eAttestation using Blockchain

Chandrashekar
Senior Consultant, SeMT
Background

• In a time where people frequently change jobs or locations and business services, it has become increasingly important for individuals to submit various documents attested by a notary to the business.

• At times, the user needs to get the original document attested again or have many originals attested for future use.

• Finally, notaries do this for a small fee and may not do the required due diligence.

• Problems are that this process is tedious, unreliable, costly and complex.

• It has become increasingly important to have a reliable and transparent process to handle the notarization requests, and also ensure a smoother and faster customer experience.
Current Process

1. Customer submits personal information for notarization.
2. Institution reviews and checks the authenticity of documents provided by the customer.
3. Institution stores the document as hardcopies or scans the same into a system.
4. Institution manually updates the documents when changes are requested.

For each new business service, the customer must go through this process again, often with slightly differing requirements that demand significant back and forth communication between parties.
Challenges

• High Operational Cost:
  - Institution must invest significant time to gather documents for compliance
  - Multiple institutions repeat the verification affecting overall productivity

• Inflexible Technology:
  - Manual processing errors could lead to non-compliance.
  - Systems may not be able to adapt to changing regulatory requirements

• Poor Customer Experience:
  - Customer may submit same document many times with slightly different requirements for every new registration process.
  - The time to transact with each customer could be high due to manual processes
Solution Using Blockchain

- An Attestations-Chain stores the attested documents along with reference keys that can be used by services for document verification.
- A wallet application, linked to Digi Locker, allows users to register and submit documents for attestation as well as submit attested documents that require document verification.
- Notaries, who provide attestation service, will be able to verify the documents and attest the documents upon which the document is hashed and timestamped and stored in the blockchain.
- Services that require verification, will access the blockchain for verification confirmation.
Attestation & Verification Process

1. Customer applies for attestation

2. Authorized Gazetted Officer attests

3. Attested document link sent to customer

4. Hash of attested document stored


6. Returning Officer uploads document to a portal to verify

7. System retrieves the document stored in Blockchain and compares hash stored in blockchain with hash of uploaded document

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Benefits Of Blockchain Solution

• **Improved Customer Experience:**
  - It will be more convenient for the customer since they need not share all the original physical documents.

• **Improved Transparency/Enhanced Compliance:**
  - Documents are stored using cryptographic hashing and timestamping, creating an immutable blockchain record with a unique private key. So documents cannot be tampered after attestation.
  - All steps in the Blockchain can easily be traced and also shared with Auditors/regulating authorities if required.

• **Cost Reduction:**
  - The Institution can reduce costs by reducing the redundancy in the verification process for all parties.
Thank You!