

## **SYNOPSIS**

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Title of the Topic: New Approach to SCM (Supply Chain Management) using Blockchain.

Area Of Topic: Blockchain

## **ABSTRACT**

The Blockchain technology is a relatively new approach in the field of information technologies. Blockchain is a recently introduced concept. Initially popularized by Bitcoin, Blockchain is more than the foundation of cryptocurrency. It offers a secure way to exchange any kind of good, service, or transaction. Industrial growth increasingly depends on trusted partnerships, but increasing regulation, Cybercrime and fraud are inhibiting expansion. To address these challenges, Blockchain will enable more agile value chains, faster product innovations, closer customer relationships, and quicker integration with the IoT and cloud technology. Further Blockchain provides a lower cost of trade with a trusted contract monitored without intervention from third parties who may not add direct value. It facilitates smart contracts, engagements, and agreements with inherent, robust Cyber security features. We will take a closer look to how Blockchain can help solve many solutions in supply chain management like delay , counterfeit , etc .

## **CONTENTS:**

### **INTRODUCTION:**

Wikipedia defines Blockchain as “A decentralized and distributed digital ledger that is used to record transactions across many computers so that the record cannot be altered retroactively without the alteration of all subsequent blocks and the collusion of the network.”

In 2008, Satoshi Nakamoto introduced the world to Bitcoin by releasing the paper, “Bitcoin: A Peer-to-Peer Electronic Cash System.” The proposal was to distribute electronic transactions rather than maintain dependency on centralized institutions for the exchange .It was the first implementation of blockchain ,after that it has come a long way it can be use to provide trust in a trust less environment .

Nearly all of the world’s leading companies run computerized enterprise resource planning (ERP) and supply chain management software . Yet despite this huge investment in digital infrastructure, most companies have only limited visibility and insight into where all their products are at any given moment.

Through Blockchain, companies gain a real-time digital ledger of transactions and movements for all participants in their supply chain network. Better visibility into procurement, more accurate and reliable data for analytics, and increased trust among all participants in your supply chain network are some of the benefits of adding Blockchain to your infrastructure. It’s important to clarify that the Blockchain isn’t merely a prerequisite piece of software to buy. It’s actually the opposite: a solution to your current fragmented infrastructure.

Once such implementation is in pharmaceutical supply chain where each step in supply chain can be recorded in Blockchain and distributed between different nodes.

**OBJECTIVE:**

1. Study and understand Blockchain.
2. Study how Blockchain can revolutionize the industry.
3. Study current supply chain management tools.
4. Take a closer look on how Blockchain can be used in supply chain management.

**APPLICATIONS:**

1. Blockchain-powered, industrial Internet of Things
2. Tracking and traceability of goods
3. Supply chain smart contracts
4. Chain of shipping

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