

## **Blockchain: Institutional and Technological Disruptions in the Public Sector**

**Authors :** Maria Florencia Ferrer, Saulo Fabiano Amancio-Vieira

**Abstract :** The use of the blockchain in the public sector is present today and no longer the future of disruptive institutional and technological models. There are still some cultural barriers and resistance to the proper use of its potential. This research aims to present the strengths and weaknesses of using a public-permitted and distributed network in the context of the public sector. Therefore, bibliographical/documentary research was conducted to raise the main aspects of the studied platform, focused on the use of the main demands of the public sector. The platform analyzed was LACChain, which is a global alliance composed of different actors in the blockchain environment, led by the Innovation Laboratory of the Inter-American Development Bank Group (IDB Lab) for the development of the blockchain ecosystem in Latin America and the Caribbean. LACChain provides blockchain infrastructure, which is a distributed ledger technology (DLT). The platform focuses on two main pillars: community and infrastructure. It is organized as a consortium for the management and administration of an infrastructure classified as public, following the ISO typologies (ISO / TC 307). It is, therefore, a network open to any participant who agrees with the established rules, which are limited to being identified and complying with the regulations. As benefits can be listed: public network (open to all), decentralized, low transaction cost, greater publicity of transactions, reduction of corruption in contracts / public acts, in addition to improving transparency for the population in general. It is also noteworthy that the platform is not based on cryptocurrency and is not anonymous; that is, it is possible to be regulated. It is concluded that the use of record platforms, such as LACChain, can contribute to greater security on the part of the public agent in the migration process of their informational applications.

**Keywords :** blockchain, LACChain, public sector, technological disruptions

**Conference Title :** ICDID 2021 : International Conference on Digital Innovation and Development

**Conference Location :** Lisbon, Portugal

**Conference Dates :** September 20-21, 2021