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Process Re-engineering in Blockchains: A Systematic Review

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Abstract

Objective: The re-engineering theory is a relatively new concept in improving businesses. This systematic analysis of the significance of re-engineering in blockchain technology explores its capabilities in blockchains. Method: This is a practical study using PRISMA data. Specialized keywords were used for data collection. Initially, 182 English papers were recognized, then screened by reviewing abstracts (thirty papers remained). The results were summarized in tables and graphs. Findings: Most studies were conducted in the last seven years, addressing nine main subjects: data encryption, registered transactions, blockchain structure, technology challenges, novel approaches, peer-to-peer networks, blockchain technology registration, blockchain self-initiation, and used technologies. Conclusion: Blockchain technology has many security and functional benefits: efficient encryption, monitoring and management rights distribution over information and computational recourses, and transaction historicity. Failure never represents the termination of re-engineering whose role in blockchains can constantly improve by novel approaches.

Keywords: Re-engineering, Process in Blockchain, Blockchain, Information Technology.