

# Internet Voting in Estonia: experience from 12 elections

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# e-Governance Academy

- Since 2002
- Independent
- Mission-based
- Non-profit
- Non-governmental
- Non-academic
- **59** employees in Estonia, Ukraine, Serbia
- **5,8 M** in turnover (2020)





# Fields of expertise

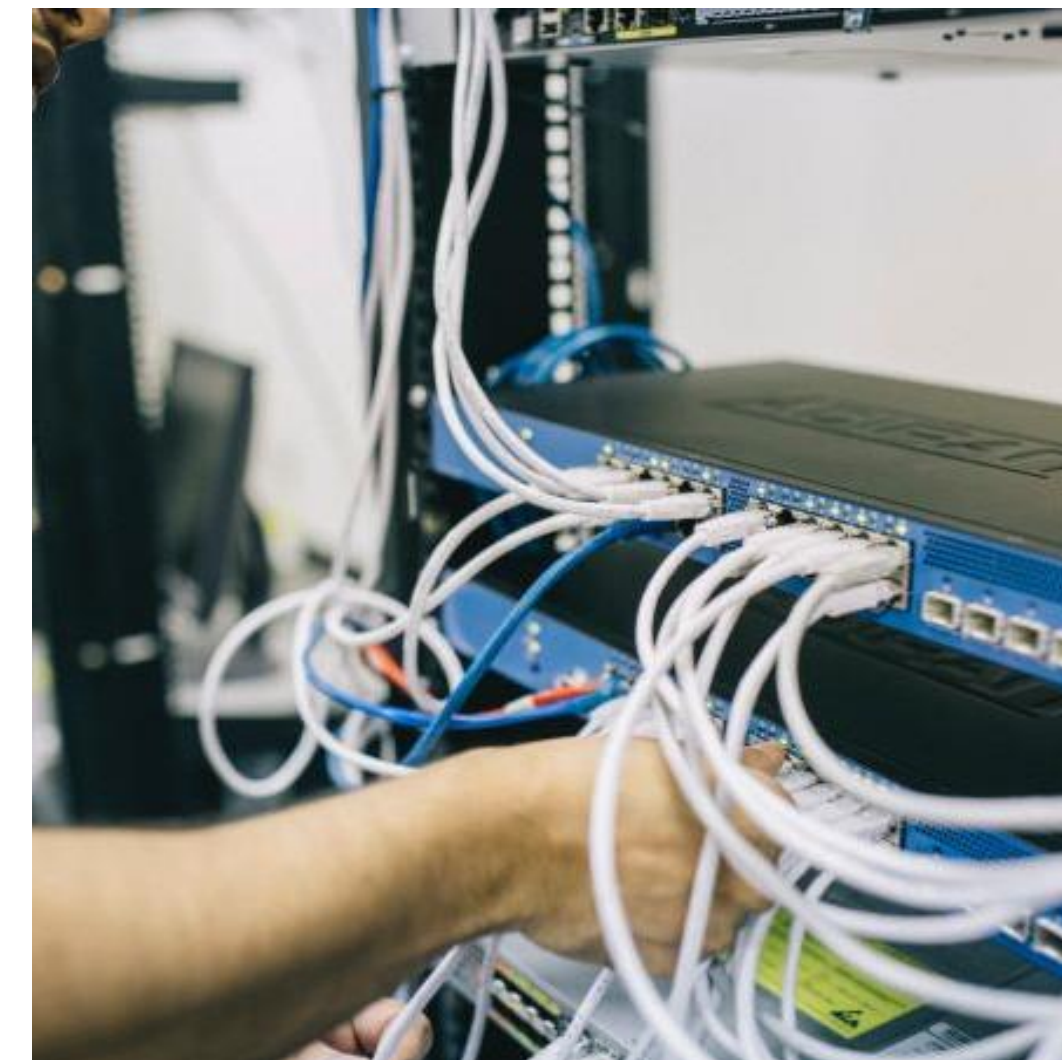
**Smart  
governance &  
change  
management**



