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E-voting Eventually? Online voting in (local) elections

Introduction

In April 2016 New Zealand's long-awaited online¹ voting trial for local elections was again cancelled, or postponed indefinitely. Despite its advocacy of e-government, central government in New Zealand has continued to stall over trialling online voting. The trial of online voting was strongly supported by local government and has long been recommended by a Parliamentary select committee. However, three months before nominations opened for the October 2016 elections, the associate local government minister, Louise Upston, called off the online voting trial proposed for the elections, citing concerns about security and vote integrity.

The cancellation of the online voting trial came as a disappointment to many in the local government sector, especially the councils that were keen to participate. The minister appeared very equivocal about the future of online voting, stating in her media release:

online voting could be trialled at future elections but there is still much to learn about online voting, and issues with online voting overseas have stressed the importance of getting it right and maintaining public confidence. The Government is open to looking at proposals for future trials of online voting in local elections but any plans for trials should be developed as part of a programme of gradual steps towards online voting in local elections. (Upston, 2016)

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Since that statement there has been no further public announcement of further steps towards online voting.

Yet the option of e-voting is a key subset, and logical extension, of e-participation, which is being proactively used in New Zealand. Indeed, New Zealand ranked fifth equal with the Netherlands in the United Nations 2016 index of e-participation, just behind the United Kingdom, Japan, Australia and South Korea (United Nations, 2016, p.56). What is perhaps more noteworthy than the high ranking is the rapid acceleration in ranking, from 19th in the 2014 index. This high level of e-participation reflects not only the pace of development of e-participation but also the rapid expansion of internet connectivity, especially since 2014, stimulated by faster broadband speeds, with exponential growth in fibre-based internet connections since the introduction of fibre in 2011 (doubling between 2014 and 2015) and more attractive pricing plans. For example, as at 30 June 2015 a third of all broadband internet connections were uncapped, compared with 8% in 2014 (Statistics New Zealand, 2015).

In this article, after reviewing the background to online voting in local elections in New Zealand, with reference to relevant overseas experience, I consider the way forward to implementing online voting, with a view to e-voting being an optional method of voting in local elections.

Online voting: the growing momentum

Postal voting, a form of remote voting, has been a long-established method of voting and was made mandatory by the fourth Labour government for local elections in 1989, in an effort to boost turnout. Following a change of government in 1990, postal voting was made optional from 1992, but with turnout plummeting at the one council (Hutt City), which used ballot box voting, the norm has been for postal voting to be used (Bush, 1995; Zvulun, 2010). However, average turnout has declined slowly, as it has in parliamentary elections, since then (Local Government New Zealand, 2013). Postal voting may have sustained voter turnout

rates in the period, but is rapidly become anachronistic as email and, in particular, online communications displace paper mail. While the voting method is not the key determinant of turnout, the opportunity to harness technology to assist voters cannot be ignored. The extent to which the antiquated postal voting method deters voters needs to be carefully examined.

The rapid expansion of e-government, which has been promoted by both central and local government, has heightened the expectation of many citizens of being able to vote electronically. The move to e-government is a worldwide phenomenon, found not just in developed countries but also in developing countries (Björklund, 2016). While online voting is 'one of the last frontiers

recommendations that this method of voting be considered for local body elections. Following the 2007 and 2010 elections, the Justice and Electoral Committee inquiry into local elections recommended a trial of online voting. Already, as will be discussed below, online voting was being successfully implemented in a number of jurisdictions internationally.

A 2011 New Zealand Society of Local Government Managers (the peak body for senior local government managers, which includes staff administering elections) electoral working party developed a strategic framework for e-voting in local elections which drew heavily on the draft strategy for voting technology published by the Chief Electoral Office referred to above. The working party noted:

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for Internet use' (Crothers, 2015, p.125), many related aspects of elections utilise, and are increasingly dependent on, the internet. These include voter registration, information about elections, information about candidates, and other voter advice. Nearly a decade ago in New Zealand the Chief Electoral Office in the Ministry of Justice published a draft strategy for voting technology which identified a very wide range of benefits to voters and the community, to government and to democracy from the introduction of e-voting technologies. It noted the natural progress towards e-voting, given that 'ICT solutions are already in place for voter registration, the roll, "download and fax" voting, the administration of the election, media and public access to election results, public access to election agency information, etc.' (Chief Electoral Office, 2007, p.36).

