European Parliament

Digital democracy

Is the future of civic engagement online?

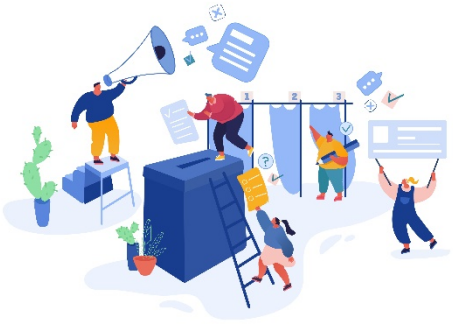
SUMMARY

Digital innovation is radically transforming democratic decision-making. Public administrations are experimenting with mobile applications (apps) to provide citizens with real-time information, using online platforms to crowdsource ideas, and testing algorithms to engage communities in day-to-day administration. The key question is what technology breakthrough means for governance systems created long before digital disruption. On the one hand, policy-makers are hoping that technology can be used to legitimise the public sector, re-engage citizens in politics and combat civic apathy. Scholars, on the other hand, point out that, if the digitalisation of democracy is left unquestioned, the danger is that the building blocks of democracy itself will be eroded.

This briefing examines three key global trends that are driving the on-going digitalisation of democratic decision-making. First are demographic patterns. These highlight growing global inequalities. Ten years from now, in the West the differentials of power among social groups will be on the rise, whereas in Eastern countries democratic freedoms will be at risk of further decline.

Second, a more urbanised global population will make cities ideal settings for innovative approaches to democratic decision-making. Current instances of digital democracy being used at local level include blockchain technology for voting and online crowdsourcing platforms.

Third, technological advancements will cut the costs of civic mobilisation and pose new challenges for democratic systems. Going forward, democratic decision-makers will be required to bridge digital literacy gaps, secure public structures from hacking, and to protect citizens' privacy.



In this Briefing

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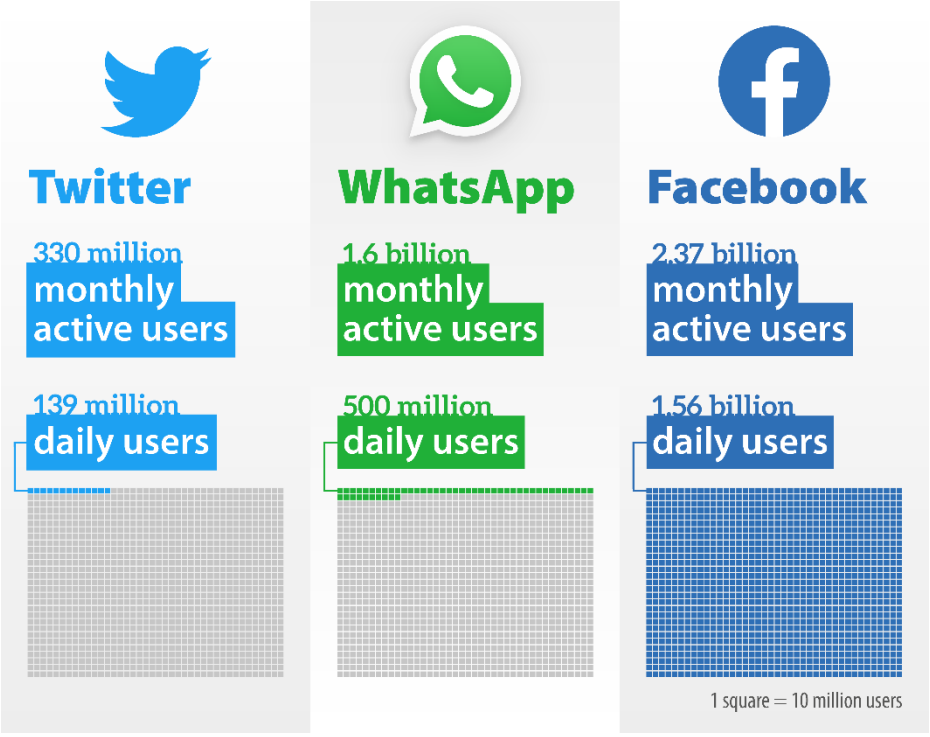
From Aristotle to Facebook

