

Improving electoral engagement

The benefits of online voting

Mike Summers & Peter van der Veldt

4th September 2019





We are the world's **largest** provider of Election Technology and Services for Governments

We create Technology and Services to make governments more **secure**, **efficient** and **transparent**...

Global Presence



We serve our customers with a network of **15** offices, **+600** employees, and numerous business partners around the world



>3.7

billion votes recorded
and counted

+350,000

machines deployed

153,000

identity verification
device deployed

62,000

candidates elected

790,000

polling stations installed

100%

success



ELECTIONS PORTFOLIO



The Elections Company



The Elections Portfolio

Voter Management



Poll Worker Support



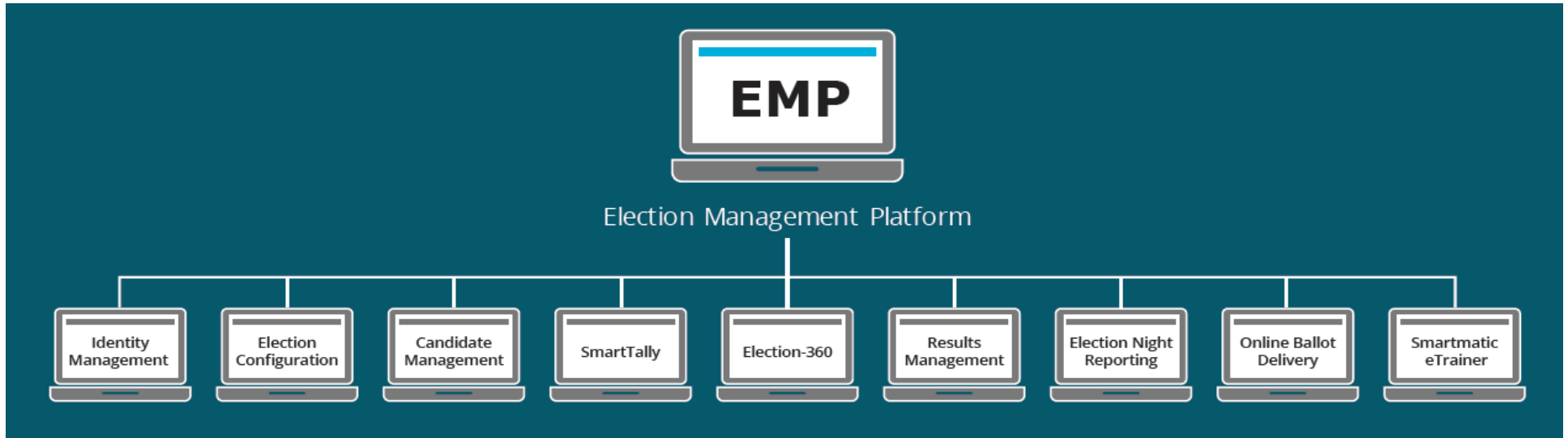
e-Voting & e-Counting



Manual Elections



Online Voting



Project Management & Services



Voter Management Solution an example



One Database – One Voter – One Vote

- Efficient voter registration for a complete and accurate **database**
- **Biographic** and **biometric** data capturing
- Document **digitalization**
- To confirm voter **eligibility** on Election Day



e-Voting solutions

Premium Voting Machine



BMD with optional tabulation with C&D printer, or DRE with VVPAT
17" touchscreen voting machine

