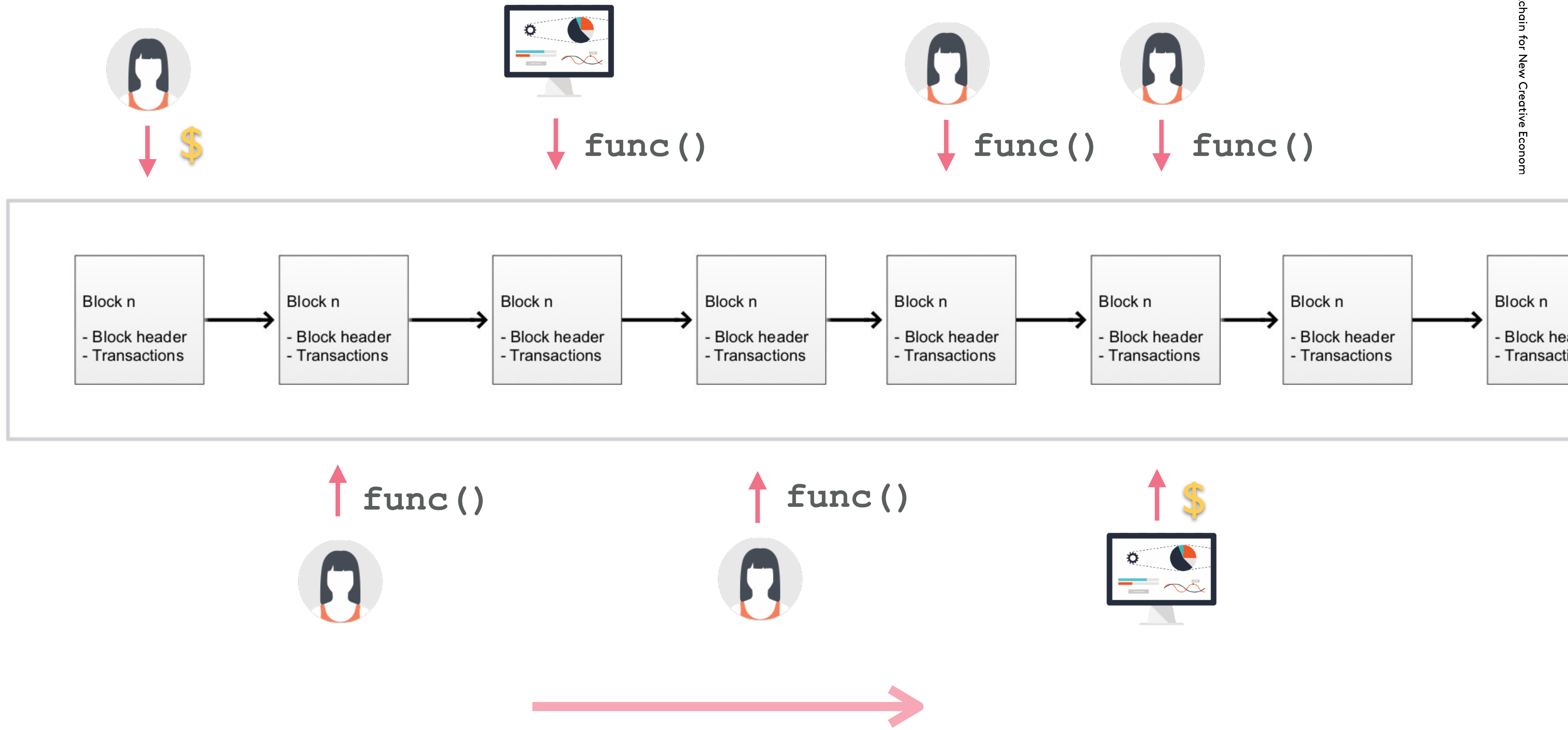
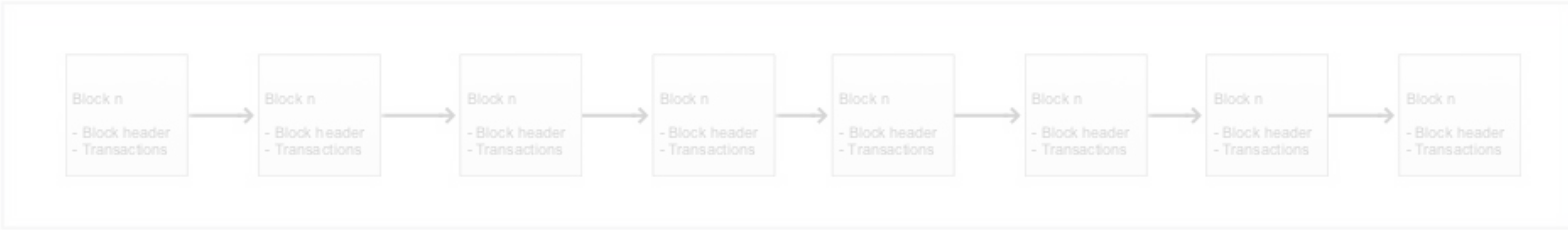


