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The Fusion of Blockchain and AI in Supply Chain Finance: Scalability in Distributed Systems

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Abstract : This study examines the promising potential of integrating Blockchain and Artificial Intelligence (AI) technologies to scalability in Distributed Systems within the field of supply chain finance. The finance industry is continually confronted with scalability challenges in its Distributed Systems, particularly within the supply chain finance sector, impacting efficiency and security. Blockchain, with its inherent attributes of high scalability and secure distributed ledger system, coupled with AI's strengths in optimizing data processing and decision-making, holds the key to innovating the industry's approach to these issues. This study elucidates the synergistic interplay between Blockchain and AI, detailing how their fusion can drive a significant transformation in the supply chain finance sector's Distributed Systems. It offers specific use-cases within this field to illustrate the practical implications and potential benefits of this technological convergence. The study also discusses future possibilities and current challenges in implementing this groundbreaking approach within the context of supply chain finance. It concludes that the intersection of Blockchain and AI could ignite a new epoch of enhanced efficiency, security, and transparency in the Distributed Systems of supply chain finance within the financial industry.

Keywords: blockchain, artificial intelligence (AI), scaled distributed systems, supply chain finance, efficiency and security

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