

ABSTRACT

The work contains 66 pages, 20 illustrations, 12 sources of used information.

The purpose of the work is to study the basic principles of blockchain. Research of the possibility of using blockchain technology in telecommunication systems and consideration of already existing solutions based on blockchain.

Blockchain technology is evolving very rapidly. It provides an opportunity to create new business models in various industries, including telecommunications. The services provided by telecommunications companies can be considered as a complex ecosystem, requiring a large number of interdependent groups of operators, both internal and external, who want and can work on joint projects. In fact, the blockchain is already being used to get rid of intermediaries between operators, to prevent roaming fraud and for the effective mobility of telephone numbers.

Keywords: blockchain, telecommunication system, smart contract, encryption, decentralization, database, cryptosystem.