

TEKX04-20-18

FORTOS Management Consulting AB

Background

In past years, Artificial Intelligence (AI) has gone from buzzword to reality with several examples of applications integrated into our daily lives - from algorithms in social media to virtual assistants in our homes. However, when it comes to industrial applications, the success cases of AI applications are still few.

AI opens up a whole new world of possibilities for Supply Chain Management. Within this practice, data has always been a key enabler to make well-informed decisions that optimize goods-, information-, and financial flows from a whole supply chain perspective. With the help from AI to collect, manage, analyze and act upon large sets of data in real time or even proactively, traditional SCM challenges are more or less resolved. However, companies have been hesitant to make AI investments and still try to understand where and how to focus the efforts.

Potential questions to be investigated

- Can AI make supply chains more adaptive and resilient?
- Can AI support in Sales & Operational Planning (forecasting, steering, hedging, inventory planning, risk analysis, simulation of supply chains) to steer towards even more efficient value chain?
- Can AI support in quality control to detect deviations?

Sample of potential areas to look into

- Planning & Optimization
- Efficiency
- Data Integration & Quality Management

The area will be chosen together in the final group.

Purpose of the study

The aim of this thesis is to investigate where in the supply chain AI has the potential to create value for industrial companies now and in the present future, and suggested AI technologies to realize the identified value. Furthermore, to identify potential examples of how value is created as well as challenges to implementing them.

Method

Literature review on Artificial Intelligence within the field of Supply Chain Management - What does previous research on the topic conclude?

Interviews with researchers within Supply Chain Management - What is their view on AI? Where and how can it create value now and in the present future?

Interviews with industrial companies on how they approach AI in their supply chains, where they believe AI can create the most value, and what challenges they see to implementing AI.

The report will be written in English at the request of Fortos.

Members

Alva Engdahl
Johanna Åberg
Josefin Elliot

Priority division

Supply and Operations Management