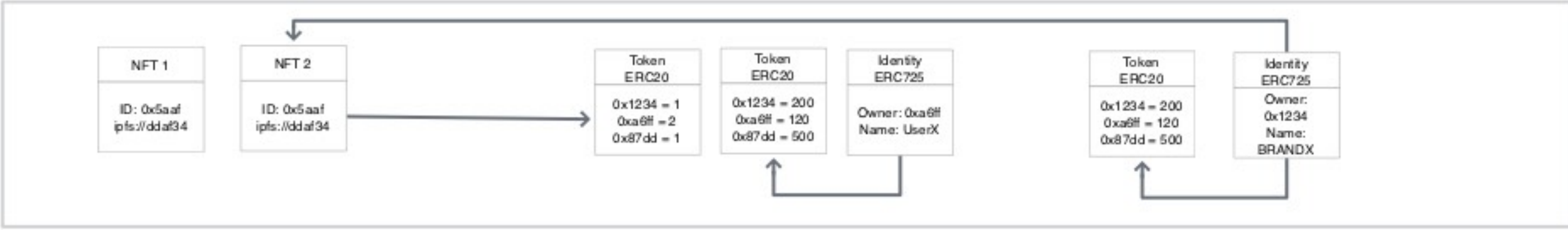
# Standards on the Blockchain

# Genesis

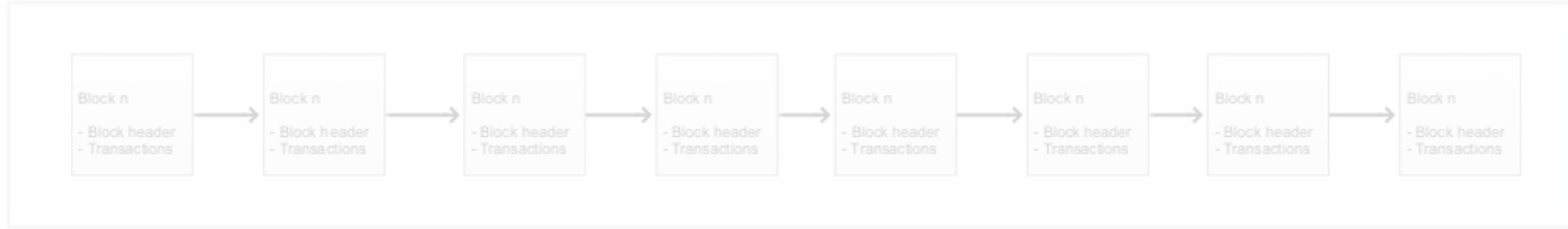




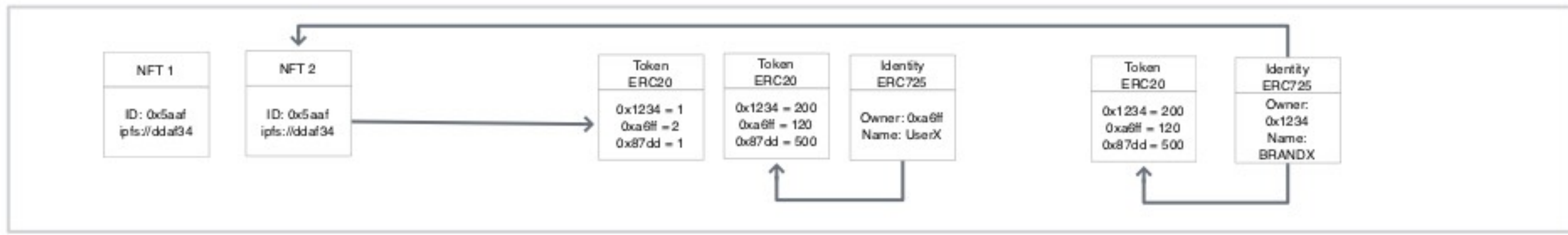
LUKSO Blockchain



Smart contracts



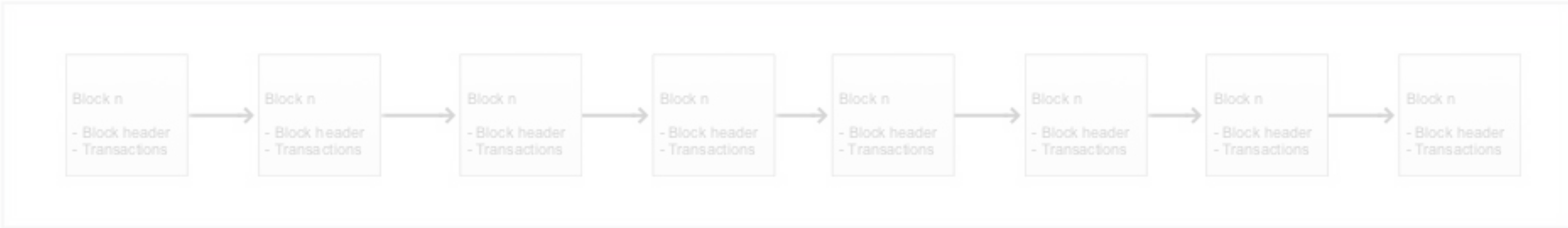
LUKSO Blockchain



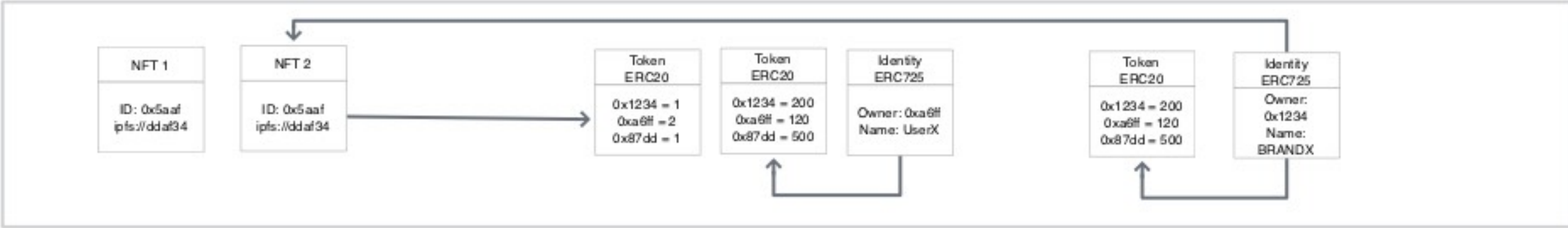
Smart contracts



dApps



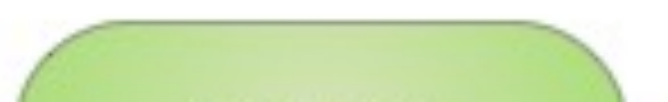
LUKSO Blockchain



Smart contracts



dApps





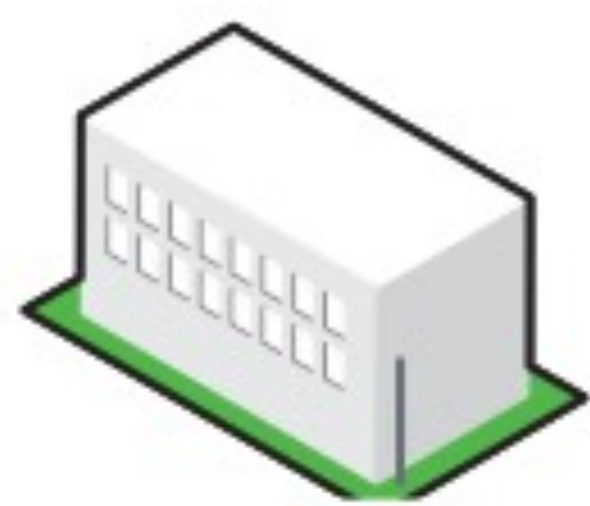
Smart contracts



dApps








Storage




BRANDX

# Examples Of Standardisation

1	 <b>Tether</b>	Omni	\$4,015,512,679	\$1.00	\$14,267,958,577
2	 <b>UNUS SED LEO</b>	Ethereum	\$1,117,868,523	\$1.12	\$5,556,613
3	 <b>Huobi Token</b>	Ethereum	\$946,386,506	\$3.85	\$78,266,062
4	 <b>Chainlink</b>	Ethereum	\$611,083,063	\$1.75	\$47,970,347
5	 <b>Maker</b>	Ethereum	\$471,943,003	\$471.94	\$14,456,875

**4.84 Billion Dollars**  
**Top 10 Ethereum Tokens**

8	 <b>Basic Atten...</b>	Ethereum	\$238,046,162	\$0.179086	\$18,655,808
---	---	----------	---------------	------------	--------------



ⓘ **EIP-1808: A Non-homogenous digital asset data sharing standard**

#2246 opened 14 days ago by ypenghui6

ⓘ **EIP-2229: Ping Interface**

#2229 opened 28 days ago by nachomazzara

ⓘ **ERC-2222 - Funds Distribution Standard**

#2222 opened on 30 Jul by jo-tud

ⓘ **ERC-2212: Interest Earning Stakes**

#2212 opened on 26 Jul by PaulRBerg

ⓘ **EIP: Global Identity Tokens - ERC Proposal**

#2204 opened on 21 Jul by edsonayllon

ⓘ **ERC-2193: dType Alias Extension - Decentralized Type System**

#2192 opened on 16 Jul by loredanacirstea

**A lot of noise...**

ⓘ **ERC: Consumable Interface**

#2135 opened on 24 Jun by xinbenlv

ⓘ **EIP-2021: Payoutable Token**

#2106 opened on 6 Jun by daniel-iobuilders

ⓘ **EIP-2019: Fundable Token**

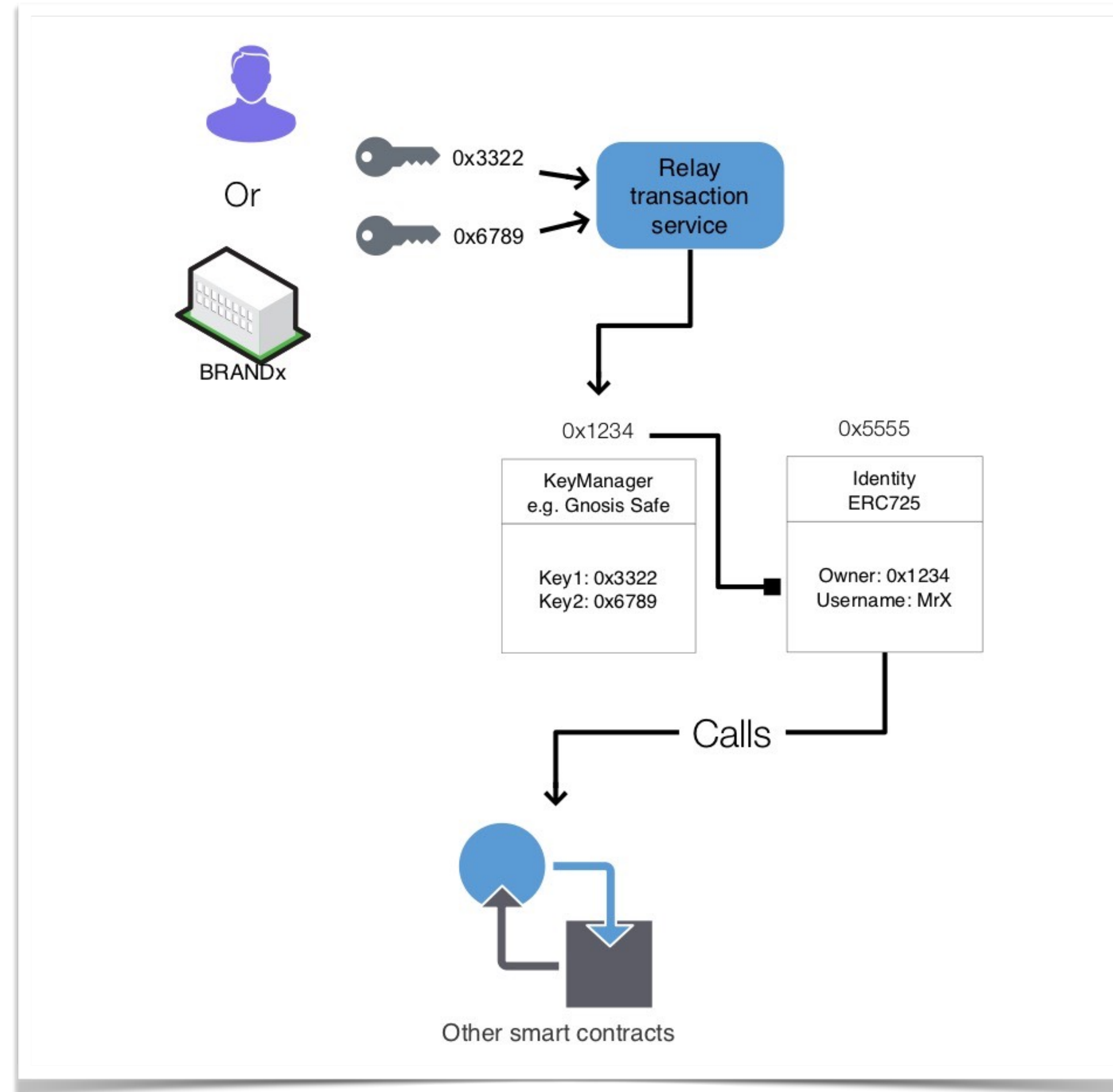
#2105 opened on 6 Jun by daniel-iobuilders

