

Making democratic innovations stick

November 2023



About Nesta's Centre for Collective Intelligence Design

Nesta's Centre for Collective Intelligence Design helps create new ways for communities to use technology to harness their insights, ideas and power to act on the problems that matter to them and create the futures they want. We design tools and projects that allow communities to respond collectively to challenges, and that help public and voluntary sector institutions strengthen trust and collaboration with citizens. We use rigorous research methods to test, learn and evaluate each solution. We have worked with organisations from the UNDP and the BBC to the Greater London Authority.

To learn more, see nesta.org.uk/project/centre-collective-intelligence-design/ or email the team at collective.intelligence@nesta.org.uk

About Collective Intelligence through Digital Tools (COLDIGIT)

COLDIGIT is a three-year research project that aims to advance accessible and inclusive citizen participation in public decision-making, where institutions and citizens understand,

are capable and work towards making the most of digital democracy. The project consortium

is made up of Nesta, Digidem Lab, University of Gothenburg, University of Helsinki and SINTEF.



Authors

Christopher Edgar and Peter Bæck

Recommended citation: : Edgar, C and Bæck, P. (2023). Making democratic innovations stick

Published November 2023
ISBN: 978-1-916699-12-0

If you'd like this publication in an alternative format, such as Braille or large-print, please contact us at: information@nesta.org.uk

Acknowledgements

This report has been made possible thanks to a variety of people working on democratic innovations giving up their time to take part in interviews, surveys and workshops. We are especially grateful to our COLDIGIT partners Mikko Rask, Bokyoung Shin and Pekka Tuominen (University of Helsinki), Annie Hermansson, Pierre Mesure and David Nordling (Digidem Lab), Jacqueline Floch and Matthieu Branlat (SINTEF), Jenny Stenberg and Jaan-Henrik Kain (University of Gothenburg) and our Nesta colleagues Aleks Berditchevskaia and Alexandra Albert for their feedback and multiple reviews. Our case study interview participants: Andre Duramois, Irene Casagrande, Robert Bjamason, Miguel Arana Catania, Arnau Monterde Mateo, Maarja-Leena Saar, Karl-Hendrik Pallo and Shu Yang Lin. Thank you to Sam Nutt and Graham Smith for sharing insights from their work and to the many people from local government who took part in our surveys and workshops. Finally, a big thank you to Oli Whittington for his early work on the COLDIGIT project which has formed the basis for much of the work in this report.

The support of the Economic and Social Research Council (ESRC) is gratefully acknowledged. COLDIGIT has been joint funded by the ESRC and Nordforsk. NordForsk project number 100855.



Making democratic innovations stick

Executive summary 4

1. Introduction 7

2. Local government and public perspectives on barriers to participation 10

Local government perspectives on barriers to participation 12

Citizen perspectives on public participation barriers in the UK 14

3. Eight recommendations for mainstreaming the use of democratic innovations 16

Recommendations 18

1. Clearly formulate aims and objectives – what is the problem you are trying to solve? 18

2. Make sure participation leads to impact and citizens have a real mandate – are citizens recommendations being implemented by government actors? 20

3. Set up dedicated teams and institutions responsible for digital participation – has your organisation got the capacity and resource to work on participation? 22

4. Develop participation skills and capacity building programmes – has your organisation got the right skills to engage with and implement participatory programmes and do citizens have the skills and resources to participate in these? 24

5. Make diversity and representation in participatory exercises a key objective – do your participatory projects represent the communities you are trying to serve? 26

6. Experiment with democratic innovations and evaluate what works best – how will you know if what you are doing works? 28

7. Invest in both the use and maintenance of digital tools for participation – who is in charge of making sure tools are fit for purpose and work and are the resources in place for this? 30

8. Use AI to develop new approaches to how citizen assemblies and participatory budgeting are implemented 33

Endnotes 35

Executive summary

There is a clear interest in democratic innovation and involving the public in decision making from those working in local government, especially to build trust and tackle climate change and poverty. The public wants to participate, with two in three saying it is important that they are involved in taking action on climate change. Yet, few feel like they have the opportunity to do this. In *Making democratic innovations stick* we analyse the barriers to implementing and sustaining the use of democratic innovations, such as citizens' assemblies and participatory budgeting, and how they can be addressed.

This report is based on lessons from the COLDIGIT project, including working with three cities in the Nordics (Trondheim, Helsinki, and Gothenburg) on citizens assemblies and participatory budgeting, expert interviews, a review of best practice as well as surveys of local government and public perspectives on participation.

Local government and public perspectives on barriers to implementing and scaling democratic innovations.