VSAP for LA County



VSAP EBM

Classic Voting Machine



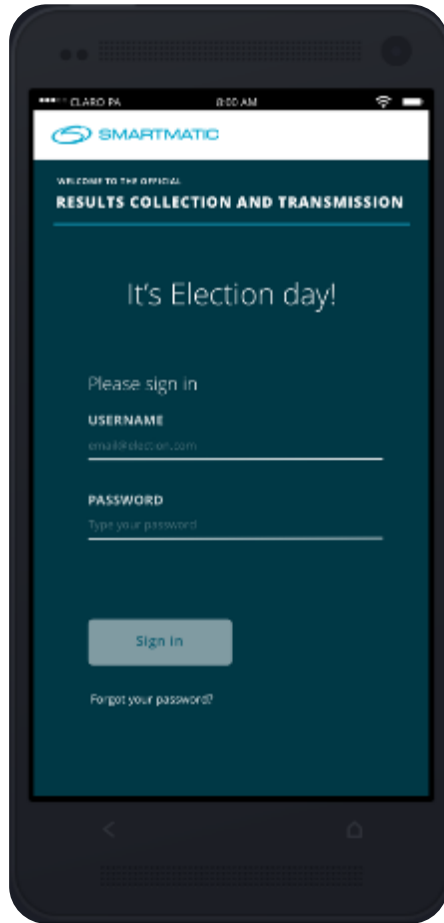
10" touchscreen voting machine
with Simple Cut or C&D printer



Project Management & Services



SmartTally Solution



Fast, trustworthy results processing for manual elections

SmartTally equips poll workers in polling stations and operators in consolidation centers with technology to securely and accurately collect, transmit, and consolidate paper tally reports and provide accurate results.



e-Counting solution

e-Counting



**Polling station
Scanner**



Central Scanners



Project Management & Services



Election Management Platform



Powerful Election Management Platform

Software to manage an election with the use of **one centralized** web-based platform, whether the election is automated or manual.

- Efficiently create elections;
- Manage important preparation milestones;
- Manage data & tools needed to prepare, and conduct an election.
- Count votes without e-Voting or e-Counting.

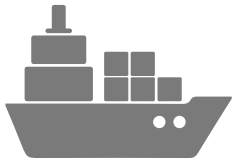


Smartmatic Services Portfolio

Procurement & Logistics



Equipment & Consumables Supply

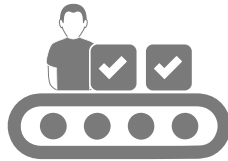


International Freight & Customs



In-Country Logistics

Warehouse & Logistics



Production Readiness

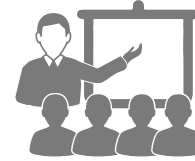


Warranty & Support



Ballot Printing

Service Delivery



Staff Training

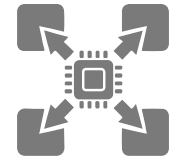


Technical Support & Field operations



Public Campaigns & Voter Education

Technology Deployment



Technology Deployment



Results Transmission



Tests & Audits



Project Management & Consulting



Online voting

Where we work



Estonia

The world leader in online voting



2014 - Present

- i-voting available to all voters
- **11** nationwide online elections
- **47.4%** of voters cast an i-vote (2019 EU)
- **5%** of i-voters vote from abroad
- World's longest standing online voting system
- **7** consecutive days of i-voting
- **1.3 million** voters

Finnmark, Norway

Facilitating voter participation through online voting



2018

- **85%** of all votes registered were cast online
- i-voting available to all voters of Finnmark
- **58,000** voters registered
- Running in **3** languages
- **8** consecutive days of i-voting (from May 7th up to May 14th)

Utah, USA

Results available 40 mins after polls closing



Utah Republican Party 2016 Preference Caucus
Online voting

2016

- Average voting time of **73 seconds**
- 89%** online turnout
- Voters from **45** different countries
- First use of **blockchain** in an online election

European Commission

Horizon 2020 PRIViLEDGE Project



European Commission

PRIViLEDGE

2018 - 2021

- EU funded research project undertaking research into the blockchain privacy and security