ⓘ **EIP-1996: Holdable token**

#2103 opened on 6 Jun by daniel-iobuilders

# Smart Contract Standards

# Identity Architecture

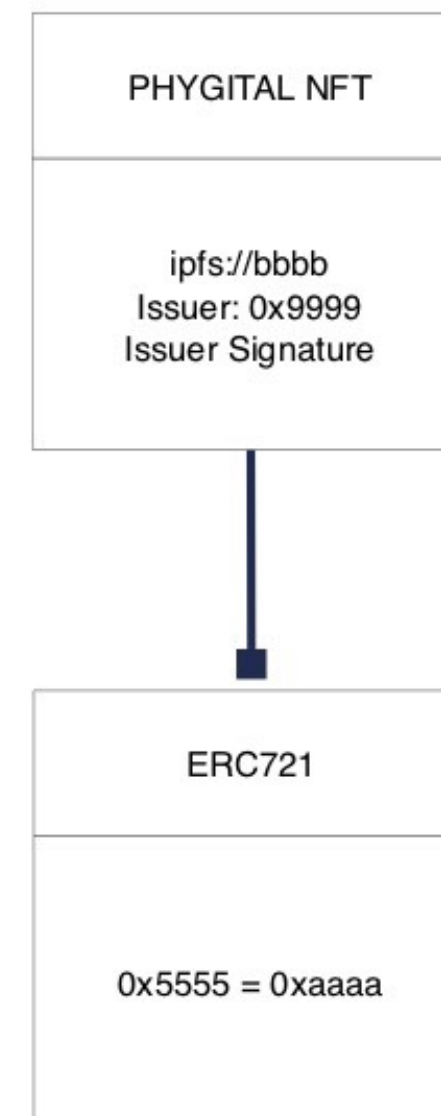


# Digital Certificates ERC725 + ERC721

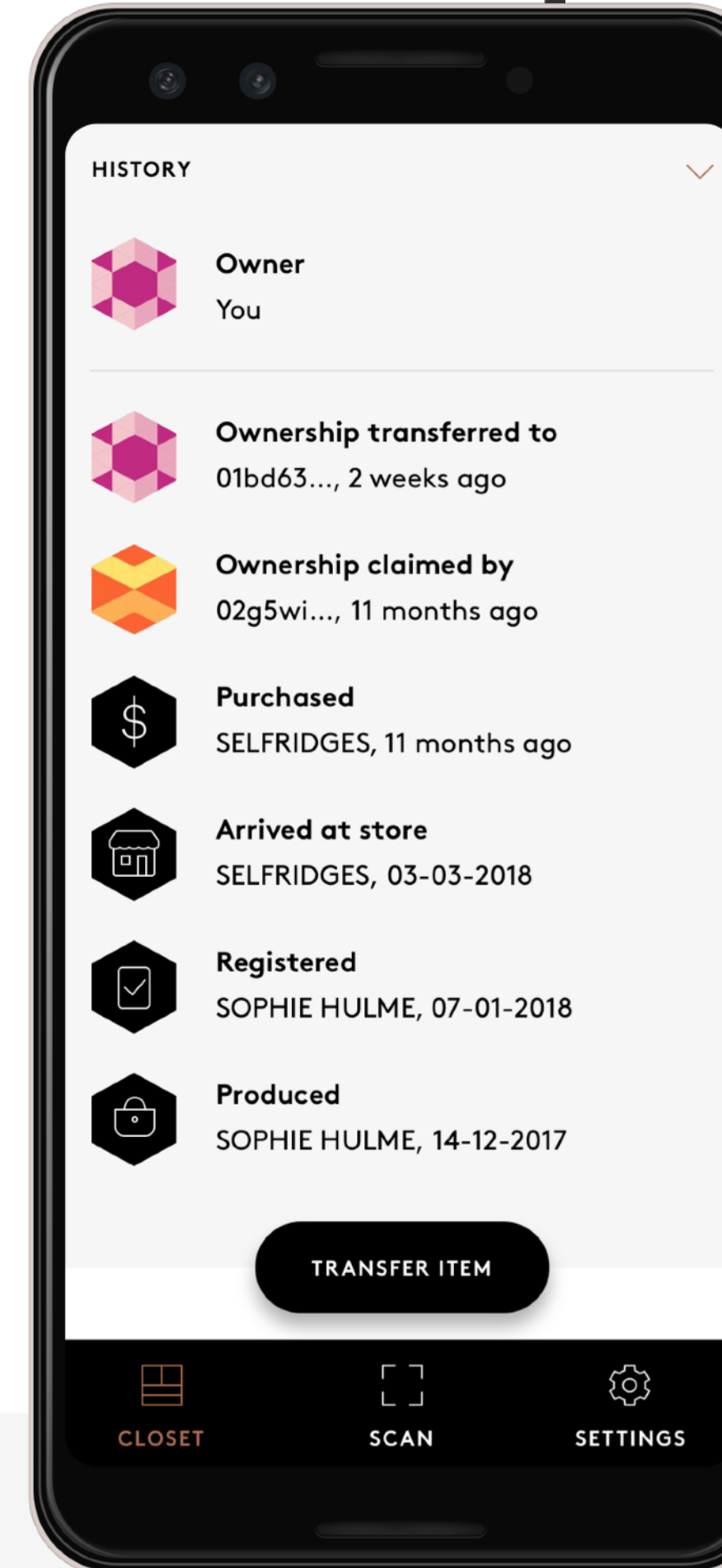
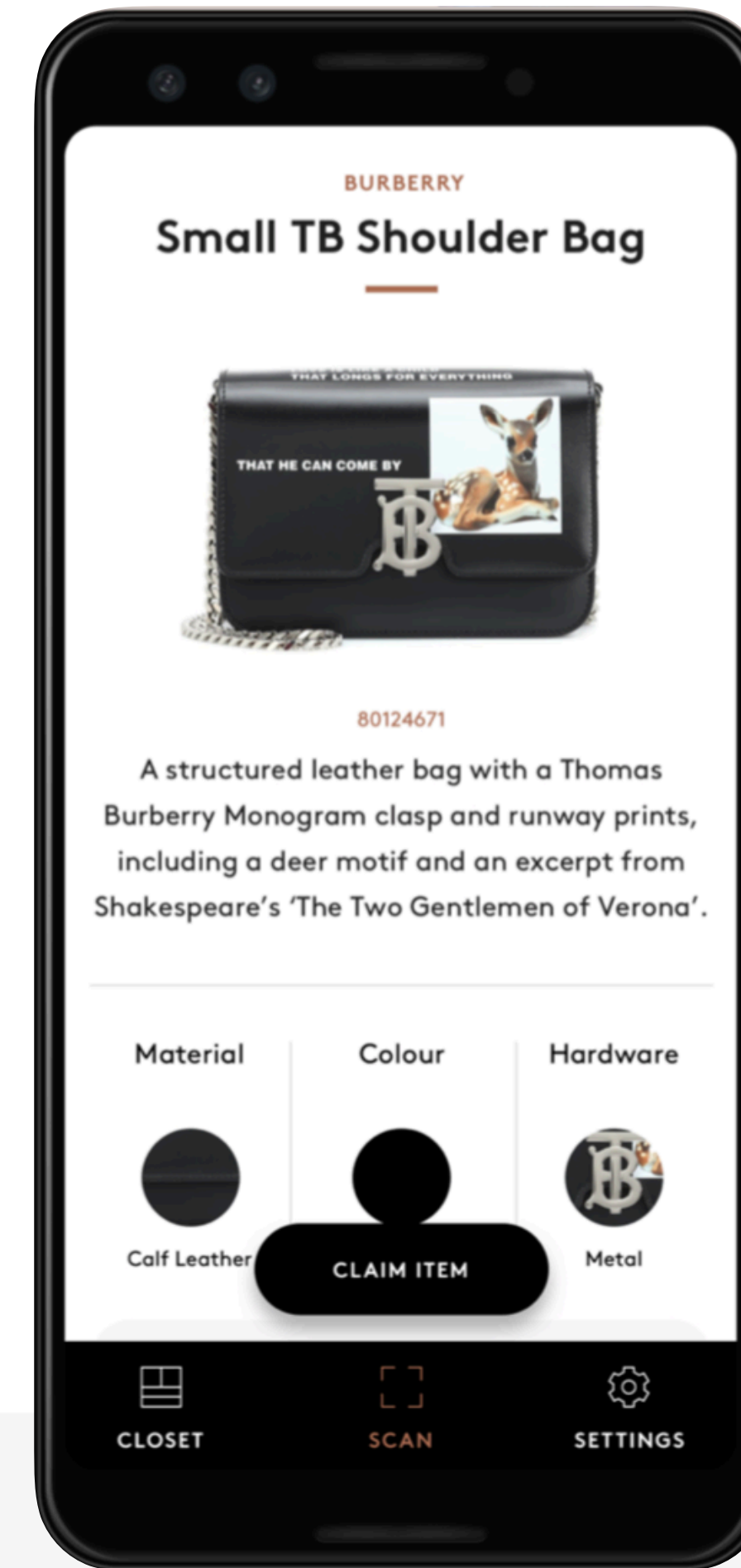
## Digital certificates

Properties:

- ownable (Singular or fungible)
- verifiable (issuer is publicly verifiable)
- any information can be attached or referenced
- linkable to hardware or software assets
- Open source public standard



- **Verifiable:** certificates are created through the identity of the brand, containing a proof of authenticity.
- **Linked Properties and assets:** are referenced from the certificate and can be retrieved from external (also permissioned) sources.
- **Transferable:** the ownership is with the buyer and can be transferred by him. While mechanics can be in place to securely recover ownership from the brand side, if required.



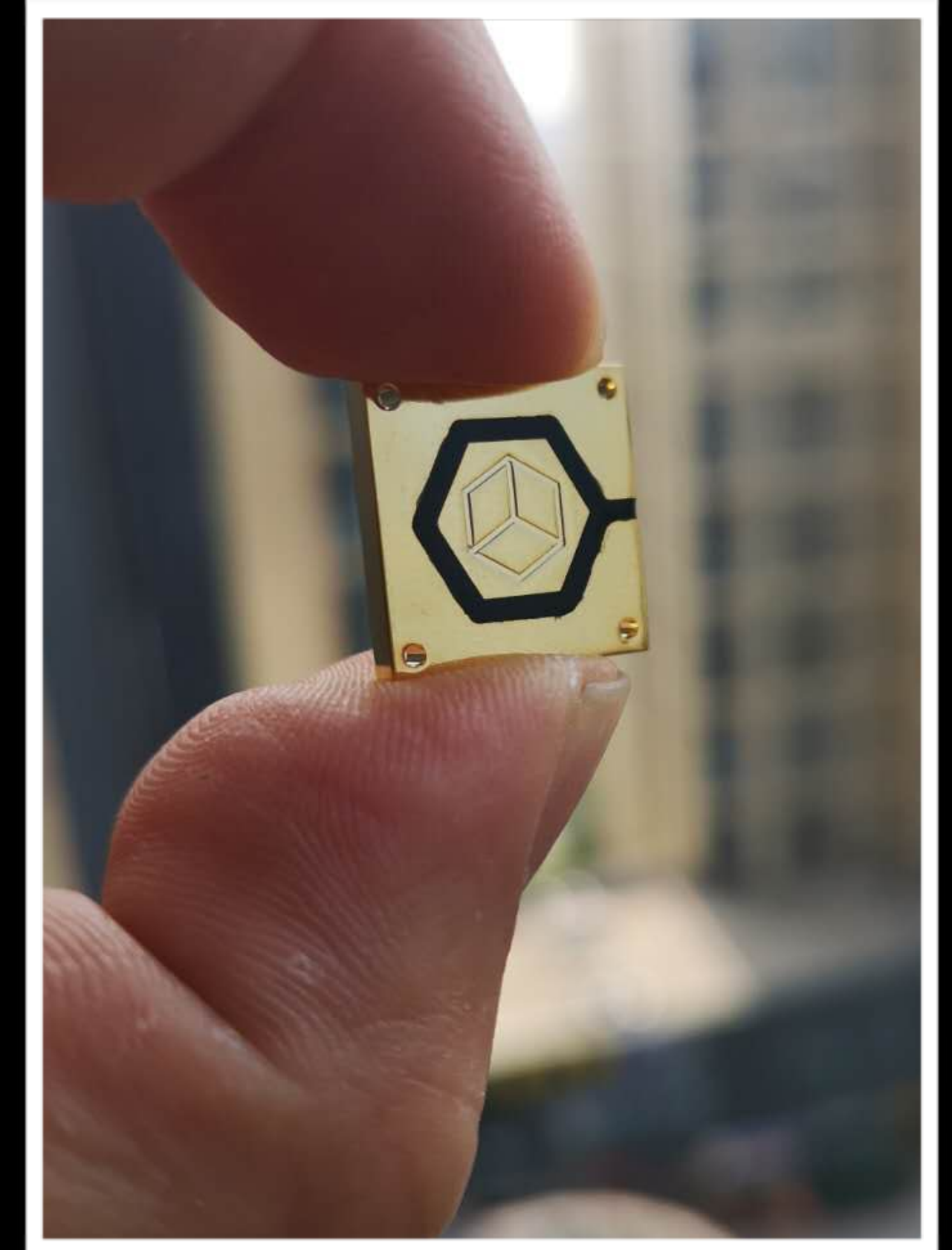
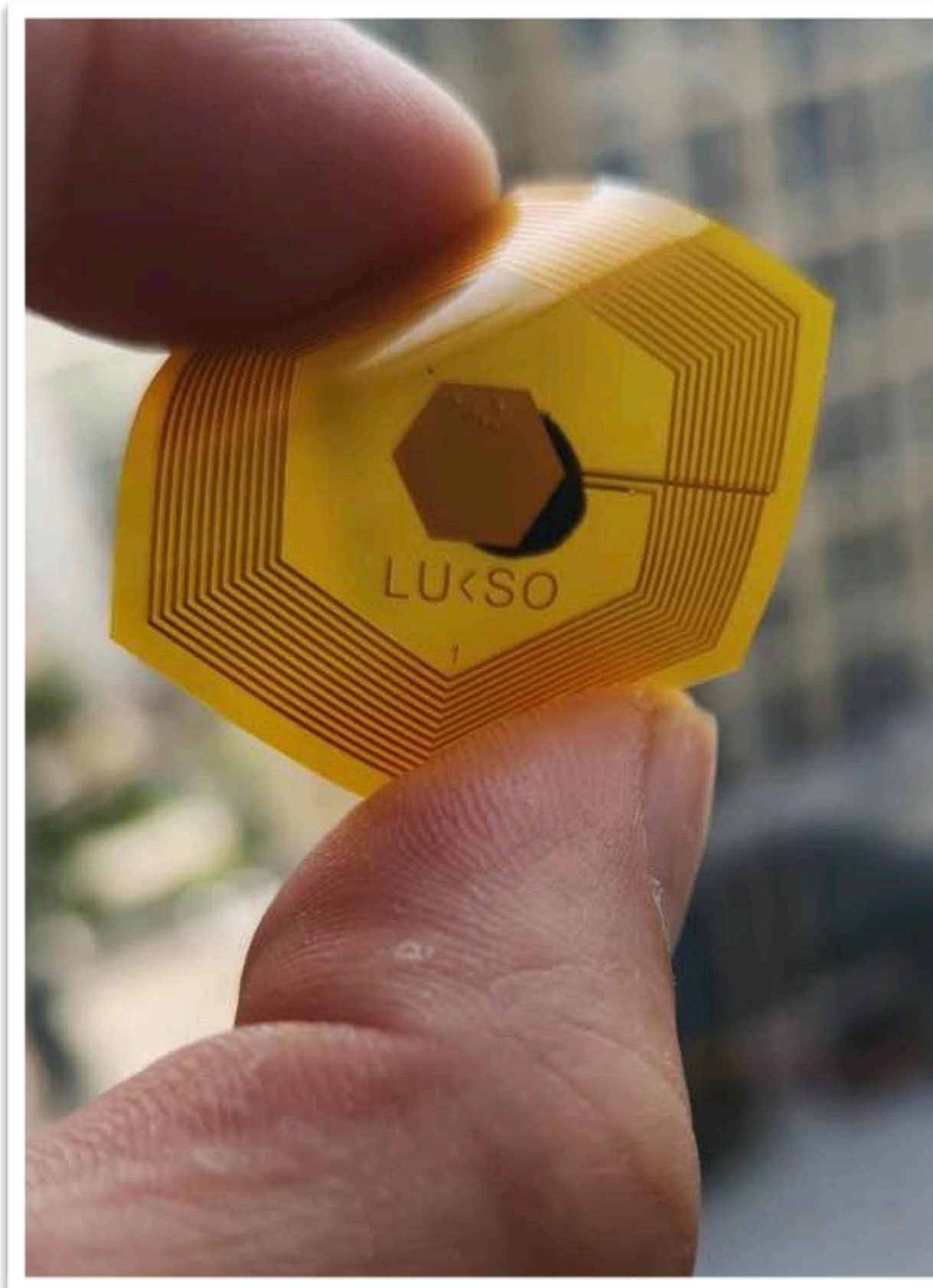
Each product is embedded with an un-cloneable identifying NFC tag.

