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Blockchain in Tunisia: From Experimentations to a Challenging Commercial Launch

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Tn.Post Overview

- The Tunisian Post, a leader in financial & social inclusion by promoting the provision of **digital services** in Tunisia: DFS, e-commerce, e-government, …
- A huge sales network for the provision of diverse services,
- The first financial organization in Tunisia to introduce e-payement (2000) & m-payement (2009),
- Oct. 2015: Launch of **Blockchain** experimentations in partnership with Tunisian Fintech startups
Tunisian e-Dinar & MobiPoste

- e-Dinar Wallet: 700K prepaid debt cards - Virtual Account,
- 520K subscribers are using SMS/USSD based MobiPost for money transfer, bill payment, mobile airtime, debt collection, …
- Up to 2.5M transactions achieved per year,
- Interoperability between telcos and possible interconnection with other payment platforms.
- e-Dinar Pro, a merchant customized prepaid debt card — Point Of Sale (POS)
DigiCash Plateform

Transaction Architecture: Blockchain Inspired Transaction Protocol

Cash In/Cash Out

Smartphone

ID PIN

Signature

SDK

Peer-to-Peer Transaction
[Transaction JSON on https://]

Notarisation

Distributed Consensus Network

Signature

Transaction Data

Notification

Cash In/Cash Out

Smartphone

ID PIN

Signature

SDK

Notification

e-Dinar Wallet

e-Dinar Wallet

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DigiCash Mobile APP

- Interoperability with existing e-dinar Platform and Bill payment platform,
- Possible use of digital national certificates,
- Opportunity to use the APP to buy & sell goods (e-commerce),
Regulatory Challenges

- Tunisian Post is an authorized financial institution but not a Bank,
- Tunisian Currency TND is not a convertible currency,
- Tunisians living in Tunisia are not allowed to have a bank account or a virtual wallet that aren’t under the Tunisian financial regulation.
- Cryptocurrency is not official authorized to be introduced or even used in Tunisia,
- Heavy regulation to prevent Money Laundering is discouraging innovative solutions to be fostered or introduced.
Blockchain is an opportunity

- Today’s typical Banking System is regulated: **Centralized Ledgers**.
- Blockchain is a technology (Peer-to-Peer based technology) and is not a cryptocurrency that might need to be regulated.
- Different levels of decentralization -> **Distributed Ledgers**
  - **Level 1**: Permissioned, Private, Shared Ledgers,
  - **Level 2**: Permissioned, Public, Shared Ledgers,
  - **Level 3**: Permission-less, Public, Shared Ledgers.
- Possible implementation considering sovereignty requirements in emergent economies: Tunisian Cryptocurrency (TNCoin/eDinar/BitDinar).
- Possible adoption by the UPU **POST Community**: PostTransfer Systems.
Conclusion

- Distributed Ledger Technology or blockchain is fostering **deep change** in the financial sector: Openness,
- Cybersecurity threats should be addressed differently: A **Social Compact** between all stakeholders,
- **Privacy** is critical & **Trust** is the Key of any development,
- There will be always **cyber security risks** to be addressed by the community — The Goal is to make the technology used more for better purposes: Digital Financial Inclusion.
Thanks for your attention

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