

# Identity of Things

Real or Fake?!

15.09.2019









Source: New York Times





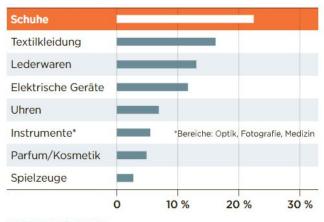


# **Economic Damage**

## € 54,5 Billion



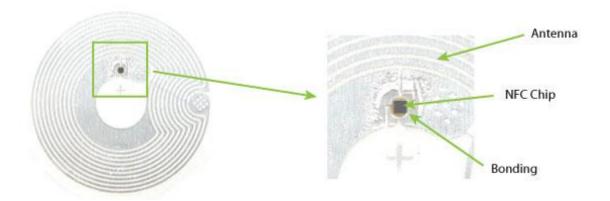
#### Häufigste Fälschungen



HANDELSBLATT-GRAFIK







**COMPACT** 

**CHEAP** 

**BATTERYLESS** 





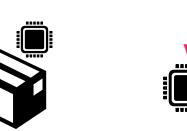
#### **Key Generation**

Manufacturing









Compute

**Activate** 



Production Pre-personalisation

Package

Personalisation

Personalise

Customer

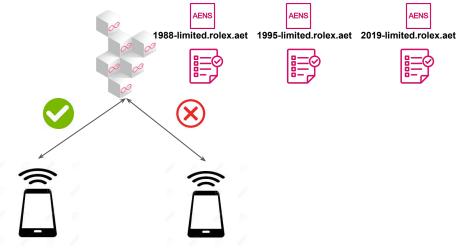
#### **Provisioning Process**







- 1. Read publicKey from the chip
- 2. Smartphone generates random message
- 3. Ask watch to sign the random message



Call verifyItem-function of SmartContract:

- publicKey
- message
- signature (from identification process)

**IDENTIFICATION** 

**VERIFICATION** 

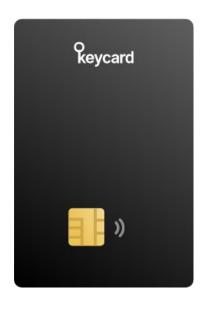
#### **Verification Process**







#### Demo



Using KeyCard by status.im <a href="mailto:okeycard">okeycard</a>



### Why Blockchain?



2018-limited.rolex.aet 2019-limited.rolex.aet



2018-limited.louisvuitton.aet 2019-limited.louisvuitton.aet



- No manipulation of ItemRegistries
  - Not even the manufacturer can manipulate
- ItemRegistries can be limited
  - It is only possible to add items
  - Items can't be removed 0
- Transparent and Verifiable
  - Everyone could build a custom app to verify items through the blockchain
  - It's only needed to know the AENS domain of a certain registry



#### Why Aeternity?



#### **AENS**

### Access contracts through domain names

- 2019-limited.rolex.aet
- 2019-limited.louisvuitton.aet

# Generalized Accounts

Sign transactions using KeyCard (or other JavaCards) by using ECDSA based signatures instead of Ed25519



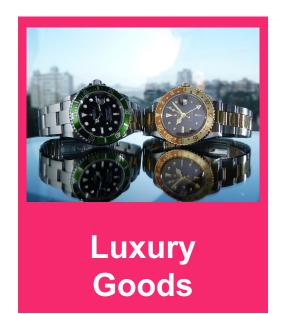
# Functional SmartContracts

Functional and secure SmartContracts with useful built-in functions like verification of ECDSA based signatures





### **Customer Segment**



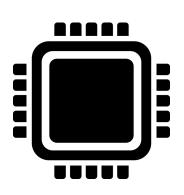


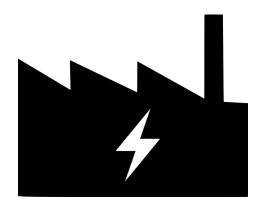


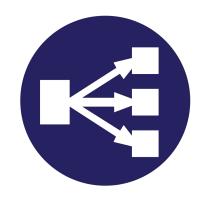




#### **Revenue Stream**







**Hardware** 

**Personalisation** 

**API Services** 



### Any questions? Contact us! :-)

- @kryptokrauts
- @marc0olo
- @nandanito
- @hayku06





## Make Brands Original Again!