# Hardware: LUKSO Crypto-Tags

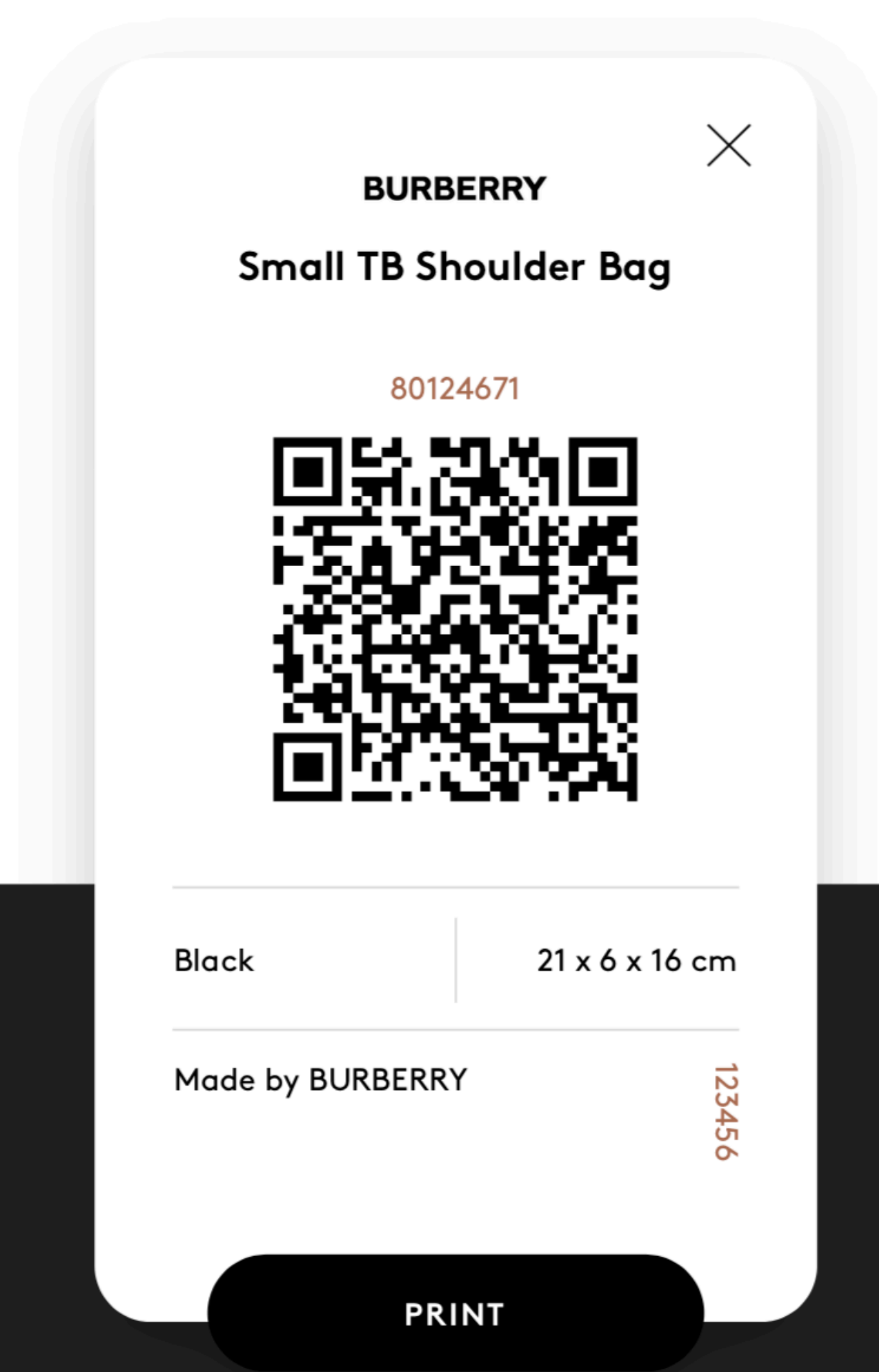
LUKSO's NFC-tag is cryptographically secure and blockchain compatible.

## Specifications:

- Passive NFC tag
- Challenge response authentication based on an ECDSA signature
- Additional challenge response signature created by the private key within the tag.
- Dimensions: 35mm  $\varnothing$  ~1000 $\mu$ m

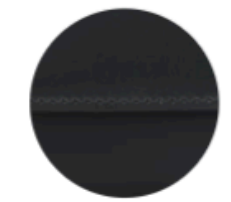




The properties of the product are now linked to the NFC tag and registered on the LUKSO Blockchain.



### Small TB Shoulder Bag

80124671  
123456

Material	Colour	Hardware
 Calf Leather	 Black	 Metal
Size		21 x 6 x 16 cm
Date of Production		26-06-2017

The app then creates a certificate that contains a unique secret QR code that will allow the future owner to claim the Digital Ownership of the product.

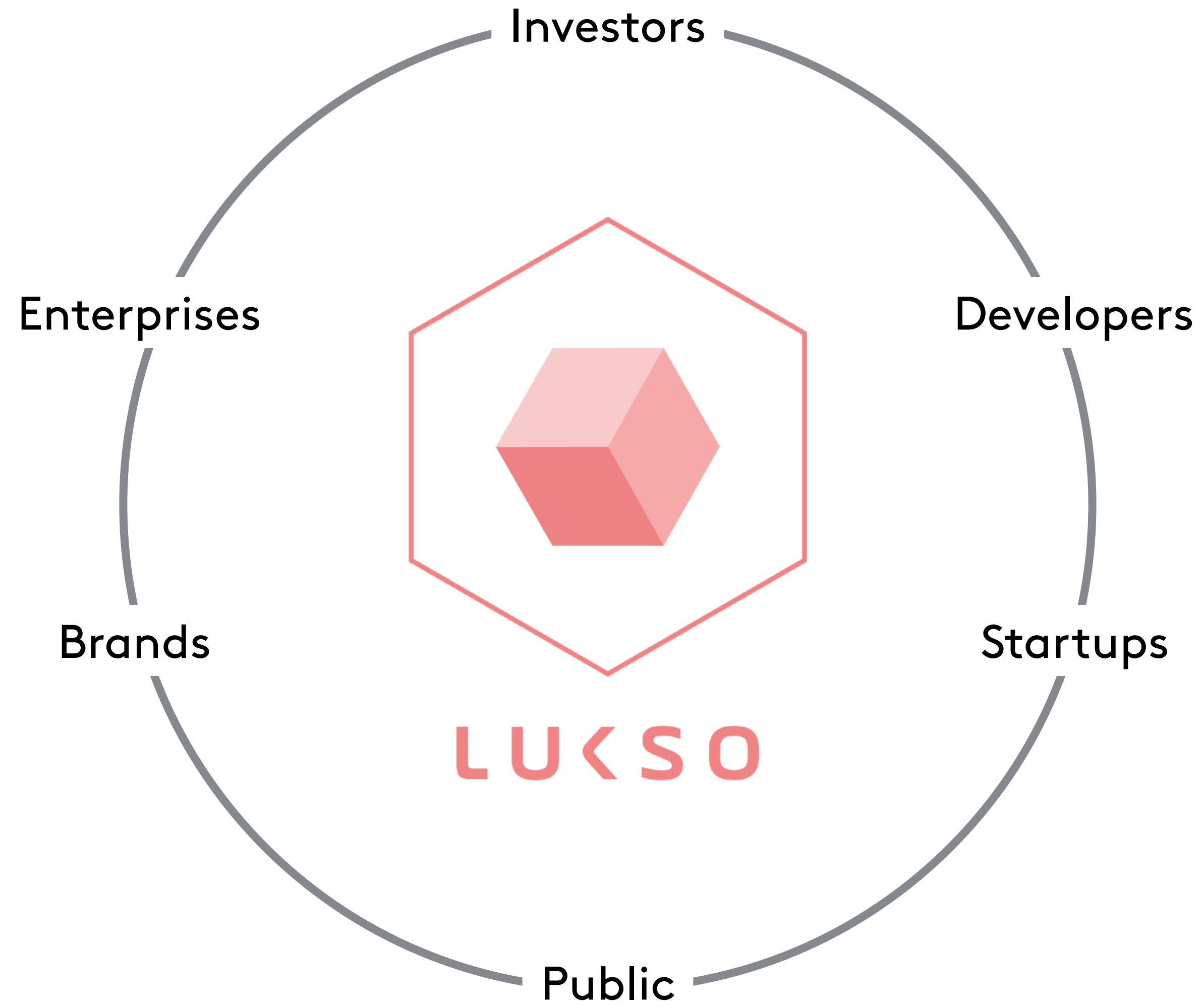
# What is LUKSO

LUKSO is a **public, permission less, programmable, domain-specific blockchain** that is based on the most advanced smart contract protocol the Ethereum Virtual Machine (EVM).