Expectations of online voting were further elevated with the recurring

The local government sector has had extensive experience in recent decades with remote/unsupervised postal voting elections which are extensively run on proven technology systems. Election Services [one of two companies that provide assistance with vote processing and other aspects of elections] have had extensive experience in running e-voting election in New Zealand in tandem with postal voting for non-public elections. This also means that there is a significant number of electors who have experienced e-voting. (New Zealand Society of Local Government Managers, 2011, p.4)

In September 2013 the minister of local government announced that online voting would be trialled at the 2016 local elections (Tremain, 2013a). Online

voting was specifically linked to digital government services:

Online transactions are the way of the future and the Government is committed to rolling out digital services for New Zealanders. ... The Government RealMe service will be used to enable online voting. New Zealanders who have a RealMe logon can now update their electoral enrolment details online. The Electoral Amendment Bill recently introduced will enable electors with a RealMe verified identity to enrol online. (Tremain, 2013a)

Zealand, had expressed support. Several councils had volunteered to participate in a trial, with interest coming from a diverse range of councils.

Just over two months later the minister announced the terms of reference and membership of the working party. The clear intention was to have a trial prior to the October 2016 local elections and then full implementation at the elections:

The online voting working party (the working party) is appointed to consider and recommend:

a) the feasibility of having online voting in local government elections by 2016;

b) any other opportunities to provide for local electoral processes through the internet; and

c) practical options for achieving online voting in the 2016 local authority elections, subject to a successful trial having been conducted before 2016. (Tremain, 2013b; Department of Internal Affairs, 2013)

It was envisaged that online voting would be available not just for council but also for district health board elections, and, if used in local authority elections, would potentially drive demand for online voting in parliamentary elections and school board elections. As noted above, the Ministry of Justice had a decade ago identified an extensive set of benefits of e-voting. It recognised that new technologies opened up new methods of voting. As well, there has been growing concern about the decline in voting in parliamentary elections. In 2013 the Electoral Commission (which replaced

the Chief Electoral Office in October 2010 and is responsible for administration of parliamentary elections) argued that there needed to be a national discussion about the implications of declining voter participation, and it sought to promote such a discussion with its strategy for participation in parliamentary elections. In that strategy it noted that enrolment and voting processes themselves do not significantly affect turnout in New Zealand, as it is easy to enrol and vote. Research on non-voting indicates that key factors are that non-voters 'are too busy, have no interest in politics, have little faith in politicians, cannot make up their mind, or do not think their vote will make a difference' (Electoral Commission, 2013, p.3). Clearly, e-voting cannot address many of these factors, but it can assist by providing a more convenient mechanism and would eliminate some of the vulnerabilities of postal voting, such as postal voting papers being undelivered, stolen or, once received, misplaced.

Security risks with e-voting are undoubtedly essential to address, but can be overstated. While such risks are ever-present, and have resulted in considerable caution, they have not prevented many countries successfully implementing online voting at various levels of government. E-voting was first introduced in local elections in Estonia (which has a population of approximately 1.3 million) in 2005, and repeated in subsequent local elections in 2009 and 2013, and also used in parliamentary elections (2007, 2011, 2015) and in the Estonian European Parliament election (2009, 2014) (Alvarez, Hall and Trechsel, 2009; Björklund, 2016; Gibson et al., 2016). There have been various other initiatives in Europe, such as in Switzerland, where e-voting was introduced in the early 2000s to allow expatriate voters to participate in elections (Mendez and Serdült, 2014).

In Canada, two provinces, Ontario and Nova Scotia, implemented e-voting in municipal elections in the early 2000s, and increasing numbers of councils have provided the option of e-voting since then. In the October 2014 elections in Ontario approximately a quarter (98 out of 414) offered e-voting in the elections, and in Nova Scotia approximately one

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In addition to the extension of e-government to elections, the minister also made a connection between online voting and voter turnout, especially among younger voters and people with disabilities:

Voter turnout in local body elections is traditionally low and we need to look at other ways to encourage people to become involved in the democratic process. Online voting will be more convenient and appeal to young voters. It will also make it easier for people with disabilities to vote (Tremain, 2013a).²

A working party was established by the Department of Internal Affairs to consider the options, costs and security aspects of online voting. As noted above, the decision by the minister to progress the implementation of the long-awaited online voting trial had been preceded by strong support from the local government sector. Both individual councils and the peak body, Local Government New

third of communities used e-voting in 2012 (Goodman and Pammett, 2014). Based on detailed analysis of online voting in the city of Markham in Ontario, Goodman concluded that ‘although online ballots are not a broad-based solution for turnout decline, electoral participation can experience modest increases when they are made available’, which seemed to result from the enhanced accessibility and convenience offered by remote e-voting (Goodman, 2014, p.22).

