Cloud challenges to high-demanding privacy scenarios
Nicolas Notario, Atos - WITDOM

Networking Session:
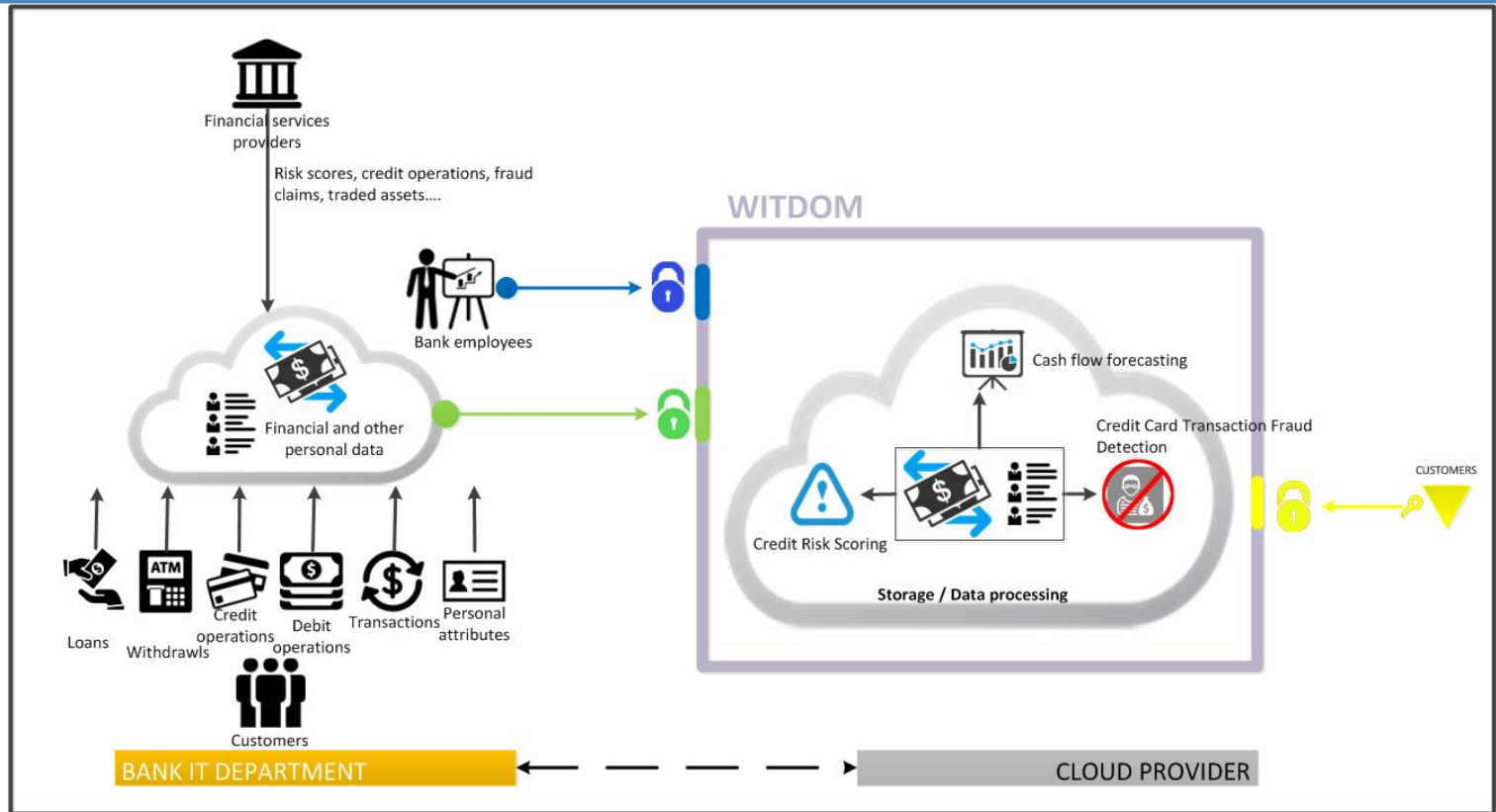*"Key challenges in end-to-end privacy/security in untrusted environments".*
Cluster: Security and Trust. *ICT 2015 -* **Innovate, Connect, Transform**
October 22nd 2015. Lisbon, Portugal