A survey of 52 people working on participation in local government in the UK and the Nordics found that:

- > **A lack of funding and bureaucracy are the biggest barriers to using and scaling democrating innovations.**
 - > **Enabling citizens to influence decision making, building trust and being more inclusive are the most important reasons for using democratic innovations.**
 - > **Tackling Climate change and reducing poverty and inequality are seen as the most important challenges to involve the public in.**
- Building on the survey of people working in local government, we wanted to understand public perspectives on participation and potential barriers to participation in democratic innovations. We focused the survey specifically on public attitudes to taking action on climate change in the UK. We found that:
- > **The public think it is important that they are being involved in how we make decisions on climate change:** 71% of the public think it is important they are given a say in how to reduce the UK's carbon emissions and transition to net-zero.
 - > **The public doesn't think the government is doing a good job of involving them:** only 12% thought that the government is doing a good job of involving them in making decisions on how we tackle climate change.
 - > **Not having the ability to influence decision makers and not having the right skills to participate are seen as the biggest barriers:** Not having the ability to influence key decision makers (39%) and not knowing what they could offer (36%) were seen as the two biggest barriers to participation.
 - > **Different approaches can help involve a wider public in climate action:** Answers confirmed high likelihood of participation in a diverse range of participatory activities such as voting and deciding with other citizens how to spend public funds (60%) and debating and developing new policies together with other citizens (53%).

How to implement and scale democratic innovations

We developed eight recommendations for implementing and scaling the use of democratic innovations:

1. **Clearly formulate aims and objectives:** Too often the use of democratic innovations fails to scale and sustain because there has been too little focus on the actual problems that need to be addressed, how these could be solved through the use of innovative approaches, and the resources that need to be in place.
 - > Clearly define your ambitions for citizen engagement – this includes how you will resource activities, your approach to responding to citizens and implementation.
 - > Ensure alignment between participatory activities, the wider organisational goals, and the strategy objectives for citizen engagement.
 - > Clearly communicate your ambitions for participation, and the outcomes, and ensuing decisions to ensure transparency and accountability is in place, both internally within organisations and externally with citizens.
 - > Involve citizens in the formulation of your participation strategy.
 - > Be tool agnostic – start with the challenge, then identify the right tool to address it.
2. **Make sure participation leads to impact and citizens have a real mandate:** Institutions often fail to properly implement citizen ideas and contributions because they are not willing or ready to significantly change how power is shared with citizens.
 - > Establish legally or institutionally-binding commitments to integrate democratic innovations into decision-making processes.
 - > Conduct feasibility studies prior to implementation to assess resource constraints and potential outcomes. Use screening criteria and risk assessments to refine proposals.
 - > Design participatory processes to produce actionable recommendations, and set a clear mandate for what can be implemented, how and by whom. This can help to prevent citizens feeling disconnected and frustrated.
3. **Set up dedicated teams and institutions responsible for digital participation:** Often participation is a side job rather than the primary responsibility for civil servants and others responsible for participation activities.
 - > Form dedicated teams responsible for democratic innovations, with clear mandates and sufficient resources to ensure effective integration and sustained commitment.
 - > Build teams with expertise from diverse backgrounds
- and disciplines to encourage knowledge sharing, varied perspectives, and collective intelligence.
 - > Cultivate the team's ability and willingness to engage in a wide range of community groups and connect with them through diverse channels. Ensure team addresses related to culture, language and digital exclusion.
 - > Ensure these teams are integrated into the decision making process and operational framework of the wider organisation.
4. **Develop participatory skills and capacity building programmes:** The success of participatory programmes relies heavily on the capacity and readiness of both implementing bodies and participating citizens.
 - > Create targeted training courses covering facilitation skills, public engagement, and project management for officials responsible for participatory programmes.
 - > Collaborate with external organisations specialising in specific methods and working with marginalised communities.
 - > Work with professional peers and build on best practice developed elsewhere.
 - > Provide training programmes for citizens to enable them to further develop domain specific knowledge and enhance their deliberation skills.

5. Make diversity and representation in participatory exercises a key objective:

- In spite of their ambitions and aims, democratic innovations often only make marginal gains in the diversity and inclusion of who takes part in decision making, or fail to address it entirely.
- > Implement targeted outreach strategies to engage marginalised groups in participatory exercises.
 - > Ensure participation goals address the needs of underrepresented groups, employ inclusive eligibility requirements, and hold events in accessible locations.
 - > Train community-based organisers and collaborate with external consultants to enhance diversity-related competencies, as well as to provide language and accessibility support.
 - > Eliminate resource-related participation barriers, including setting project limits, and offer support for loss of income, childcare, food, and transportation costs.
 - > Continuously monitor and assess the impact of these measures on diversity, adjusting strategies as needed to maintain inclusivity in participatory exercises.

6. Experiment with democratic innovations and evaluate what works best:

- There is a lack of systematic evidence about what works in democratic innovations, and there is little funding for rigorous experimentation to really test what works.
- > Invest in understanding what works and what doesn't and learn from this. Identify what your key outcomes are, such as diversity of participation, quality of ideas, or behaviour change, and how you will measure this.
 - > Engage citizens in evaluation for assessing impact and empowerment. Adopt a participatory evaluation framework and ensure it is consistently applied within and across democratic innovations.
 - > Share lessons from experimentations and evaluations with others.

