eID in Mobile Devices

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Campus Cards Today

- Many universities have physical cards

- The identity of the user is verified manually

- Lots of different system uses the card

- The card is in practice and id both within and outside the university

Lund University

- We have had a campus card since 2005
  - Identities are checked at the card office

- 10% less cards issued during autumn 2020
  - The university if officially open but online education is recommended

- Mobile credentials could be interesting
  - Most students would prefer mobile solution instead of a card
  - We probably still need a card
  - Would the benefit be greater than the work/cost?

The Future ?

- Issuing mobile credentials is the "easy" part

- There are security benefits
  - It's easier to update/revoke a mobile credential
  - People don't share their phone

- How about combability with existing systems
  - NFC/Host Card Emulation in mobile devices could be an option
  - Readers could support other technologies i.e. Bluetooth
  - Replace everything… probably not an option.

- How do we verify the identity?
  - Should we do the verification or who do we trust
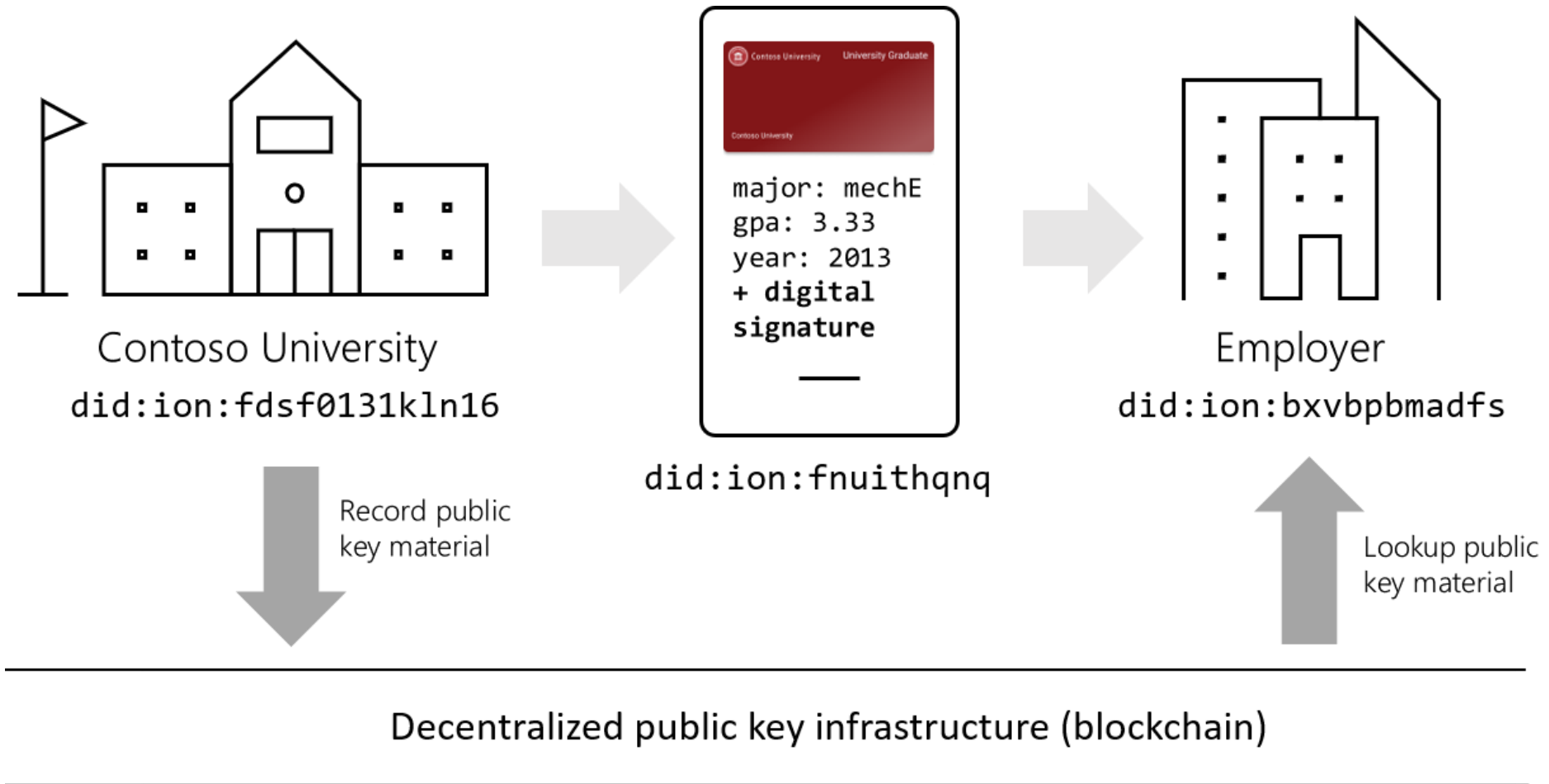
Card Technology and Combability

- What do we want

- What can our suppliers provide

- One app or many

- Vendor specific app(s) or integrated in a university app

- Only phone or should we support other devices (smart watches)

- The transition will take some time – start planning

Electronic Identities

- We could start using electronic identities today
  - Fully automated campus card issuing?
  - What do we want to check even if we trust the identity?

- In/from Sweden
  - BankID (https://www.bankid.com/en/), about 80% of the population
  - Freja eID (https://org.frejaeid.com/en/freja-eid-corporate/), connected to eIDAS
  - 365id (https://365id.com/chip-verification/?lang=en), verification of physical id

Microsoft Verifiable Credentials

Contoso University
did:ion:fdsf0131kln16

Record public key material

major: mechE
gpa: 3.33
year: 2013
+ digital signature

did:ion:fnuithqnq

Employer
did:ion:bxvbpbmadfs

Lookup public key material

Decentralized public key infrastructure (blockchain)

http://aka.ms/didfordevs

Who do we trust / who trusts us

- Most solutions are based on a manual verification of a physical id at some stage

- We don't want to add information in our credentials that hasn't been verified

- We don't want to add information to the wrong identity

- Don't forget about GDPR

Questions ?