Much closer to New Zealand, some states in Australia (where voting is compulsory, so e-voting is not seen as an engagement mechanism) have introduced remote electronic voting in state general elections for voters who live at a distance from the nearest polling booth, or have a disability that means they require assistance with voting, or who are absent from the state during the hours of polling (Holmes, 2012; Zada, Falzon and Kwan, 2016). In New South Wales, legislation in 2010 made e-voting available in state elections for visually-impaired voters and others with disabilities. In Victoria, electronically assisted voting for the visually impaired had been trialled in state elections in 2006 and was expanded to all advance voting centres in the state in 2010. This was prompted by recognition that the United Nations Convention on the Rights of Persons with Disabilities, to which Australia is a party, protects the right of persons with disabilities to vote by secret ballot (Holmes, 2012). In the 2015 New South Wales state general election approximately 200,000 voters were able to use the remote electronic voting system iVote, which allowed them to vote using the telephone or internet (Zada, Falzon and Kwan, 2016).

Independent, up-to-date research is needed into what voters think about postal voting. Surveys by the Electoral Commission are primarily focused on how it can improve its services, as opposed to rigorously assessing current and potential voting methods. An Australian survey found that respondents were more in favour of the use of mobile internet e-voting than against it. They were attracted by its mobility, verifiability and speed. As well, security issues continue to affect postal voting. In

September 2016, just over a week before polling ended nearly 700 voting papers were found among up to 3,000 mail items that had not been delivered by a New Zealand Post worker in Wellington (Stewart, Shadwell and Nicoll, 2016).

The Justice and Electoral Committee inquiry into the 2011 general election had also made recommendations supportive of online voting. It had received submissions from the Electoral Commission recommending that e-voting be initially trialled with small-scale pilots at coming elections, targeting

undertook its work against this backdrop of considerable interest in, support for and international experience with online voting. In early August 2014 the working party’s report, *Online Voting in New Zealand: feasibility and options for local elections*, was released. The report found that online voting for local elections was feasible. In October 2015 Local Government New Zealand announced that eight councils had expressed interest in participating in a trial of online voting in the 2016 local elections.³ The trial would take place alongside postal voting.

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overseas voters and others disadvantaged by paper-based ballots. The committee noted that the Electoral Commission had sought guidance from the government on the feasibility of running such a pilot of internet and telephone voting for the 2014 election. The commission had estimated the cost at \$5–7 million, but the government indicated that resourcing the pilots was not a fiscal priority. E-voting by overseas voters had dropped significantly, and the select committee endorsed recommendations from the Electoral Commission for online voting to replace outdated technology (fax machines) which was being used at that time (Justice and Electoral Committee, 2013). In the 2014 general election, overseas voters were able to download their voting papers from the commission’s website (in addition to the existing options for voting) and could scan and upload them directly to the commission’s website – a first tentative step towards remote electronic voting (Justice and Electoral Committee, 2016).

The online voting working party which met in the first half of 2014

The president of Local Government New Zealand, Lawrence Yule, noted that

the eight councils together meet the Cabinet’s requirement that the trial is of sufficient scale and representativeness to produce evidence of the practicality and value of online voting in local elections across New Zealand. The councils will only be able to offer online voting if they meet the regulatory requirements set by Cabinet and if Cabinet agrees to a trial going ahead. (quoted in Local Government New Zealand, 2015)

Councils seeking to participate in the trial had to give an assurance that they were able to meet regulatory requirements imposed by the Department of Internal Affairs, and their participation would be subject to an audit by the government’s chief information officer. Councils also had to meet the costs of the trial, despite the trial being for what was intended to be a nationwide policy initiative. The eight councils worked with national organisations for six months to

prepare for the October 2016 online voting trial, until the government's decision to cancel the trial.

