ID4Africa 2018
E-voting: An analysis of scenarios and preconditions of success

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April 25, 2018
## Agenda

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Infineon at a glance

Business Segments

- Automotive (ATV) 17%
- Industrial Power Control (IPC) 31%
- Power Management & Multimarket (PMM) 42%
- Chip Card & Security (CCS) 10%

Revenue FY 2017

Employees

- Around 37,500 employees worldwide (as of Sept. 2017)
- Europe 15,650 employees
- Americas 3,850 employees
- Asia/Pacific 18,000 employees
- 36 R&D locations
- 18 manufacturing locations

Financials

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<tr>
<th>[EUR m]</th>
<th>FY 13</th>
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<td>Revenue</td>
<td>3,843</td>
<td>4,320</td>
<td>5,795</td>
<td>6,473</td>
<td>7,063</td>
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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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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)

**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

Smartphone as card reader

Virtual voting card

Secure protocol mutual authentication

eGov service
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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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.