

# The Reliable Blockchain Powered Smart Rental Application Using Smart Contract

**Ketaki More<sup>1</sup>, Disha Gaikwad<sup>2</sup>, Akanksha Thombare<sup>3</sup>, Pritam Gholap<sup>4</sup>, Prof. Tushar Phadtare<sup>5</sup>**

Students, Department of Computer Engineering<sup>1,2,3,4</sup>

Assistant Professor, Department of Computer Engineering<sup>5</sup>

JSPM's Bhivarabai Sawant Institute of Technology & Research, Pune, Maharashtra, India

**Abstract:** *Usually whenever we take a subscription from any OTT platform we often use it only for 5-10% of time we subscribe for, but we end up paying for the whole lot of time. Also, often users keep sharing their subscriptions with their friends and a single screen subscription ends up running on multiple devices. It causes losses to service providers. So, a more smooth and efficient subscription system is needed and it would benefit both the parties - Customers and Service Providers. Since Ethereum has been an open source development platform, the industry has taken advantage of decentralized application or DApp where by the application is based on Smart Contract, a set of programming written code becomes the law of in agreement.*

**Keywords:** Blockchain, Ethereum, Rental application, Smart contract

## REFERENCES

- [1]. Shi, Jianfeng & Yi, Dian & Kuang, Jian. (2019). Pharmaceutical Supply Chain Management System with Integration of IoT and Blockchain Technology. 10.1007/978-3-030-34083-4\_10.
- [2]. Tseng JH, Liao YC, Chong B, Liao SW. Governance on the Drug Supply Chain via Gcoin Blockchain. Int J Environ Res Public Health. 2018 May 23;15(6):1055. doi: 10.3390/ijerph15061055. PMID: 29882861; PMCID: PMC6025275.
- [3]. Haya Hasan, Esra AlHadhrami, Alia AlDhaheeri, Khaled Salah, Raja Jayaraman, Smart contract-based approach for efficient shipment management, Computers & Industrial Engineering, ISSN 0360-8352, doi:10.1016/j.cie.2019.07.022
- [4]. Sunny, J., Undralla, N., Madhusudanan Pillai, V., Supply Chain Transparency through Blockchain-Based Traceability: An Overview with Demonstration, Computers & Industrial Engineering (2020), doi: <https://doi.org/10.1016/j.cie.2020.106895>
- [5]. T. Bocek, B. B. Rodrigues, T. Strasser and B. Stiller, "Blockchains everywhere - a use-case of blockchains in the pharma supply-chain," 2017 IFIP/IEEE Symposium on Integrated Network and Service Management (IM), Lisbon, 2017, pp.772-777, doi: 10.23919/INM.2017.7987376.
- [6]. Akhtar, Mohd & Rizvi, Danish. (2020). Traceability and Detection of Counterfeit Medicines in Pharmaceutical Supply Chain Using Blockchain-Based Architectures. 10.1007/978-3-030-51070-1\_1.
- [7]. B. M. A. L. Basnayake and C. Rajapakse, "A Blockchain-based decentralized system to ensure the transparency of organic food supply chain," 2019 International Research Conference on Smart Computing and Systems Engineering (SCSE), Colombo, Sri Lanka, 2019, pp. 103-107, doi: 10.23919/SCSE.2019.8842690.
- [8]. Haq, Ijazul & Muselemu, Olivier. (2018). Blockchain Technology in Pharmaceutical Industry to Prevent Counterfeit Drugs. International Journal of Computer Applications. 180. 8-12. 10.5120/ijca2018916579.
- [9]. K. M. Botcha, V. V. Chakravarthy and Anurag, "Enhancing Traceability in Pharmaceutical Supply Chain using Internet of Things (IoT) and Blockchain," 2019 IEEE International Conference on Intelligent Systems and Green Technology (ICISGT), Visakhapatnam, India, 2019, pp. 45-453, doi: 10.1109/ICISGT44072.2019.00025.
- [10]. Supply Chain Management based on Blockchain: A Systematic Mapping Study Youness Tribis, Abdelali El Bouchti, Houssine Bouayad MATEC Web Conf. 200 00020 (2018) DOI: 10.1051/mateconf/201820000020

- [11]. Gregor Blossey, Jannick Eisenhardt, Gerd Hahn, "Blockchain Technology in Supply Chain Management: An Application Perspective", doi:10.24251/HICSS.2019.824

#### APPENDICES

##### Base Paper

- T. Bocek, B. B. Rodrigues, T. Strasser and B. Stiller, "Blockchains everywhere - a use-case of blockchains in the pharma supply-chain," 2017 IFIP/IEEE Symposium on Integrated Network and Service Management (IM), Lisbon, 2017, pp. 772-777, doi: 10.23919/INM.2017.7987376.
- K. M. Botcha, V. V. Chakravarthy and Anurag, "Enhancing Traceability in Pharmaceutical Supply Chain using Internet of Things (IoT) and Blockchain," 2019 IEEE International Conference on Intelligent Systems and Green Technology (ICISGT), Visakhapatnam, India, 2019, pp. 45-453, doi: 10.1109/ICISGT44072.2019.00025.
- Akhtar, Mohd & Rizvi, Danish. (2020). Traceability and Detection of Counterfeit Medicines in Pharmaceutical Supply Chain Using Blockchain-Base Architecture. 10.1007/978-3-030-51070-1\_1.