Institute for Supply Chain Security GmbH
Wasserstrasse 496, 44795 Bochum

BlockChain@SupplyChain

Basics of the Blockchain Technology and its Operational Application in Global Supply Chains

Increasing demands for traceability and transparency in supply chain management has led to a growing digital penetration of business and manufacturing processes. Wherever data need to be protected and saved in a secure manner an innovative not vulnerable technology is required: “Blockchain”. A blockchain is an invariable, high-availability, distributed database, in which all data are audit-proof and can be shielded from external access via encryption. The advantage of a blockchain is the decentralized storage, which guarantees that all information is available at any time and at any place. Automated contracts, so-called Smart Contracts, help the company to speed up processes and achieve consistently high quality and performance.

Why do Global Supply Chains need secure Blockchain Technology?

Operational and supply chain interruptions are the most significant corporate risk. Due to the rapidly increasing globalization and digitization of production and logistics processes (Industry 4.0 / IoT), supply chains become increasingly fragile. Already today more than 60% of the operational and supply chain interruptions are caused by IT failures. Two-thirds of these IT failures can be attributed to criminal cyber-attacks. But not only simple destructive cyber-attacks interfere with the business process, even deliberate data manipulation and data theft can be a threat to business. Today's IT security standards no longer satisfy the future challenges of digital value-added networks. Blockchain is the solution for the task.

Institute for Supply Chain Security GmbH
Wasserstrasse 496, 44795 Bochum

Basics of Blockchain Technology

Within the first part of the workshop (approx. 3 hours), we introduce the participants to the Blockchain technology. The technology is explained, the advantages and disadvantages are discussed and the challenges to be expected are identified. The participants can subsequently evaluate the technology for their own application purposes.

Blockchain: Using Examples of different Supply Chain Use Cases

Within the second part of the workshop (about 3 hours) different production and logistics use cases are described, analysed and evaluated. Recommendations for the use and application of blockchain technology in the company and its supply chain are developed.

Participants Benefit

After the two parts of the workshop, the participants will be able to see why and in which areas the blockchain technology makes the flow of information and thus the production and logistics processes more efficient and safer. Participants develop an understanding of how and with which challenges this technology can be integrated into existing infrastructure. This workshop provides companies with the basic knowledge in order to start into the new age of “Blockchain Technology in digital Supply Chains”.

Contact:

Dr. Ulrich Franke

Institute for Supply Chain Security GmbH

Email: ulrich.franke@supply-chain-security.org