How it works



Online Voting

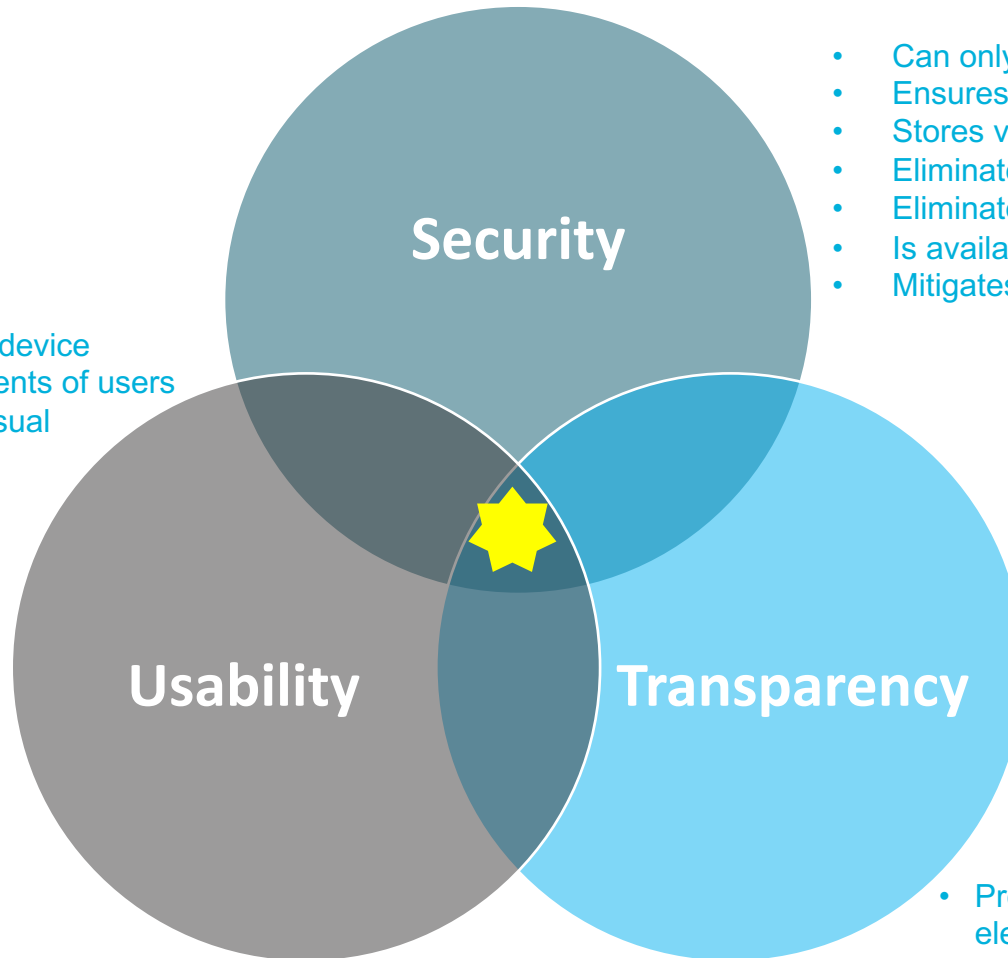
What is online voting?



- A platform to allow voters to cast their vote **remotely** using the internet using their own personal digital device:
- Computer
- Tablet
- Smartphone

Critical attributes

- Simple and intuitive
- Easy to use on any device
- Meets the requirements of users with physical and visual impairments

