The curse of knowledge? Does having more technology skills lead to less trust towards ivoting?

Mihkel Solvak (Tartu University)

Robert Krimmer (TalTech)

E-Vote-ID 2019

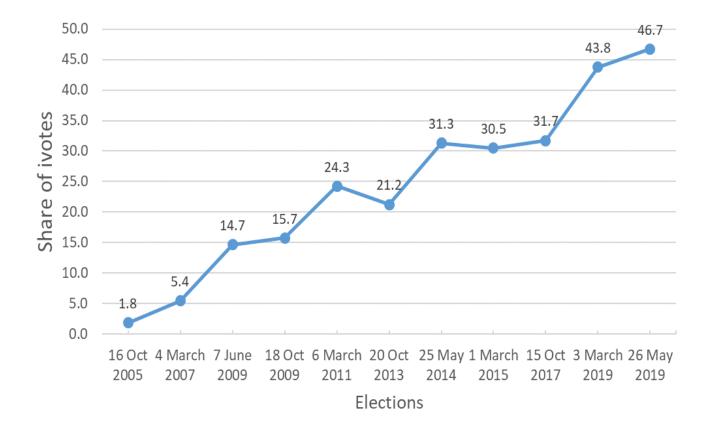
1-4 October, Bregenz, Austria



Context

ivoting in Estonia:

- o big bang launch in 2005
- o 11 elections with ivoting so far between 2005-2019
- o Individual verifiability since 2013

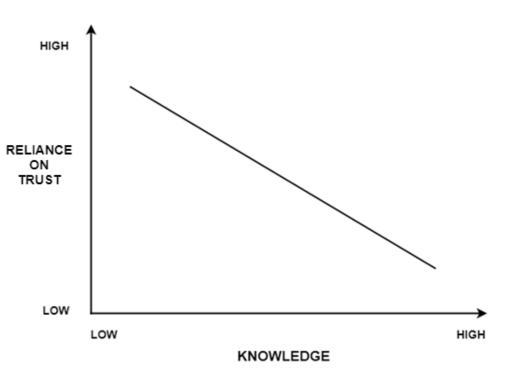




The curse of knowledge

The curse of knowledge:

- o digital skills/knowledge correlate with younger age, higher income, better education & urban settings
- o less knowledge means more need to rely on trust to use the technology
- o advanced knowledge (on ivoting) tends to correlate with being more threat averse
- o bottleneck as one increases, the other decreases