Diversity of cultural backgrounds and multiplicity of ideas were well-known in ancient Greece – and so were efforts to harmonise conflicting interests and opinions through discussion. In Aristotle's politics, *'synoikismos'* describes the drawing together of different families and tribes, competing economic interests, and natives and foreigners. Urban environments were up to the task of letting diverging interests co-habit peacefully; Greek cities were designed for that purpose. In amphitheatres, citizens could listen to public debates and take collective decisions. They would sit in assigned places, with members of their tribe, and listen to the orator's speech, replying if they so wished. The town square, the *'agora'*, served a different purpose. It exposed citizens to differences in a less mediated way. Typically, public squares hosted various events simultaneously. It was common, while walking across the square, to be caught up in debates: a trial occurring in the law court, for instance. So much so that, by leaving the square, citizens would symbolically step back from engagement, transitioning from the public to their private space.[1]

Flash forward to the 21st century. First radio broke the information barrier between people living in different parts of the world, then the telephone stopped the information gap between distant relatives, and now the internet and social networks have closed the gap between literally every stranger in the world. The data are telling. In April 2019, Facebook had 2.37 billion **monthly active users**, an increase of **55 million** on the previous quarter. The same year WhatsApp reached 1.5 billion active users in **180 countries**, which makes it the most-popular messaging app in the world. The average global rate of **users accessing the internet for the first time every day stands at nearly 1 million**. Those who are already connected spend, on average, **6 hours and 42 minutes** a day online.

Figure 1: User figures for three key social network applications



Data source: Facebook, Twitter, WhatsApp, 2020.

It has been argued that social media and online digital platforms are the new public spaces. Online chats and instant messaging apps resemble a modern version of the Greek amphitheatre. People use them to connect with friends and family, or coordinate with colleagues, share documents, assign tasks and set deadlines. Social networks, meanwhile, are the contemporary agora. These platforms

are actually designed to resemble public places. They offer their users a rich menu of choices, including opportunities to debate politics, get informed about events or even mobilise in favour of social causes. In fact, most of the mass protests that broke out in 2019, from Hong Kong to Algeria and Lebanon, were convened by smartphone, inspired by hashtags and coordinated through social networks. On several such occasions, public authorities blocked social media platforms and disrupted the internet temporarily. In 2018 alone, there were **128 documented internet shutdowns**. While these attempts to curb digital mobilisation have been ineffective for the most part, they offer glaring proof of the political power of online spaces.

Further evidence of this is provided by the progressive transformation of social media into a core campaign tool. The 2018 Twiplomacy study counted **187 world leaders** with **951 accounts** – 372 personal and 579 institutional accounts – on Twitter. They reach out to over 400 million followers. Heads of government and foreign ministers of 179 countries, representing **93 %** of all United Nations (UN) member states, also populate Facebook. On Instagram, **81 %** of all UN member states have set up an account, on which they post pictures and share daily Instagram stories. With the global rise of political advertising on social media, the associated risks of misinformation and polarisation have also amplified. In this regard, the recent decision of Twitter to ban all political advertising has caused controversy, with public opinion deeply divided on the issue.

Digital democracy in theory and in practice

With online spaces having replaced physical spaces as venues for political argument and social interaction, the full digitalisation of democratic processes seems inevitable. This sense is heightened by the fact that traditional democratic systems are perceived as inefficient. Everyday interactions with bureaucracies appear lethargic when compared with the dynamic relationships people entertain with digital arenas. Going digital therefore seems to be not just plausible, but also desirable. Whether it be convincing people to vote, or engaging them in day-to-day administration, digital tools seem to offer a way out of the issues of contemporary democracies: declining trust, disengagement from politics, or political instability, for instance. This is true, in part. In many cases digitalisation has effectively helped public administrations to enhance inclusivity and boost engagement.