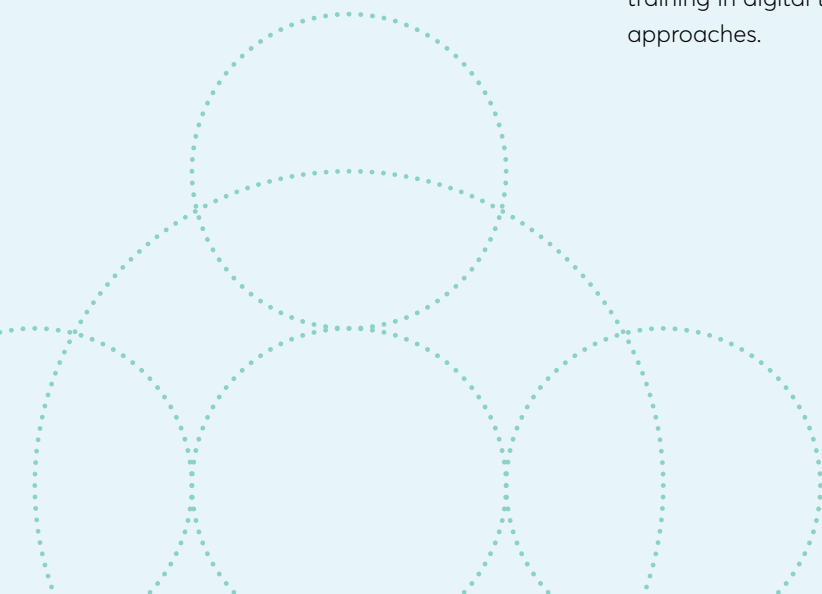
7. Invest in both the use and maintenance of digital tools for participation:

- With an increase in the use and capability of digital tools for participation, comes an increase in operational complexity and capacity requirements.
- > Invest in upskilling participation teams with digital skills and bring digital experts into participation teams alongside investing in training in digital tools and approaches.

- > Review and use existing digital tools and infrastructure to reduce operational costs.
- > Foster collaboration within and across organisations to enhance capacity for delivering digital democracy.
- > Engage citizens on the platforms they already use to facilitate initial interactions, crucial for sustaining engagement and increasing diversity in participation.
- > Complement digital approaches with non-digital methods and provide assistance and training to citizens with low digital literacy.

8. Use AI to improve and create innovative approaches to how citizen assemblies and participatory budgeting are implemented:

- AI can assist with how groups deliberate and work together. However, in spite of the potential of this technology in the field of democratic innovation, this application gets only a fraction of the investment and political interest of more mainstream uses of AI.
- > Use AI to make tools more efficient and reduce costs.
 - > Use AI to recruit diverse participants, such as using AI for better sortition in citizen assemblies.
 - > Use AI to enable new forms of deliberation, discussion, and collaboration in groups.





1.

Introduction

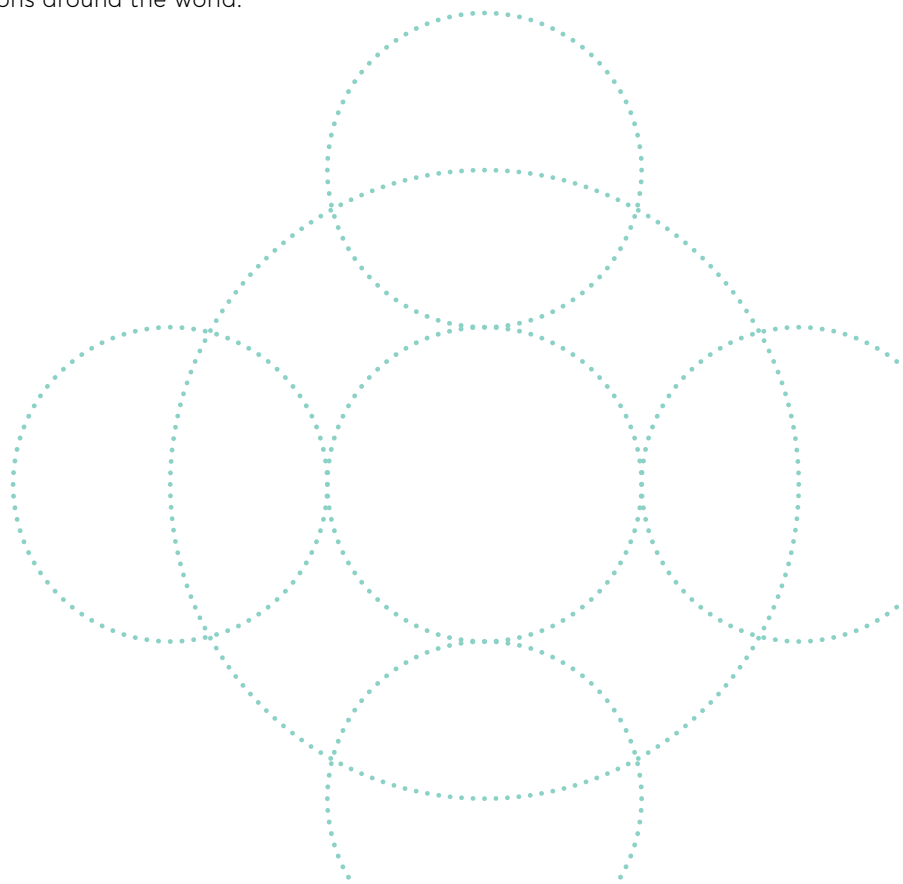
Understanding how to mainstream and scale the use of methods such as citizen assemblies, participatory budgeting and the crowdsourcing of policy ideas from citizens is often considered ‘the holy grail’ of studies of democratic innovations.

