

Democracy in the Digital Age

How we'll vote and what we'll vote about

Costa Vayenas lives in Switzerland, where ordinary citizens are called upon to be legislators. He has voted in over 200 legislative proposals at all three levels of government: local, cantonal and federal. The insights he gained from this process have been useful in his professional life as an investment analyst. Asset prices, after all, are also a function of how well a country is governed. He is the editor of an 800-page book on the emerging markets (Bloomsbury). He was Head of Research for the emerging markets at UBS, and has worked as an analyst in London, New York and Zurich. One of his reports was cited in *The Financial Times* as having triggered a currency crisis. Another featured on the front page of *The Wall Street Journal* under “What’s News”. He has lectured at the University of Zurich and has been a guest lecturer at the Swiss Federal Institute of Technology. It was an invitation to speak at the latter’s Institute of Science, Technology and Policy that was the trigger for this book, which describes how democracy is being disrupted by digitalization and the profound consequences of that disruption.

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PREFACE AND ACKNOWLEDGEMENTS

The idea for this book originated from research I had done about the impact that digital technology can have in opening up new markets. It struck me that while digitalization was changing all aspects of how modern societies operate, there was one sector that appeared to have been left untouched.

Disintermediation, short for “cutting out the intermediary or middle man between two parties”, was happening everywhere, except in arguably the most important arena of all – democracy. Was there a special reason, I wondered, why the job of the lawmaker had not changed in the digital age? How long would the grand buildings housing parliaments still have activity on their floors, while the grand buildings housing stock exchanges had already gone quiet?

Looking for answers, I found evidence that disintermediation is under way in politics too – globally. I wrote this book to highlight the evidence and consider the implications of this coming disruption.

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FOREWORD

By Thomas Bernauer, Professor of Political Science and Head of the Institute of Science, Technology and Policy at the Swiss Federal Institute of Technology

In a definition commonly attributed to Abraham Lincoln, democracy means government of the people, by the people, and for the people. No government in the world is perfect in this regard, but some are better than others. Autocrats typically claim that their policies are what people want, though without free and fair elections or free news media and civil liberties it is impossible to say, and most often entirely implausible that this is true. Even in mature democracies, parochial interest groups oftentimes shape policies in ways that cater to their interests, rather than to the welfare of the country's population.

The advent of the digital age raises hopes that ever lower costs and higher speeds of information flows over electronic networks will facilitate interaction between policymakers and citizens. What this will do to the quality of democracy, in the sense defined above, remains contested. Optimists believe that the digital age will also bring digital democracy (what exactly this means remains open to debate), and this in turn will create more transparency of, and greater accountability by, policymakers for citizens. As a result, policies are likely to align better with what the majority of citizens want. Pessimists point out that faster and cheaper communication could lead to more volatile and poorly thought-through policy choices, relative to the traditional decision process where representatives meet in person, are able to familiarize themselves with substantive policy issues, debate, and strike compromises. Hence they fear that digital democracy harbours the risk of an unstable and conflict-prone tyranny by the majority.

Costa Vayenas seeks to navigate between these two extremes, pointing out the benefits of digitalizing the democratic decision process, but also the challenges or risks. He also points to many open questions, for instance whether this could reverse the trend of declining political participation by younger citizens, or how digital democracy could work in very large countries, for instance India. The example of Switzerland, which is discussed in depth and receives much praise, actually highlights two issues. First, Switzerland has been very reluctant to digitalize direct democracy (initiatives, referendums), both in terms of collecting signatures and voting on proposals. Most citizens and policy observers

fear that making the system faster and cheaper to operate may increase voter fatigue and result in more extreme (usually right- or left-wing populist-type) policies. Second, strong checks and balances and subsidiarity in the system have developed over a long period of time. These have made the decision process very slow, but by-and-large have worked well in protecting minorities, dealing with differences in a country that has four languages and several religions, and have helped make the country politically stable and wealthy. This suggests that digital democracy is not a panacea for achieving transparent, accountable, and welfare-enhancing governance in countries around the world. Rather, it is one additional tool in the broader repertoire of decision-making mechanisms that can be very useful, provided the institutions in which it is embedded make sure it works to the advantage of citizens and protects minorities.

INTRODUCTION

The three-century-old ritual, by which the people need to queue up at the polling station every few years to assign a multi-year blank check to representatives to make the law, is a model that was designed when mail delivery was new and unreliable.

Unlike the disruption caused by digitalization in postal services, where people were happy with the product – mail – but just switched to another form of delivery – email – the people worldwide seem less and less impressed with the product that their representatives have been delivering.

Technology now offers the people, who in democracies have the say about the political system, the opportunity, for better or worse, to exercise greater control. Whereas senders and receivers of mail probably did not think they needed digital post on the device they used for making calls, they happily used it when available. With representative government it is the other way round: the data shows that the people desperately want better

outcomes, and now technology is giving them new possibilities to try and achieve that.