Beyond 2016

While the cancellation of the 2016 online voting trial in local elections was disappointing to many councils and voters, it is clear that from the beginning there was a lack of interest and support on the part of central government. Recommendations for online voting from select committee inquiries into local elections had been addressed somewhat belatedly and half-heartedly. Central government insisted that ratepayers in each local authority should foot the bill for the trials, which clearly penalised councils that offered to be part of the trial and acted as a disincentive to participation. The lack

Australia in August 2016).⁴ Yet occasional failures should not be cause for rejection of the use of digital technology. While a number of countries have stepped back from e-voting, there are generally factors specific to each country that have prompted the retreat, as in the case of the German federal court's decision in 2009 that e-voting using a particular type of machine was unconstitutional; this did not, however, mean that e-voting was unconstitutional (BVerfG, 2009).

Moving forward, a detailed implementation plan for e-voting trials should be developed, co-ordinated centrally by a joint local–central government working group, and resourced centrally (by the Department of Internal Affairs or the Electoral Commission). It might be argued that

needed simultaneously. In 2016 Local Government New Zealand launched a campaign to promote voter awareness of local government, but the effectiveness of this is questionable. It needs to be complemented by many other initiatives.

A single initiative such as e-voting, or even enhancements more generally to elections, cannot address the complex set of factors affecting turnout. However, it is essential to increase access to and convenience of voting. E-voting offers a mode of voting which will be preferred by many voters who are familiar with digital technologies or not able to use postal or ballot box voting. Goodman, based on her research on e-voting in municipal elections in Ontario, concluded:

‘Though voting by Internet is by no means a systemic fix for apathy or other social and political causes of nonvoting, and the numbers are small, there does seem to be some potential for engagement among less committed voters, particularly young people’ (Goodman, 2014, p.22).

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of central government commitment was particularly noticeable given that the trial was nationally significant: it was intended to provide information which will benefit all councils, and indeed other elections, such as parliamentary elections.

The cancellation of the online voting trial was disappointing also because of the length of time available for resolving the technical challenges, and experience internationally. In fact, technical feasibility is not regarded as a key impediment; rather, the issue is public acceptance and political will. In New Zealand, public acceptance is evident in the support from many sectors for a trial of online voting as a complementary method to postal voting. Some e-voting systems that have been used in other jurisdictions have not been trustworthy or trusted; however, that has also been the case with other forms of e-government, such as online censuses (for example, in

use of e-voting should be a matter of choice for local communities or local councils. However, in a country the size of New Zealand consistency is needed to assist voter understanding of elections, rather than different practices from one council to another. Trials should be conducted at council by-elections. As well, a trial of e-voting by overseas voters should be conducted in association with the 2017 parliamentary election. Groups representing voters with disabilities need to be fully involved in planning for online voting trials.

It has been suggested that, rather than implementing e-voting, central and local government should first focus on encouraging people to vote by improving voter knowledge of the importance of local government. The two initiatives, encouragement (or, as some prefer, engagement) and access, should not be seen as mutually exclusive. Both are

While accessibility for those who are not able to vote via conventional methods was improved for New Zealand voters with disabilities with the introduction of dictation voting by telephone in the 2014 general election, many voters in local elections still require assistance with paper ballots from friends and family members.⁵

Several technical challenges are associated with e-voting, as indeed with postal voting. These include verifiability, dependability, security, anonymity and trust (Gibson et al., 2016). However, as with postal voting and other methods in the past, technology and testing has enabled these challenges to be minimised. While postal voting has enjoyed a degree of confidence in the past, it cannot be assumed that this confidence continues, especially in the wake of the non-delivery of voting papers in Wellington in September 2016. Up-to-date research on confidence in this method, especially given recent reductions in postal services and the related decline in use of ‘snail mail’, is needed.

Conclusion

E-voting is a key aspect of e-government, which is increasingly being implemented internationally as technological and sociological challenges are resolved. E-voting has been utilised successfully in many developed and developing countries for municipal and higher-level elections. No voting method is free from risk; however, risks perceived with e-voting can be and have been mitigated. E-voting is not intended to replace other voting methods, but will provide a much needed level of convenience and a more accessible form of voting. Increasingly, the choice to use digital means to cast a vote will be important for voter participation in elections in a country like New Zealand, which ranks so highly internationally in indices of e-government and e-participation.

