

# Identity crises – say what?



# Introduction

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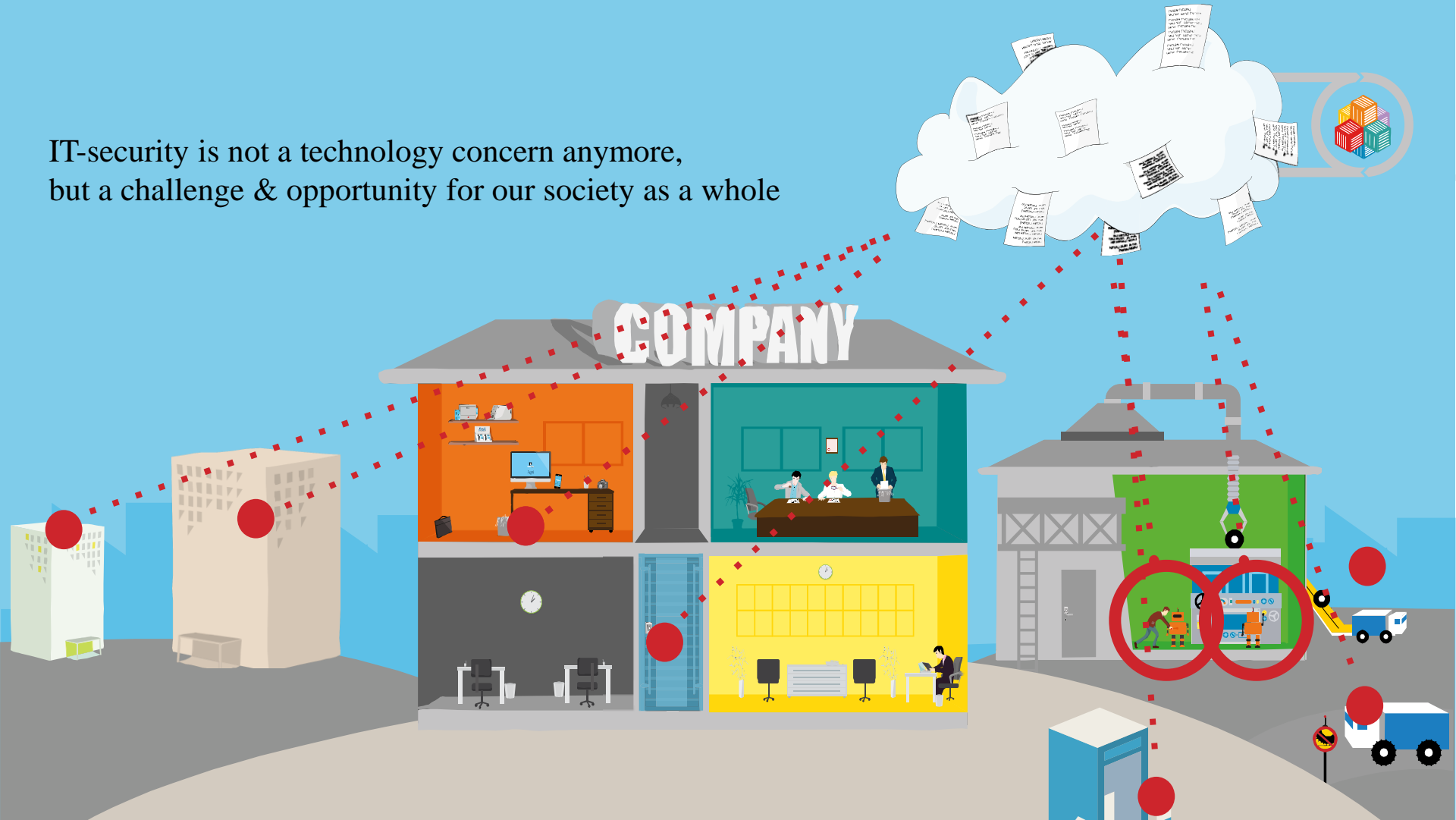
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# Introduction