Technology is now making it possible for the people to petition their government electronically, for the people to launch initiatives online, to vote online and, most radically, to compete with their legislature or even to replace it. Technology can now directly connect the people to the server where legislation is being prepared on their behalf. Technology holds the capacity to transfer power directly to the people.

This book was written to address the profound change that modern technology has the capacity to make in democracy itself. The idea that everything can be disintermediated in the internet age, except the job of the middle men in politics does not seem plausible. That no further shifts in power to the people can occur is also not supported by history. Constitutions fix a system in place, but every national constitution also provides the means to change the system. What we know from history is that the question of who can vote about what using which means is never settled.

Had the representative model been invented today, it would almost certainly have been configured differently. Just as the evolution occurred on the question of *who* could vote, it seems inevitable that in the digital age the question will now turn to *how* people vote and *what* they vote on. These changes may work to improve the quality of government or make it worse, but these changes appear to be the inevitable evolution to the next iteration of how free people want to organize themselves politically.

CHAPTER 1

A TECHNOLOGICAL CHALLENGE TO THE FOUNDING FATHERS

Very little has changed in the machinery of representative democracy since the late 1700s. As in those early days, in most countries the people still have to wait for years at a time for the privilege of queuing up at the ballot box. Between those visits, policy decisions that can have momentous consequences continue to lie outside of the people's remit.

This bargain is starting to unravel. The technology by which the people receive their information and make their will known is being revolutionized.

That technology influences how the people instruct their representatives, is as old as recorded history. Over thousands of years, the ballot has been many different things: a show of hands, the spoken word, light and dark pebbles, engravings on bits of clay, entries on small wax tablets, olive leaves, pieces of bronze, papyrus, parchment, vellum, marbles, the lifting of swords, and paper.¹ Since the beginning of the twenty-first century, in more and more places, the ballot has become a series of electronic digits transmitted far from the traditional polling booth. In recent years, hundreds of government-sponsored and government-supervised elections over the internet have taken place in many countries, including in Australia, Canada, Estonia, France, India, Mexico, the Netherlands, New Zealand, Norway, Portugal, Switzerland, the United Kingdom and the United States.² The evolution of the ballot is continuing, therefore.

Estonia, the country where the software for Skype was developed, moved beyond the experimental phase of electronic voting by introducing legally-binding voting via the internet in 2005. The entire Estonian electorate no longer needs to go to the polls – they can vote from anywhere in the world.

What are we to call this new kind of ballot? A digital ballot? An electronic ballot? An internet ballot? Here it is abbreviated as the *i-ballot*.

A ballot can reinforce the pursuit of happiness or undermine it, but a ballot can never be neutral. That being the case, the ease with which people can get access to a ballot matters. When technology changes profoundly, the effects can be spectacular. When technology permitted us to add the “e” to mail, we sent and received far more mail than before. If we now add the “i” to ballot, what are we going to get more of? Might we get a higher turnout of voters? More elections? Might we be asked to vote about new kinds of things?

Slowly but surely we are getting a growing body of data, experience and academic research on this topic, which offers some first answers to these questions. The data from Estonia, France and Switzerland provides the longest time series in this area, allowing for some meaningful initial comparisons.

The key takeaway from the Estonian data is that the i-ballot there has resulted in a higher voter turnout overall.³ These results confirm what one might have expected intuitively, namely, that if something is easier to do, like voting from home in your pyjamas, then more people are likely to try it, but only if they think what they’re doing is relevant. That last requirement – only if it is worth doing – is a condition that still needs to be fulfilled in the digital age in order to get out the vote.

Let’s look at the data. Even before the Estonian case, we already had empirical evidence that when the state makes it a bit easier for citizens to vote, then more people are likely to vote. This evidence comes from the world’s only postal democracy, Switzerland. In that country every eligible citizen, regardless of where they are registered in the world, automatically receives a ballot in the post, complete with a self-addressed return envelope, whether they want it or not. A long-term study that looked at the impact on voter turnout following the introduction of postal voting in Switzerland found that it resulted in an increased voter turnout of around four percentage points.⁴ At first glance, that is a surprisingly low number considering that the ballot arrives at your home without you requesting it, and includes a return envelope addressed to the ballot-counting authority. How much easier can it be than that? But that is also a reminder of how

uninterested the average person is in politics – they don't even want to open the envelope. Getting people to vote is hard work. On the other hand, a permanent increase of four percentage points in voter turnout shows that more convenience *does* make a difference. And given how narrow some election wins are, four percentage points can make a huge difference in some places. Seen from that perspective, a permanent increase of four percentage points is a big deal in politics.

If four extra percentage points are what happens in a postal democracy where the postal system works well, what would happen in a digital democracy? It would be reasonable to assume that pushing a button on one's smart phone should be even easier than posting a letter, thereby increasing voter turnout by more than in a postal democracy. And this is also what the current evidence shows: the i-ballot has increased voter turnout in Estonia by around six percentage points. That's an even bigger deal in politics.