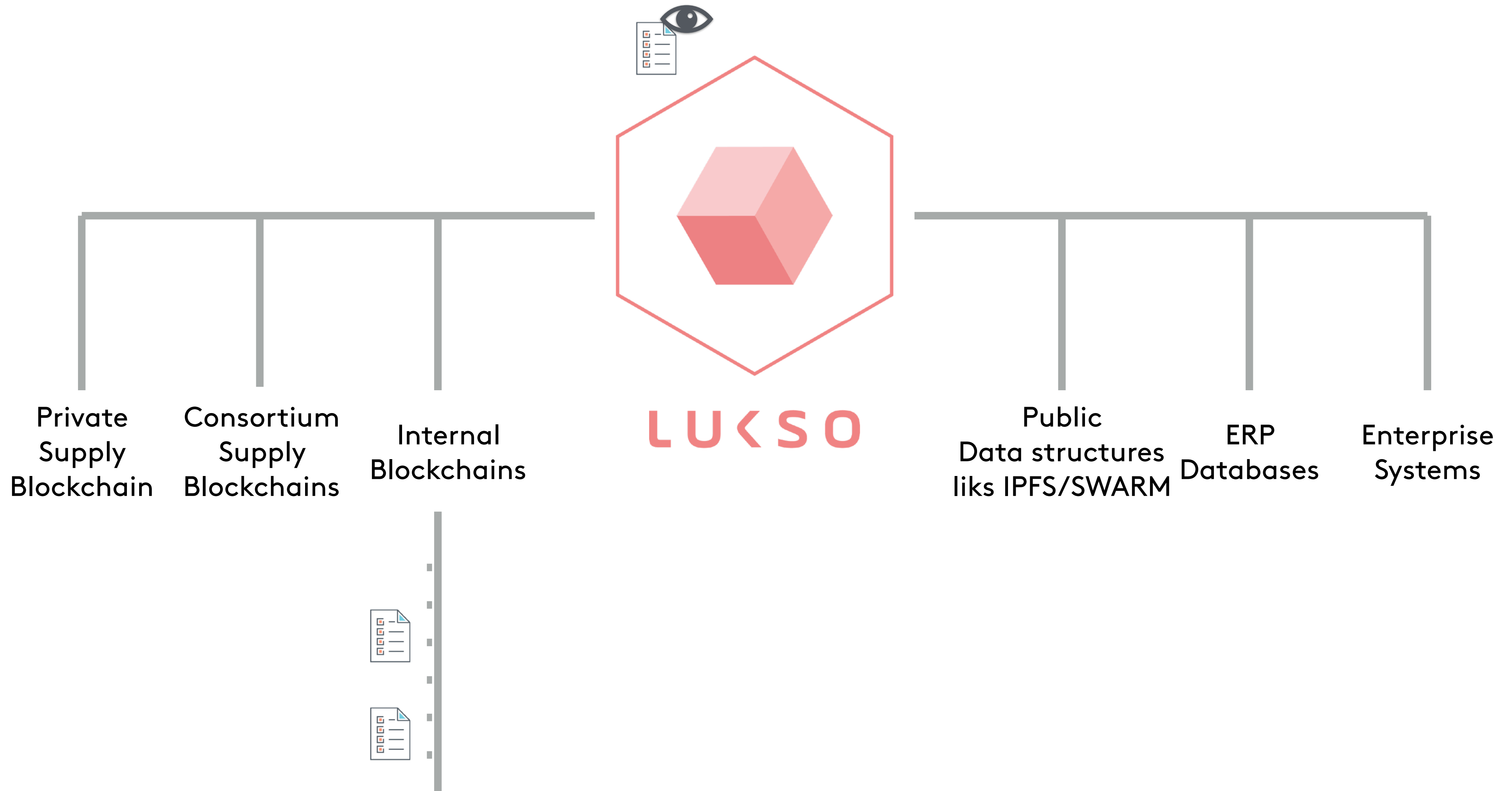
The network is governed by a delegated Proof of Stake consensus (dPoS) using smart contracts (PoSDAO).



# The LUKSO ecosystem



# The LUKSO ecosystem



# LUKSO Standards Process – LSP

lukso-network / LIPs

Unwatch 2 Unstar 1 Fork 1

Code Issues 0 Pull requests 1 Projects 0 Wiki Security Insights Settings

LUKSO Improvement Proposals. Repository for the LUKSO Blockchain Improvement Proposals (LIPs) and LUKSO Standards Process (LSP). Edit

standards evm ethereum solidity erc eip lip lsp Manage topics

12 commits 1 branch 0 releases 2 contributors

Branch: master New pull request Create new file Upload files Find File Clone or download

	frozeman Update README.md	Latest commit e76b103 5 minutes ago
	LIPs Update lip-1.md	2 months ago
	README.md Update README.md	5 minutes ago
	lip-X.md changed to LSP, LUKSO standards process	2 days ago

README.md

## LIPs

LUKSO Improvement Proposals (LIPs) and LUKSO standard proposal (LSPs) describe standards for the LUKSO platform, including core protocol specifications, client APIs, and smart contract standards.

A browsable version of all current and draft LIPs can be found on [the official LIP site](#).

# Contact

<https://www.lukso.network>

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[marjorie@lukso.network](mailto:marjorie@lukso.network)

Fabian Vogelsteller  
Managing Director, Blockchain Architect

+49 1577 156 8060

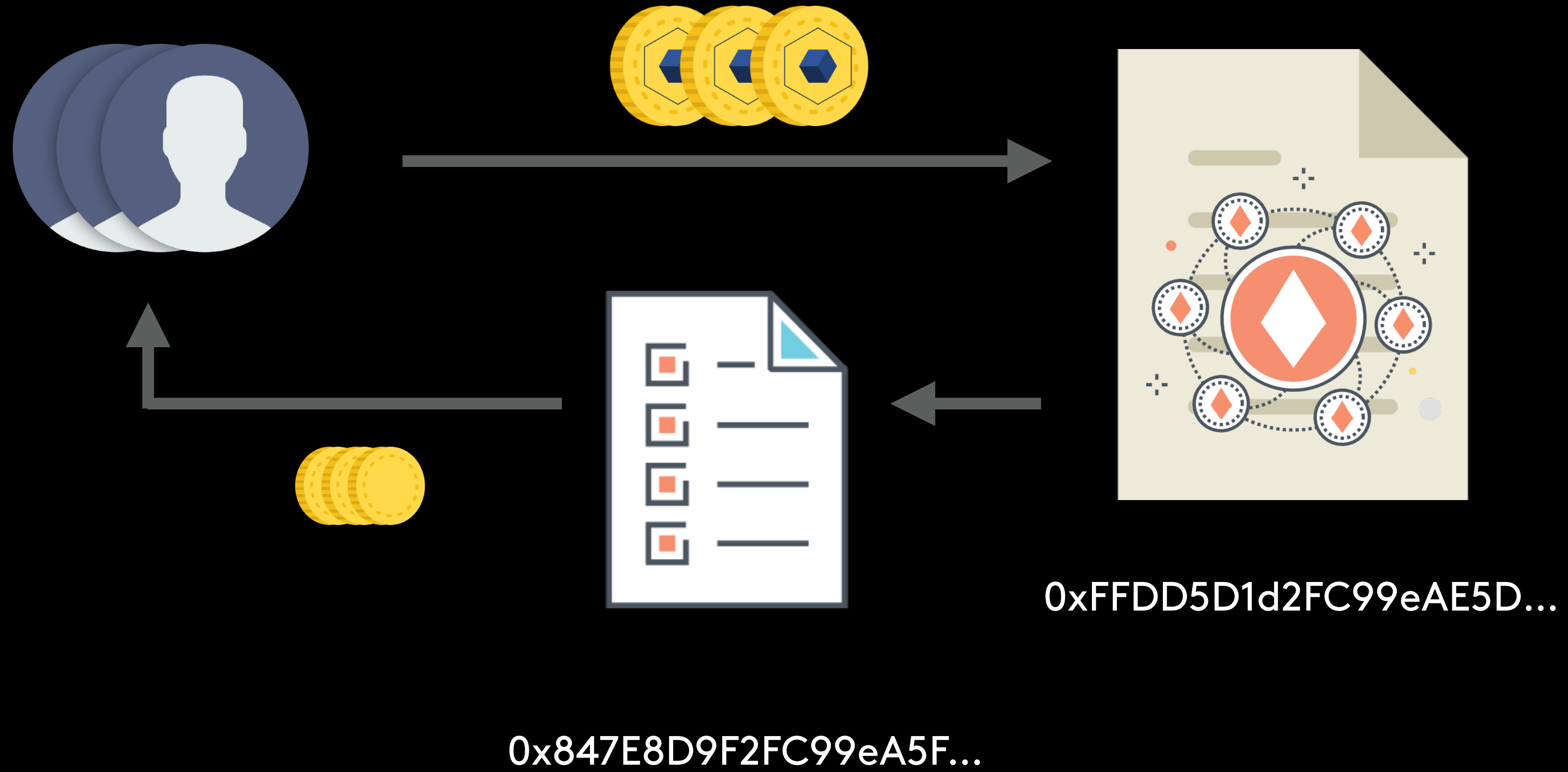
[fabian@lukso.network](mailto:fabian@lukso.network)

# Appendix



0x847E8D9F2FC99eA5F...



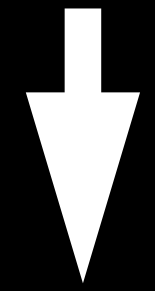




LUKSO



0x567567567847E8D9F2FC99eA5F...



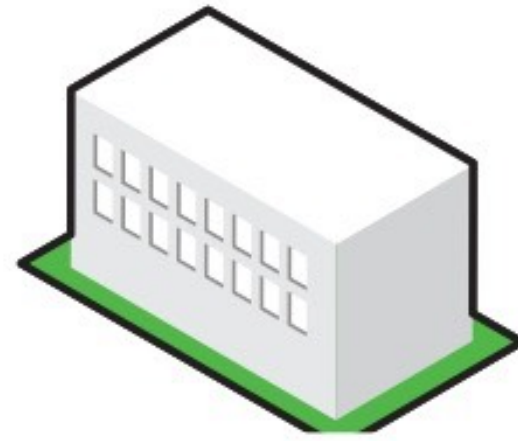
Digital Closet

Digital Certificate

Brand Token

Token Swap

# Digital Certificates Creation



BRANDx

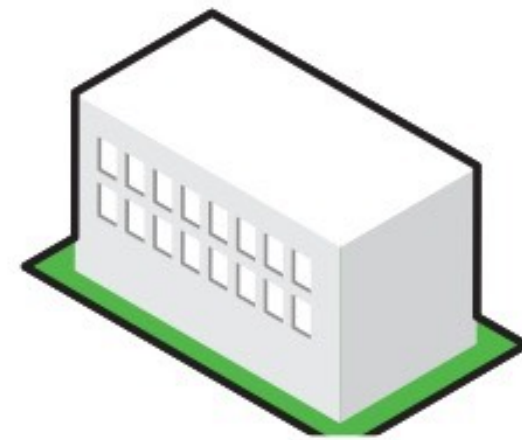


Product with ID/chip: 0xaaaa



Product certificate

# Digital Certificates Creation



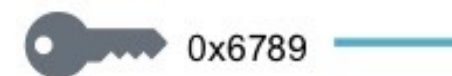
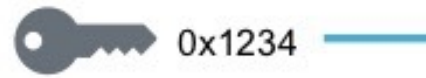
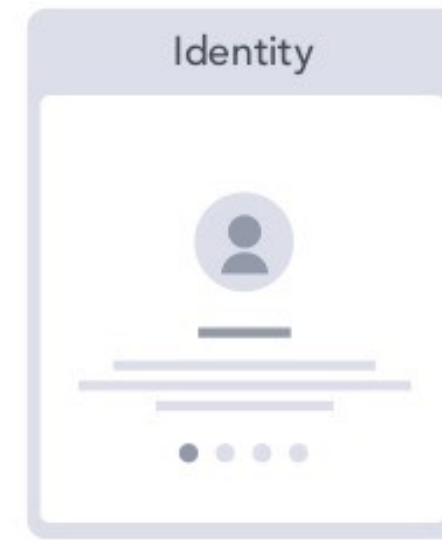
BRANDx



