ProVotE

Transition to electronic voting and citizen participation

An overview of the social impact of e-voting trials in the Provincia Autonoma di Trento, Italy
ProVotE - A systematic approach

Investigating the social impact

SOCIAL IMPACT: any change occurring in the symbolic order or in the concrete behaviour of a population in consequence of the exposure to an external stimulus

AIMS:
• Evaluating if the shift to electronic voting is feasible from a sociological standpoint
• Facilitating the transition from paper and pencil ballot to electronic voting

ATTITUDES EXPECTATIONS FEARS PRACTICES

Before
During the field trials of electronic voting
After

SUPERVISED ENVIRONMENT (electronic booths)
no internet voting

In actual local elections
no citizen consultation/polls
The research design - I

“BEFORE”

- 8 focus groups
  young people, senior citizens, women and scrutinizers from rural and urban areas

- >2500 telephone interviews
  representative sample of the adult population in Trentino

- 160 supervised trials (ethnographic observation and questionnaires)
  potentially disadvantaged target (low educated, elderly)

- monitoring of turnout to open trials
  in the towns chosen for the first field test
The research design - II

“DURING”

• first field test: five towns, **6950 electronic voters**
• second field test: one town, **336 electronic voters**
• (third field test: one town, **1134 electronic voters**)

“AFTER”

• analysis of electoral data and comparison of electronic and paper-and-pencil results
• 1200 telephone interviews representative sample of the population involved in the first field test
The practice of voting - I

Evidence provided during the focus groups:

The day of elections (Sunday) follows a routine in respect to:

- when going to vote: early/late/fit with services etc.
- with whom going to vote: relatives/friends/transport
- “how” to vote: facsimiles/vote for councillors

Undervoting is reported ⇔ fear of writing names improperly

The board of scrutinizers “learns by doing” on the same day of elections - courses provide theoretical background, but experience and efficiency are learnt on the spot.

This professional culture is accessible to anyone:
⇒ accessibility to a procedure enhances feeling of TRUST...
The practice of voting - II

...voters **TRUST** that:

Each ballot is **personal** and **secret**
  (thus guaranteeing one’s freedom of choice)

Each and every vote is **actually counted**
  (i.e., not “thrown away”)

The ballot count truly **respects the voter’s will**
  (also by being available for further controls and re-counts)

**So what about electronic voting?**

“Immaterial” practices might require expertise in managing procedures

⇒ **risk:** sense of “loosing control” of the process
E-voting: expectations and fears - I

Interviewees...

...expect that

• e-voting **will be introduced**, sooner or later  
  *(technological determinism?!!)*

• e-voting **will not increase the turnout**

• **distrust in politics as a whole** will result in an apathetic or critical attitude

...fear that

• costs for elections will increase, compared to paper ballots

• the elderly will not be able to vote electronically

• age will impact more than education or skill
Interviewees project their worries onto senior citizens (‘‘I will have no problems, but the (other) elderly...’’)

A paper proof of their ballots (VVPB) is understood as an unnecessary duplicate, which doesn’t fit with the idea of “electronic” voting!!

BUT

a simplification in the procedures related to electors identification ballots count register filling

would definitely be welcome
E-voting: technical skills

E-voting requires “skills” that are not much different from those needed in using common menu-like devices.

Through computer assisted telephone interviewing (CATI) the technological habits of the population were investigated.

- potentially impaired in e-voting:
  an estimated 6% of the population, mostly elderly people, retired, with no or very little education.
E-voting: attitudes - I

Voting procedures should be changed, sooner or later (70%)
E-voting is a good idea, but it is difficult to implement (58%)

Should e-voting be adopted in the next provincial elections, would you be...

\[ n=2561 \]
## E-voting: attitudes - II

<table>
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<th>Attendance in elections:</th>
<th>Always</th>
<th>Sometimes</th>
<th>Never</th>
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<td>12,5</td>
<td>13,8</td>
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<td>Very against</td>
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</tr>
<tr>
<td>No answer</td>
<td>2,7</td>
<td>4,2</td>
<td>5,2</td>
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<tr>
<td>%</td>
<td>100,0</td>
<td>100,0</td>
<td>100,0</td>
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<tr>
<td>( N = )</td>
<td>2347</td>
<td>144</td>
<td>58</td>
</tr>
</tbody>
</table>
E-voting: attitudes - III