Too often the use of democratic innovations are stuck in the piloting phase, constantly at the risk of falling off the edge of a cliff when funding ends, or sat too far in the periphery of everyday processes and systems for working and decision making in public institutions. This means they risk never making any lasting impact. We need to address this risk if we are to make the most of the opportunities in using democratic innovations to revitalise our democracies and public participation.

The challenges faced by our democracies are well documented. The Economist’s Democracy Index¹ found that while the global decline in democracy has stagnated,

conditions aren’t improving. Similarly, the Open Society Barometer – one of the largest studies of global public opinion on human rights and democracy undertaken to date found that people in many democracies think their country is headed in the wrong direction and in nearly every country surveyed, people have less trust in local and national politicians than in other actors to work in their best interests².

A significant part of the COLDIGIT project³ has been dedicated to exploring how to address this challenge, with a specific focus on understanding the barriers to mainstreaming the use of democratic innovations. We’ve done this through learning from projects on Participatory Budgeting and Citizens assemblies delivered by our city partners in Gothenburg, Helsinki, and Trondheim, interviewing leading experts on democratic innovations and studying successful as well as failed attempts at mainstreaming in other cities and public institutions around the world.



In *Democratic Innovation and Digital Participation*⁴ (2022) we brought together lessons from this work and analysis into our framework of the main barriers to mainstreaming and the different

interventions and activities that can address these. In this report, we build on this analysis and look in more detail at what policy makers and funders can do to create the right conditions for mainstreaming

and scaling the use of democratic innovations, and what to prioritise when doing this. We build the recommendations on three new pieces of research.

> **Surveys of local government and public attitudes to participation and views on mainstreaming barriers:**

A survey of 52 (32 UK, 20 nordic) people working on participation and engagement in local government in the UK and the nordics helped us understand how they perceive and rank the importance of different barriers to mainstreaming the use of democratic innovations, as well as what they would like to achieve through their use. With a specific focus on public participation in taking action on climate change in the UK, we also surveyed 2,049 UK adults to understand their interest in participation and their perceived barriers to doing this.

> **Learning from mainstreaming success stories:**

We conducted a series of follow up interviews with the people and organisations behind pioneering democratic innovations such as vTaiwan, Rahvaalgatus, Consul and Betri Reykjavík that we first case studied as part of our 2017 report on *Digital Democracy: The Tools Transforming Political Engagement*. The focus of these interviews was to understand what had contributed to the evolution and development of these projects over the five years since our initial analysis.

> **Review of how to mainstream and scale democratic innovations:**

Drawing primarily from peer-reviewed research and grey literature, we undertook a comprehensive review of the research into the actions and initiatives that have enabled organisations to implement, mainstream and, in some cases, scale up the use of democratic innovations.

In section one we discuss insights from the surveys and what they tell us about the priorities for the public and people working in local government when it comes to participation and the use of approaches such as citizens assemblies and participatory budgeting. In section two we bring together insights from our interviews and literature review, and present eight recommendations for what can be done to mainstream the use of democratic innovations.

The recommendations will be relevant to anyone working on democratic innovation, and will be of particular interest for cities, municipalities and other public sector institutions interested in ensuring their work on democratic innovation is sustained and continues to have impact. This list is by no means exhaustive. However, it covers the main actions we, based on our research, recommend local governments and public institutions focus on in their work on democratic innovations if they want these to sustain and have a real impact.

While many of the recommendations might not seem radical or particularly novel, they cover the most important barriers that most organisations continue to face and address mistakes in the design of participatory processes that many organisations often make. Without getting these fundamentals right, projects significantly increase the risk of failing as pilot support or short term funding and support comes to an end.



2.

Local government and public perspectives on barriers to participation

In our work on Democratic Innovation and Digital Participation⁵ (2022) we, based on a detailed review of the literature, developed a comprehensive list of barriers to using and mainstreaming the use of democratic innovations. But which of these are most significant?

