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The Suitability of Distributed Ledger Technology in Central Bank Digital Currency

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About us

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Theme

The central bank of Sweden is responsible for the distribution of cash in Sweden. Considering the changed behaviour of payment services and the reduction of cash use in Sweden, the central bank of Sweden is aspiring to develop a digital krona to maintain its role as issuer of banknotes and coins in Sweden.

The theme of this research is to investigate the **suitability of distributed ledger technology in the central bank digital currency setting.**

To meet the goals of the research, we answered the following question:

“In what way is distributed ledger technology suitable for central bank digital currency?”



Approach

The research used a **single case study** approach on **the Sweden's Central Bank** pilot project. The conducted research used a qualitative approach and semi-structured interviews with experts working in the E-krona project. The data was coded according to the themes of a selected theoretical framework.



Results

The results of the empirical data suggest that distributed ledger technology follows stringent criteria for banking institutions but that there are also deficits in the chosen platform. The E-krona pilot project is currently in development, which excludes any usage data or usage-related information from the use or the performance of the technology.





Discussion

The outcome of the research is that the DLT is a viable technology that submits to several requirements of the E-krona project, but there are also some requirements that are yet to be fulfilled in the implementation phase of the pilot project.

The use of the DLT technology and implementation of CBDC in Sweden are still matter of speculation. The technology could potentially bring full transparency to the transactions, non-manipulative data, and fraud.

However, confirmation of this cannot be done before the implementation of E-krona has occurred and usage data can be gathered.