Professionals, students, highly educated, below 50

>65% % agreement (average: 56%)

<40%

Retired, elderly, no education

Size and level of development of a town have no effect

Education impacts only if it is very low, controlling for age and technological skills
E-voting: attitudes - IV

**WHAT MATTERS** is: a positive or negative attitude

Belief that e-vote will:
- Limit contentions
- Lower mistakes
- Increase frauds
- Increase abstentions

feeling voting as a duty

feeling confident of own skills

*And (hypothesis):* trust institutions
Developing an e-voting interface - I

Fac-simile of a paper ballot
Developing an e-voting interface - II

Screenshot of the touchscreen
Developing an e-voting interface - III

Printer (VVPB!) touchscreen

The e-voting machine
Developing an e-voting interface - IV

The printed ballot
8 May 2005

15375 potential electors in 16 electoral sections

5 towns: 3 small-sized (ca. 1500 inhabitants)
1 medium (ca. 5000 inhabitants)
1 large (ca. 110000 inhabitants)

Average turnout: 76% (11723 voters)

of those, 6950 (59%) repeated their vote electronically

min. e-turnout: 39%; max. e-turnout: 81%

5534 interviews to learn about what could be improved in the voting interface

led to →
Trialling e-voting – II

6 November 2005

564 potential electors in a small town (650 inhabitants)

Turnout: 67% (376)

of those, 336 (89%) repeated their vote electronically

330 interviews to both e-voters and non e-voters
Trialling e-voting – III

A word of caution:

E-voters are a self selected sample!

Overall positive evaluation of the electronic system:

- <5% described it as “quite” or “very difficult”
- 10% would be “quite” or “very” against voting only electronically already in the next provincial elections (2008)

“Scrutinizer effect”

Results of e-voting are consistent with paper ballots
The experimentation did not cause drops nor rises in turn-out
Before the trials

Telephone interviewing five months before the first trial

The sample is representative of the adult population in the province

\[ n = 2561 \]

BEFORE the trials

- **very in favour**: 19%
- **very against**: 11%
- **against**: 11%
- **indifferent + NA**: 22%
- **in favour**: 37%
After the trials - I

Telephone interviewing four months after the first trial

The sample is representative of the adult population in the electoral sections that experimented e-voting

very in favour 21%
very against 7%
against 14%
indifferent + NA 17%
in favour 41%

n=1206
After the trials - II

Telephone interviewing four months after the first trial

The sample is representative of the adult population in the electoral sections that experimented e-voting

<table>
<thead>
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<th>sample</th>
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<th>watchers</th>
<th>non-voters</th>
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<tr>
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<td>32%</td>
<td>12%</td>
<td>9%</td>
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<tr>
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<tr>
<td>against</td>
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<td>9%</td>
<td>19%</td>
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<tr>
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<td>7%</td>
<td>2%</td>
<td>10%</td>
<td>14%</td>
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<tr>
<td>N</td>
<td>1206</td>
<td>503</td>
<td>372</td>
<td>146</td>
</tr>
</tbody>
</table>
After the trials - III

- Voting is easy
- Quick results
- Number of employees
- Makes frauds difficult
- Interpretation is easy

Comparison between paper and electronic methods:
- Paper: 8,9, 7,8, 6,9, 7,3, 6,4, 5,3, 7,9
- Electronic: 7,9, 7,8, 6,4, 6,8, 7,4, 7,1, 7,6

Quick results, voting is secret, voting is quick.
Final remarks: what did we learn?

Citizens are ready to accept e-voting: they don’t show a negative attitude toward innovation and on the whole are confident with technology

**BUT**

the introduction of electronic voting requires synergy of

A smoother transition is gained by involvement of all stakeholders

POLICY MAKERS

TECHNOLOGISTS

CITIZENS
Final remarks: what did we learn?

Adequate communication  Open trials  Public meetings

No “impose” but “propose” the transition to e-voting

Involvement of local administrators and opinion leaders

Voting is a symbolic and traditional ritual

Need to keep e-voting interface as consistent as possible with paper ballots
Final remarks: what did we learn?

We cannot expect that electors adapt themselves to voting machines

BUT

We have to ensure that voting machines are adapted to electors needs

... and citizens should be aware of this effort

E-voting is a challenge that can be won only when, and if, it’ll make voting procedures simpler and truly “democratic”
ProVotE – Further information

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