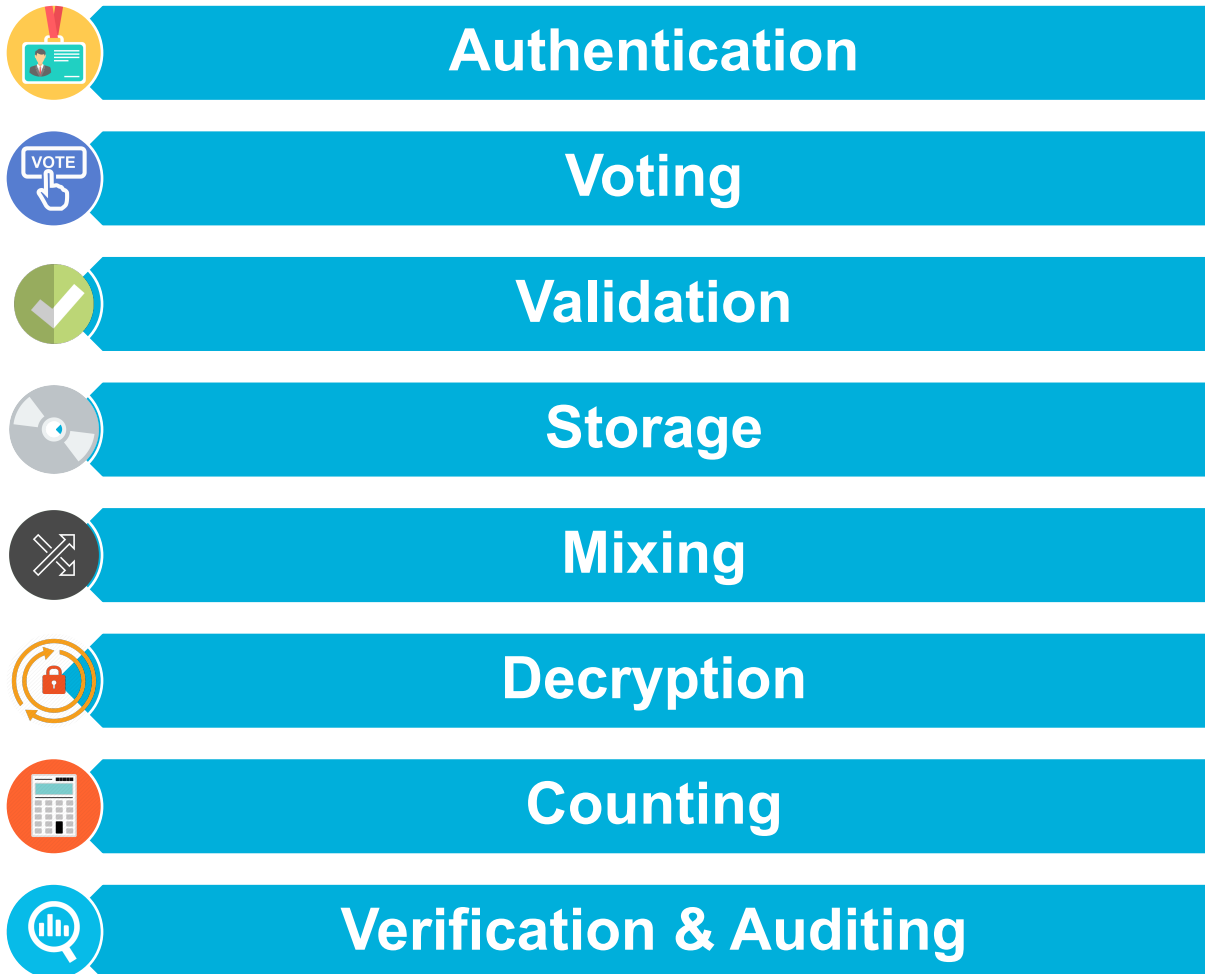


- Can only be used by eligible voters
- Ensures private /secret voting
- Stores votes in a tamperproof manner
- Eliminates the adding of bogus votes
- Eliminates the deletion of eligible voter
- Is available through the duration of the election
- Mitigates against leakage of intermediate results

