



ID4Africa 2018

E-voting: An analysis of scenarios and preconditions of success

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- 1 Infineon presentation
- 2 Definition of e-voting
- 3 Overview of technologies
- 4 Benefits and limitations of e-voting
- 5 Framework: legal, cultural and technical
- 6 E-voting as an application of an eID card
- 7 Wrap-up

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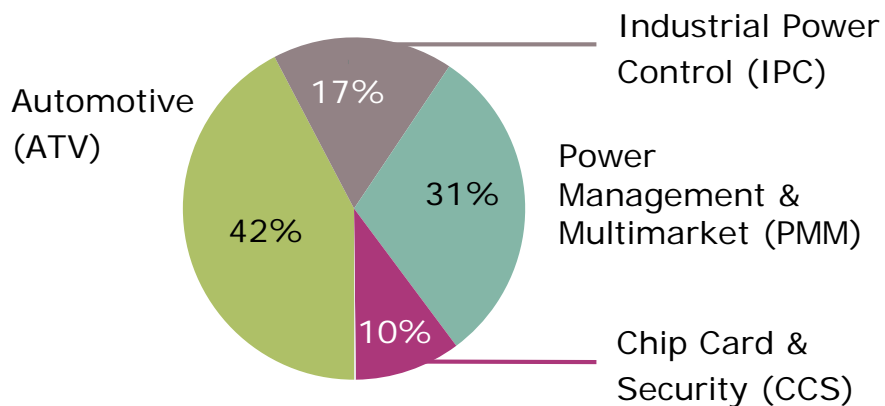
E-voting as an application of an eID card

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Wrap-up

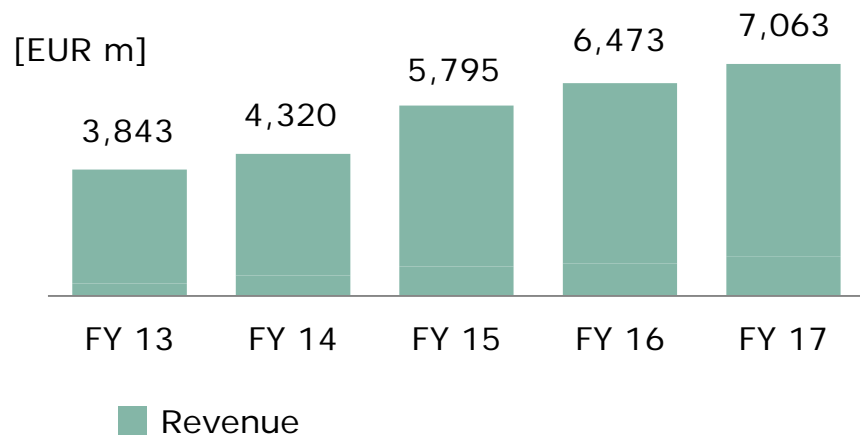
Infineon at a glance

Business Segments



Revenue FY 2017

Financials



Employees

Around **37,500** employees worldwide (as of Sept. 2017)



Market Position

Automotive



2

Strategy Analytics,
April 2017

Power



1

IHS Markit,
Technology Group,
August 2017

Smart card ICs



1

IHS Market,
Technology Group,
July 2017

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E-voting: what does it take?



Political elections using electronic means for

- › recording,
- › casting
- › and counting votes

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Some of the e-voting technologies

DRE touchscreen machines
(Philippines, USA, Venezuela)

Mobile Tablet (Kenya)

e-voting
technologies



Smartcard based (Estonia),
as one variant of Internet voting

E-voting booth
(Peru)

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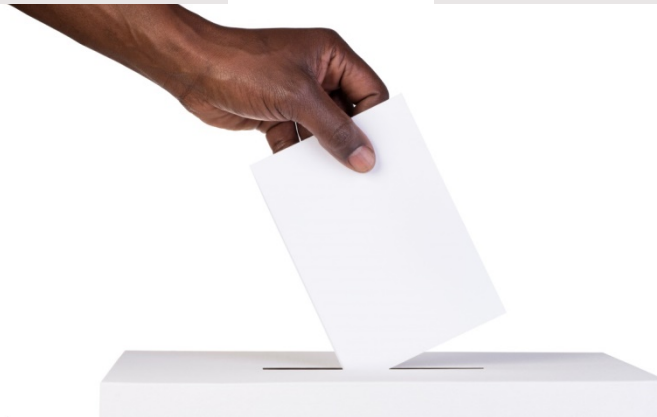
Benefits & limitations of e-voting