**E-democracy &  
E-participation**



**Technology &  
Open Data**



**National Cyber  
Security**



# Internet Voting versus Electronic Voting

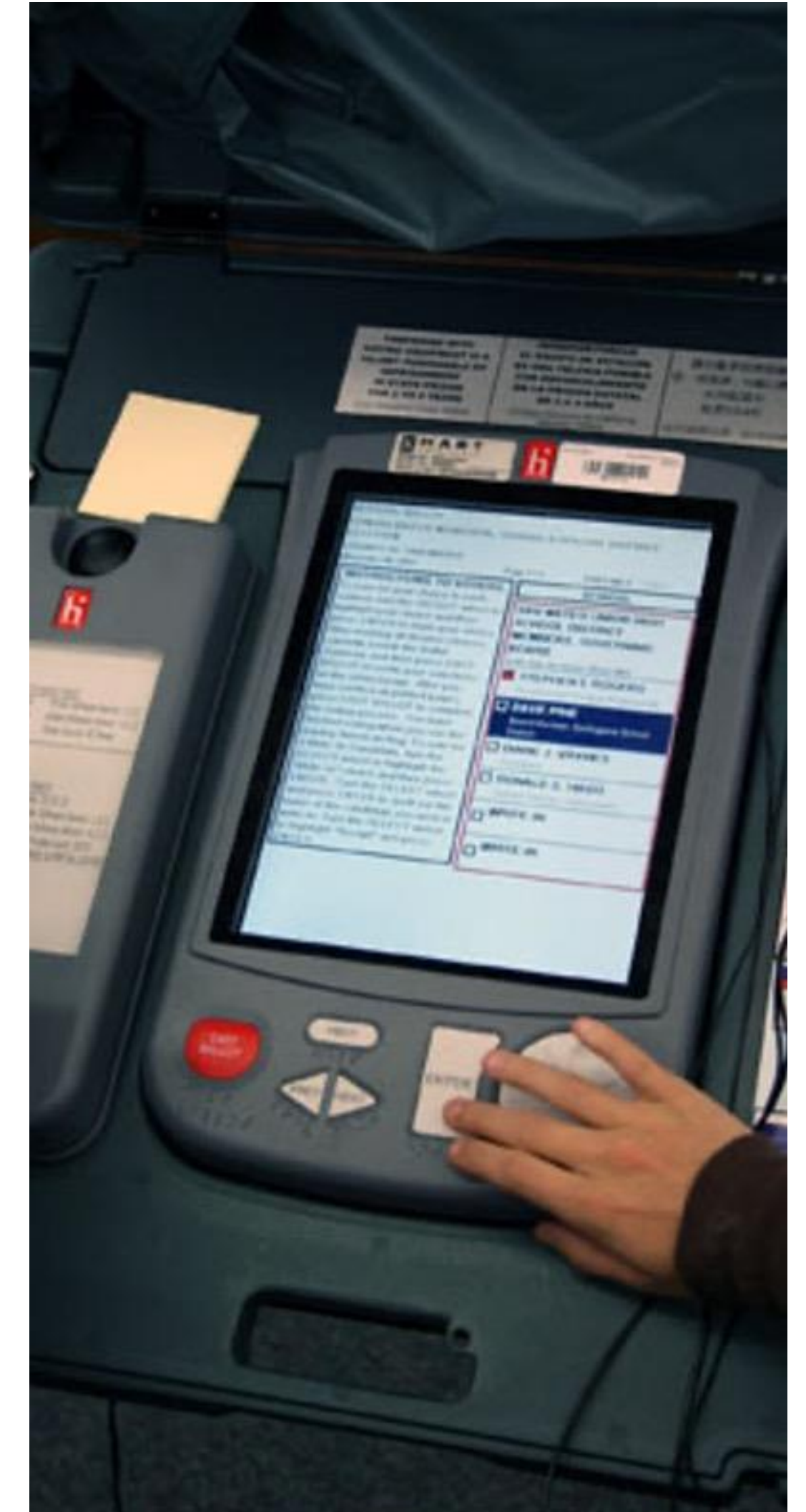
## I-Voting

- Remote voting from an uncontrolled environment (online setting)
- Identity is verified by remote means (e.g. eID)



## E-Voting

- Electronic voting by using dedicated machines or devices (e.g. DRE devices, e-voting machines with paper auditing slips etc)
- Identity is verified manually





# Key facts about Estonia

- Smallish country in Northern Europe
- Parliamentary republic, member of EU and NATO
- 900 000...1 100 000 voters
- Internet voting since 2005 and has been used in 12 elections
- I-voting just another method of voting, paper voting is available
- More than 45% of voters vote online
- Voting lasts for a full week





# Initial Goals

- First discussions in 2002
- Raise voter turnout
- Engage young voters
- Cater for the mobile lifestyle
- Provide for an additional e-service (eID service)





