

## Application of Blockchain on Manufacturing Process Control and Pricing Policy

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**Abstract :** Today, supply chain managers face extensive disruptions in raw material pricing, transportation block, and quality issue due to product complexity. While digitalization might help managers to mitigate the disruption risk and increase supply chain resilience by sharing information between sellers and buyers through the supply chain, entities are reluctant to build such a system. The main reason is it is not clear what information should be shared and who has access to the stored information. In this research, we propose a smart contract built by blockchain technology. This contract helps both buyer and seller to identify the type of information, the access to the information, and how to trace the information. This contract helps managers control their orders through the supply chain and address any disruption they see fit. Furthermore, with the same smart contract, the supplier can track the production process of an order and increase production efficiency by eliminating waste.

**Keywords :** blockchain, production process, smart contract, supply chain resilience

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