Benefits

- › 1 person = 1 vote
- › Difficulty of access / persons overseas / illiterate persons / language minorities
- › Potential cost savings, faster counting & results, less manual handling, reduced fraud
- › Opportunity for greenfield ID

Limitations

- › Lack of transparency / recounting
- › Potential loss of control
- › High investment costs
- › Lack of standards
- › High tech equipment



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Preconditions for success of e-voting

Cultural

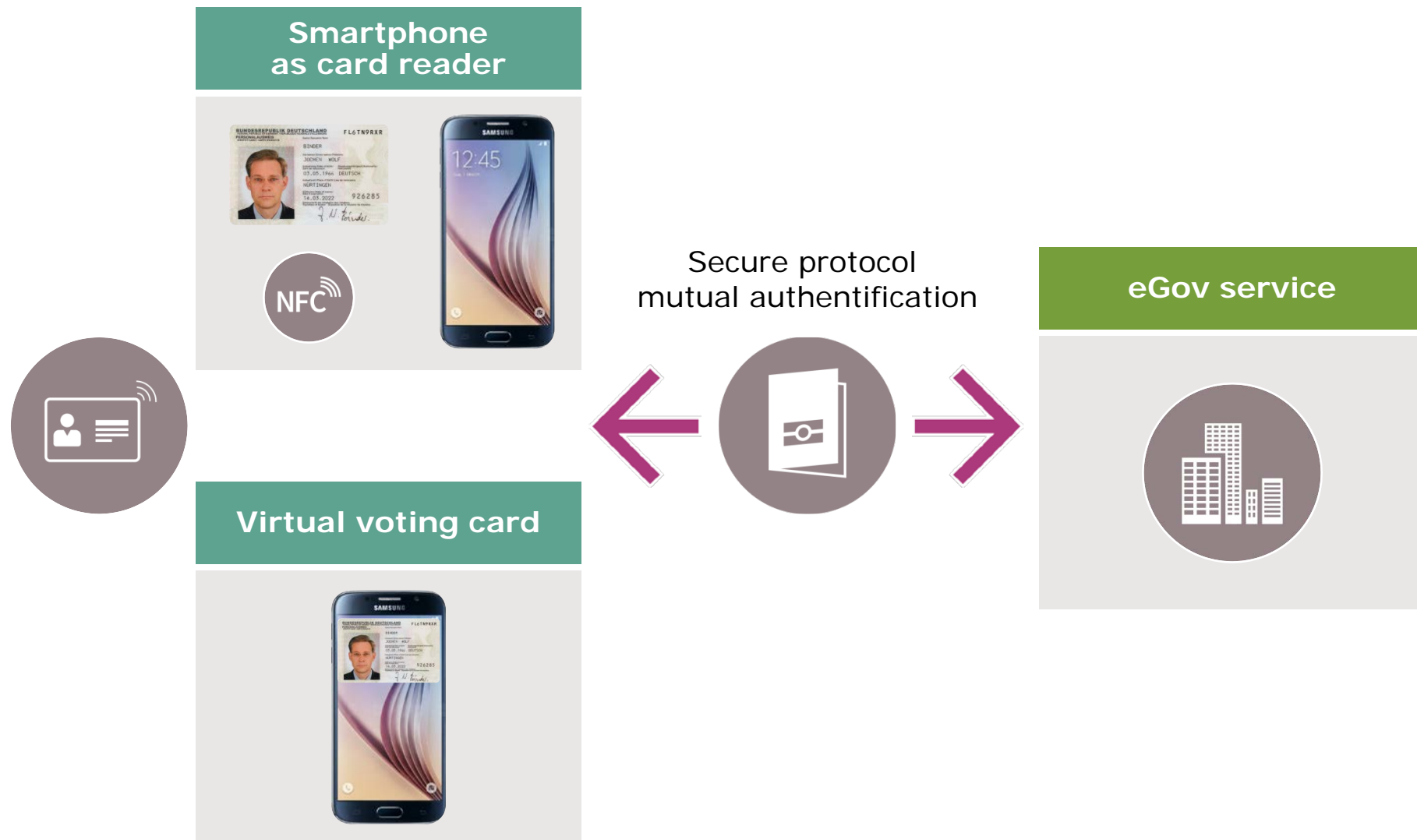
Legal &
institutional

Technical

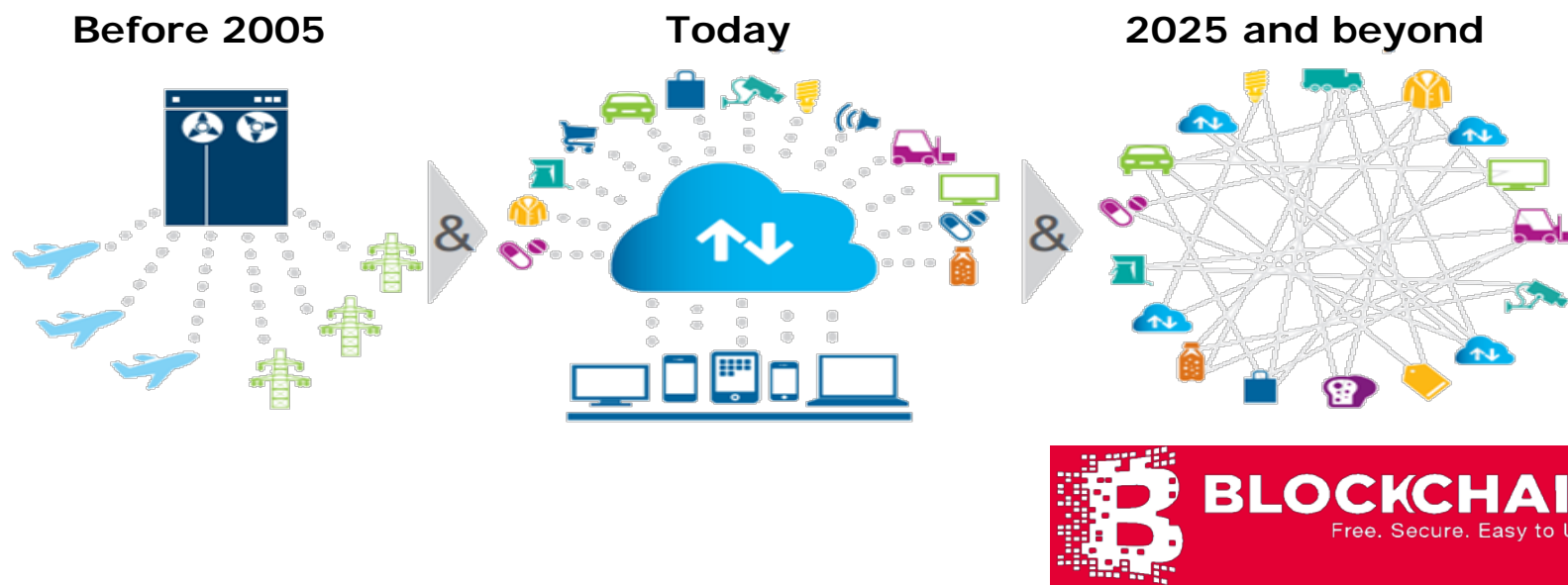
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E-voting using smartphones



Blockchain and trust in e-voting



The blockchain is a distributed database that maintains a continuously growing list of data records that are hardened against tampering and revision. Its most famous application – Bitcoin – is all about securely storing your personal signing (encryption) key.

E-voting system can and shall use some Blockchain-related features, as it will help solving issues of mistrust & untransparent aspects.

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Wrap-up

E-voting can be

TRANSPARENT

ACCURATE

FAST

INTUITIVE



However it will not work without careful planning and being embraced within a larger scope of national e-Gov governance.



Part of your life. Part of tomorrow.

