

# Identification vs Authentication

Jean-Yves Mathieu

10.05.2019



# Identification vs Authentication

- **Identification** is the ability to identify uniquely a user of a system or an application that is running in the system.
- **Authentication** is the ability to prove that a user or application is genuinely who that person or what that application claims to be.

# Something you have (biometric)





# Something you have (biometric)



# Something you have (biometric)



# Something about you – Fake!!

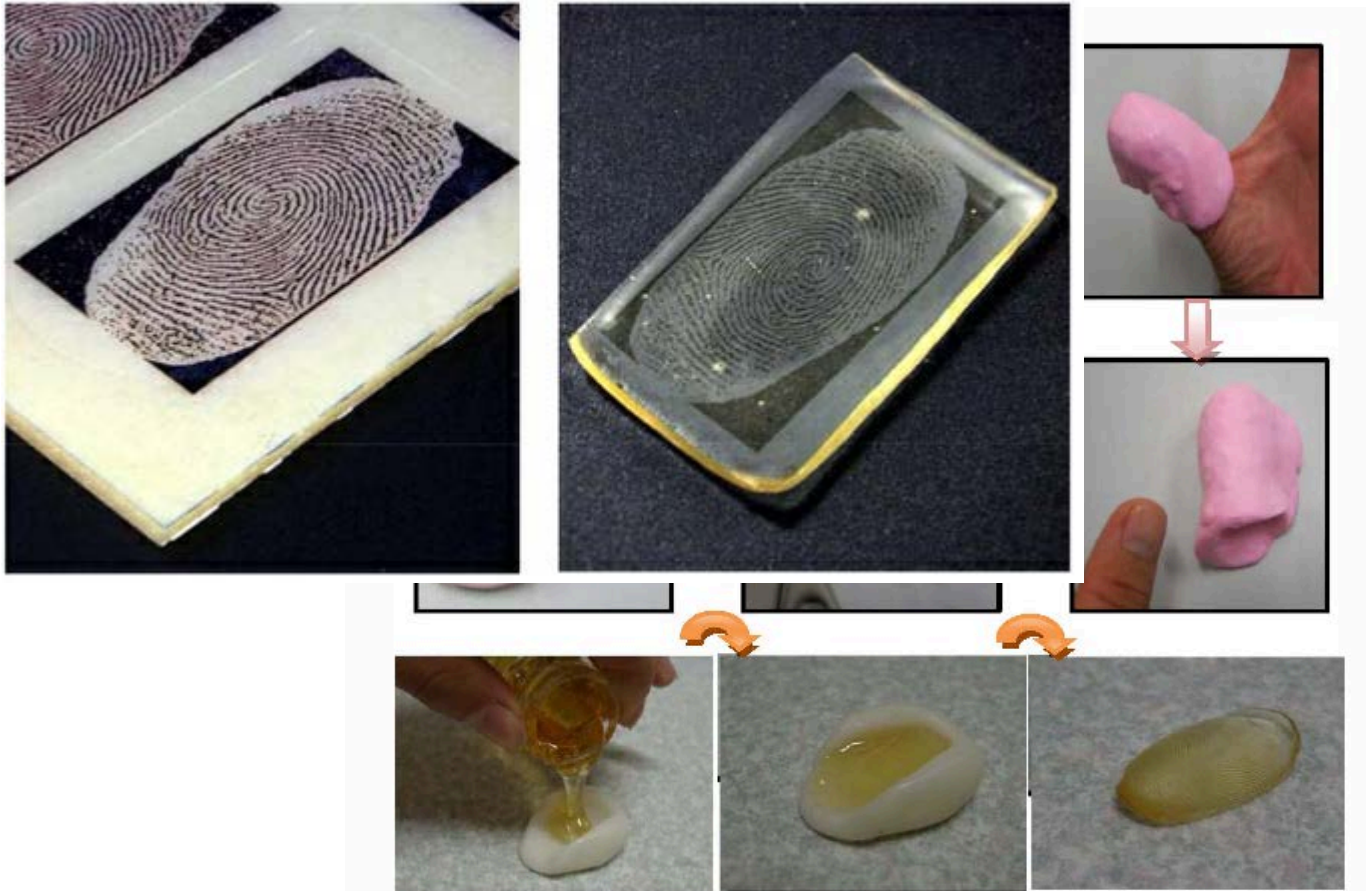


Fig. 12. Two examples of reproduction of used fingerprints with

# Identification

- Something you have
- Something you know





# Shoulder surfing





# The constraints of the Market

*Files*