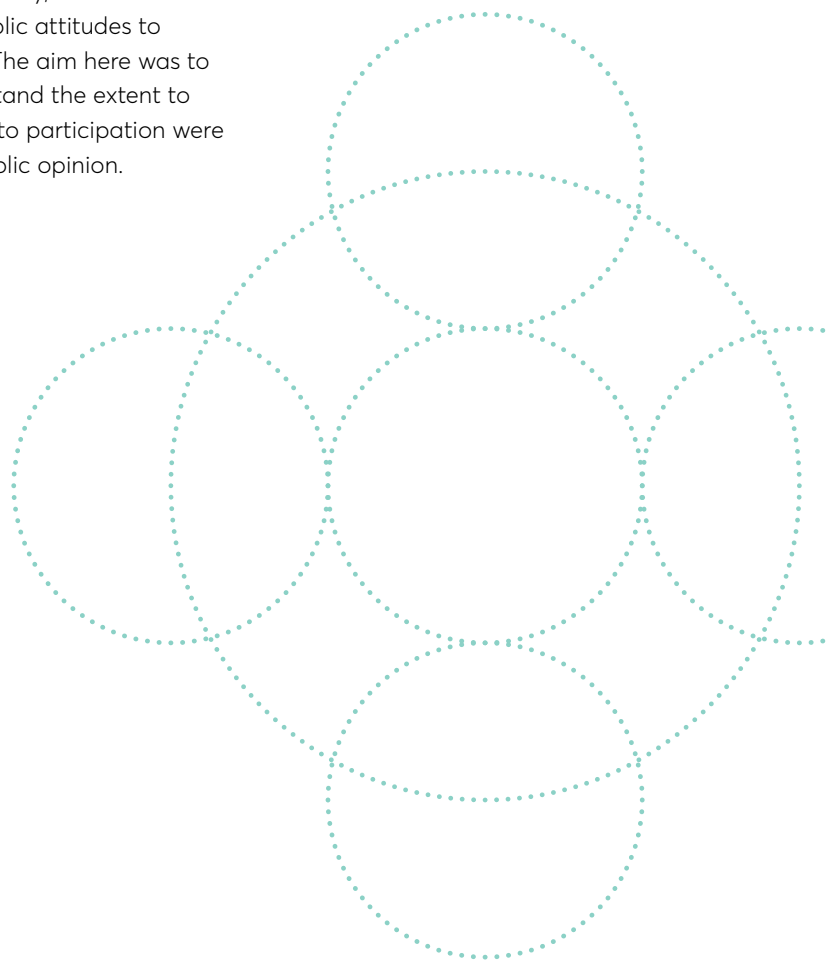
To guide our work on developing the policy recommendations we sought to understand this question through a short survey conducted over the summer of 2023 with participation from people working on participation in local governments in the UK and the Nordics (Finland, Norway, Sweden and Denmark).

Using our analysis from the Democratic Innovation and Digital Participation study we created a list of questions concerning potential issues affecting the use of democratic innovations. We then asked people working in local government in the UK and the Nordics which of these they thought were most significant.

Before assessing the barriers they were asked to give their answers as responses to one of three specific democratic innovations, **citizens assemblies**, **participatory budgeting** or **crowdsourcing of policy ideas**. In addition we also asked respondents what they would like to achieve through the use of these approaches.

With 52 participants across five countries the survey isn't comprehensive or representative but it provides a snapshot of how people working on participation view the different barriers to doing this well, as well as what they would like to achieve through better participation and engagement with citizens.

Following on from the survey of local government perspectives, we, with a specific focus on the UK as a case study, commissioned a survey of public attitudes to participation. The aim here was to help us understand the extent to which barriers to participation were reflected in public opinion.



Local government perspectives on barriers to participation

Below we describe key insights from our survey on how people working in local government view barriers to the use of democratic innovations.

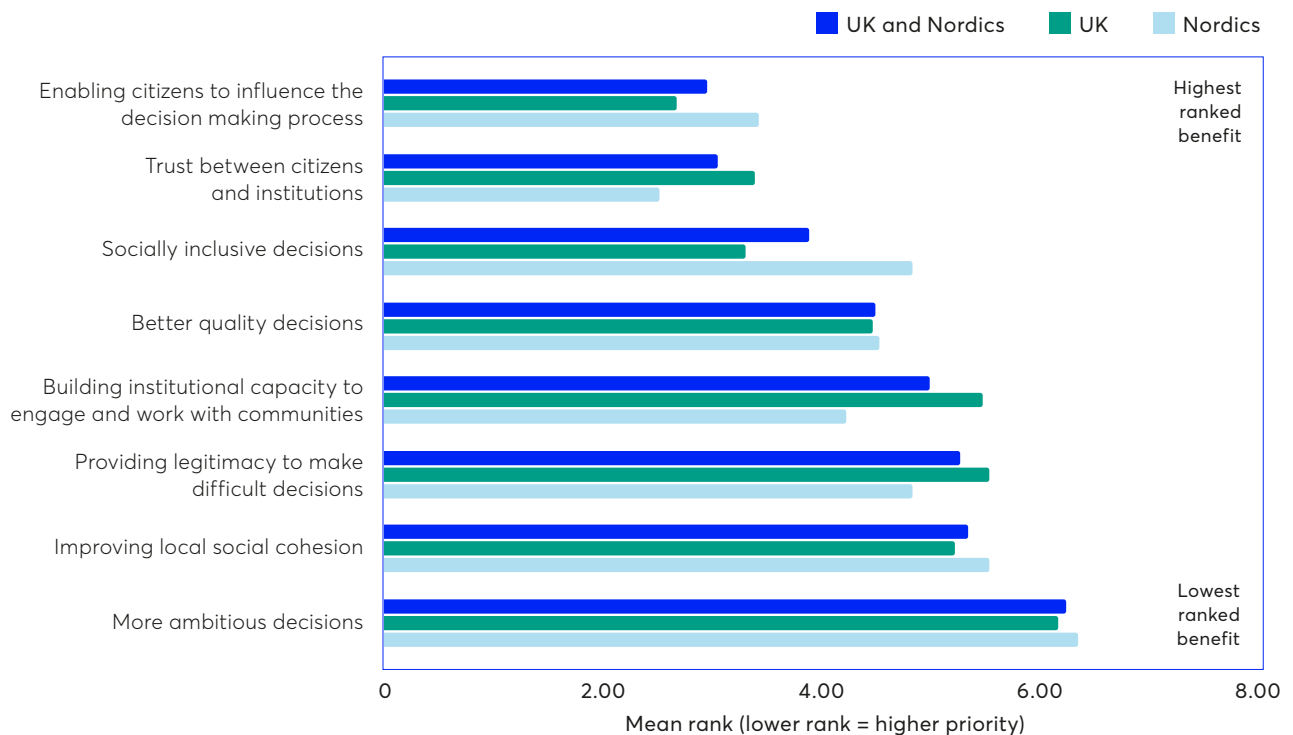
> **Lack of funding, bureaucracy and diversity are the biggest barriers:** Perhaps unsurprisingly, the survey found that people working in local government think that funding is the biggest barrier to using democratic innovations. This was followed by organisational bureaucracy and struggling with diversity