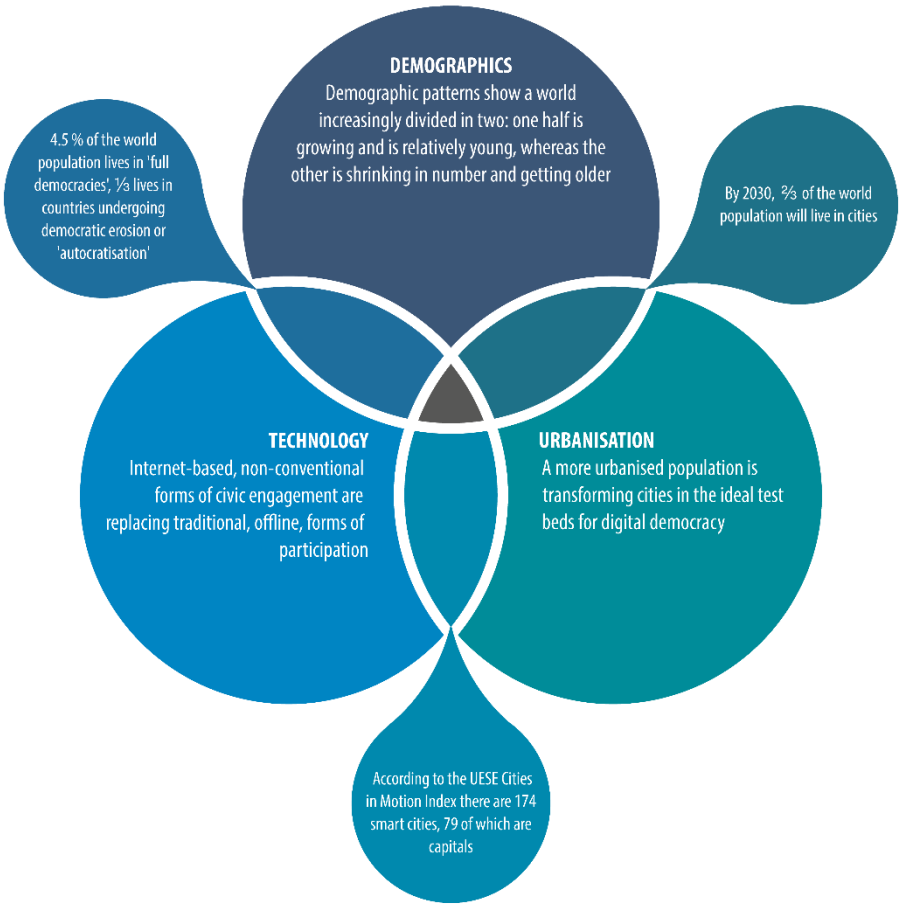
However, digital tools have yet to answer one key question: **how can democratic systems be digitalised 'safely'?** On-going efforts to digitalise democracy have to reckon with organisational resistance to digital innovation in the public sector. Public administrations are further challenged by the risks of fraudulent use of citizens' feedback, privacy threats and gaps in digital literacy.

This briefing looks at the on-going processes of digitalisation of democratic decision-making, at both national and supranational levels. It analyses three demographic, societal and technological trends that are key to understanding how democratic systems are evolving, and the challenges ahead. In doing so, it assesses a number of cases in which digitalisation has enhanced civic participation. Examples include the use of blockchain technology for voting, and digital platforms aimed at harnessing collective intelligence.

Three trends driving digital democracy

Three trends are likely to drive future developments in digital democratic governance. Demographic patterns rank first. They show a world increasingly divided in two: one half is growing and is relatively young, whereas the other is shrinking in number and getting older. Governments reflect this. The second trend is urbanisation. With a growing share of the world population living in cities, human interactions and governmental approaches are transforming rapidly. Technological advances, the third global trend to be examined in this briefing, are also impacting on social interactions. Constant digital connectedness is swaying human connections and governance.

Figure 2: Intersection of the three trends in digital democracy



Source: EPRS.

Demographics

How will things look 10 years from now? Foresight studies concur that the global population will grow over the next decade, but do so unevenly. While the populations of Africa and Asia, on the one hand, will increase, Europe (and in part the Americas) will have fewer (but longer-living) inhabitants. The European Strategy and Policy Analysis System (ESPAS) estimates at **12 %** the share of the world population that will be over 65 by 2030. In Europe alone, the over 65s will represent **25.5 %** of the population (up from 19 % in 2017). Fewer births will mean greater reliance on **immigration** for population growth.

Personal economic status will also undergo substantial changes. Current estimates highlight three important changes. First, **5.3 billion** people (up from 3.2 billion currently) will be classified as '**middle class**' (i.e. individuals enjoying between 67 % and 200 % of the median income in a country). Second, a large chunk of this global middle class will be situated in emerging economies, especially in China. The accumulation of wealth, however, will remain in the hands of a few. This results in a third change: a mere **1 %** of the world population is expected to own two-thirds of global wealth within less than 10 years.

