Review of: "CryptoAudit and its inherent challenges"

Rui António Santos Cruz

1 University of Lisbon

Potential competing interests: No potential competing interests to declare.

The document is quite well written and reasonably structured, but too short and not clear, as the author mixes the auditing process of cryptocurrencies with digital ledgers, such as blockchain-based Distributed Ledger Technologies (DLTs).

By definition, digital ledgers are distributed databases using strong cryptography in order to secure immutable transaction records, and so, are adequate technologies to control the creation and verification of the transfer of ownership of digital currency (cryptocurrency) assets, as well as many other types of assets, such as Electronic Health Records (EHRs), Land/Property Titles, etc.

Additionally, the author briefly mentions "permissioned" blockchains as "well-suited" for accounting, without having comprehensively described what that means, and even mixing with the types of blockchains (Public, Private, Semi-Private), their Access Control Modes (Permissionless, i.e., anonymous or Permissioned, i.e., participant identity is required) and Consensus Validation Models.

For a scientific publication, it is advisable for the author to conduct the research process following an adequate research methodology (e.g., Exploratory Research) in order to process and verify the formulated hypotheses, the research objectives and the solutions or approaches to overcome the identified challenges. For that, it would be beneficial to expand the Literature/State of the Art review but also include important background information on the technologies (digital ledgers, blockchains, cryptocurrencies) and also on the adequate auditing methodologies or procedures to be employed.

Additionally, the author should provide details on the proposed solutions or approaches to address the identified challenges, not just simply mentioning generalities such as "...audits must possess a strong understanding of blockchain..." or "...develop...procedures to...audit cryptocurrency transactions..."

Additionally, there are some undefined or enigmatic claims in the text such as:

- "The cryptocurrency company was spurred by..." --> Which Company is the author referring to?
- "For auditors, the blockchain necessitates changes in audit processes..." --> What does the author mean? Is it that "audit processes" need to be changed, or that blockchains need to be changed? In any case, what would the author hypothesise as needed changes?