*P.K.I.'s*



*Who*

*is?*

*A granted service justifies :*

⚠ *Central file*

⚠ *Only presumptions*

⚠ *limited liability*

⚠ *no autonomy*

⚠ *no original document*

# EIDAS

- To sum up



I'm a bit Me



I'm a little bit more Me



I'm almost Me

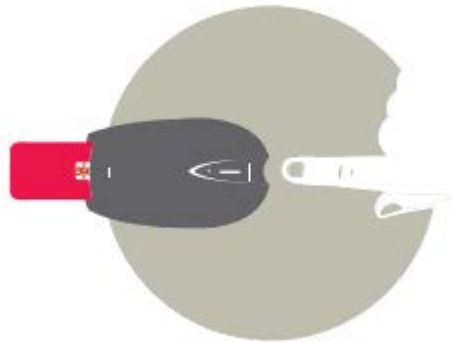
**Do you deal with someone  
you do not know?**

# How is it working?

Smart Card

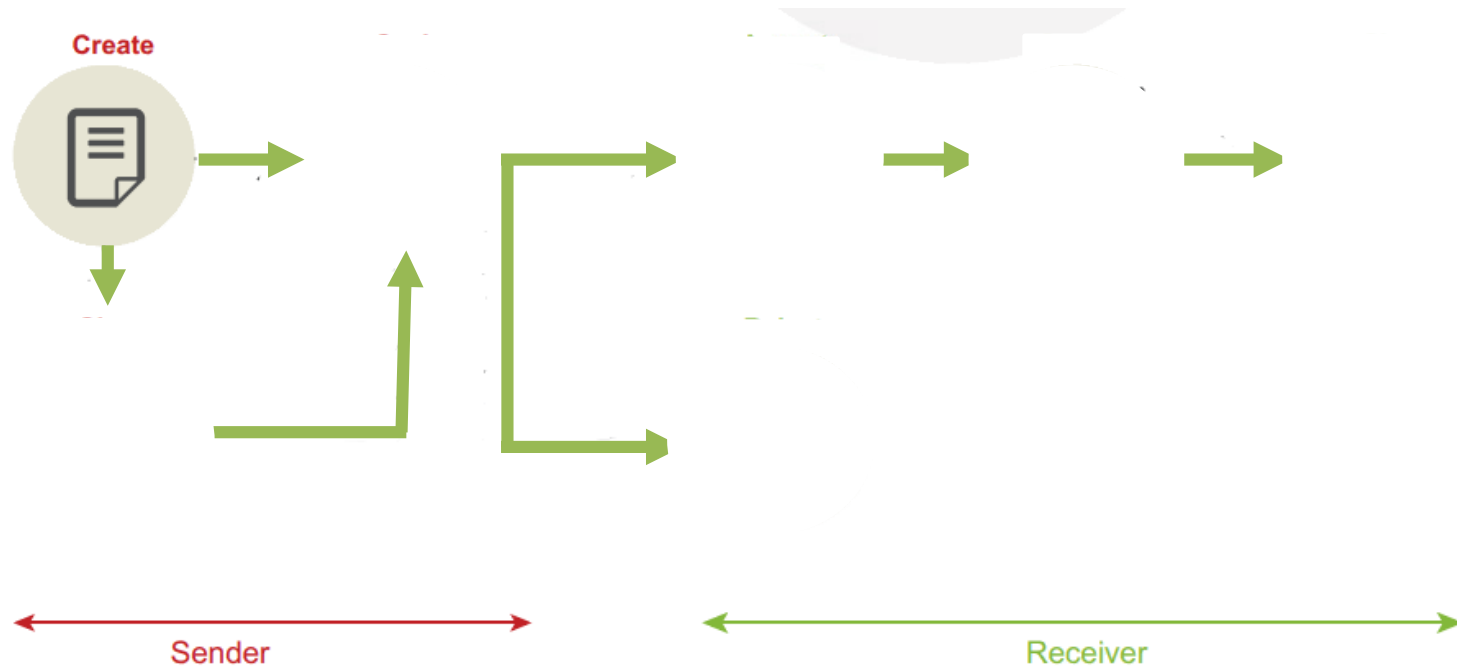


Woobe biometric  
identification



The user swipes his or her finger  
across the Woobe reader to  
generate a unique signature  
linked to a document

# How is it working?





# 4 steps

## 1. Identification

- Users log in by inserting their personal ID card into the Woobe ID reader and swiping a finger across the scanner.

