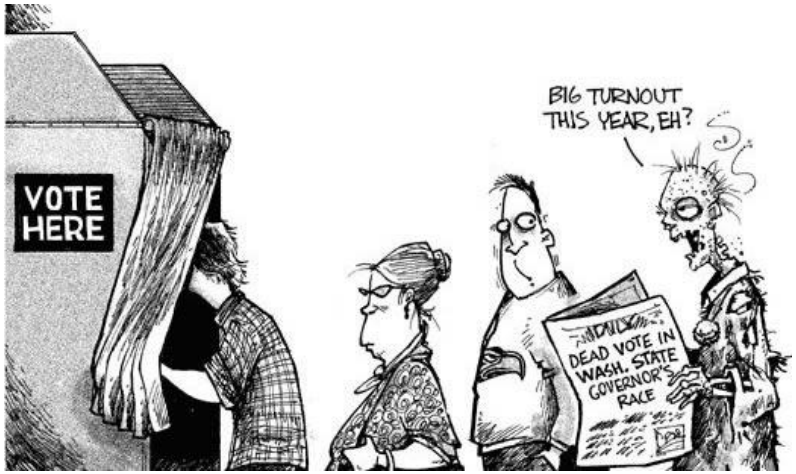
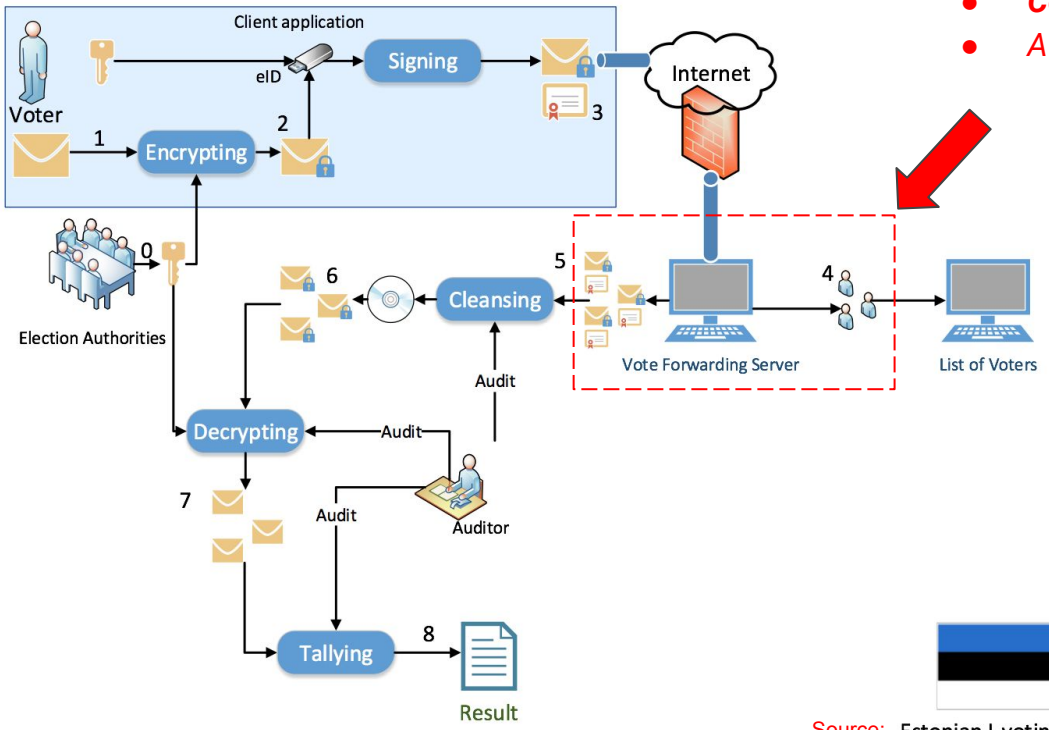
CURRENT VOTING SYSTEM CHALLENGES

1. **Fraud**: Single person, multiple votes**,** and vote manipulation
2. Financially **costly**
3. **Security** issues
4. **Convenience**
5. **Less trust**ed government
6. Disengaged **youth**
7. Poor voter **turnout**
8. ..