With the support of:

Challenge – Financial scenario

"Key challenges in end-to-end privacy/security in untrusted environments"
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Challenge – eHealth scenario
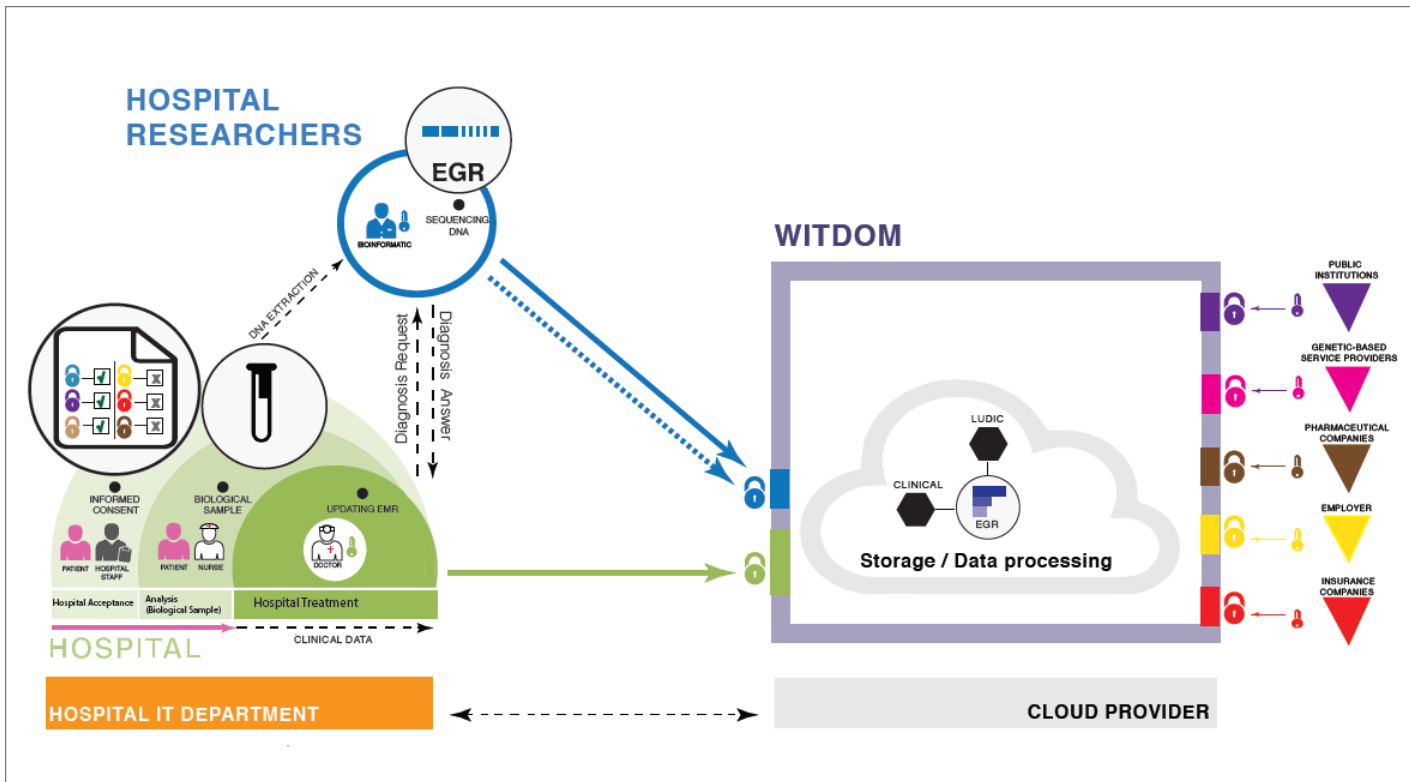
"Key challenges in end-to-end privacy/security in untrusted environments"
ICT 2015 - Innovate, Connect, Transform. October 22nd 2015.