Disparity of access to democratic processes

What impact will these demographic patterns have on democratic systems? The prospects are mixed. In **Western countries** the ageing of the population is likely to worsen the **disparity of access** to participatory channels. Typically, only citizens with preferential access to three fundamental

resources – time, money and knowledge – tend to engage civically. Their identikit picture is easy to sketch: male, college-educated, middle-aged and wealthier than the average citizen. By contrast, participation among women, racial and linguistic minorities, younger people and people with low-paid jobs and poor education tends to be less frequent. Moreover, people from the latter groups generally do not commit for long periods, and show less interest in engaging in conventional forms of participation. By looking at demographic patterns it might be expected that European and North American democracies will have a broader base of citizens potentially interested in participating (those in retirement) but will also be challenged with the risk of increased disengagement of young citizens.

Linguistic minorities will be at risk, too. Non-native speakers will increase in number, but language barriers will exacerbate the separation between linguistically versatile citizens and those citizens who believe themselves not to be proficient enough in the language of the country where they live to take part in online conversations, to participate in web polls, or engage in any other online-based participatory venue.[2]

There will be different challenges for **Eastern and Southern countries**. Benefiting from growing (and young) populations, African and Middle-Eastern and Asian governments will enjoy ideal conditions to experiment with digitalised participatory processes. Most of these countries, however, are currently governed by flawed, hybrid or non-democratic regimes that are reluctant, if not hostile, to engaging with citizens democratically, with or without digital tools. It is difficult to foresee whether a democratic transition will take place in these regions. Data, however, seem to suggest the opposite: the world is facing a steady decline in democratic rights and freedoms. In 2018 only 4.5 % of the world population lived in 'full democracies', with almost one third of the world's population living in countries undergoing democratic erosion or 'autocratisation'.

Digital technology and civic engagement

The **differentials in power** among social groups in Western countries may be levelled up by digital technology. Some scholars are optimistic about the potential for the internet (and more generally digital tools) to increase the inclusiveness of democratic governance.[3]

Three examples: first, behavioural incentives have returned promising results in terms of engagement of younger audiences. Second, design-thinking (i.e. the approach to policy-making from a design perspective) has proven effective at addressing common deficits of democratic systems, such as the registration of new voters. Third, experimental attempts with blockchain technology applied to voting in elections have shown promising results in removing frictions from voting mechanisms. One good example of this was the **2016 referendum on the peace treaty between the Colombian government and the *Fuerzas Armadas Revolucionarias de Colombia* (FARC)**. Following a decision of the National Civil Registrar of Colombia, of roughly 6 million Colombians living abroad only the 599 000 (those who had voted during previous elections) had the right to vote at the consulate in their country of residence. The tech non-profit Democracy Earth Foundation set up Plebiscito Digital, an online voting platform powered by blockchain technology, that tested a new way of validating and authenticating the electoral vote. This allowed Colombian expats, who were unable to vote through the official process, an opportunity to participate in a plebiscite on whether or not to approve the peace treaty.

As far as **non-democratic countries** are concerned, internet and digital tools may help activists to connect and put further pressure on governments to implement democratic reforms. This remains a controversial topic. On the one hand, recent research has shown how several of the protests that have occurred over the last few years in countries as diverse as Algeria, Armenia, Korea, Iran, Venezuela, and Sudan, have been unsuccessful at fostering political and constitutional reforms. Some, instead, have triggered draconian government reprisals, or have been clamped down on by authoritarian governments. On the other, hand, research has proven already that the 'democratic mood' of a country (i.e. national-level support for democratic versus non-democratic regimes) is inversely proportional to the quality and quantity of democratic freedoms. Following on from this,

it could be argued that the more sophisticated digital innovation becomes, the better chances activists will have of calling for democratic reform, and putting pressure on their governments internally or through 'transnational advocacy networks'.

Urbanisation

The second key trend influencing digital democracy is urbanisation. The UN has estimated that **55 %** of the world population currently lives in urban areas, a proportion that is expected to increase to **68 %** by 2050. Studies estimate that, by 2030, **two thirds** of the world population will live in cities. Many will live in 'megacities' – i.e. urban agglomerations with more than 10 million residents; the majority, however, will reside in medium-sized cities.