and involving marginalised citizens in activities.

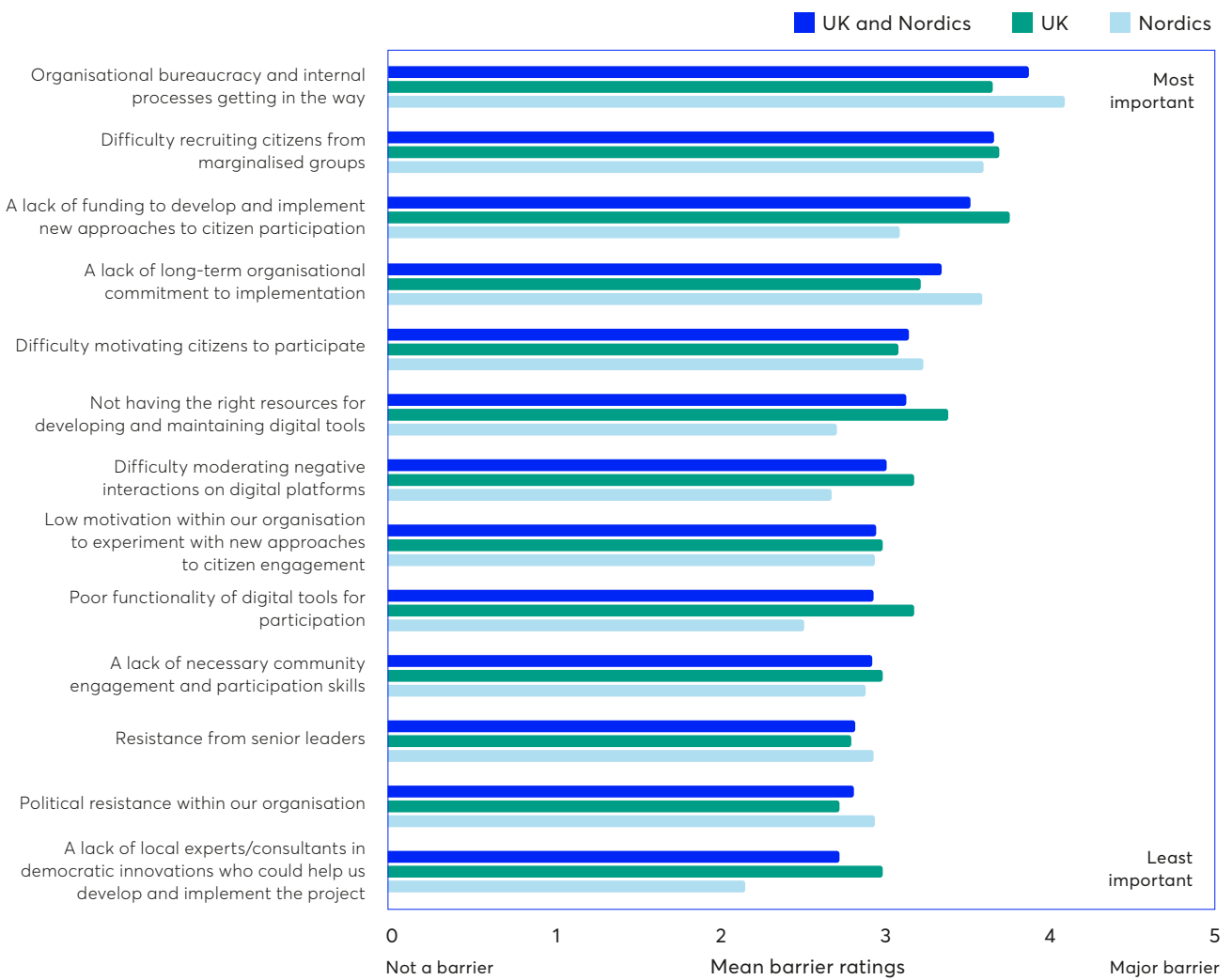
> **Climate change and poverty are seen as the most important challenges to involve citizens in addressing:** When asked which challenges they were most interested in addressing through citizen participation, respondents had the highest interest in climate change followed by poverty and inequality and health, with least interest for involvement in transportation.