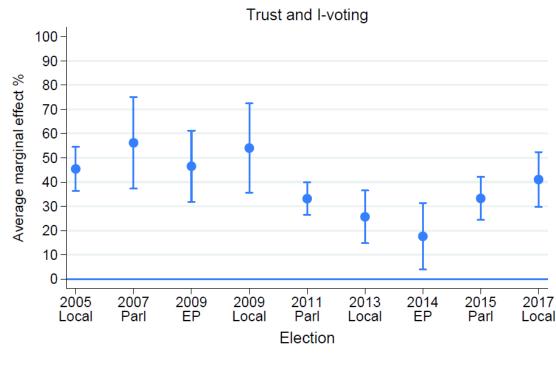
Trust levels in Estonia

Trust towards i-voting 2005-2019





Trust drives usage



Trust is a strong predictor of i-voting



68.2

Parl

2019

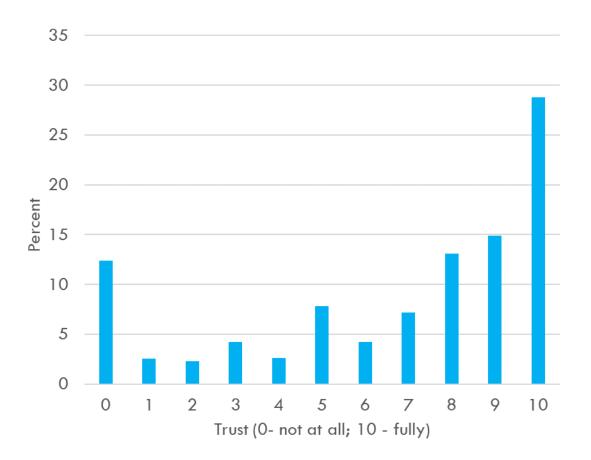
Trust towards ivoting 2005-2019

Trust structure Trust towards ivoting 2019

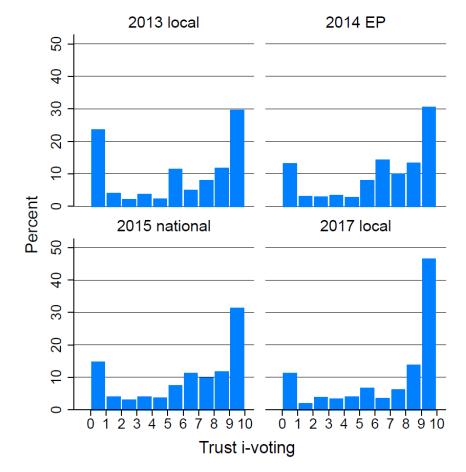
90.0 35 77.4 80.0 73.4 30 69.4 68.6 67.6 70.0 65.8 63.6 25 58.6 bercent who trust 20.0 20.0 20.0 20.0 20.0 53.7 20 Percent 5 30.0 10 20.0 5 10.0 0 0.0 3 5 7 8 9 10 0 2 4 6 Local Parl EP Local Parl EP Parl Local Local Trust (0- not at all; 10 - fully) 2005 2011 2007 2009 2009 2013 2014 2015 2017



Trust structure Trust towards ivoting 2019



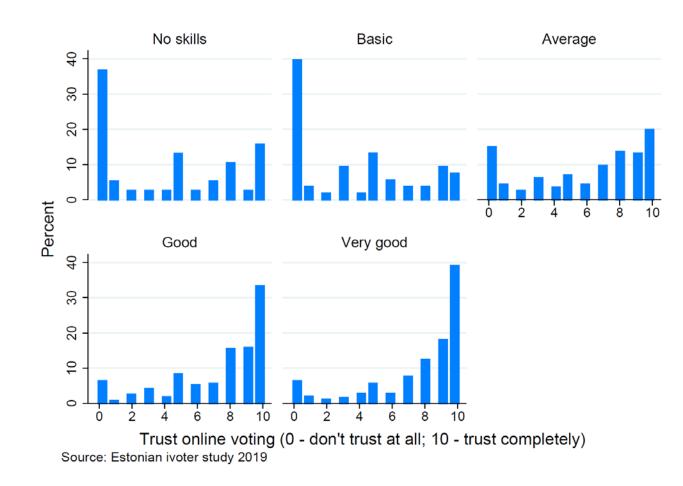
Trust towards ivoting 2013-2019





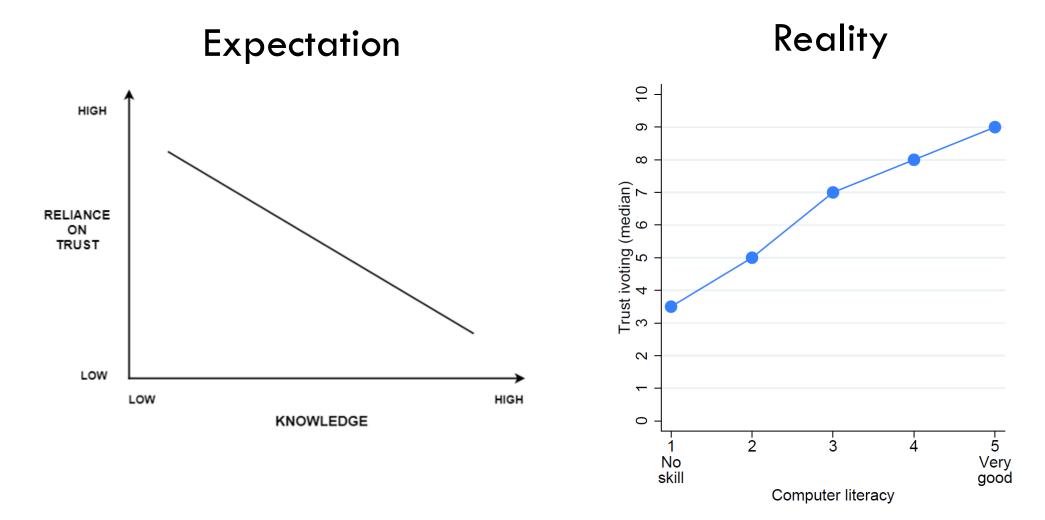
The surprise

Trust towards ivoting by computer literacy levels (2019)