These changes will have unprecedented social implications. A more urbanised population will (on paper, at least) be a more engaged population. Enhanced engagement will arise from the proximity of residents to local administrators, making the latter more likely to pass on the needs of the former and engage them in active participation. Compared with their national counterparts, city managers already enjoy higher levels of trust. On average, while **21 %** of Europeans state that they have faith in national governments, **45 %** say they trust local or regional administrations.

These conditions, together with technological advances (see below), make cities the ideal test beds for digital democracy. For some years already, urban management has built on the combination of technology and data. Progressively, the 'smart city' brand has shifted from pursuing the efficiency of (digital) public services to taking care of citizens' concerns. Inclusiveness has become central to designing local public services.[4] Today **smart cities** are creative digital democracy workshops. Seoul, with Sharing City, Barcelona, with its Fab initiative, and Chicago are at the forefront of efforts to incorporate collaborative and distributed digital decision-making processes so as to catalyse innovative solutions to urban problems. Other cities have followed, engaging citizen planners in all phases of urban management, from planning to service provision, through digital means. There have been attempts to frame these attempts into a coherent theoretical structure. The Governance Lab, based at New York University, has theorised a crowd-sourcing process that urban managers can use to seek creative solutions to some of their most pressing problems.

Technological advances

The third trend worth observing, in order to understand how social connection and democratic governance are evolving, is technological innovation. First, the data: there are over **3 billion** people connected online. The number of connected machines exceeds **5 billion** globally, and it is predicted to triple by 2020. According to the World Bank, there are 98 mobile cellular subscriptions per 100 people in the world – a 50 % increase since 2007. The daily average number of physical interactions each of us has with mobile phones exceeds **2 600**. This is causing two broad, and inter-related, phenomena. First and foremost, internet-based, non-conventional forms of civic engagement are replacing traditional, offline, forms of participation. Second, governments are, as a result, being asked to rethink democratic decision-making structures and procedures.

Social connections and technology

Between 1994 and 2017 trust in parliaments and governments in Europe fell by approximately 15 percentage points, from 55 % to 40 %. Dissatisfaction with the way democracy works has risen both in Europe and globally. Political parties have seen a continued drop in membership, both in absolute numbers and as a share of the electorate. Widespread political disaffection and civic apathy have quickly become the new norm among large segments of the population.

In reality, the average civic potential of contemporary societies has not disappeared; it has transformed. Traditional forms of engagement, such as voting in elections or participating in council meetings, have been replaced by a wide variety of '**non-conventional' forms of engagement**. The former requires citizens to be able to engage directly with governments, often face to face, in a

lengthy process of negotiation. By contrast, non-conventional forms of engagement are more volatile, but also less demanding in terms of time and cost. This explains why, in terms of the number of countries swept up and the number of people mobilised, only the global unrest of the late 1960s bears comparison with the wave of protests currently taking place around the world. It took less than a year for the #MeToo hashtag to be shared over **19 million** times globally. From 2016 and 2018 another hashtag, #BlackLivesMatter, was used an average of **20 000 times** daily around the globe. Whether it is the environment, civil rights, economic reforms or transparency of politics, networked social movements have shown great capacity to mobilise large crowds quickly and effectively to protest against governmental decisions.

Unconventional forms of engagement are built on **weak ties**. With family members, friends and colleagues, we are linked by strong ties. Weak ties, explains Clay Shirky, differ from these in two fundamental ways. First, they are activated by necessity and, second, they encourage tiny acts of participation, like sharing text messages or images relating to a political issue or signing up to a digital campaign. None of these acts, taken alone, is capable of impacting on social or political discourse. Collectively, however, weak ties are extremely impactful. They enable large crowds to disseminate information, expose violations, or mobilise for a cause. The number of individuals that can be mobilised online is potentially unlimited. The cognitive limit to the number of people with whom one can maintain stable social relationships (commonly known as **Dunbar's number**)[5] does not apply to weak ties.

Having acknowledged unconventional forms of participation, academics have coined new terms to describe unconventionally engaged citizens. Ethan Zuckerman names them 'participatory civics'. Stephan Coleman's 'Autonomous citizens', meanwhile call for creative ways to engage in policy-making. The 'communities of practice' theorised by Jean Lave and Etienne Wenger consist of groups of citizens collaborating to develop ideas on issues of common concern. Finally, the 'communities of trust' described by Irene Wu exchange information and ideas through the internet, which in a later stage are the subject of advocacy towards established powers.