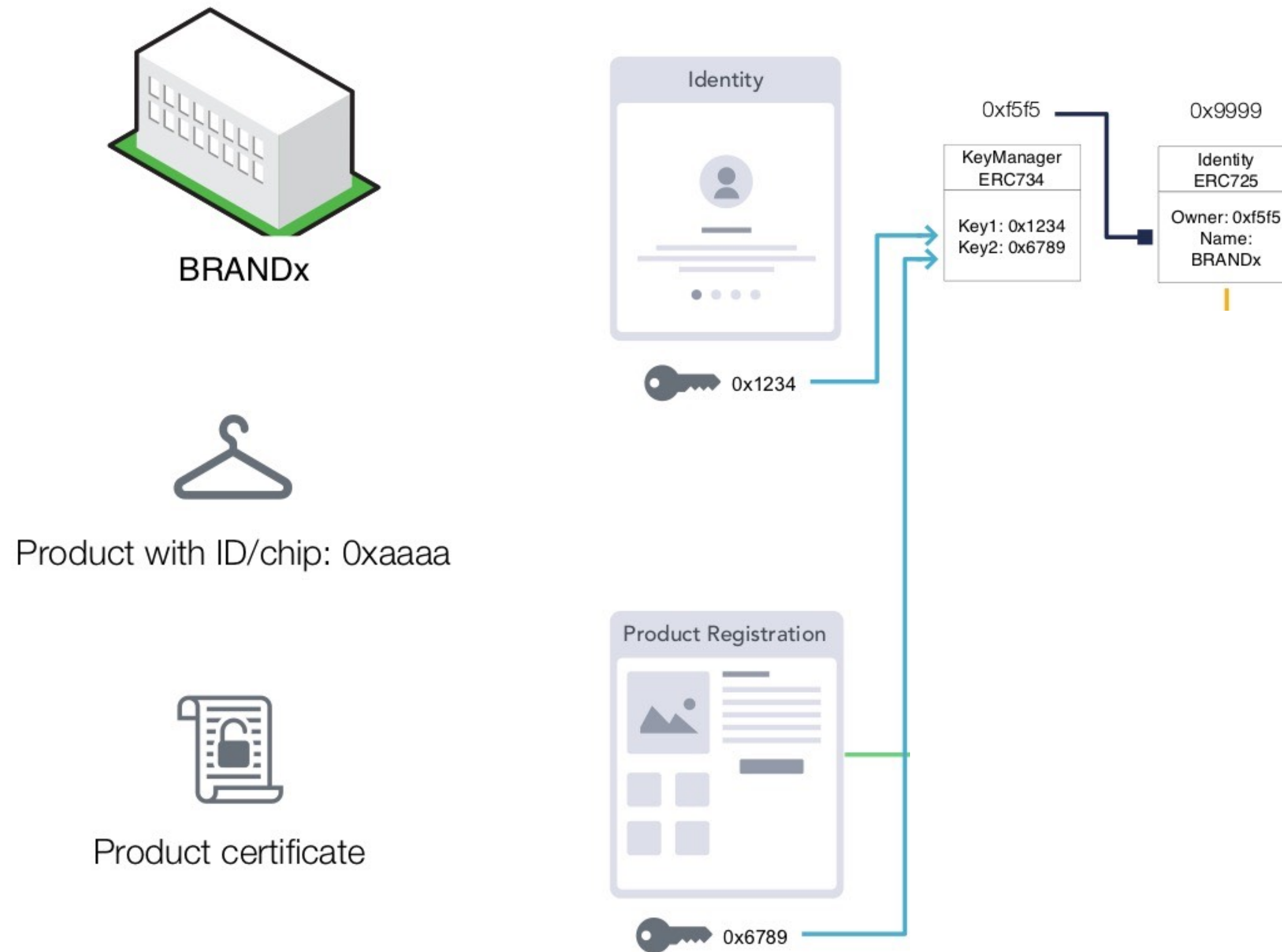
Product with ID/chip: 0xaaaa



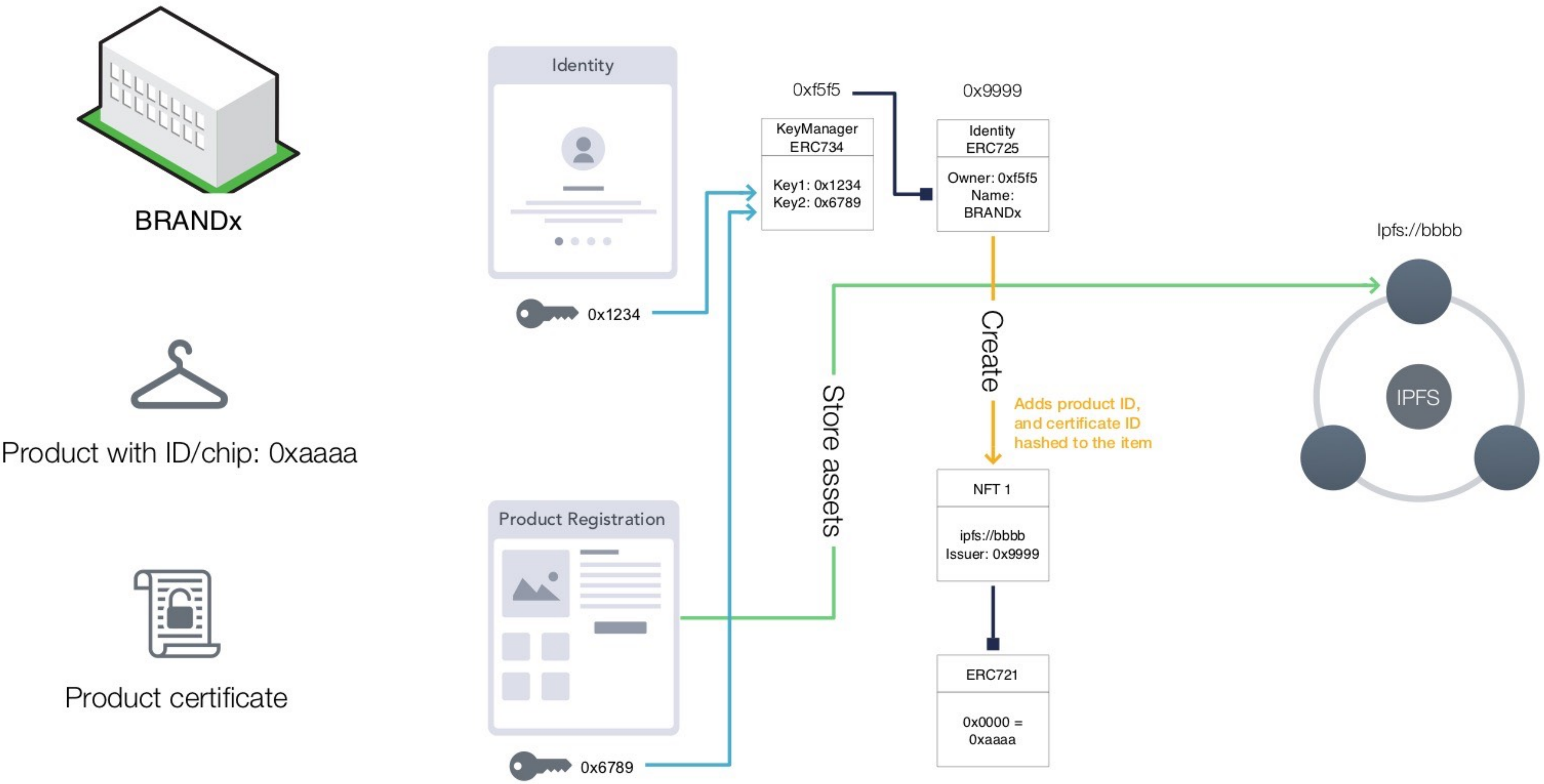
Product certificate



# Digital Certificates Creation



# Digital Certificates Creation



# Digital Certificates Claiming



UserX

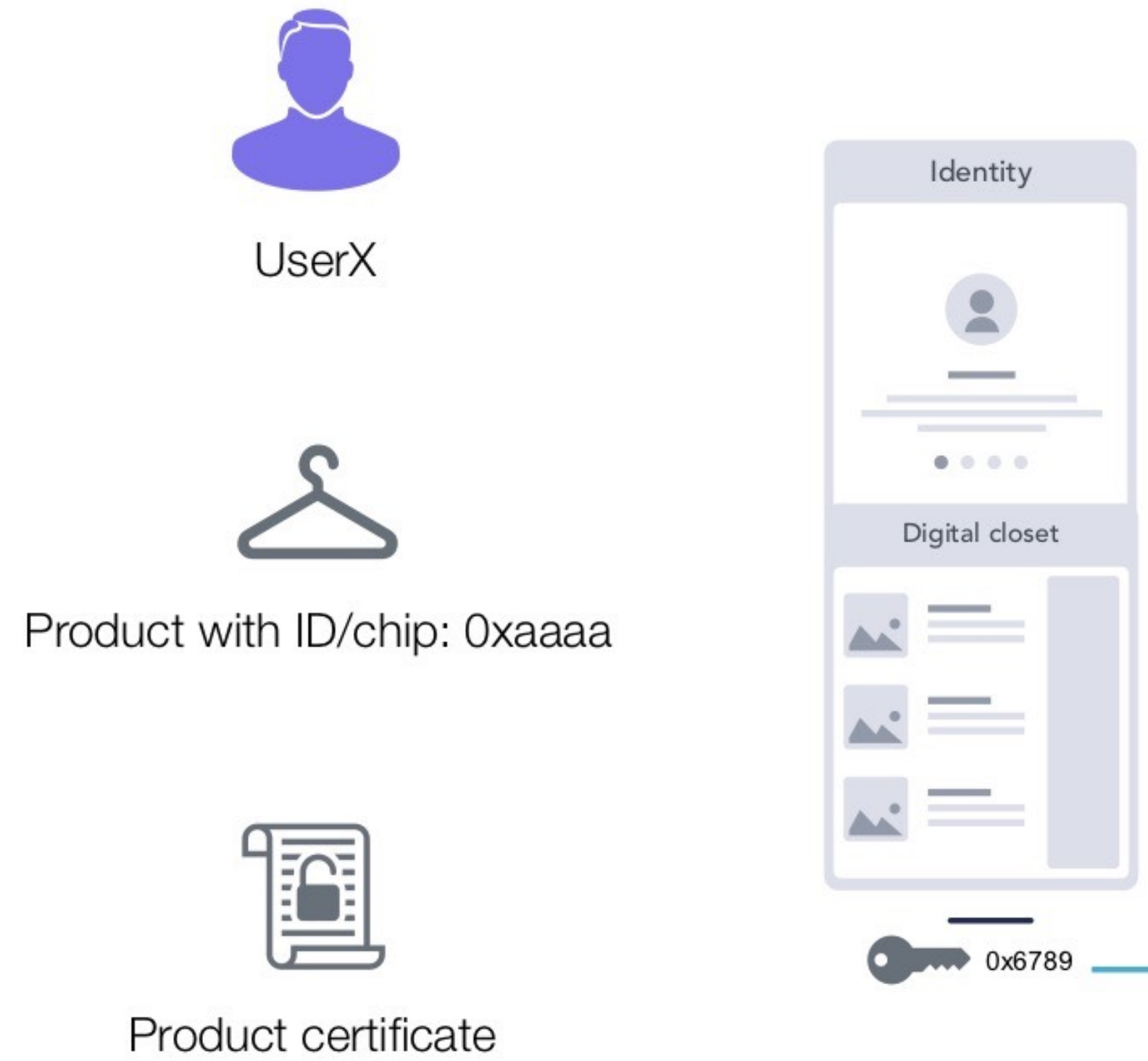


Product with ID/chip: 0xaaaa

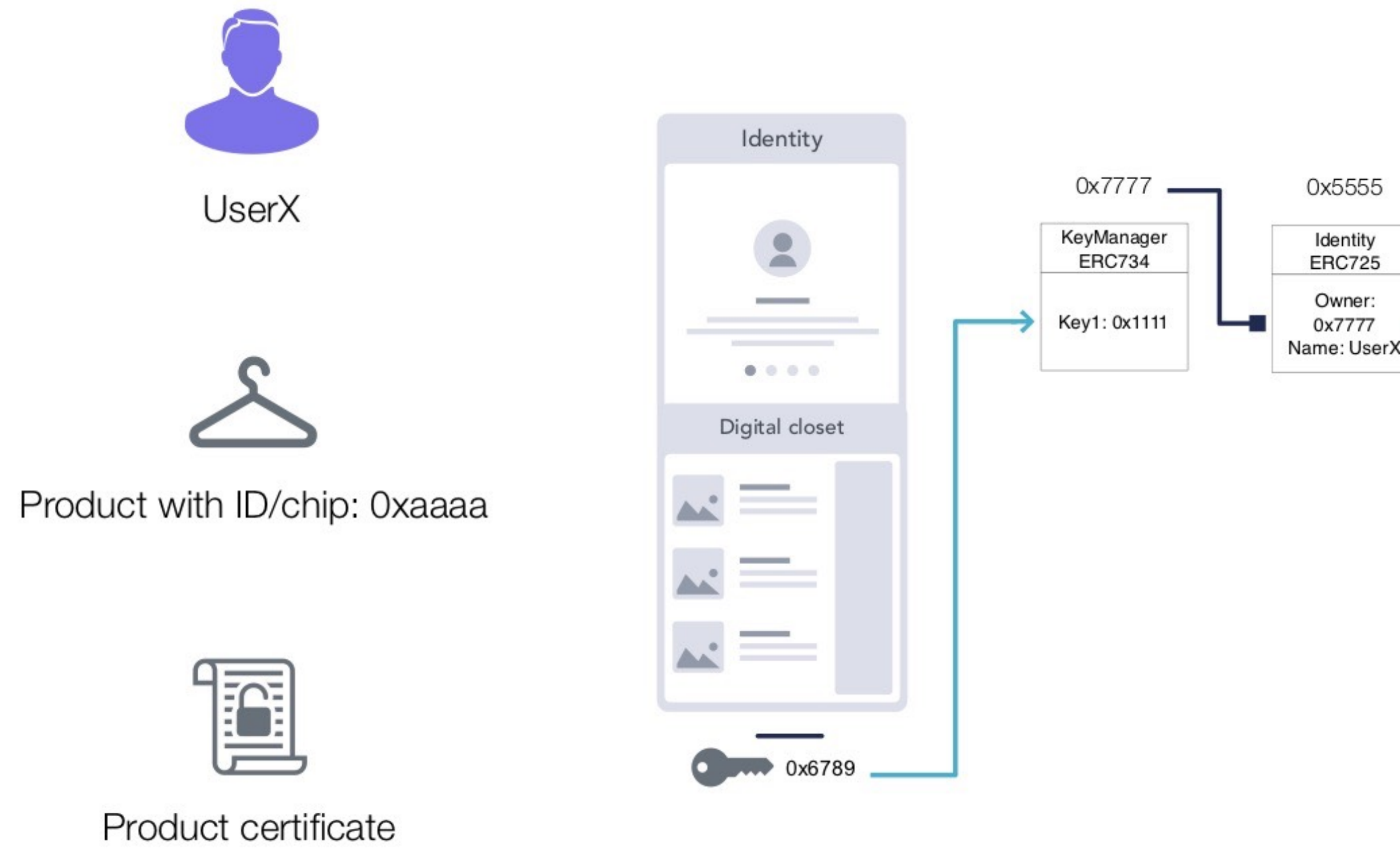


Product certificate

# Digital Certificates Claiming

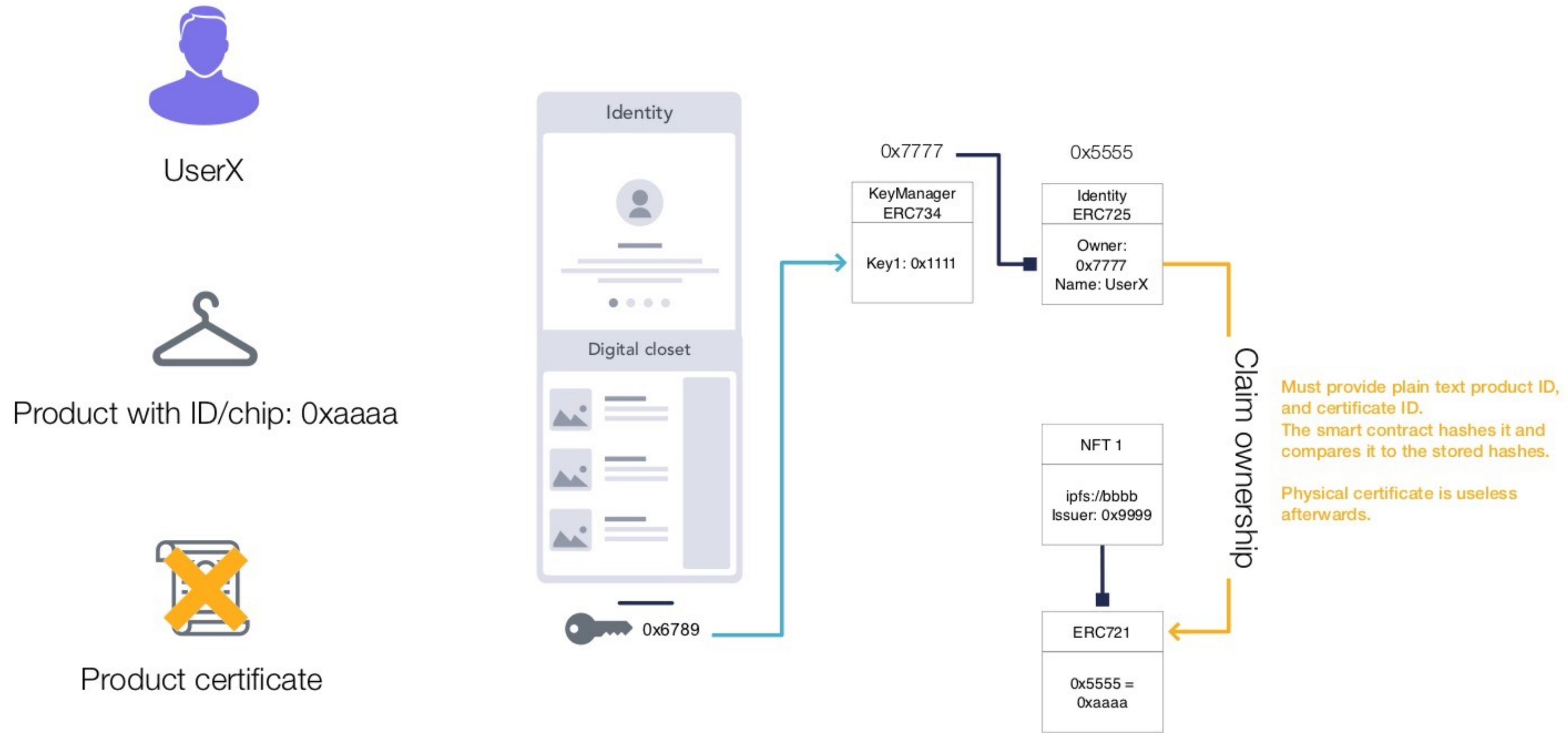


# Digital Certificates Claiming

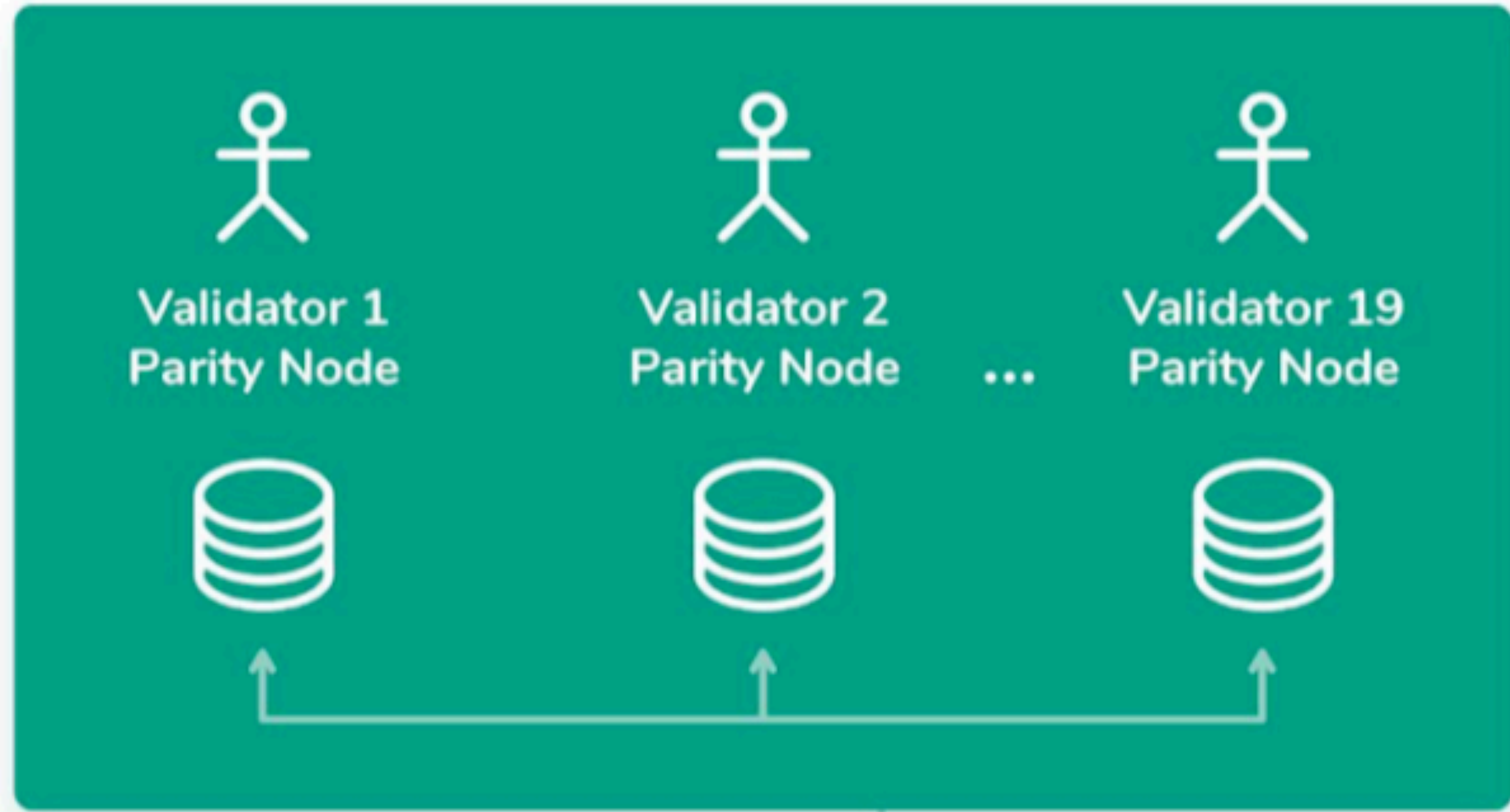




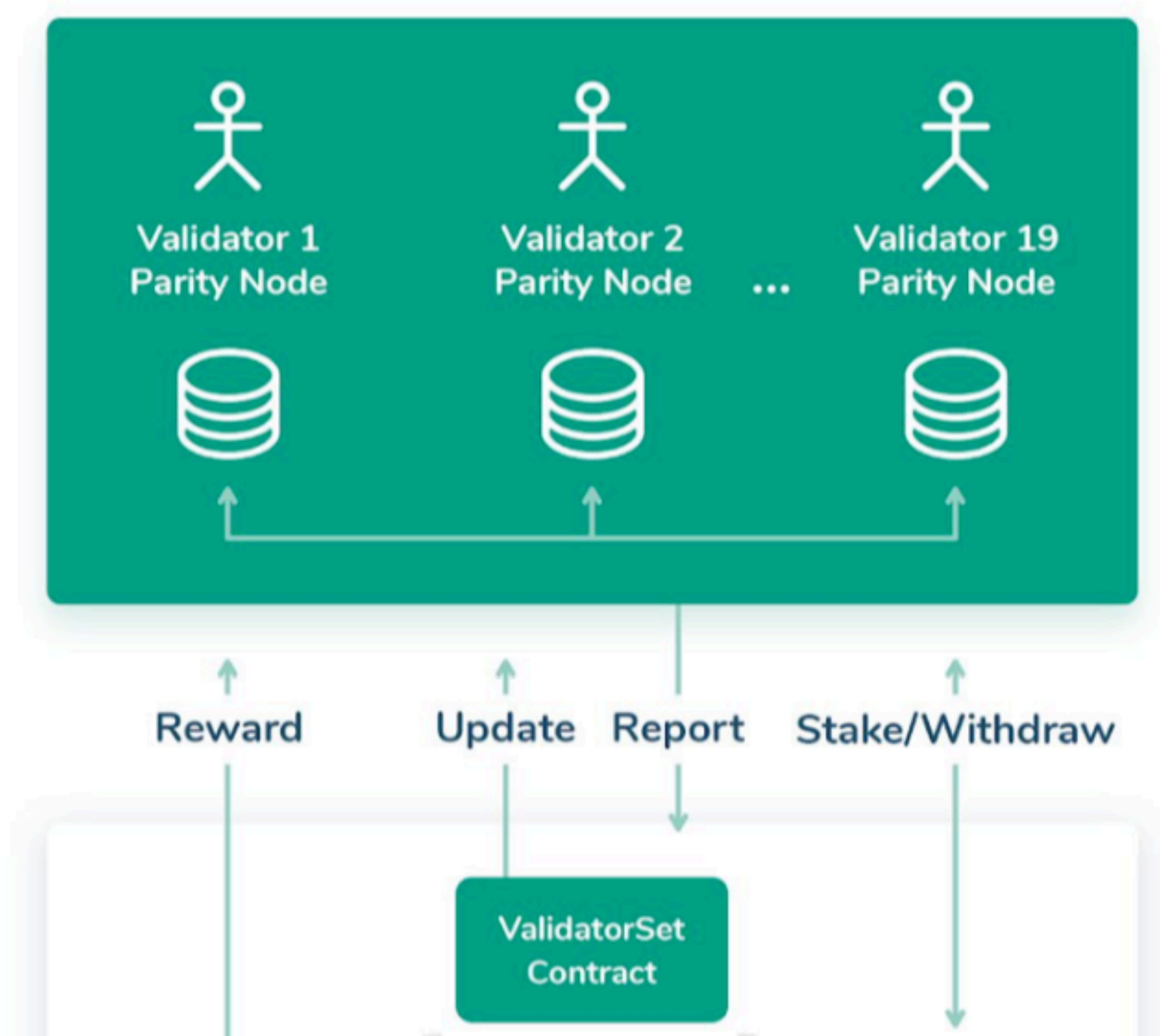
# Digital Certificates Claiming



# Validators

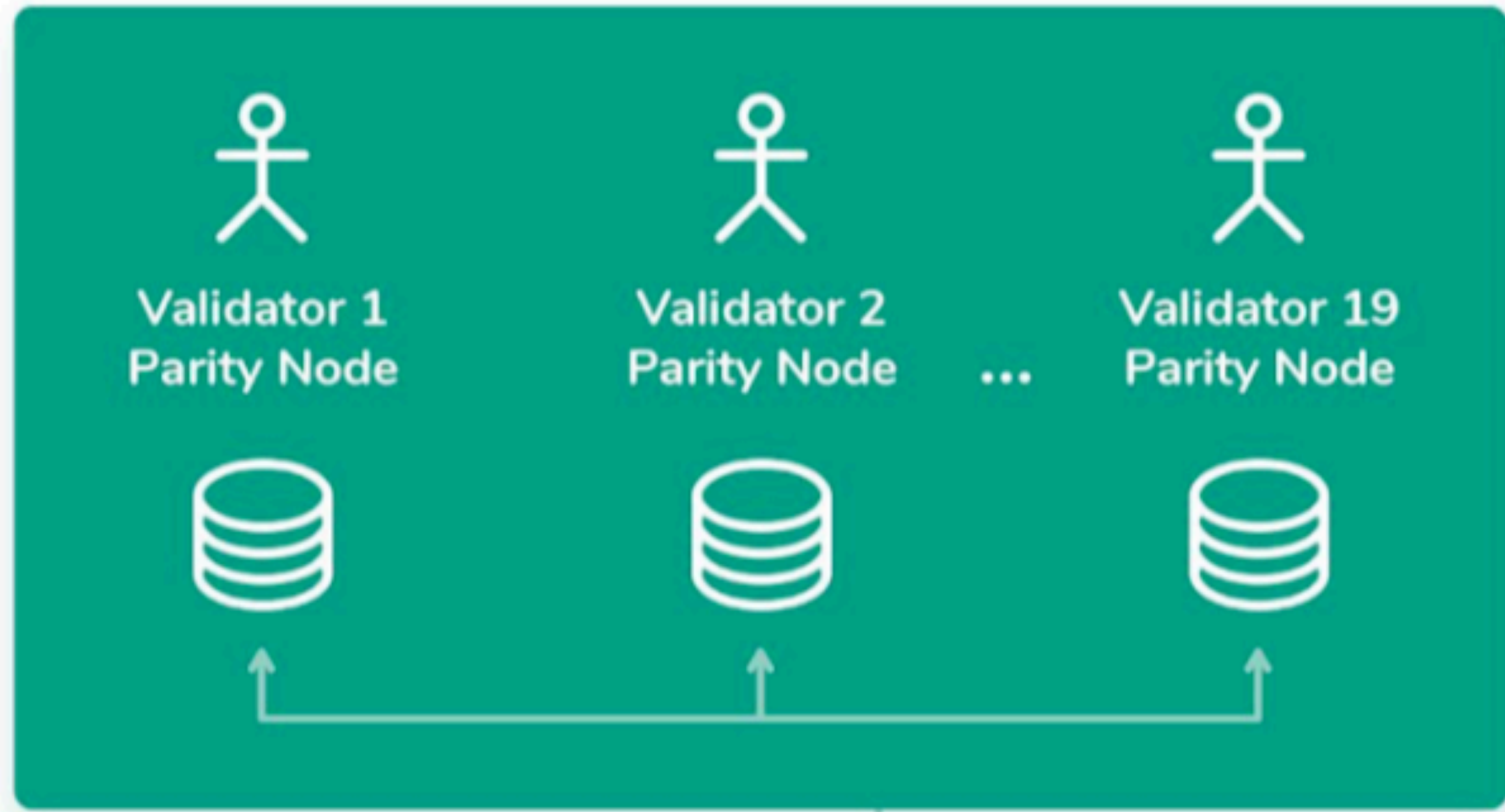


## Validators



## Smart Contracts

# Validators



# Smart Contracts



BURBERRY can register existing products on the LUKSO Blockchain, by selecting the model and linking them to the NFC tag embedded into the item.

# Registry

CANCEL

- Select Model
- Scan Item
- Create Certificate
- Add to Blockchain
- Confirmation

## Select Model

- Item model 01
- Item model 02
- Item model 03
- Item model 04
- Item model 05
- Item model 06
- Item model 07
- Item model 08



Name

Code