MAIN TECHNICAL CHALLENGE



- ***Proprietary***
- ***Centralized***
- *A single **supplier controls***
  - ***Code base***
  - ***Database***
  - ***System outputs** and supplies the monitoring tools at the same time.*

Source: Estonian I-voting

TRUSTFUL

TRUSTFUL

E-Voting on Blockchain

Remote . Secure . Transparent

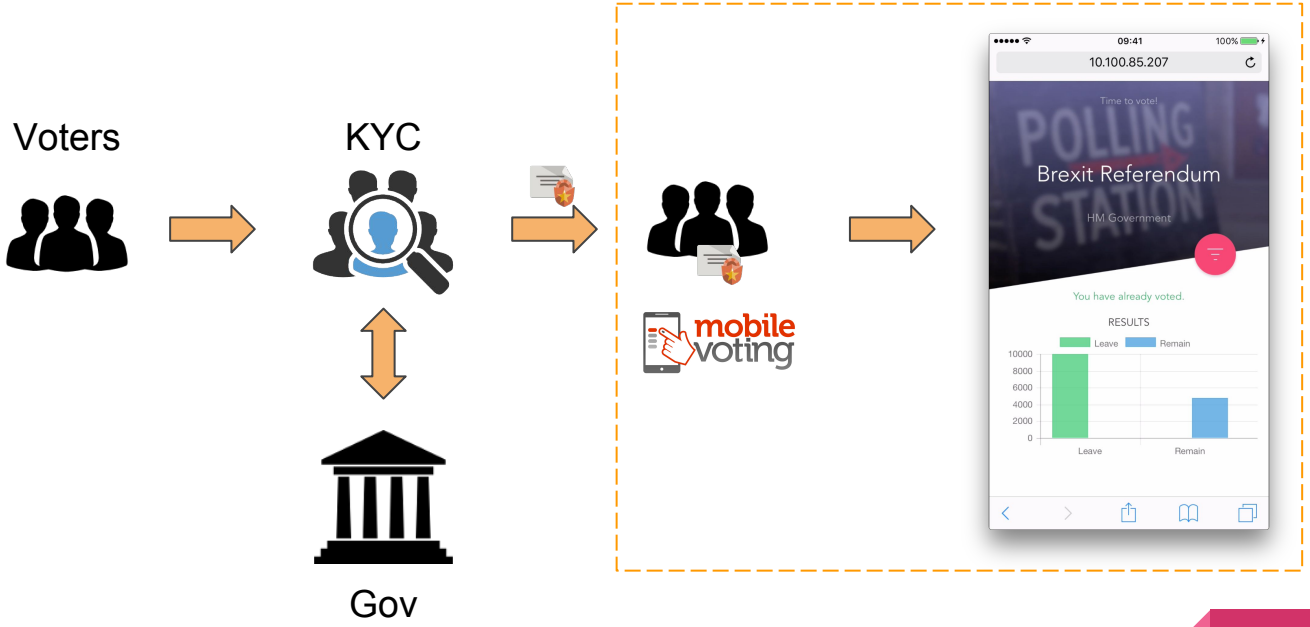
TRUSTFUL