## 2. Authorization

- Once inside the Woobe interface, users can select the documents they wish to access.

## 4 steps

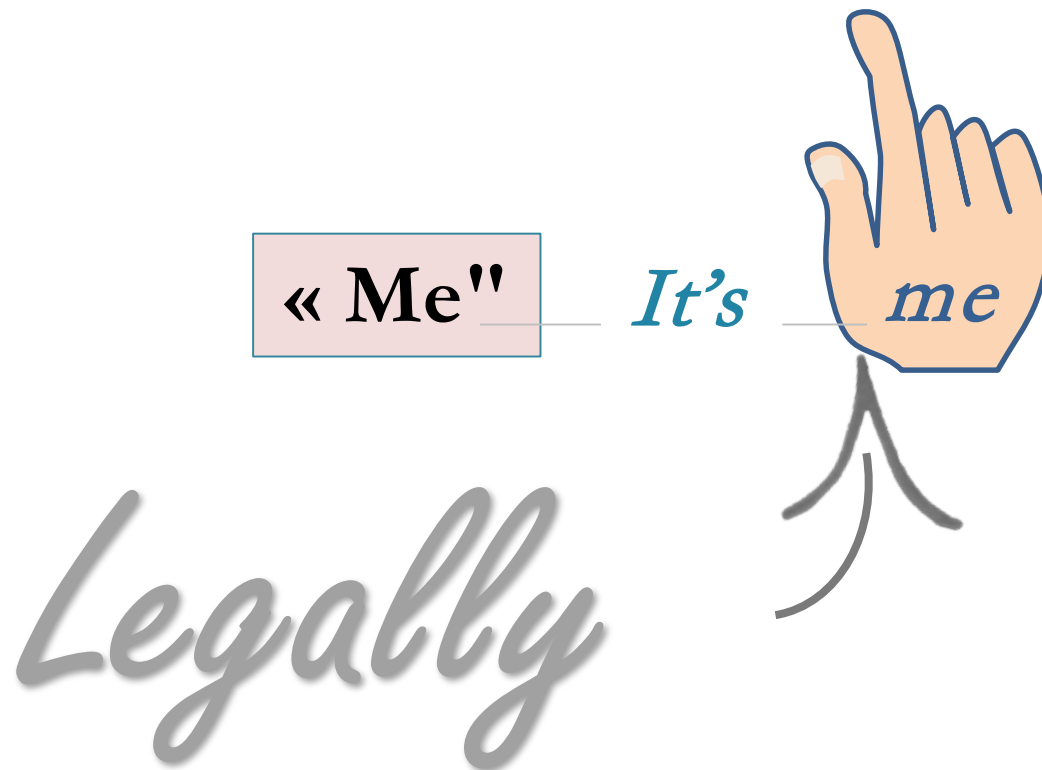
### **3. Action: sign, seal, deliver...and more**

- Users can create, seal, accept or refuse, open, sign and archive content in complete confidence.