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Expected Results

NO SILVER BULLET

"Key challenges in end-to-end privacy/security in untrusted environments"
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Expected Results

WITDOM Framework

- **Efficiency**
- **Utility of results**
- **Level of privacy**

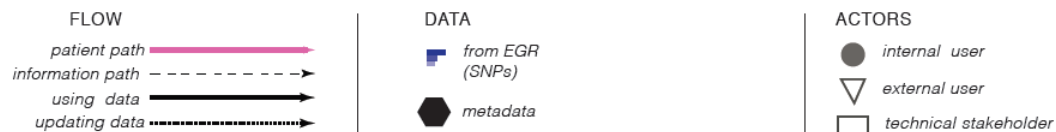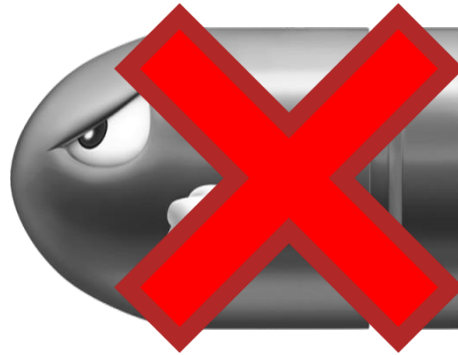## Privacy metrics

"Key challenges in end-to-end privacy/security in untrusted environments"
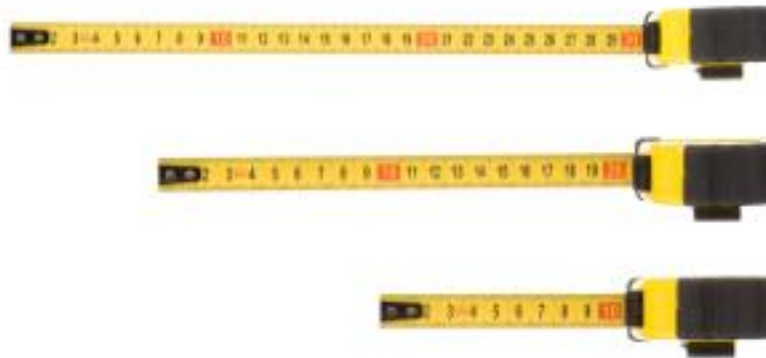ICT 2015 - Innovate, Connect, Transform. October 22nd 2015.