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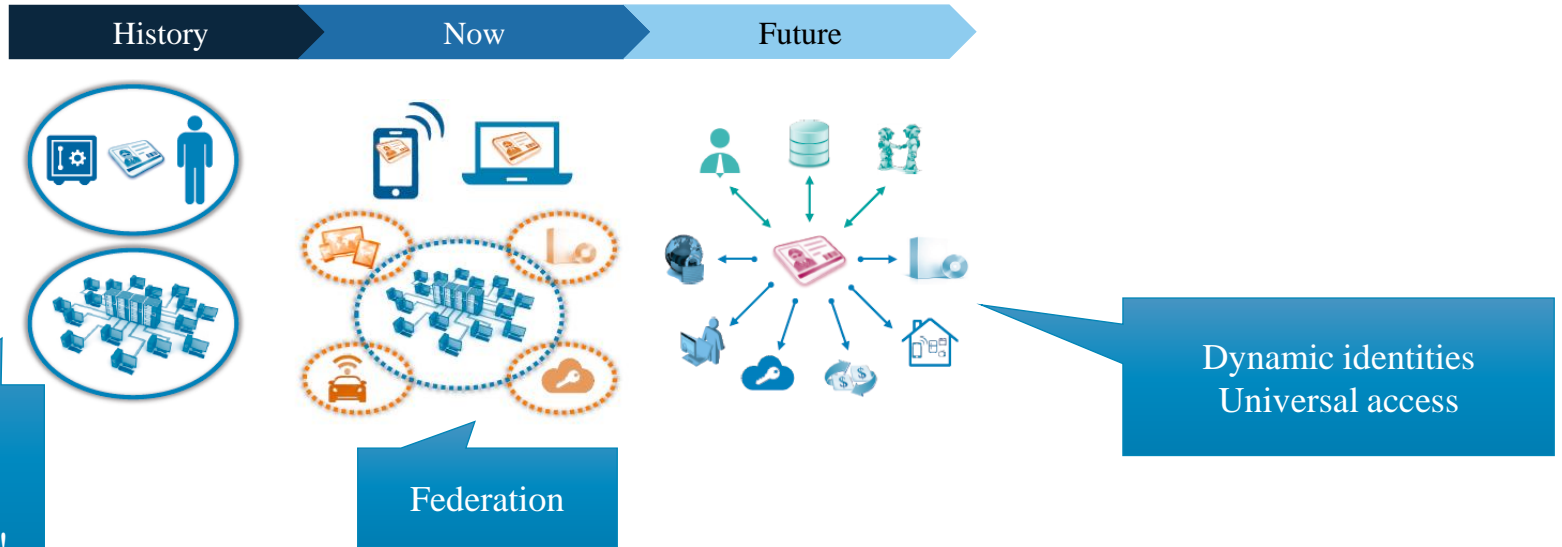
IT-security is not a technology concern anymore,  
but a challenge & opportunity for our society as a whole



# General trends

- ⦿ More systems, services and information become more available
- ⦿ Systems are getting more and more integrated
- ⦿ Traditional crimes are moving to the digital arena
- ⦿ Increased harmonization within the European Union

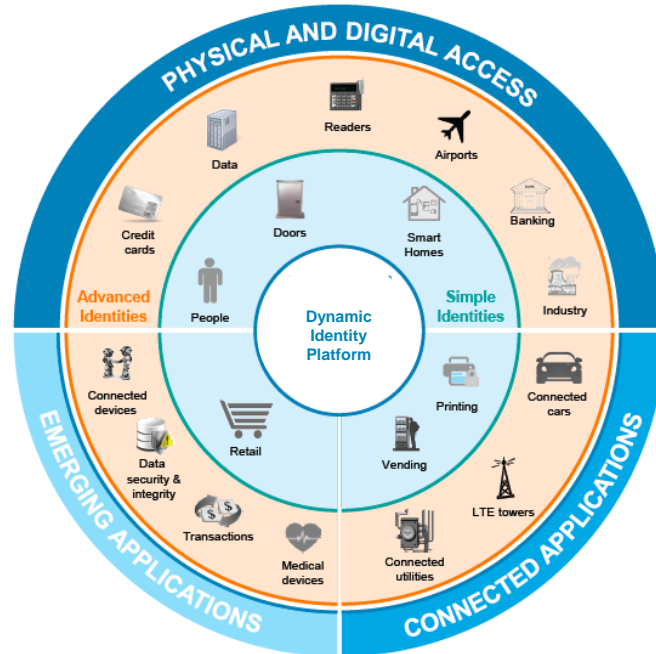
# The evolution of the identity challenge



