Title

**Blockchain Technology in supply chain management**

Introduction

Since the early 1980s, most of the fundamental concepts of blockchain have been arisen [1], while after presenting Bitcoin by an anonymous person, Satoshi Nakamoto, the blockchain was introduced [2]. Based on [3] and [4], Blockchain Technology (BT) has several explanations. Therefore, by combining different definitions in literature, Blockchain is a decentralized ledger shared in a peer-to-peer distributed network with no central authority. According to [5], Although BT has some main characteristics such as anonymity, traceability, decentralization, immutable, etc., it has some restriction by nature, including confidentiality, immutability, scalability, regulation, legacy system integration, and authenticity. There are several fields such as healthcare, Internet of Things (IoT), agriculture, finance, education, supply chain, etc., in which BT has been applied. One of these fields, which has recently become popular in both academic and practical context, is Supply Chain Management (SCM) [5][6][7].

SCM can be defined as a system to manage (1) relationships between a firm and interdependent organizations, (2) all activities from sourcing to logistics [3]. Moreover, it involves some processes to facility flows of produce, finances, and information among all parties in Supply Chain [4]. Traditional SCM has inefficiency with delay, errors, and being costly, which are caused by the lake of traceability and transparency. By applying BT to SCM, traditional relationships in this field are reconfigured. In other words, by applying smart-contract operations, all intermediaries eliminate. As a result, there are some benefits such as cost reduction, improve trust, and increase transaction process speed, which BT brings to SCM. Research studies show that implementation SCM by using BT can be reached to maximize performance considered some technologies such as using IoT and smart-contract [3][5].

# References

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