Open Source - Decentralized - Verifiable

MAKING VOTING PROCESS MORE SECURE, CONVENIENT AND COST EFFECTIVE

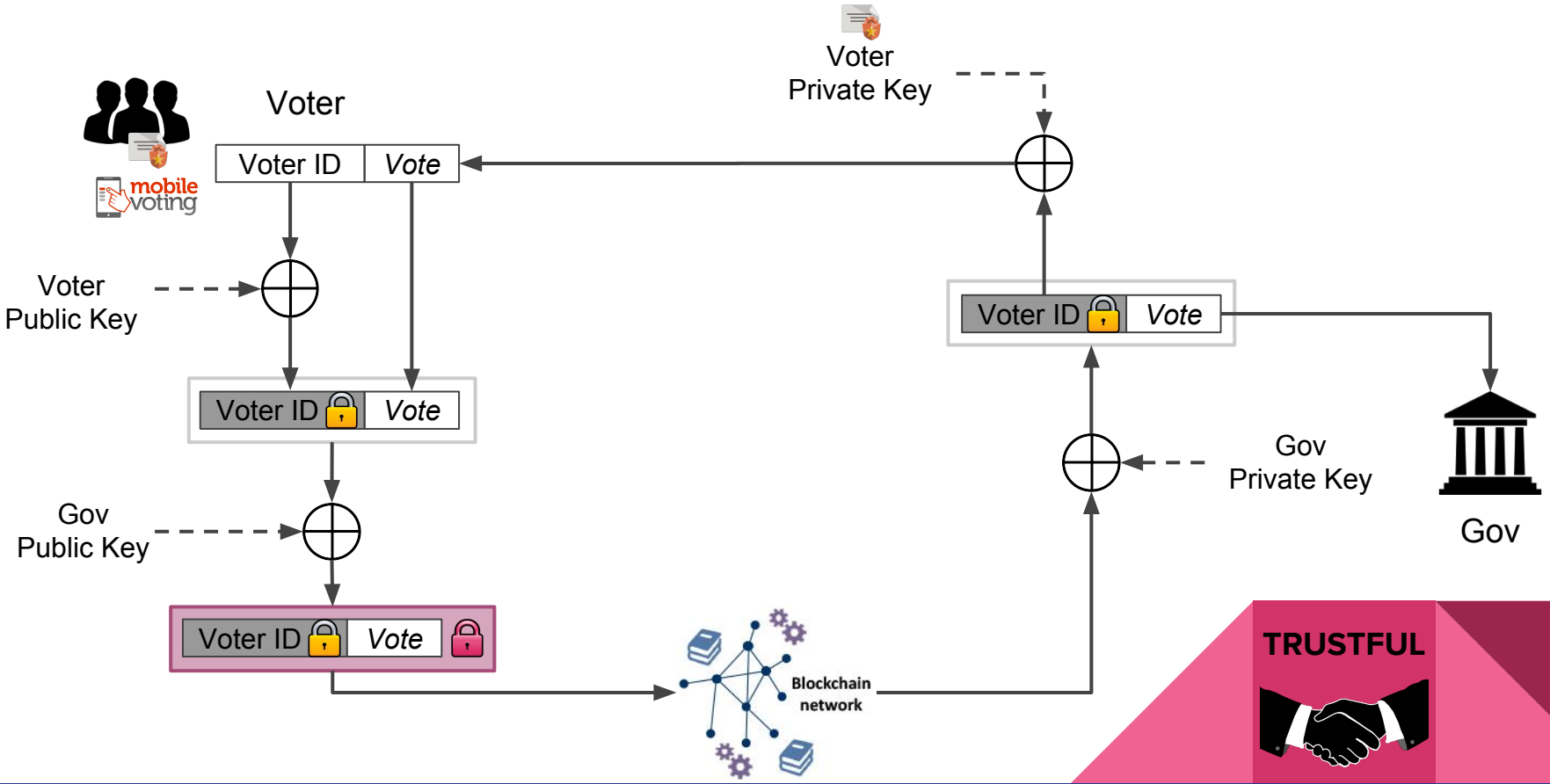
No single **supplier controls** the **code base**, the **database**, and the **system outputs** and supplies the monitoring tools at the same time.

How does it work?

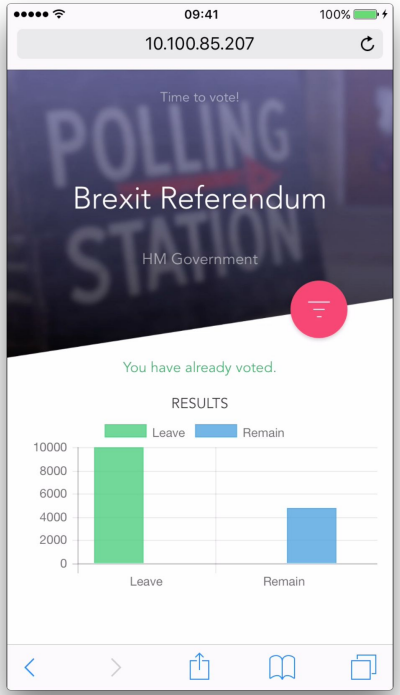


TRUSTFUL

How does it work?



DEMO time ..