It is widely accepted that e-voting is not a silver bullet that will fix low voter turnout. However, that does not provide grounds for postponing the introduction of online voting. As the Australian case demonstrates, even where voting is compulsory and turnout is not an issue, e-voting is an important mechanism for allowing participation by voters overseas, those away from their electorate on polling day and people with disabilities. It forms part of a very diverse set of initiatives needed to address voting, which include wider societal responses to social exclusion as well as measures related to elections (including not just the method of voting but also timing and the voting system). A co-ordinated response is needed so that the decline in

turnout in parliamentary elections can also be addressed. Political leadership from central government is needed to ensure that the technology is robust and voters have comprehensive information about the option of e-voting.

Digital platforms are increasingly being used to provide information about candidates in an attempt to address one of the causes of non-voting: namely, lack of knowledge about the candidates. With a paper-based system only limited information can be made available, as has been done through candidate profile statements. These are clearly inadequate, and digital information will become increasingly important for most voters. Efforts to provide information to voters about candidates can be more effectively targeted through digital platforms than can paper-based information, and digital platforms are already used to remind voters about registering and voting. Officially sanctioned, digital information sources about elections and candidates can potentially be linked to official election information sources available online.

With online voting now postponed, there is sufficient time for a trial of online voting in a council by-election and for any refinements needed to be made in time for a full roll-out of online voting in the 2019 local elections. The abandoned 2016 pilot would have provided valuable insights to assist deliberation about online voting in general elections. Online voting in elections is likely to become a focus of public and media debate if the trend of declining turnout in general

elections continues in 2017. While it is important to distinguish between engagement and access, access can be significantly enhanced with the use of digital technologies.

- 1 The term 'online voting' is used interchangeably with the term 'e-voting' throughout this article. The former is the term used by the minister and government officials in New Zealand primarily to refer to remote vote casting by digital means. The term 'e-voting' (along with 'internet voting') is used more extensively in the international literature. Some authors use these terms to encompass other aspects of elections that use electronic means, such as vote counting, or local e-voting using an electronic device in an officially designated polling place. However, the focus in this discussion is on vote casting at a distance from the hub that captures, records and counts the vote.
- 2 While the minister refers to low turnout in local elections, it is important to note that there are reasons for the gap in turnout between central and local government elections. More relevant to note is the common trend in both local and general elections of declining turnout. The Electoral Commission in its report on the 2014 general election noted: 'Turnout has been in decline in most developed democracies over the last 30 years, but New Zealand's decline has been particularly steep and persistent. At the 2011 election, turnout as a percentage of those eligible to enrol dropped to 69.57%, the lowest recorded at a New Zealand Parliamentary election since the adoption of universal suffrage in 1893. The 2014 result, 72.14%, is the second lowest. This small increase, while welcome, is no cause for comfort. New Zealand has a serious problem with declining voter participation' (Electoral Commission, 2015, p.i).
- 3 The eight councils were Masterton District Council, Matamata-Piako District Council, Palmerston North City Council, Porirua City Council, Rotorua Lakes Council, Selwyn District Council, Wellington City Council and Whanganui District Council. They encompassed a mix of metropolitan, provincial and rural councils, socio-economic status and voting systems, including single transferable vote (STV) and combined STV and FPP (first past the post) elections. They included councils with community boards and licensing trusts. According to Local Government New Zealand (2015), the population within the jurisdiction of these councils comprised about 10% of New Zealand's total population.
- 4 In August 2016 the Australian Bureau of Statistics attempted to administer the census online but a technological failure resulted in the census website shutting down. The Australian Parliament subsequently tasked the Senate Standing Committees on Economics with inquiring into the preparation, administration and management of the census (Parliament of Australia, 2016).
- 5 In 2016 Auckland Council, working with the Blind Foundation, offered 'assisted voting' for blind and low-vision voters, who could register for a service which used technology and in-house visits (Auckland Council, 2016). The Blind Foundation also supports online voting.

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Festive greetings from the School of Government

The School of Government would like to extend our sincere thanks and good wishes to all those who had contact with the School during 2016, with particular acknowledgement of our 2016 graduands and prize-winners.

We wish you all a happy and restful festive season and look forward to working with you all again in 2017.