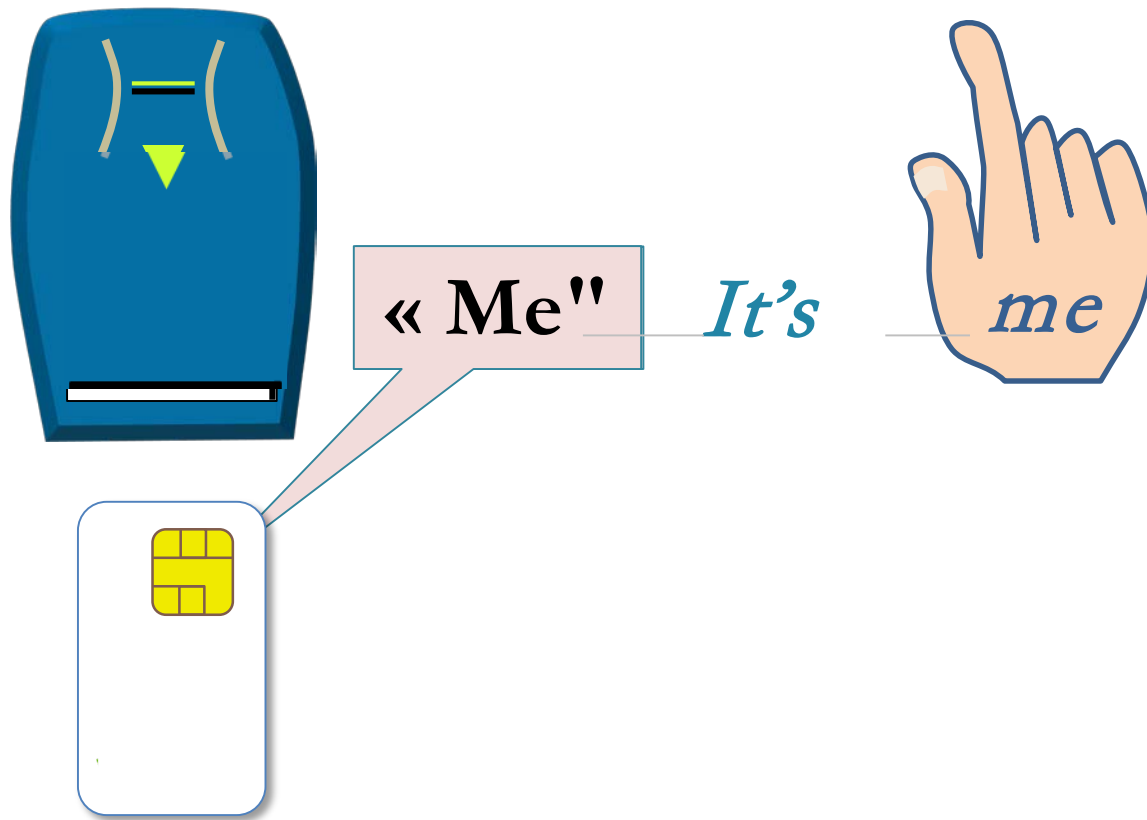
### **4. Tracking/legal proof (Optional)**

- Every transaction is authenticated and timestamped, providing accurate confirmation to users and, if necessary, the law.