> **Enabling citizens to influence decision making, building trust and being more inclusive are the most important reasons for using democratic innovations:** When asked to rank what they wanted to achieve through the use of democratic innovations, respondents identified enabling citizens to influence decision making as the most important reason, followed by building trust and being more inclusive.

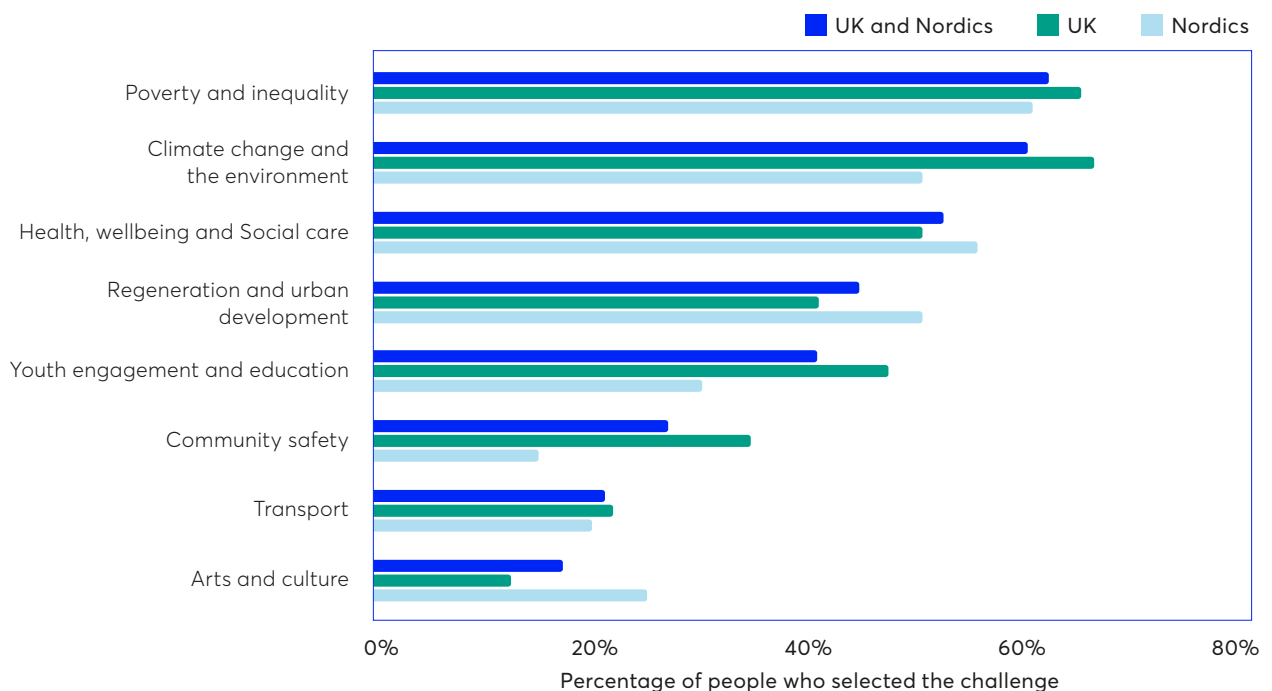
The benefits that are most important to achieve through the use of democratic innovations according to people working in local government



Local government perceived barriers to implementation of democratic innovations



Challenges local government want to address using democratic innovations



Citizen perspectives on public participation barriers in the UK

Building on the insights from the survey of people working in local government we wanted to understand the public perspectives on attitudes to participation and perspectives on potential participation barriers.

Here we focus specifically on attitudes towards participation in the UK and focus on attitudes to participation in climate change, the challenge that was seen as most important for public participation by people in local government. While there will be variation between results from the UK and public opinion in the Nordics, the UK opinion poll public results help us understand how the public view challenges concerning participation.

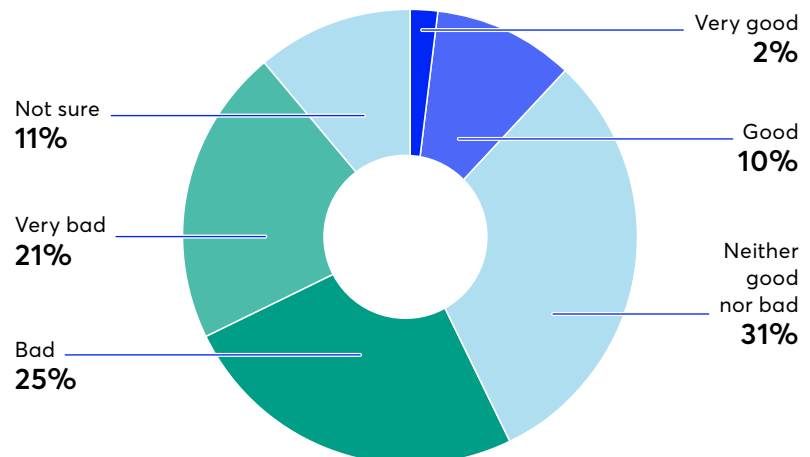
The survey of public opinion was conducted by the survey company Opinium between the 18th – 20th of October 2023 with 2,049 UK adults, weighted to be politically and nationally representative.