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Expected Results

Privacy Enhancing Techniques

Cryptographic Secure Processing

Verifiability
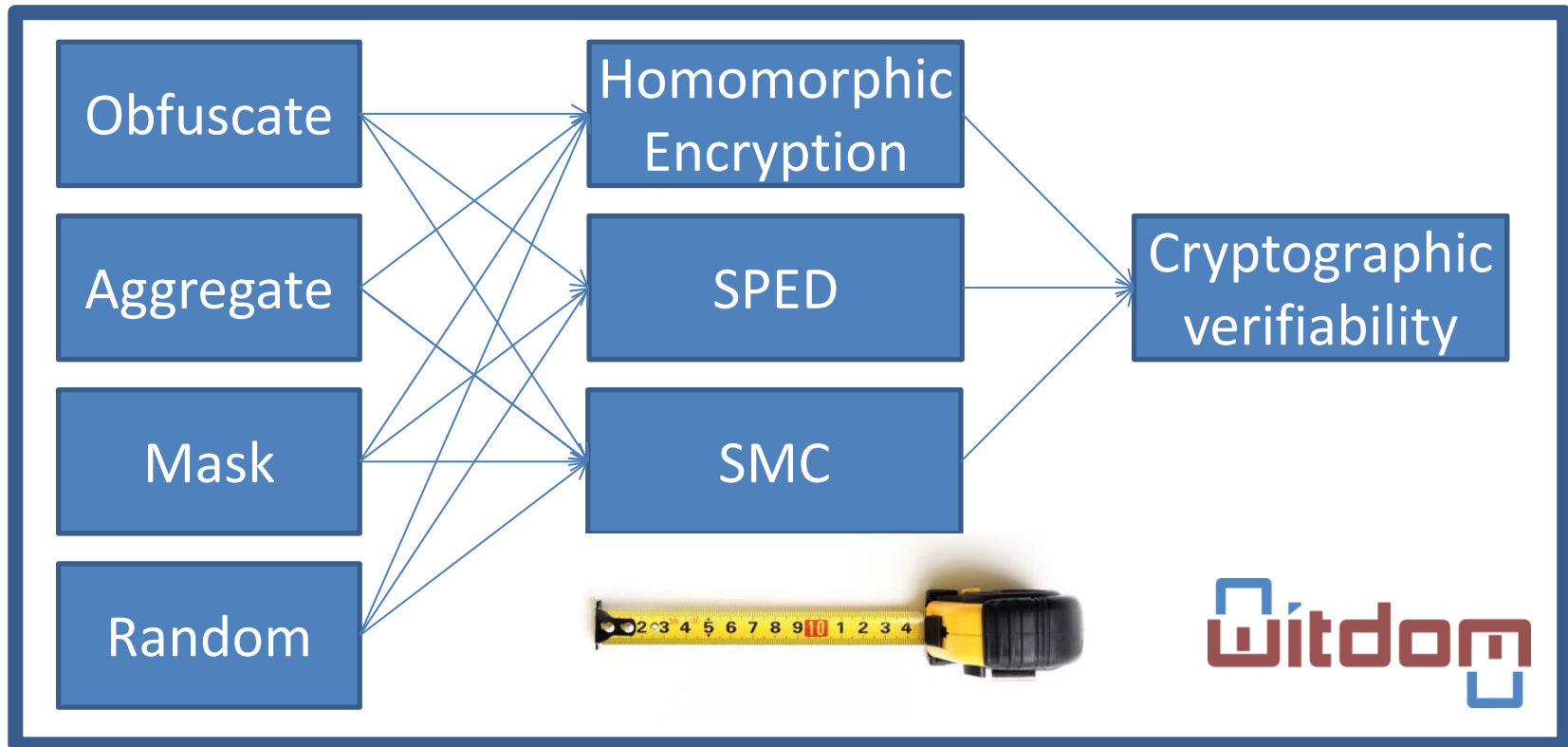
Obfuscate

Aggregate

Mask

Random

Homomorphic Encryption

SPED

SMC

Cryptographic verifiability

Ideas for the future

- **Generalization of the approach**
  - E.g.
    - ICT-18-2016: Big data PPP: privacy-preserving big data technologies
    - EUB-01-2017: Cloud Computing
    - DS-03-2016: Increasing digital security of health related data on a systemic level
- **Extend**
  - New algorithms, different approaches(e.g. ABAC)
- **Semi-automatic composer**
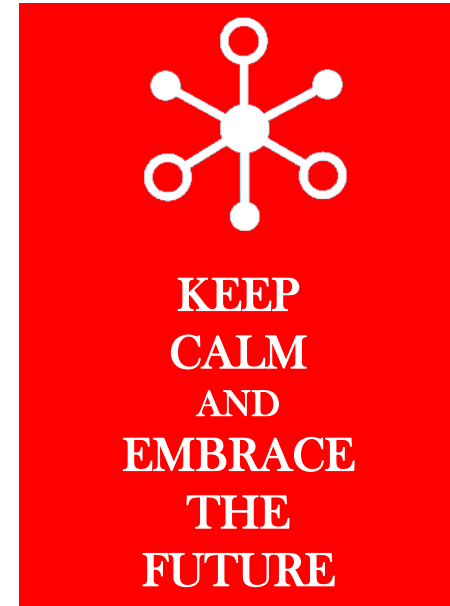 - E.g. Smart orchestration

KEEP CALM AND EMBRACE THE FUTURE

"Key challenges in end-to-end privacy/security in untrusted environments"
ICT 2015 - Innovate, Connect, Transform. October 22nd 2015.

Atos

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Thank you for you attention!

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