Governing and technology

The social impact of technology has not as yet been mirrored by equally significant changes in the public sector. In general, bureaucracies have been slow to adapt to technological change.[6] The reasons for this outcome may vary. These are partly structural – owing to anachronistic structures, public administrations may be unprepared to face technological challenges, or may be too slow to adapt to the fast changes imposed by technology – and partly related to knowledge-scarcity.[7] Regulatory failure plays a role, too. With public problems becoming increasingly complex, regulatory bodies often lack the capacity to design coordinated solutions across actors, sectors, and skills.[8] Finally, the resistance of the public sector to using technology to become more accessible and participatory may have cultural explanations.[9]

While these problems remain common in many public institutions, constant connectedness is pushing governments to rethink their policies and organisational forms. **Connectedness** is now used to assess the performance of governments. Examples include the Connectedness Index published yearly by the consulting firm McKinsey (the index measures global flows of data, services and people, and ranks countries in terms of how connected they are to other countries) and the Deutsche Post DHL Group's Global Connectedness Index, ranking 125 countries based on their integration into the world economy.

The list of national and supranational public structures that are experimenting with digital approaches to engage with unconventional forms of participation is growing day by day. At European Union level, the new online platform to support the organisers of new European Citizens Initiatives provides a good example in this regard. The platform was re-designed to help the organisers of new initiatives pass the threshold of one million signatures and possibly attract more young European citizens. At national level, the Grand Débat launched by the French President in reaction to the *gilets jaunes* movement can be used as an example. The online consultation resulted

in over **2 million** online contributions. Other examples of digital crowdsourcing have been tested at local level. Delib's Citizen Space, for instance, has been used by UK local government organisations to assist in running consultation processes.

The future of civic engagement

Demographic patterns, urbanisation and technological advances are driving key changes in how citizens interact, mobilise and engage with decision-makers. In line with these trends, unconventional forms of civic engagement are replacing offline, face-to-face forms of participation. Governments are transforming too, embracing digital tools to apply innovation to the quantity and quality of participatory channels. This does not mean that offline engagement is irrelevant. In-person engagement from citizens and civic organisations remains crucial, especially at local level. But civic engagement is increasingly moving online, and while this transition from analogue to digital is likely to bring policy-makers great opportunities; it also brings serious challenges. Privacy, equality and security will be particularly important in determining how digital democracy evolves.

Privacy. Digital democracy is data-consuming. Public services that are more targeted, customised, cheaper and faster are, in fact, data-demanding. 'Citizen-scoring' systems are a case in point. Described as systems to categorise, segment, rate and rank segments of the population according to a variety of datasets, with the goal of allocating services and identifying risks, such systems are increasingly being used to enhance civic engagement. While governmental approaches vary, they often lack adequate regulatory frameworks, posing serious threats to citizens' privacy. Privacy is further threatened by the growing number of links between public organisations and tech companies applying emerging technologies to innovative policy-making techniques (a field known as 'GovTech'). Already now, the largest and most valuable pool of data is no longer held by governments but by private companies. According to Bruce Schneier from the Harvard Law School the pervasiveness of tech companies in our lives has created a **new feudal society**. According to Schneier, most of us sacrifice complete control over our data and pledge allegiance to large corporations. These corporations, in turn, protect us from security threats. The use of digital tools has increased the control of data by governments and decreased citizens' control of their privacy.

Equality. Digital democracy has not yet been able to level out inequalities between social groups. Uneven conditions of access to technology are caused by three inter-related phenomena. First, the *digital divide*: biases in internet availability can restrict participation to those with appropriate technologies, while leaving those without access voiceless. Second, *digital exclusion*: certain groups are systematically under-represented in (if not excluded by) online political and social discourses (LGBTQ+ people for instance). Third, *digital ignorance*: digital technology (social media in particular) is responsible for spreading hoaxes and misinformation and enhancing polarising political opinions. Digitally misinformed citizens are not only harming themselves with distorted perceptions of reality and polarised opinions; they collectively impact on the erosion of trust in policy-makers.