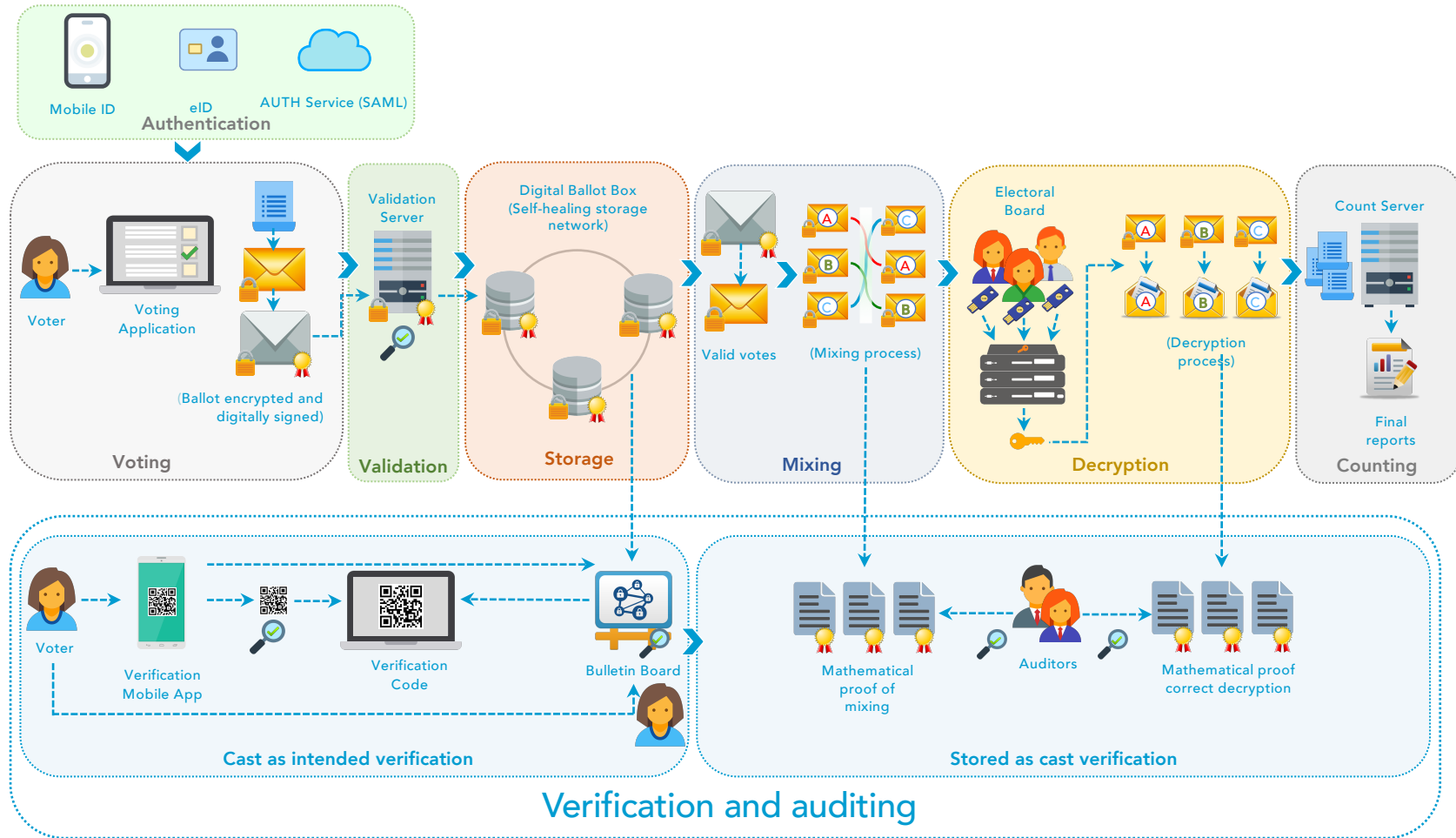
- Provides visibility of correctness of key election processes
- Allows independent auditing of technology
- Allows independent auditing of source code



