

ABSTRACT

Blockchain technology is widely known as the technological basis on which bitcoin is built. This technology has created high expectations, as transactions of every kind are executed in a decentralized way, without the need of a trusted third-party. Blockchain real business applications are currently limited mostly to financial services but many R&D projects in companies and corporations try to amplify the areas of blockchain implementation. Managing and verifying digital identities is undoubtedly among the most important applications of blockchain technology for various developments. In this project, we conduct a systematic literature mapping with the aim of pointing out the applications of blockchain technology in the field of Identity Management, that are being developed both in the public and private sector. Identity management solutions are generally designed to facilitate the management of digital identities and operations such as authentication, and have been widely used in real-world applications. In recent years, there have been attempts to introduce blockchain-based identity management solutions, which allow the user to take over control of his/her own identity (i.e. self-sovereign identity). In the results, we discuss the vast effect that this technology could bring to various IdM as well as the concerns regarding the development of the blockchain technology.

Keywords: Blockchain, Distributed ledger, Digital identity, Access management
