

Internet Voting in Canadian Municipalities: What Can We Learn?

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ABSTRACT

In recent years the concept of e-democracy has attracted considerable attention. Electronic voting methods, particularly Internet voting is one aspect that has generated much notoriety not only because of the concerns it raises with respect to privacy and security, but also its potential to enhance accessibility for electors, positively effect voting turnout, and make the administration of elections more efficient. Notably, in cases where Internet voting pilots have been successful and maintained by governments reported access to voting, voting turnout, and use of electronic ballots has increased over time. While European cases and US trials and research are well documented, the Canadian experience has received attention only from news media despite an abundance of well-developed trials and the presence of unique model features. To shed light on Internet voting as a viable alternative voting channel this paper examines the Internet voting approaches used in two major Canadian municipalities to conduct their local elections. Relying on data from personal interviews with key officials and technical experts from Halifax and Markham the paper discusses model characteristics, effects on the electoral process and turnout, and supportive factors, which make Internet voting work in these cases. Finally, it discusses what conclusions can be made about the use of Internet voting in binding elections in light of these examples.

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INTRODUCTION

WHAT IS INTERNET VOTING?

Internet voting is a type of electronic voting wherein an Internet connection is used to cast a ballot. There are different types of Internet voting which can involve **kiosks**, **polling place machines** and **computers from remote locations** (Alvarez and Hall, 2004). The type of Internet voting considered here however is **remote Internet voting**, which involves casting a ballot over the Internet from a remote location such as an elector's home or other potential site (Goodman et al., 2010).

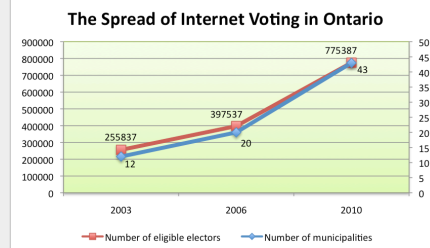
WHY CANADA?

- Second greatest number of legally binding elections with an Internet voting option worldwide (next to the UK)
- Most active Internet users (75 percent of Canadians report regular use)
- Third highest Internet penetration rate worldwide (84 percent)

CANADIAN CASES: Ontario and Nova Scotia

- Ontario (see Figure 1)
- Used Internet voting in 2003, 2006, and soon...2010
- Estimated to reach 800,000 or one tenth of eligible electors
- 43 municipalities (10 percent) will use Internet voting in 2010
- Nova Scotia
- Used Internet voting in 2008 and 2009
- Reached approximately 400,000 electors
- 4 municipalities

Figure 1.



METHODS

- The primary data comes from a series of unstructured qualitative interviews conducted over the phone or in person between July 2009 and April 2010 with relevant experts, professionals, and municipal representatives from Markham and Halifax.
- Survey data collected by the municipalities or other private companies are also drawn upon to highlight some potential patterns.

RESULTS

WHAT ARE THE EFFECTS OF INTERNET VOTING IN CANADA?

- Candidates (changes the nature of campaigns)
- Electoral process (changes/eliminates need for scrutineers)
- Electors (convenience & accessibility see Figure 2 for use)
- Election administration (efficiency, service delivery, cost)
- Voting turnout

MARKHAM

- Advance **turnout increased** 300 percent in 2003 and an additional 48 percent in 2006
- Encouraged non-voters** (25 percent in 2003 and 21 percent in 2006 report not voting in the previous election)
- Faithfulness effect** – those who cast ballots online in one election are likely to continue to do so in future elections
- Convenience** cited as the primary reason for voting online
- Middle-aged electors** (40 to 59) were the greatest users (see Figure 3)
- Positive effects for **stakeholders** (e.g. candidates)

HALIFAX

- Advanced **turnout rose** by 54 percent in 2008 and overall turnout increased by an average of 51 percent in 2009
- Convenience** cited as the primary reason for voting online
- Middle-aged electors** most likely to use Internet voting
- Reinforces **stakeholder and electoral process** benefits (e.g. candidates, scrutineers)
- Unique model features**

Figure 2.

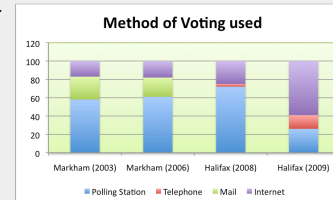
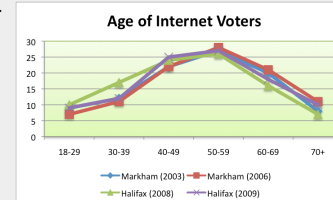


Figure 3.



DISCUSSION

WHAT MAKES THE CANADIAN MODELS WORK?

Factor	Country		
	Canada	Estonia	Switzerland
Political will	X	X	X
Internet penetration	X	X	X
Public support and trust	X	X	X
Legal framework	X	X	X
Gradual implementation, testing & research	X	X	X
Digital identification system	X	X	X
Interdisciplinary involvement	X	X	X

*Estonia factors taken from Alvarez et al., 2009; Swiss factors taken from Chevallier et al., 2006

LESSONS FOR CANADA

- Supportive factors** may be *important prerequisites* for the successful deployment of Internet voting systems elsewhere
- Convenience & accessibility** are the clear benefit of online ballots, but there are also broader effects (e.g. campaigns, scrutineers, electoral process)
- Though it is not guaranteed, Internet voting *can positively impact voting turnout*
- Specific model features** (e.g. multi-channel voting, candidate list, DRO list, spoiled ballot button)

CONCLUSIONS

- Canada cannot be ignored as a model for Internet voting
- More research and data collection is needed
- Provincial and federal interest and growth at the municipal level suggest that Internet voting projects will expand in Canada (e.g. federal parliamentary mandate to trial Internet voting by 2013)
- Sheer number of trials at the municipal level (soon to be the most worldwide) suggest we cannot ignore Canada

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