SUPPLY CHAIN

DEFINING THE UNIVERSE OF ROBOTICS AND AI

AUTOMATION FOR ORGANISATIONS

1. OBJECTIVE

The aim of this study case is to present findings about Magnus in Manufacturing Industry, especially in automated supply chain.

Blockchain elevates manufacturing traceability and transparency to a totally new level while improving process efficiencies and reducing costs. It can also help manage and audit transactions so that information can't be changed by anyone in the transaction chain. It is tamper-proof and acts as a single source of truth in the chain of custody.

For manufacturers, the pressures that blockchain technology has the potential to address are staggering.

 Examples of Blockchain in Manufacturing

Three examples of the potential blockchain holds for manufacturers include asset management, food product traceability, and pharmaceuticals traceability.

In day-to-day manufacturing operations, blockchain may prove incredibly useful in asset management and minimizing manufacturing downtime. Aberdeen envisions manufacturers deploying blockchain technology between their ERP system and parts suppliers, enabling IoT-connected machines to safely order replacement parts that arrive just in time for an engineer to install. Combined with predictive and prescriptive analytics, IoT-driven blockchain

technology may eventually be the most automated, fail-safe way to keep the factory humming.

 These are just examples of how blockchain can improve manufacturing operations and supply chains. As you think about deploying this technology to improve manufacturing processes for yourself, look for:

• Pre-defined use-case blueprints and ready-to-use solutions

• Embedded blockchain technology in existing applications that adds permission-based transaction security

• Manufacturing applications that feature easy on-boarding for manufacturing supply chain partners.

Role of Magnus in Automated Supply Chain (Manufacturing)

Different supply chain vendors use robotics in their plants to make parts that are combined together upstream into a finished product to be used as a component by another supplier.

The assembly upstream of the final product depends on the scheduling, manufacturing, and quality of the parts produced by these downstream suppliers.

The manufacturing robots of the supplier A detect a problem with the manufacturing of the parts they are producing.

They communicate this automatically to the robots at supplier B so that they can adjust their schedule and production accordingly until the issue at supplier A can be remedied.

The upstream supplier, who produces the final product, is informed of the delay, and their supplier C robots adjust their assembly line schedule to proactively produce a different product. The distributors are automatically notified of the changes to expected inventories.