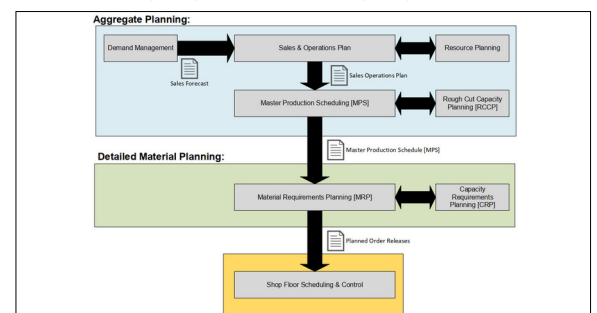
Themengebiet
Innovation in Products,
Processes and
Materials - Business
Engineering and
Productions

Different Levels of Planning -

Key Question: Which tools are needed to support all levels?
Waibel R, Käppeli M (2013)



Key Steps of the most commonly used planning approach in industries (MRPII). **Key Question: Which tools for which step?**
Schönsleben P (2016); Schuh G, Stich V (2012)



Example of a generic high-level application landscape for the Supply and Demand Planning.

Eigene Darstellung