How the system works - Processes steps



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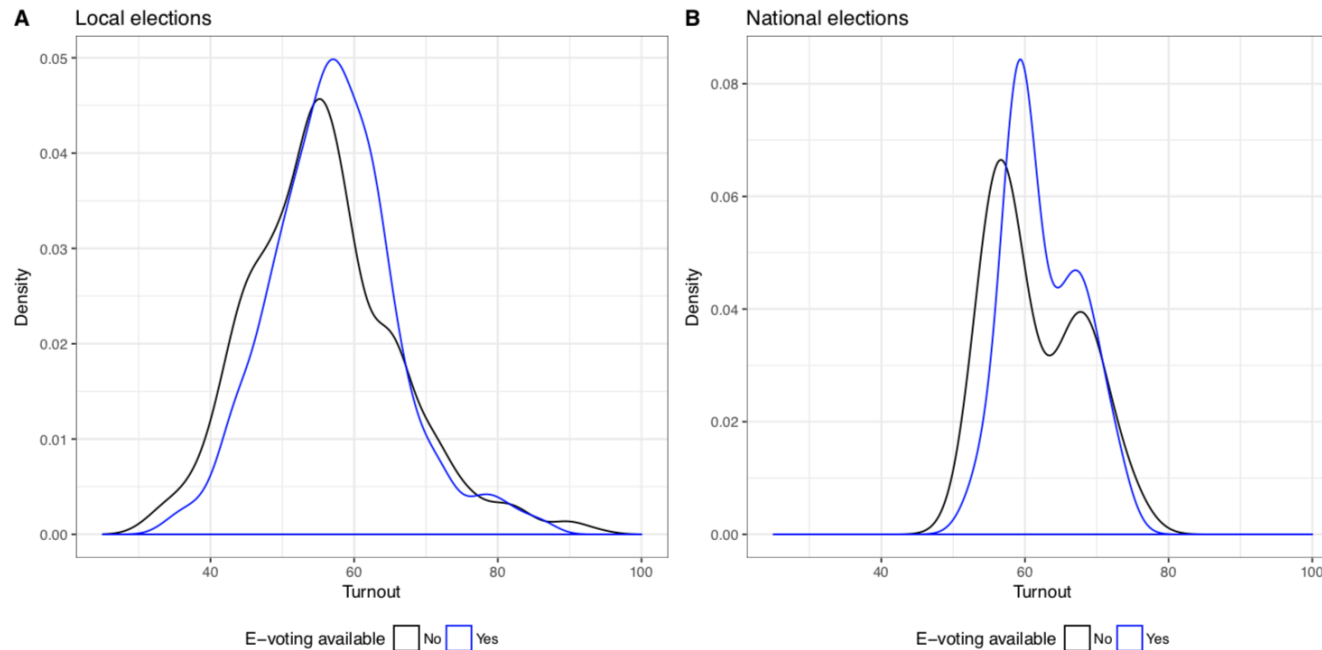