Again, at first glance, it may be surprising that this new technology has not resulted in even higher voter turnouts. But here we have to overcome the first rule of getting out the vote: What's in it for me? Why should I bother to vote? Data comparing internet voting in France and Switzerland underlines this.

In France in 2012, French citizens living abroad were, for the first time, able to vote for their own members of the lower house of the legislature. The i-ballot was one of the options available.⁵ Testing started in 2003 for selected elections for French residents living abroad, but the i-ballot was not offered for presidential elections, referendums or elections to the European parliament.⁶ For those elections, French citizens living abroad still need to find a car, bus, train, boat or plane to take them to the local consulate or embassy. After more than a decade of experience with this limited i-ballot, the data shows that the French living abroad are twice as likely to make the effort to get to a polling booth to vote in an election that they believe matters, like the election of the president, rather than using the internet to vote from home in an election that they feel is less important.⁷ The main insight here is that it is not the type of ballot – papyrus, small pebbles or the i-ballot – that determines voter turnout, but the importance of the issue being decided. Even if it is possible to vote

over the internet, therefore, few will waste their time pushing the send button for issues they think are unimportant.

In contrast to the French, the Swiss approach during the current test phase permits the i-ballot for all votes, including for the really important ones. The result is that five times as many Swiss expatriates use the i-ballot compared to French expatriates.⁸ The Swiss data reinforces the intuitive view that more voters would opt for the i-ballot if it were available to vote on things that matter to them.⁹

The key inference, therefore, is that the new technology can result in a higher turnout *if* the election in question is relevant to voters. This is also confirmed by the data about one of the great mysteries of voter-turnout: Will the i-ballot cause more young people to vote? A report published by the British parliament's Commission on Digital Democracy, set up by the Speaker of the House of Commons, John Bercow, was of the view that "there is a substantial appetite for online voting in the UK, particularly among young people".¹⁰ The report, published in 2015, set the ambition that "by 2020 secure online voting should be an option for all voters."¹¹

But the data from Estonia reveal that the i-ballot has *not* resulted in an increase in the share of voters in the 18-24 age group. Throughout the world, when voting is not compulsory, the overwhelming majority of the 18-24 age group is not easily persuaded to go and vote. A review of many academic studies up until 2015 on what kinds of people vote by internet found that the 18-24 age group continued to be uninterested.¹² They are not going to be cajoled by parents or politicians to download apps that don't interest them. Strategists targeting the 18-24 age group will need to find other ways to connect with these young people.

As more experience is gathered on holding binding elections over the internet in developed countries, the topic is beginning to attract more attention in more countries. A 2016 survey of academic papers on the i-ballot by the University of New South Wales in Canberra, Australia, found an increased output in academic research on this topic in the following developing countries (ranked according to the number of academic papers): Nigeria, Brazil, Indonesia, Argentina, India, Iran, Jordan, South Africa, Colombia, Pakistan, Tanzania, Ghana, Ecuador, Lebanon, Mauritius, Mexico, Thailand, Turkey and Uganda.¹³

The United States is the country one might have expected to see take the lead in introducing the i-ballot, but so far the picture has been a mixed patchwork, reflecting the competing centres of power in that federal republic. Currently thirty-one US states offer the i-ballot to military and overseas voters. The lack of experimentation for US residents appears uncharacteristically hesitant for a country that is home to Silicon Valley.¹⁴ One reason for this hesitance is that, everywhere, everyone appears to be facing the same worrying questions about the i-ballot. Is it safe? This is a wonderful time for the lawyers. Already there is a build-up of case law on this technology in many countries, including in Argentina, Australia, Brazil, Estonia, France, Finland, Germany, India, Mexico, Switzerland, the United States and Venezuela.¹⁵

Some voters keep suing on the basis that this new technology is undermining their rights. The legal challenges come from three main angles: first, that the technology might not ensure the *secrecy* of each individual's choice (like when you mark your cross on a piece of paper privately behind a curtain at a polling booth), second, that what happens on the inside of the computer is not *verifiable* by ordinary members of the public (like when election observers can see how the ballot boxes are emptied onto counting tables to be counted and the people doing the counting can be monitored), and third, that each vote might not be given *equal* treatment if different types of ballots and different mechanisms are used for recording, transmitting, sorting, counting and storing votes in different constituencies. This latter point becomes especially important in very tight races and when recounts are needed and a tiny number of votes can make the difference. It is then that the curtain gets pulled away to reveal the hidden world of voting technology. In the US, we learnt about the "hanging chads" affecting some of the ballots in the Bush vs. Gore election. In Switzerland, when the curtain was pulled away after one particularly close election, it revealed the surprising information that some jurisdictions did not actually count the paper ballots, they just weighed them!¹⁶ Strange things have happened, therefore, with the tallying of paper ballots. In the digital era, it thus needs to be transparent what happens to the i-ballots on their way to an electronic database.