
 **Election Technologies**

Global long term perspectives and trends


Peter Wolf
International IDEA
IDEA/IOF/NE/RECEP Workshop on the use of New Voting Technologies
Praia, 22 November 2017

International IDEA


 **20+ years of "new" voting technology**


... 1997 2002 2007 2012 2017

International IDEA


 **Voting Machine Pioneers 1980s-1990s**

... 1997 2002 2007 2012 2017







International IDEA

 **VM investment boom after US 2000**

... 1997 2002 2007 2012 2017






International IDEA

INTERNATIONAL IDEA

Internet voting Estonia 2005

... 1997 2002 2007 2012 2017




International IDEA

This slide features a timeline with years 1997, 2002, 2007, 2012, and 2017. A yellow arrow points from a photograph of a person using a smart card and a scanner to the year 2007. The photograph shows a person's hands holding a smart card over a scanner, with a computer monitor in the background displaying a web interface.

INTERNATIONAL IDEA

The future is e-voting!

... 1997 2002 2007 2012 2017




International IDEA

This slide features a timeline with years 1997, 2002, 2007, 2012, and 2017. A yellow arrow points from the year 2007 to the right.

INTERNATIONAL IDEA

The future is e-voting?

... 1997 2002 2007 2012 2017



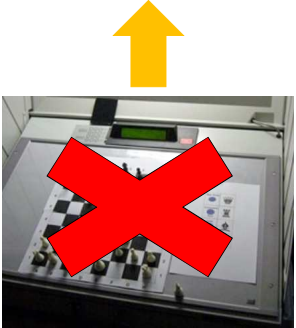
International IDEA

This slide features a timeline with years 1997, 2002, 2007, 2012, and 2017. A yellow arrow points from a photograph of a voting machine to the year 2007. The photograph shows a voting machine with a keypad and a display screen.

INTERNATIONAL IDEA

More critical view on e-voting

... 1997 2002 2007 2012 2017



International IDEA

This slide features a timeline with years 1997, 2002, 2007, 2012, and 2017. A yellow arrow points from a photograph of a voting machine to the year 2007. A large red 'X' is overlaid on the photograph, indicating a critical view on e-voting.

Voter registration, from OMR and Polaroid ...

... 1997 2002 2007 2012 2017

International IDEA

... to biometric VR field kits.

... 1997 2002 2007 2012 2017

International IDEA

Electronic Tally and Transmission

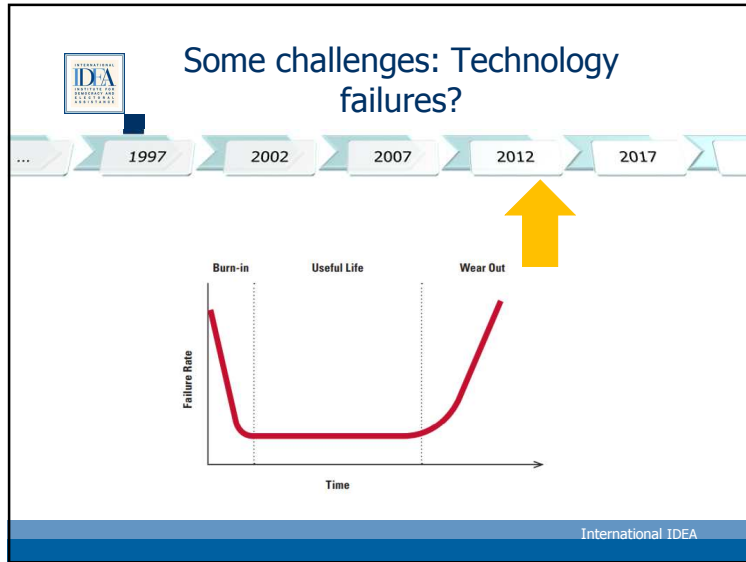
... 1997 2002 2007 2012 2017

International IDEA

Biometric Voter Identification

... 1997 2002 2007 2012 2017

International IDEA



Some challenges: Election and technology cycles?

Election year	1992	1996	2000	2004	2008	2012
Operating System						
Data Transfer						
Mobile Computers						
Biometrics Standard	1-1986	1-1993	1a-1997	1-2000	1-2007	1-2011

International IDEA

Cost & sustainability – The need for synergies

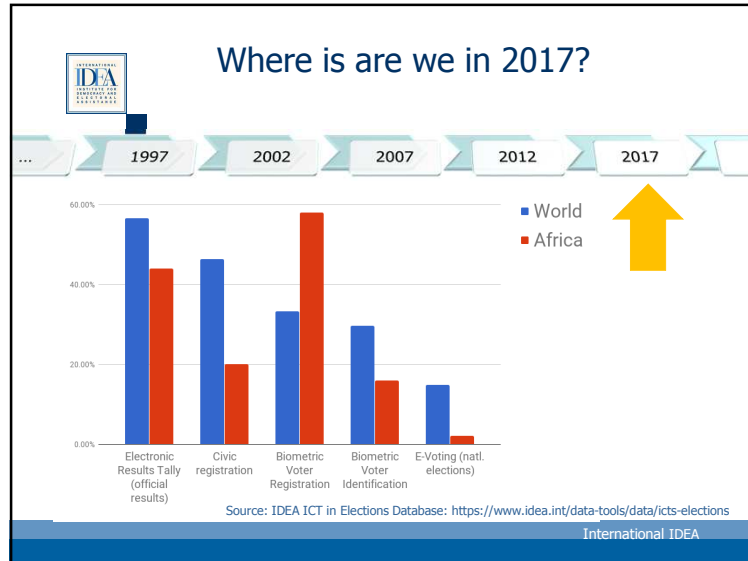
The collage includes: a tablet device, a red stamp that says 'CIVIL REGISTRATION', a blue 'SHARE' icon with arrows, and a document cover titled 'The Use of Open Source Technology in Elections'. A yellow arrow points to the year 2012 on the timeline above.

International IDEA

Another focus since 2016 Reality, Perception, Counter-Measures

The collage includes: a person at a computer workstation, a large 'HACKED' sign in a digital space, a sign that says 'US Election Databases HACKED!', and a person in a hoodie. A yellow arrow points to the year 2017 on the timeline above.

International IDEA



Beyond the stats: Taking stock

- What were the successes and achievements?
- What are remaining and new challenges?
- What solutions have been found?
- What is the future?

Beyond the stats: Taking stock

- What were the successes and achievements?
- What are remaining and new challenges?
- What solutions have been found?
- What is the future?

Thank You!