Material	Colour	Hardware
●	●	●

Size

DD-MM-YYYY

# Registry

CANCEL

- Select Model
- Scan Item
- Create Certificate
- Add to Blockchain
- Confirmation

### Scan Item

Scanning...



Tag

Colour	Hardware
● Black	● Metal

21 x 6 x 16 cm

Date of Production

26-06-2017

# Registry

CANCEL

Select Model    Scan Item    Create Certificate    **Add to Blockchain**    Confirmation




## Add to Blockchain

Item model 4



### Small TB Shoulder Bag

80124671  
123456

Material	Colour	Hardware
 Calf Leather	 Black	 Metal
Size		21 x 6 x 16 cm
Date of Production		26-06-2017

VIEW CERTIFICATE





ADD TO BLOCKCHAIN

[BACK](#)

powered by  
LUKSO

# Registry

ITEMS (12)    NAME

- 12  Small TB Shou
- 11  The 1983 Chec
- 10  Medium D Ring  
Shoulder Baq
- 9  The Baby Bag

powered by  
LUKSO

The Product's Digital Twin is now registered on the LUKSO Blockchain and accessible and transferable by the future owner. All products can be managed from the app and allow to see and interact with its current anonymous owner. Enabling unlimited web3 based customer engagement models.

# The LUKSO Blockchain Test Network

The L14 Test Network is live at <https://blockscout.com/lukso/l14>

## Specifications:

- Consensus Algorithm: RoundRobin
- Governance: PoA Smart contracts
- Block time: 5 seconds
- Validator Nodes: 4
- Smart contracts: Ethereum Virtual Machine (EVM)

The screenshot displays the LUKSO blockchain explorer interface. At the top, the navigation bar includes 'LUKSO', 'Blocks', 'Transactions', 'Accounts', 'APIs', and 'LUKSO L14 Testnet'. A search bar is located on the right. Below the navigation bar, a summary section provides key network statistics:

Metric	Value
Average block time	5 seconds
Total transactions	1,771
Wallet addresses	37
Total blocks	1,025,988

The 'Blocks' section shows a list of recent blocks, each with its ID, transaction count, time since mined, miner address, and reward. For example, block 1025987 was mined 4 seconds ago by miner 0xCc271FDB440c0A37c51a... with a reward of 1 LYX.

The 'Transactions' section shows a list of recent transactions, each with a status (e.g., 'Transaction Success'), a hex address, and a fee. For example, a transaction with address 0x08499a21cb1456b6396057358275ca438ef5b3242b2088b3214c84eaf0f28fdc was successful and had a fee of 0.8950870935442363 LYX.