# Authentication

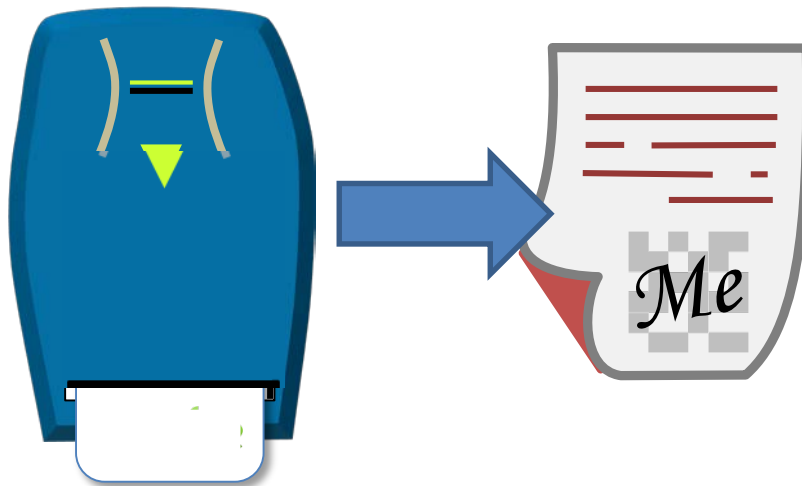


# The irrevocable digital identity



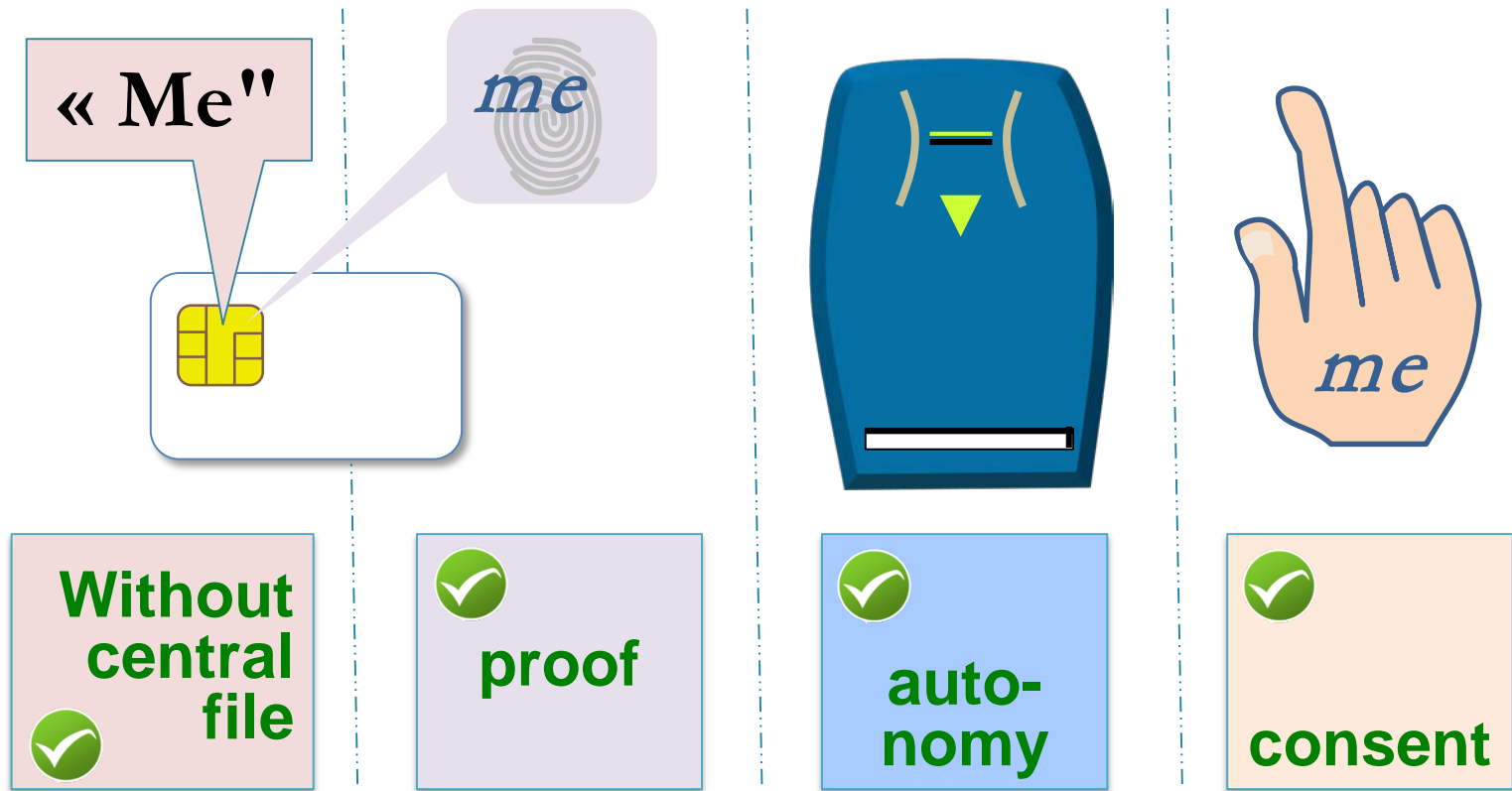


# A supranational electronic signature

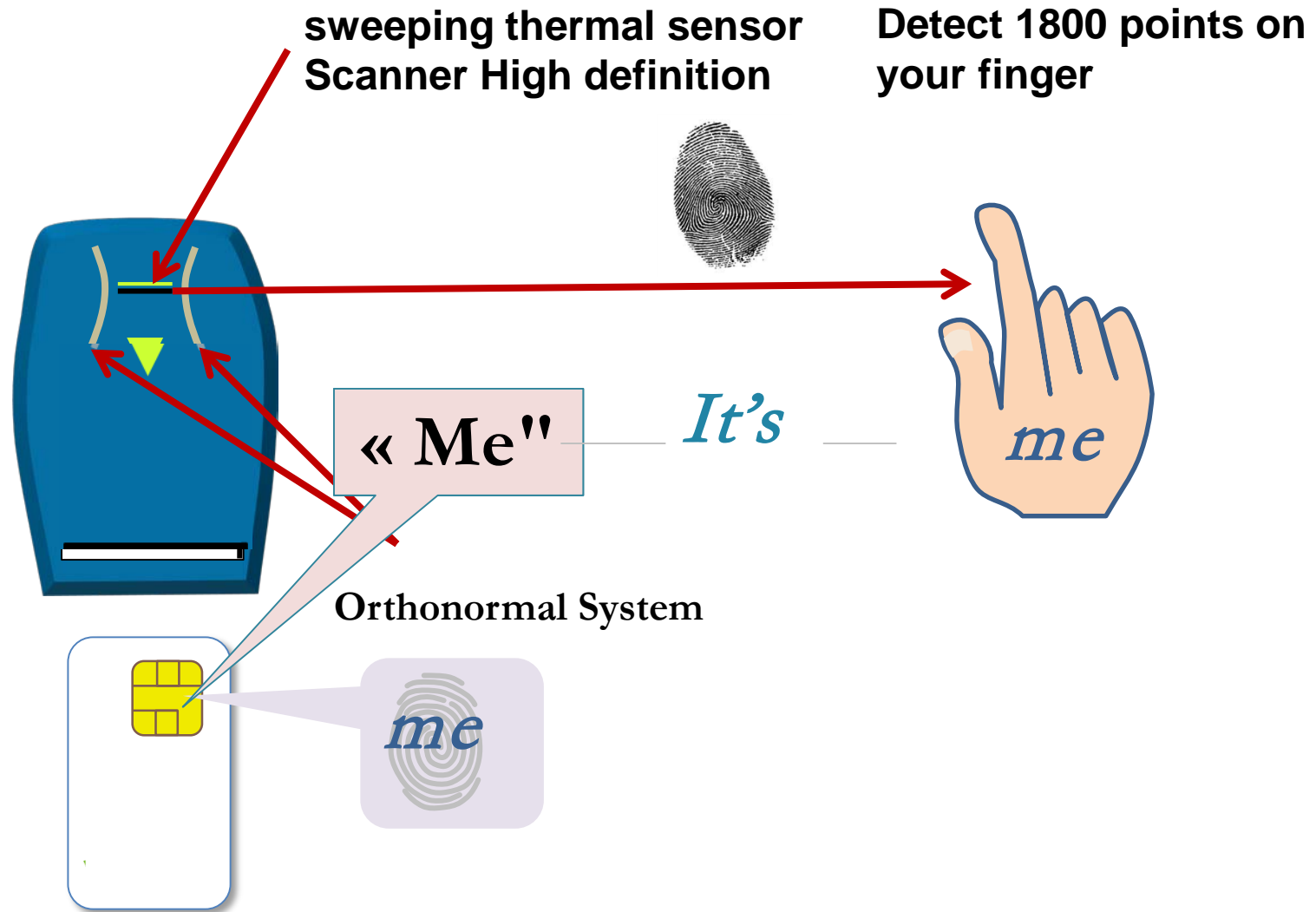


- ✓ Contractualisation
- ✓ Original Document
- ✓ be enforceable against third persons.

# Without central file of the personal data



# How is it working?



# Advantages

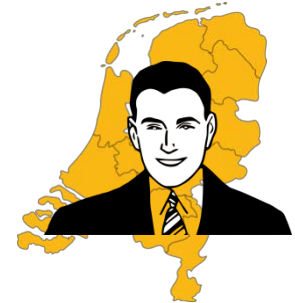
- One card
  - Multiple different identities
    - Health card (ie CNS)
    - National ID card
    - Employee ID card
    - Association ID card
    - .....



# Case study (Financial aspect)

- Contract signing with legal commitments in front of 185 countries
  - Original contract signed, sealed and encrypted
  - Size of this document (PDF/A) will not change anymore even if you access it in 10, 15 years or even more.