Online voting – The benefits

Empirical evidence from nine nationwide elections in Estonia

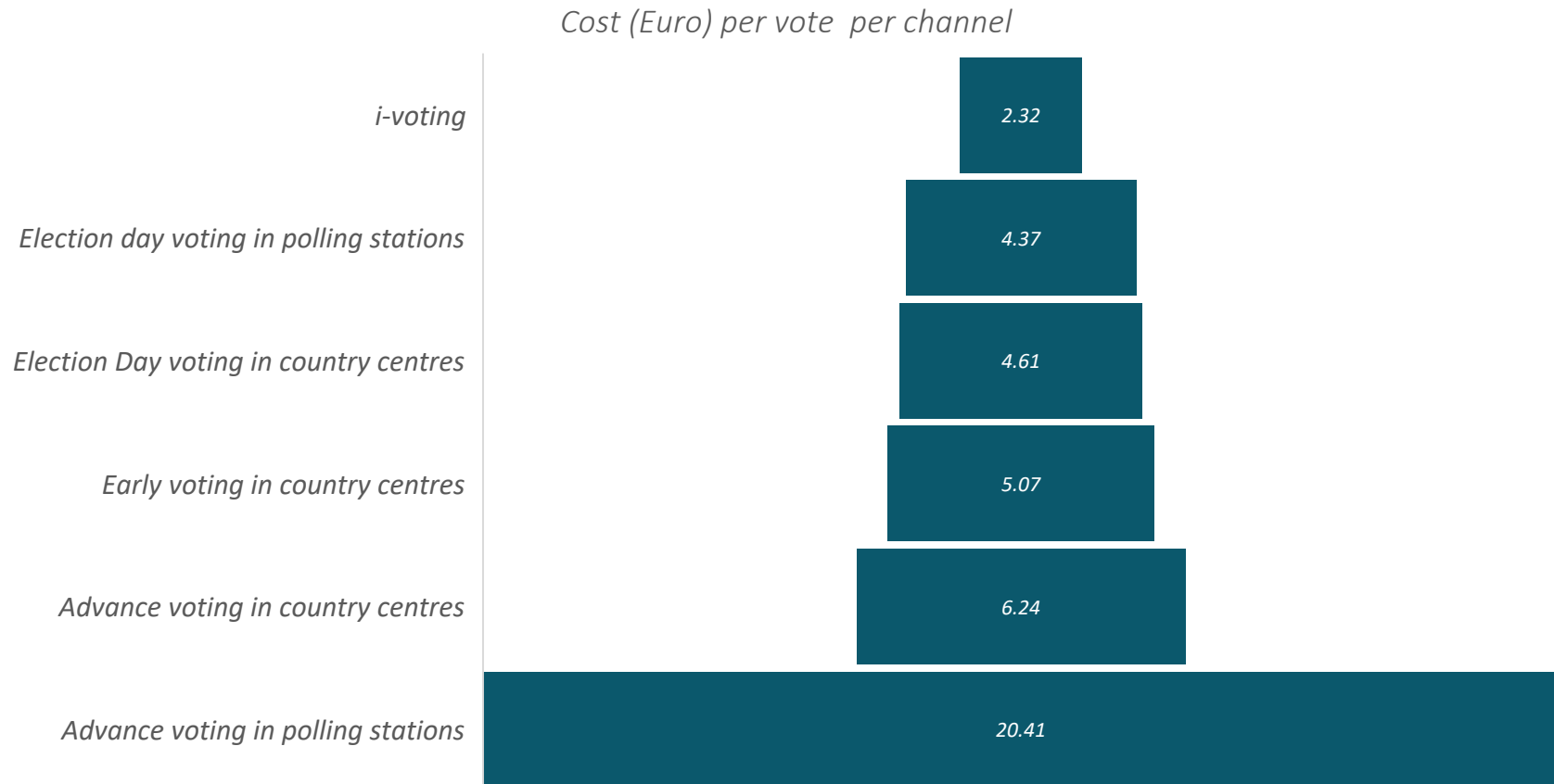
Increased participation

- **Complex matched statistical model**



- Evidence links the use of online voting causally to turnout increase:
 - 1.7 % in local elections
 - 5.0 % in national elections

The most cost effective voting method



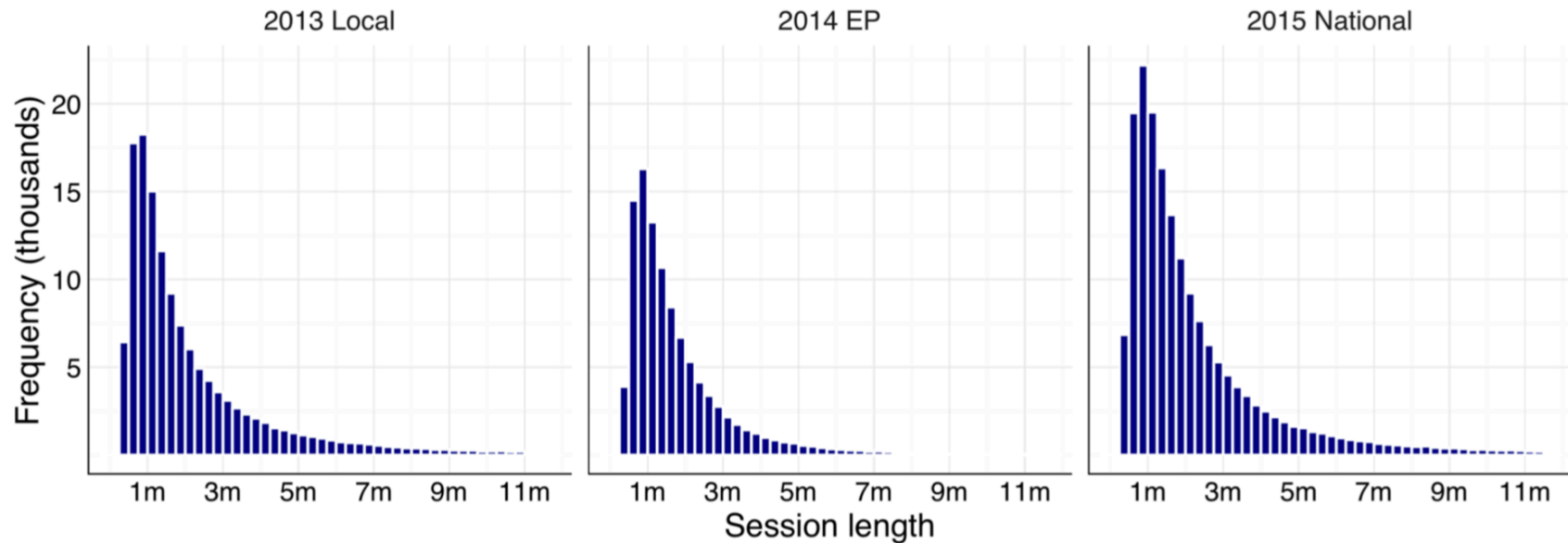
How much does an e-vote cost? Cost comparison per vote in multi-channel elections in Estonia (Krimmer et al. 2018)