Security. This has become the front line of defence for digital democracy. From online crowdsourcing platforms to voter registration databases and result-reporting websites, several weak spots are available for hackers to exploit. The potential scope of malicious attacks varies. Researchers have stressed that action to undermine democratic processes could form part of a general attempt to prove theories about the fragility of democracies, or could also be designed to wrestle the target into a condition of temporary political paralysis. Prolonged uncertainty domestically draws attention and resources away from foreign policy issues that rely on active leadership, leaving a vacuum and room for manoeuvre for other actors.

ENDNOTES

[1] For further detail on the architecture of Greek cities, see R. Sennett, 'The Pnyx and the Agora', in *Designing Politics: The Limits of Design*, Theatrum Mundi – LSE Cities – Fondation Maison des sciences de l'homme, 2016.

[2] See W. Kymlicka, 'Citizenship in an era of globalisation', in Shapiro and Hacker (eds.), *Democracy's Edge*. Even if a person understands a foreign language in a technical sense, suggests Kymlicka, it does not mean that he or she feels comfortable in debating political issues in that language. Kymlicka points out that political communication is based on ritualistic components, and without knowledge of those elements, it can be difficult to follow political debates.

[3] See for instance, G. Aichholzer and D. Allhutter, *Online Forms of Political Participation and their Impact on Democracy*, Austrian Academy of Sciences, 2009. See also A. Fung, H. Russon Gilman and J. Shkabatur, 'Six Models for the Internet + Politics', *International Studies Review*, Vol. 15, pp. 30-47, 2013. The authors identify six models of how digital technologies might affect democratic politics: the empowered public sphere, displacement of traditional organisations by new digitally self-organised groups, digitally direct democracy, truth-based advocacy, constituent mobilisation, and crowdsourced social monitoring. Other scholars disagree with these optimistic viewpoints, pointing at the fact that those lacking knowledge and interest in political and civic activities will be no more likely to engage in online or digital forms of participation. See P. Norris, 'Preaching to the converted? Pluralism, participation and party web-sites', *Party Politics*, Vol. 9, pp. 21-45, 2003. See also A. Smith, K.L. Schlozman, S. Verba and H.E. Brady, The Internet and Civic Engagement, Pew Internet & American Life Project, 2009.

[4] Traditionally, urban managers have outsourced public functions to private companies – to solve urban problems. Following concerns about the privatisation of public services, urban management has progressively shifted the focus from the efficiency of public services to citizens' participation. See S. Ranchordas, Cities as corporations? The privatisation of cities and the automation of local law, AdminLaw Blog, 2018. More generally on smart cities, see A.M. Townsend, *Smart Cities: Big Data, Civic Hackers, and the Quest for a New Utopia*, Norton 2013; and A. Cocchia, *Smart and Digital City: A Systematic Literature Review*, Springer 2014.

5 Robin Dunbar, an anthropologist at Oxford University, sets at 150 the maximum number of social relations an individual can engage with meaningfully, see: R. Dunbar, *How Many Friends Does One Person Need? Dunbar's Number and Other Evolutionary Quirks*, Harvard University Press, 2010.

[6] See G. Mulgan, *Connexity: How to Live in a Connected World*, Harvard Business School Press, 1997. Connectedness is so important that it is measured. Examples include the Connectedness Index published yearly by the consulting firm McKinsey (the index measures global flows of data, services and people, and ranks countries in terms of how connected they are to other countries) and the Deutsche Post DHL Group's Global Connectedness Index, ranking 125 countries based on their integration into the world economy. It provides a detailed analysis of the flows that connect the world.

[7] On this point See B. Noveck and R. Glover, *Today's problems, yesterday's toolkit*, The Australia and New Zealand School of Government, 2019.

[8] See B. Gray and J. Purdy, *Collaborating for the future: Multi-stakeholders partnerships for solving complex problems*, Oxford, 2018; and J.E. Innes and D.E. Booher, *Planning with complexity: An introduction to collaborative rationality for public policy*, London 2018.

[9] Public administrations are not generally exposed to market competition. There are reasonable justifications for this condition that require no further analysis here. However being safeguarded from market competition by public regulators also means that they have limited incentives to change. The result is that governments either persist in addressing demands for participation with traditional, inefficient, regulatory approaches, or – worse – they disregard the innovative potential of technological innovation.

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