

TeleTrusT-EBCA "PKI-Workshop"

Berlin, 26.06.2018

Trend zu Formfaktoren

**'sichere Verschlüsselungsträger' (Smartphone,
Smartcard-Leser etc.)"**

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QuoVadis Poster

Topic		Description
	DNA in PKI and digital identities	9 roots in 3 Data centre (Netherlands, Swiss, Bermuda)
	Top (best in class) accreditation	
	Ubiquity of trusted roots	
	History  	Founded 1999 – Cofounder of  CAB CA/BROWSER FORUM
	Portfolio	360° expertise in managed PKI and electronic signatures and IoT
	Stability	No incident during the last 18 years – 100% performance given
	Geography	Australia and New Zealand, Belgium, Bermuda, Germany, Netherlands, United Kingdom, Switzerland,
	Team Germany	German GmbH / First Line SLA / RA / Professional Service / German Law
	Growth and performance	Solid wealth and Swiss stock market noted (WIS@key)
	Top clients in fortune 500	Extract: ABN-Amro, Airbus, Allianz, Bosch, Commerzbank, Daimler, E.ON AG, Fiducia, Freistaat Bayern, S-Finanzgruppe, Siemens AG

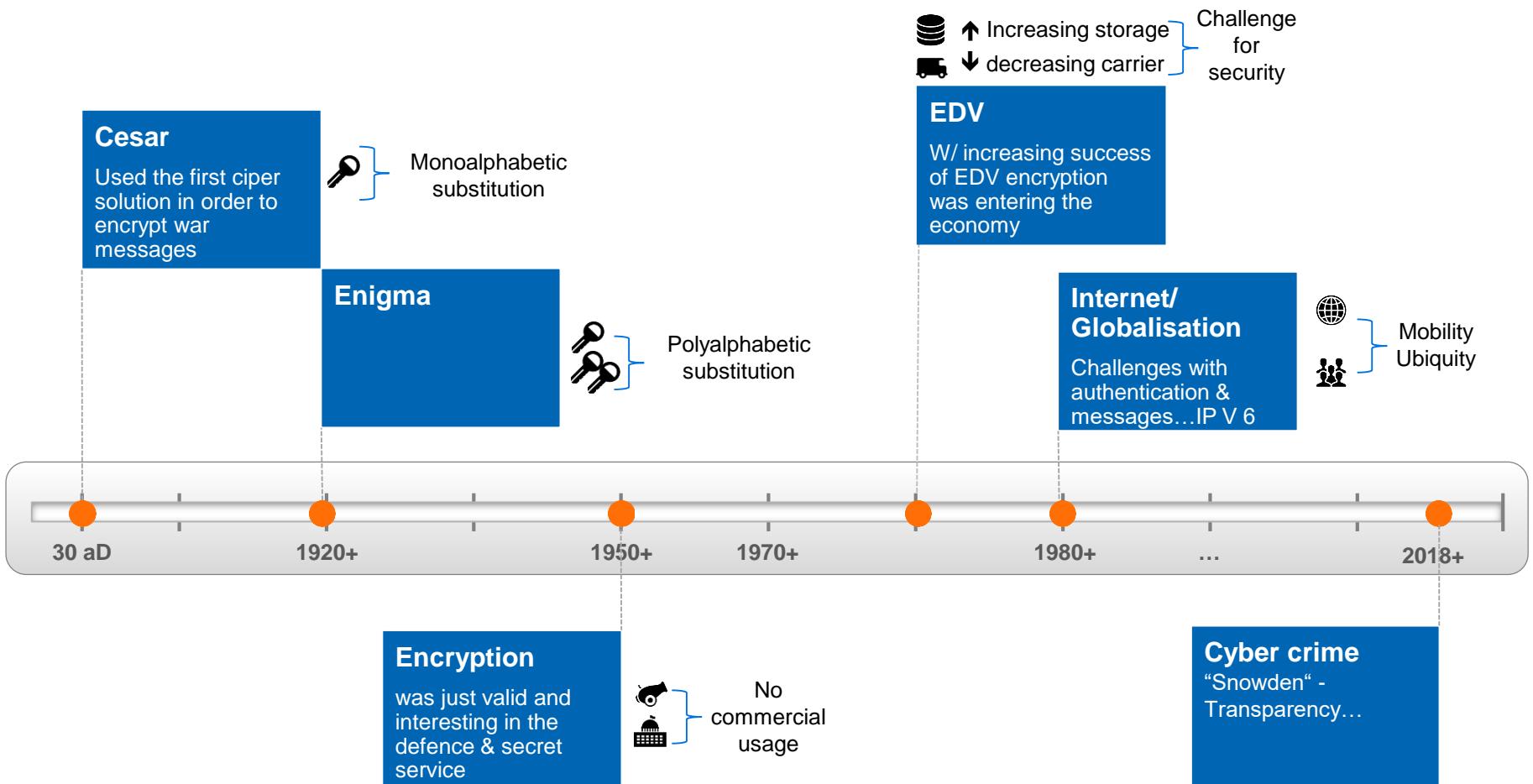
Agenda

Encryption history | Paradigmen & validation | outlook

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Encryption history



Agenda

Encryption history | **Paradigmen & validation** | outlook

Paradigm

Scenario?
Use case?

Hardware

- USB-Token
- Smartcard
- OTP-Token
- Self encryption Drive SED
- Micro SD-Card
- Soft-Token
- Smart - app
- MS bit-Locker
- OTP-Token
- Operating system encryption

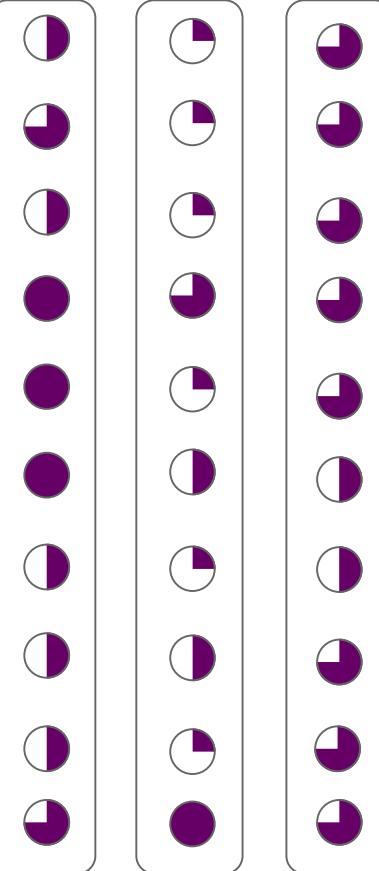
Software

1

2

3

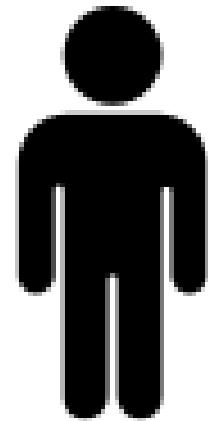
Costs Convenience Security



Managed PKI
(Cloud)
PKCS12

On site PKI

“biggest risk factor”



Requirement cube –where is the best fit?