# The identity challenge now

Formats	Carriers	Communication	Standards & Protocols	Security Algorithms
Hardware ID	Card	<b>Near Proximity</b>	<b>Federation</b>	<b>Encryption Algorithms</b>
Software ID	Smartphone	NFC	<b>Authentication &amp; Authorization</b>	<b>Symmetric Encryption</b>
OTP	Paper	Mifare	<b>Certificate / Key Management</b>	<b>Public Key / Asymmetric Encryption</b>
EID	Hardware Token	ICLASS	<b>Directories and Identity Management</b>	<b>TLS &amp; SSL Algorithms</b>
Password	Software Token	LEGIC	<b>Digital Signatures</b>	<b>Hash Algorithms</b>
Improved Password	Web Token	<i>and many more...</i>	<b>Transport Protocols</b>	AES, DES, 3DES, RC2
Challenge Response	Message Token	<b>Networks</b>	<b>Management</b>	Elliptic curve cryptography (ECC)
Behaviometrics	Smart Devices	3GPP	<b>Other</b>	RSA
Signatures	Biometrics	SMS	SAML 1.1, SAML 2.0	TLS_RSA_WITH_AES_256_SHA
Data Analytics		IPV4	LDAP/LDAPS	RIPEMD-160, SHA-1
Reputation-based Authentication		IPv6 / Glowpan*	XMLDSIG	<i>and many more...</i>
			<i>and many more...</i>	<i>and many more...</i>

# Case studies





# Case study #1: Identity for Users



- ⦿ Needs
  - Smart card (Photo ID, e-identification)
  - Lifecycle management
  - Different applications
  - Scalable solution & added functions over time
- ⦿ Solution
  - Integrated Card Management System (CMS)



# Case study #2: Identity of Things



- ⦿ Needs
  - Unique ID for all gateways
  - Lifecycle management
  - Mutual authentication
- ⦿ Solution
  - Certificate Service as a Managed Service

greenWAVE  
REALITY



# Case study #3: Identity for Software



- Needs
  - Patient Safety 24/7/365
  - High availability
  - Compliance
  - Life cycle management
- Solution
  - Whitelisting solution based on unique identity



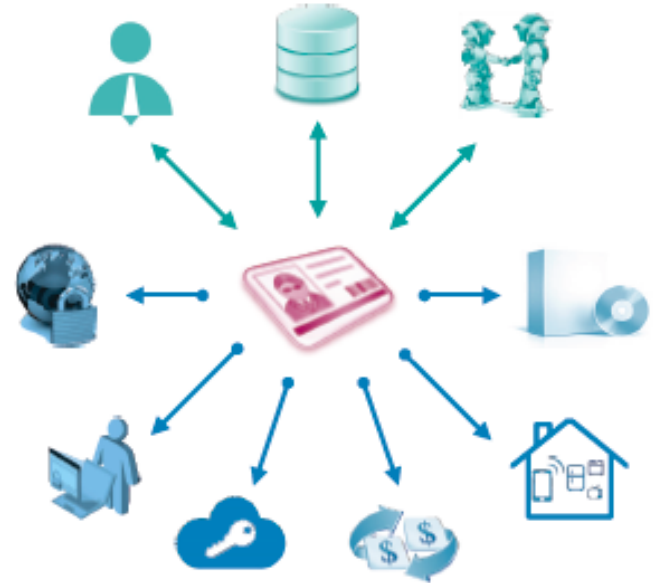
# User centric approach

- ◉ Reformation of the existing data protection legal framework in the European Union
- ◉ Right to protection and control of personal data
- ◉ More emphasis on privacy
- ◉ The “right to be forgotten”
- ◉ Easier for companies to comply with the new rules



# Summary

- ⦿ Everyone & everything will need an identity
- ⦿ Flexible & dynamic solutions to provide identities
- ⦿ Respect user's privacy
- ⦿ Protect personal data
- ⦿ Future is now!



# Q & A