09:41
100%
10.100.85.207
Time to vote!
Brexit Referendum
HM Government
You have already voted.
RESULTS
Leave
Remain
10000
8000
6000
4000
2000
0
Leave
Remain

TEAM

- Chris Lockwood
- Edward Ruchevits
- George Ivanov
- Shaswar Baban

TRUSTFUL

E-Voting on Blockchain

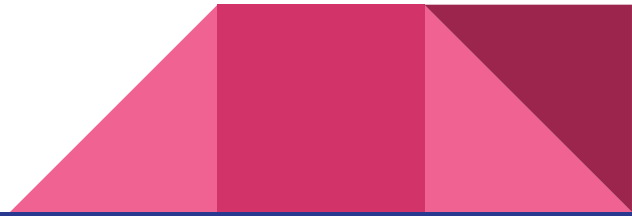
Remote . Secure . Transparent

THE CHALLENGES

COST: 10’000 → £0.01

SCALABILITY: can use BIGCHAINDB → 1M Writes/sec ~ 100k Votes/sec

PSYCHOLOGY: recent polls show promising take-up in e-voting



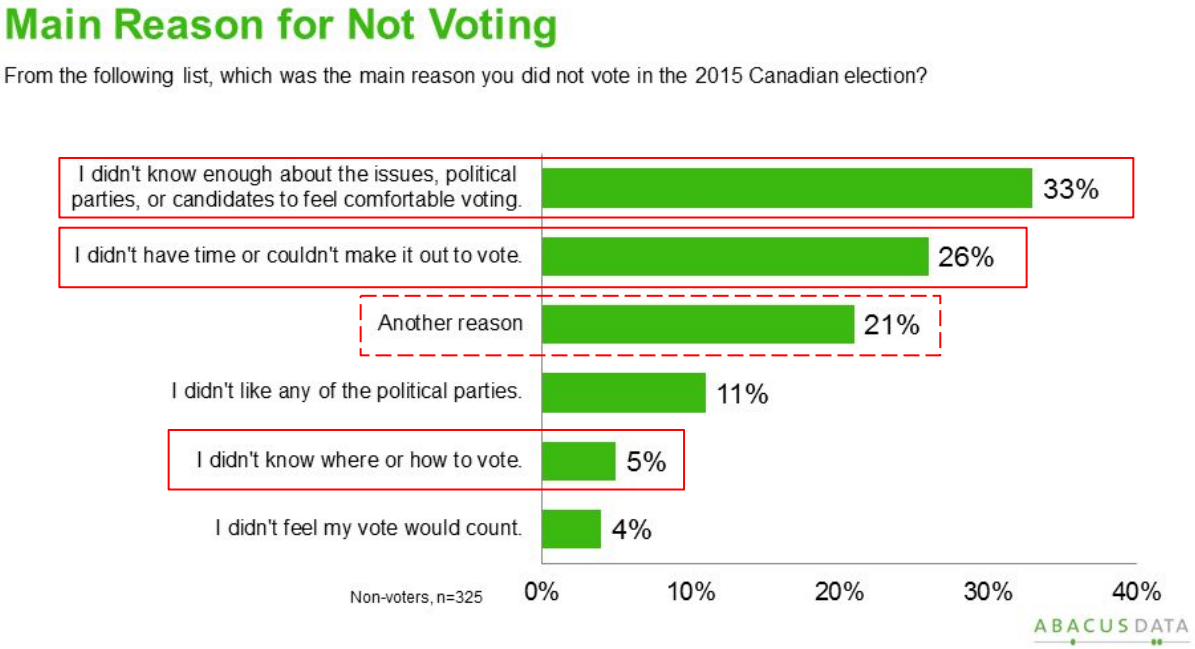
COMPETITION

- Followmyvote.com
-

Some example

- Estonia case:
  - http://www.vvk.ee/valijale/e-haaletamine/e-statistika/
-

Case Study 1: 2015 Canadian Election



Market Entry Strategy

SME:

- Newspapers: polls
- Consultancies: surveys
- Education: research

Gov. :

- hard to enter in the beginning
- Fierce competition

BENEFITS

- Easier access to voting:
- Cost effective:
- Security:
- Enables Direct democracy: from representative democracies → people decide policy initiatives directly.
- Ubiquitous: Access from Mobile, PC, and Digital Polling Station
-