[*Third International Joint Conference on Electronic Voting E-Vote-ID 2018: 2-5 October 2018, Lochau / Bregenz, Austria: Proceedings*](#)

- Overwhelmingly the lowest cost voting option

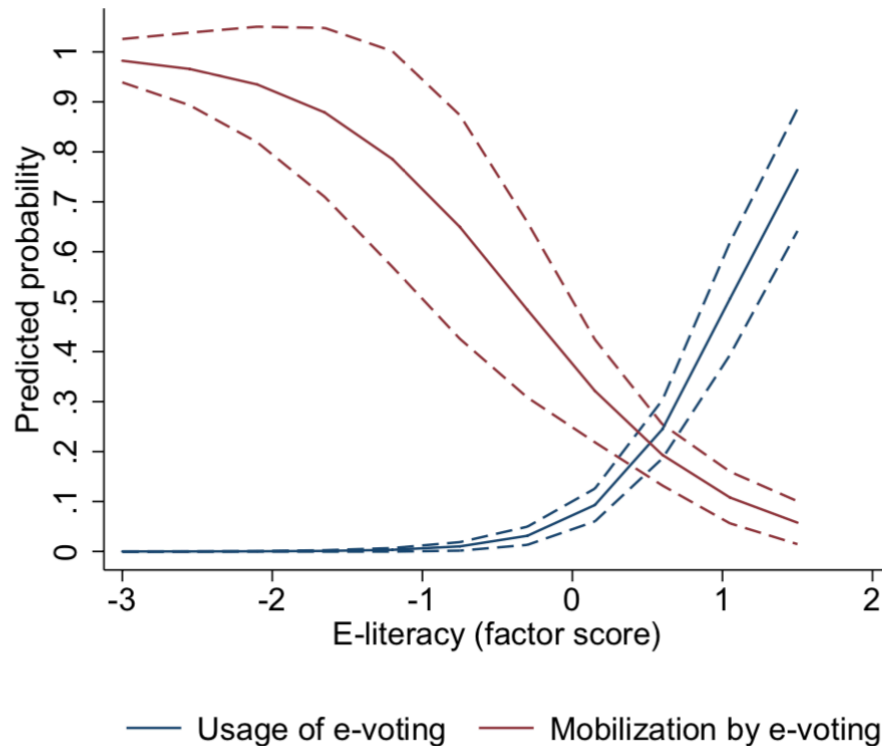


Makes voting quicker



- Online voting is **16 times faster** than paper voting.
- Median voting session length is **90 seconds** - paper voting takes about 24 minutes

Appealing to all levels of IT literacy



- Online voting actually **mobilises** those who are digitally least savvy
- Council of Europe report (2011) concluded that IT literacy has no effect

Conclusion

6. CONCLUSIONS: ATTEMPTING TO ASSESS THE OPPORTUNITY OF INTRODUCING INTERNET VOTING FOR EUROPEAN ELECTIONS

KEY FINDINGS

- Internet voting has been implemented successfully and **has gone beyond the trial stage** in multiple contexts.
- **E-voters are growing in numbers and remain loyal** to Internet voting after having been exposed to it.
- Internet voting for the European Parliament elections could build on the Estonian case.
- Opportunity to **modernise European Parliament elections** and bring them closer to citizens.



Thank you

Mike.summers@smartmatic.com

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