

AI IN SUPPLY CHAIN MANAGEMENT

WHAT IS AI?

Artificial intelligence (AI) is machine learned human intelligence, often used in the form of computer systems.

AI has integrated itself into our lives in many ways through smartphone developments, manufacturing practices and more.

AI is made up of 3 components:



LEARNING



REASONING



SELF-CORRECTION

It can be broken down into 2 categories:

AUGMENTATION

Assisting humans with their tasks without having complete control of the output. This category of AU is mainly used to reduce errors cause by human bias. (examples: virtual assistant, computing software)

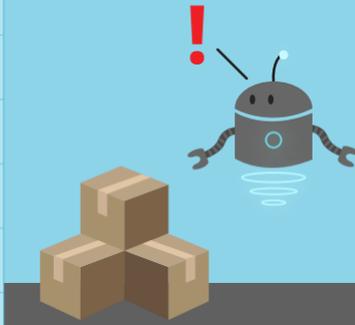
AUTOMATION

Works completely autonomously without the need for human intervention. (examples: robotic arm in a manufacturing plant)

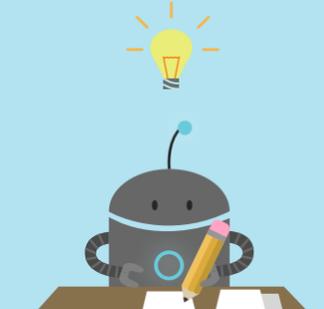
Benefits



Boosts Productivity



Automates Production Management Work



More Efficient Problem Solving



Improves Quality of Life

Current Developments of AI in SCM:



MACHINE LEARNING FOR WAREHOUSE MANAGEMENT

The warehouse environment is fast paced and ever changing. Using combinations of algorithms and data streams, ML provides an endless loop of forecasting. It has predictive power that is consistently self improving. It can be integrated into WMS to sense and adapt to changes that occur.



SUPPLIER RELATIONSHIP MANAGEMENT

Strong relationships with other businesses and clients are important. Even one slip-up in your supply chain can come with a lot of bad PR. AI helps with risk management and can predict the best case scenario outcomes with every interaction you have.



MACHINE LEARNING FOR SUPPLY CHAIN PLANNING

ML in combination with SCM can help with inventory forecasting. Using algorithms and big data analysis, the capabilities of AI can optimize delivery while balancing supply and demand. This eliminates the need for human analysis and sets parameters for success.



AUTONOMOUS VEHICLE DELIVERY

This is a more recent development and autonomous vehicles are still in the testing stages. However, once implemented, they have the potential to make shipping faster and more accurate, as well as reduce lead times and transportation expenses.



Important to Note

If you're considering AI for your supply chain, it is important to understand the different types. It will help greatly with future implementation, ensuring that you know which areas of your operation can benefit the most.