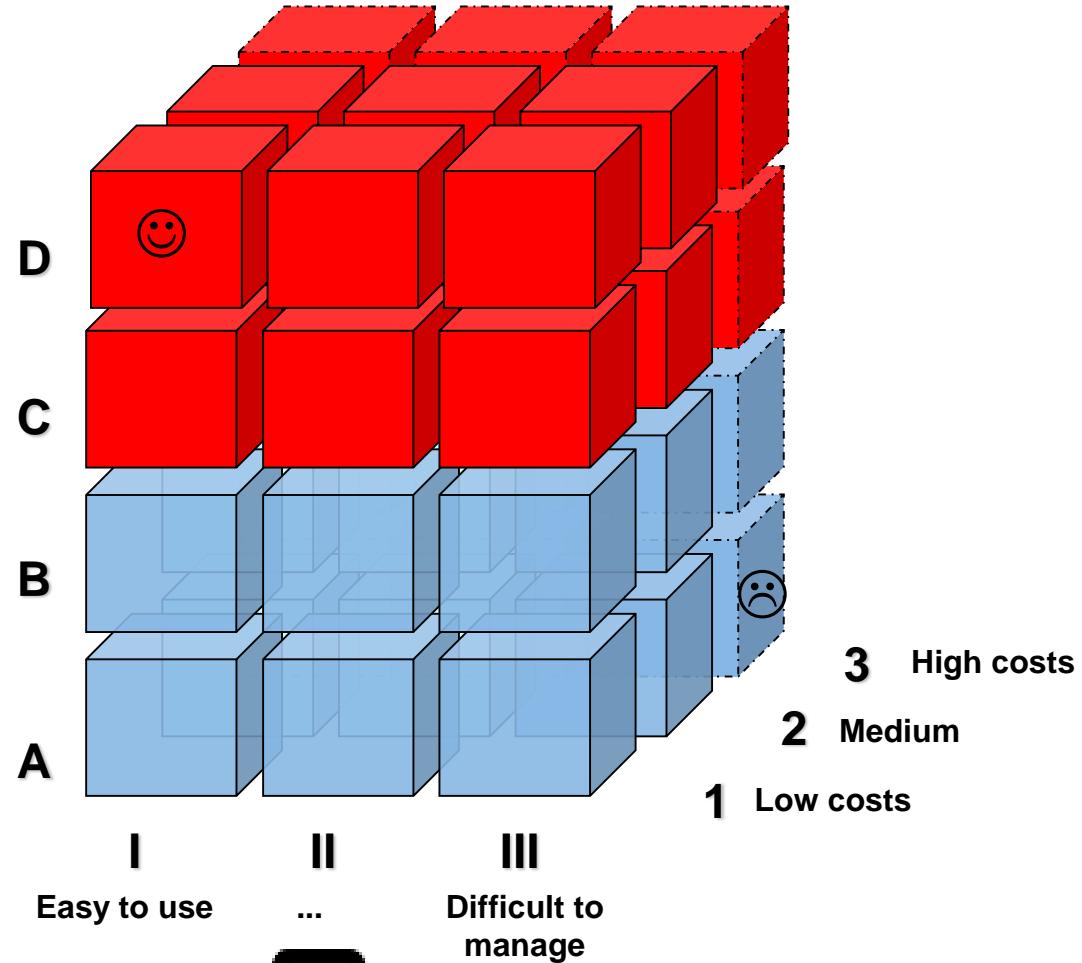


Best in class security

High level security

Standard security

Low security



Agenda

Encryption history | Paradigmen & validation | **outlook**

Trends

	Description	Trends
DNA Storage	<p>DNA digital data storage refers to any process to store digital data in the base sequence of DNA using commercially available oligonucleotide synthesis machines for storage and DNA sequencing machines for retrieval.</p>	
Quantum cryptography	<p>Quantum cryptography is the use of quantum mechanical effects (especially in quantum communication and quantum computers) as part of cryptographic methods or for cryptanalysis</p>	
Blockchain as PKI Platform	<p>IKP (Instant Karma PKI). This addresses the problem of possible misconduct of a certificate authority (CA) via blockchain. DPKI (Decentralized PKI). In this approach, control over the online identities is returned to the entities to which they belong. Support of detailed access data with a blockchain PKI. This revokes revoked certificates on the local copy of the blockchain</p>	

Workshop Outlook

- Let's share experience regarding the solution cube
- ...and distinguish in Scenarios

- Lets discuss some thesis
 1. Convenience beats security – Automation as key
 1. Security beats pricing
 2. Hardware beats Software