# Ensuring secrecy of ballot and freedom to vote

## Re-casting & the Virtual Voting Booth

I-voting

Voter can re-cast  
the I-vote infinite  
times

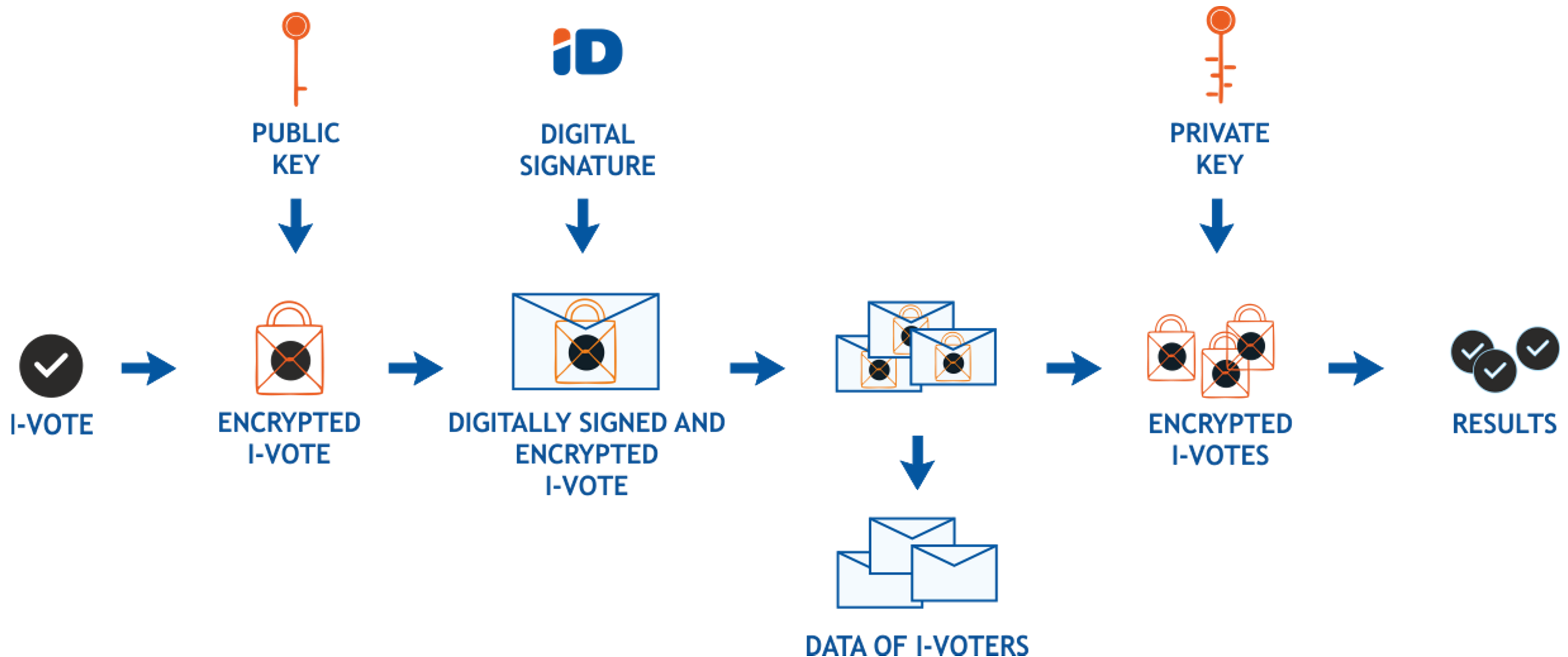
New I-vote  
cancels previous  
I-vote

Paper vote  
cancels I-vote  
and is final

Paper  
ballot

The voter casts a paper ballot and it is final

# “Double envelope” scheme





# Spread of Internet Voting

- Initially at 1,9%
- After 12 elections stabilized at around 46%
- Overall turnout depends on election type (National, Local, EU Parliament)
- Internet Voting has no immediate effect on overall turnout





# Research results from 16 years

- Internet voting is age neutral, gender neutral
- Not a silver bullet - the youngest voter group least likely to vote
- Older voters vote faster
- Enables the use of assistive IT technologies
- „Stickiness factor“ – I-voters more likely to I-vote and vote in the future
- Voting abroad has increased dramatically, both for temporary and permanent abroad voters
- It takes around 3 minutes to I-vote
- If it takes more than 30 min to go to polling station, people are more likely to I-vote



# Why Estonia?

- eID infrastructure
- Political will (majority)
- Compliance with general principles
- Size of the country
- In general, a positive attitude towards high-tech
- Laziness and weather 😊





# Where to in the future?

- Voting on mobile devices
- Using alternative eID solutions
- Additional verification – Feedback Channel, Facial Recognition etc
- Internet-Voting-as-a-Service





# Let's make digital transformation happen! Everywhere.

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