The surprise



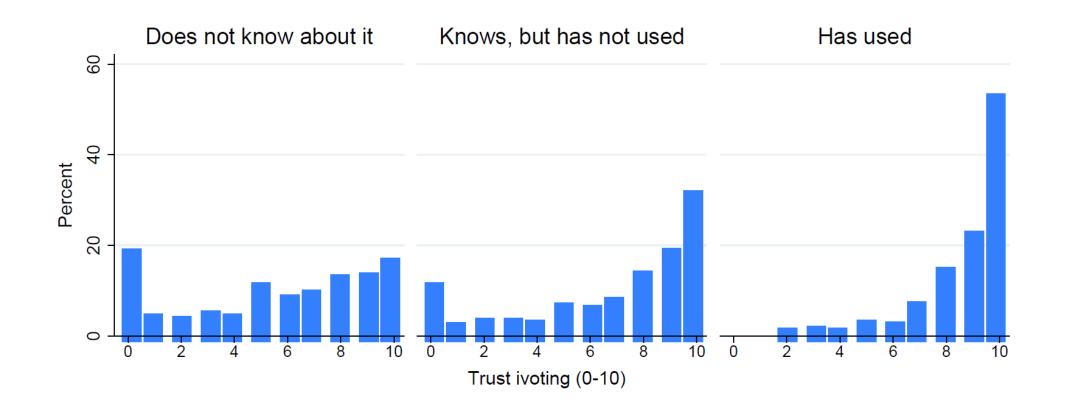


Usage of verification

What about technology that should reduce reliance on trust?



Usage of verification





Usage of verification

Verification data from anonymized logs 2019

Comparatively larger share of ivotes:

- verified on first voting day;
- and/or late at night.

	ivoters	ivote verifiers (1 time)	ivote verifiers (≥2 times)
Age (mean)	45.5	40.3	39.3
Males (%)	45.77	61.1	65.5
OS: Windows	89.33	81.34	79.51
OS: Mac	9.89	15.8	16.17
OS: Linux	0.78	2.86	4.32



To conclude

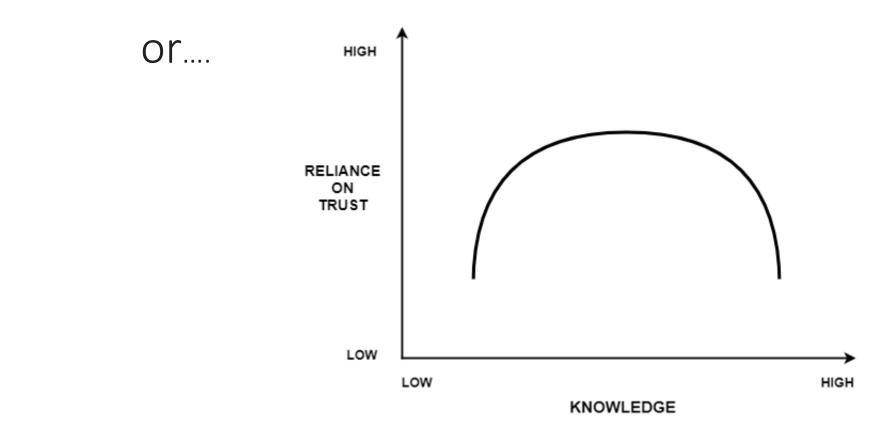
We find:

- o no curse of knowledge, at least in the Estonian case;
- o context matters, long experience of e-service usage;
- o verification technology used by those who trust already;

o or...

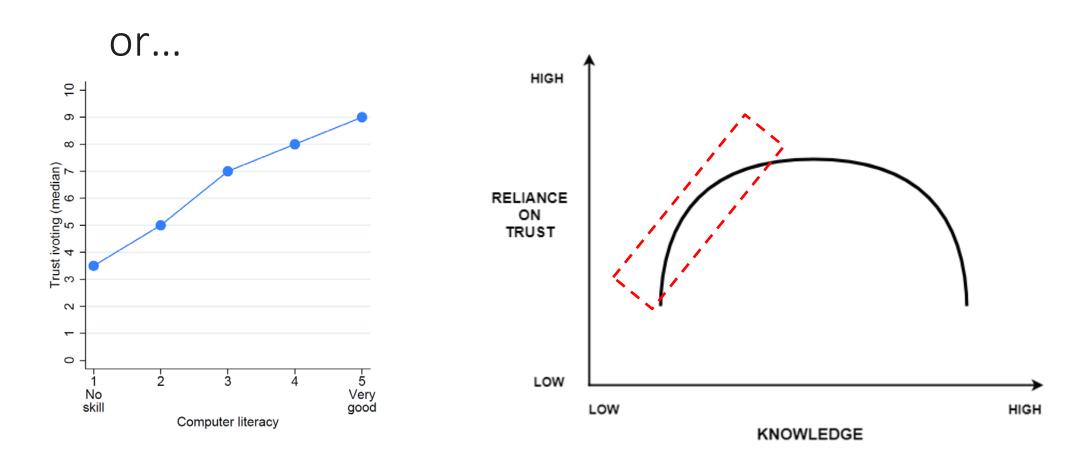


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Thank you!