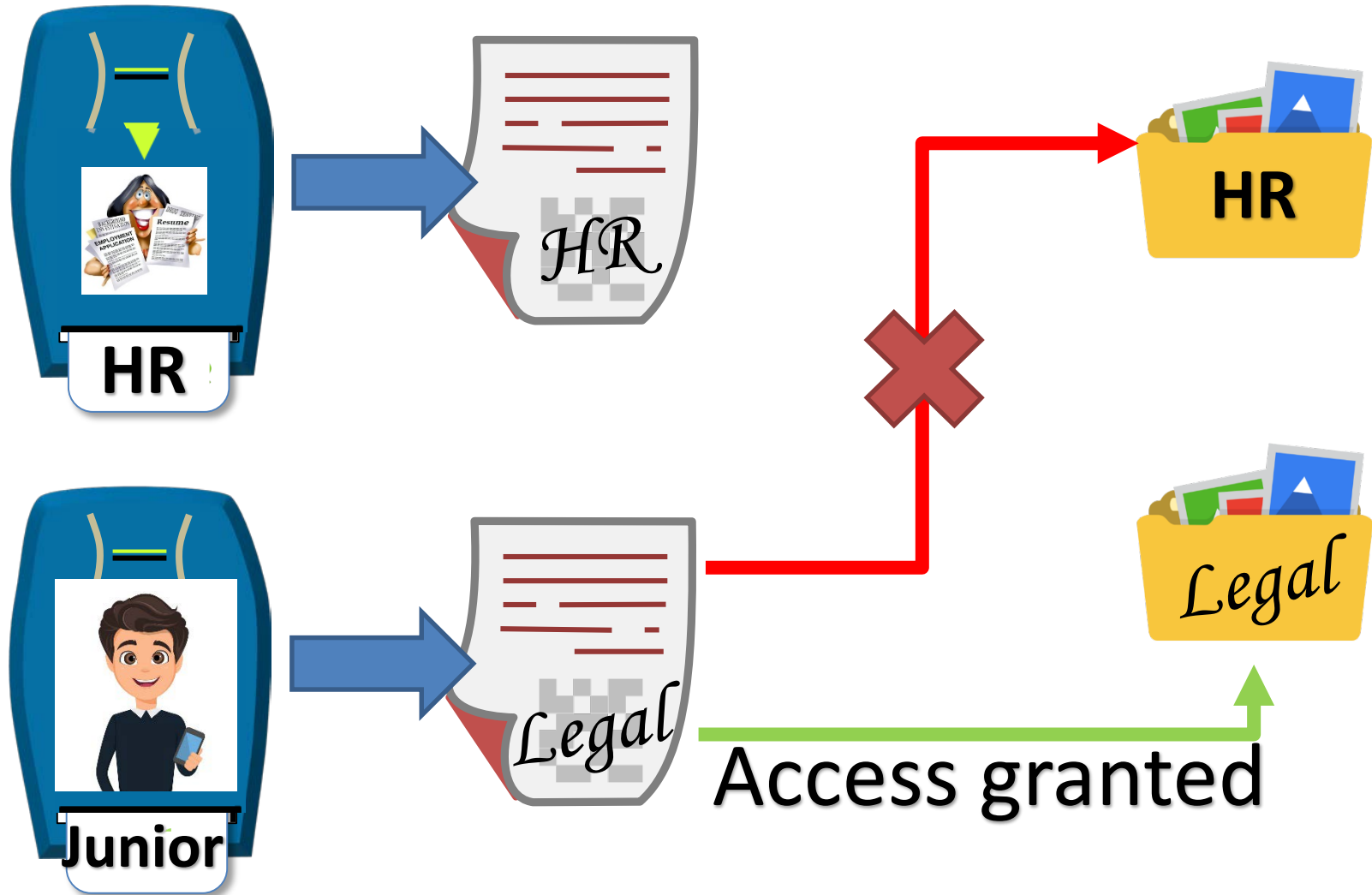
# Signing an agreement



## Board Meeting



# ACCESS RIGHT



# Case study (IT)

- Use of this card to
  - Access network of the bank
  - Access data on the company network
  - physical access badge (Garage, department, etc...)



# Conclusions

- Woobe raises data confidentiality, security and privacy to a new level by combining several layers of protection:
  1. At the user level,
    - By storing personal identification (fingerprint) data on cards.
    - Woobe “match-on-card” technology ensures complete data privacy for users.
  2. At the document level,
    - By encrypting content and restricting access to authorized, identified users through dynamic fingerprint matching,

# Conclusions

## 3. At the system level,

- By separating the document storage and working functions.

## 4. At the network level,

- By storing documents in the cloud on highly secure, redundant Woobe servers.

## 4. At the legal level,

- By identifying users and timestamping their actions at every critical step.

# Confidentiality, Security & Data Privacy

- Personal data privacy is not just a concern but a requirement.
- All personal data is stored on the card and can only be accessed by the only person it relates to: no one else can read or change the information on the card.

**THANK YOU**

