Business Processes and Patterns of Blockchain Technology

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Abstract

The decentralized digital ledger Blockchain is one of the most secure data protection technologies that may be used to transparency record and verify transactions. Blockchain technology is suitable for various corporate and organizational process. It has the potential to greatly improved the efficiency and transparency of business within the insurance industry.

Blockchain may be used by insurance companies to automate different business processes such as claims processing and policy management. Smart contact can also automate the claim process, making it faster and more efficient. Furthermore, it may be used to securely store data, which can serve to decrease fraud and errors. Overall, the application of blockchain technology in the insurance business has the potential to increase efficiency, increase transparency and reduce cost .

This paper introduces a new method that can help businesses improve their processes and enhance the transparency of their business operations. Through the DMAIC method, we suggest algorithmic approaches to improve organizational processes and enhance their efficiency. These algorithmic approaches convert the XML meta-model of a UML activity diagram into a more accurate and useful version. We first used the Papyrus tool to represent an activity diagram. We then

used Acceleo to extract and improve the non-improved XML. We then produced an improved version of the activity diagram using the updated XML.

To demonstrate the viability of our approach, we showcase the operation of our method in the financial domain. Our research plan is to apply the proposed technique for the process improvement and digitization of business processes in the financial realm. We want to pay attention the blockchain technology too and investigate the integration of blockchain patterns, and workflow patterns for digital transformation in the case of financial enterprises [1–3, 5–7]. For building up smart contracts, we use a novel approach based on functional programming language, and we investigate the effectiveness and efficiency of this approach in comparison with other smart contract languages [4, 8].

References

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