- > **The public think it is important that they are being involved in how we make decisions on climate change:** 72% of the public think it is important they are given a say in how to reduce the UK's carbon emissions and transition to net-zero.
- > **The public doesn't think the government is doing a good job of involving them:** only 12% of respondents from the same survey thought that the government is doing a good job of involving them in making decisions on how we tackle climate change and 46% think the government is doing a bad job of this.
- > **Not having the ability to influence decision makers and not having the right skills to participate are seen as biggest barriers:** When asked what they thought the biggest barriers are to participation, people report not having the the ability to influence key decision makers / politicians (39%) and feeling like they don't have the right skills

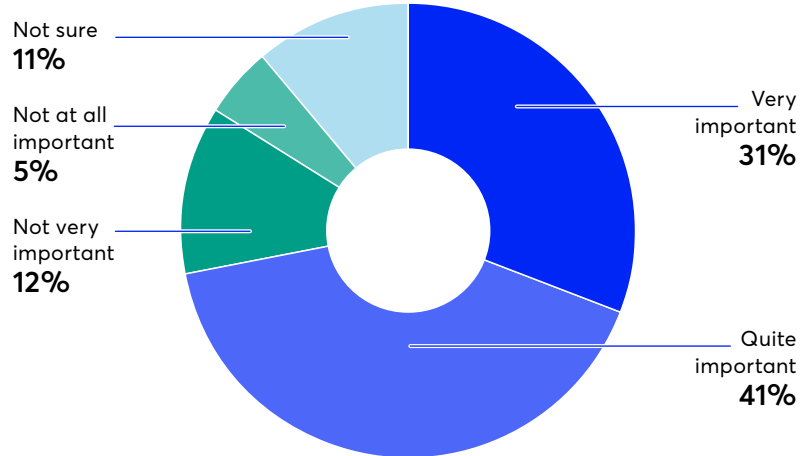
or not knowing what they could offer (36%). Only 12% reported it not being worth it or there being more important problems as a barrier.

- > **Different approaches can help involve a wider public in climate action:** When asked about their likelihood of participating in different activities that involve the public in taking action on tackling climate change, answers confirmed high interest in participation. Overall, 69% of our sample said they would be 'likely' or 'very likely' to participate in at least one form of citizen participation. For activities similar to those undertaken in participatory budgeting 'Voting and deciding with other citizens about how to spend public funds dedicated to tackling climate change' 60% said they were likely to take part. Similarly, for citizens assemblies – 'Debating and developing new climate change policies together with other citizens', 53% said they were likely to take part.

How good or bad a job do you think the government has done in involving citizens in making decisions on how we tackle climate change?



How important is it that you are given a say in how to reduce the UK's carbon emissions and transition to net-zero?



If the following activities to help tackle human-caused climate change were available to you, how likely or unlikely would you be to participate in them?

	Helping to collect and share data to better understand climate change and its impact	Working with other citizens/people on designing new projects to tackle climate change	Voting and deciding with other citizens about how to spend public funds dedicated to tackling climate change	Debating and developing new climate change policies together with other citizens	Monitoring and tracking progress on how public institutions and other partners implement climate change projects
Very likely	13%	11%	19%	12%	12%
Likely	36%	32%	41%	31%	31%

Looking across lessons from the two surveys it is noticeable how there is a clear interest in participation and involving the public in decision making from those working in the public sector, especially to build trust (most important for respondents from UK local government) and being more inclusive. On the public side, using our survey of attitudes of the public in the UK, it is clear that the public wants to participate.

With the public ranking not being able to influence decision makers and not having the right skills to participate as the biggest barriers and those working on participation in local government identifying bureaucracy (in addition to funding) as the biggest barrier, the question is what can be done to address these.

In the following section we explore what can be done to enable institutions to work more strategically on democratic innovations, reduce the bureaucracy limiting their use and shortening the distance between citizen interest in participation and the opportunities to do so.



3.

**Eight
recommendations
for mainstreaming
the use of
democratic
innovations**

There is no one size fits all for the use and mainstreaming of democratic innovations such as citizens assemblies, participatory budgeting and crowdsourcing of policy ideas. Their use and success will depend on a variety of factors from politics and culture to resourcing, the challenge that is being addressed and methods that are used.

However, with this in mind, we have identified a number of common trends in the challenges that local governments and other public institutions typically face in their work on democratic innovations, especially when it comes to sustaining and mainstreaming this work.

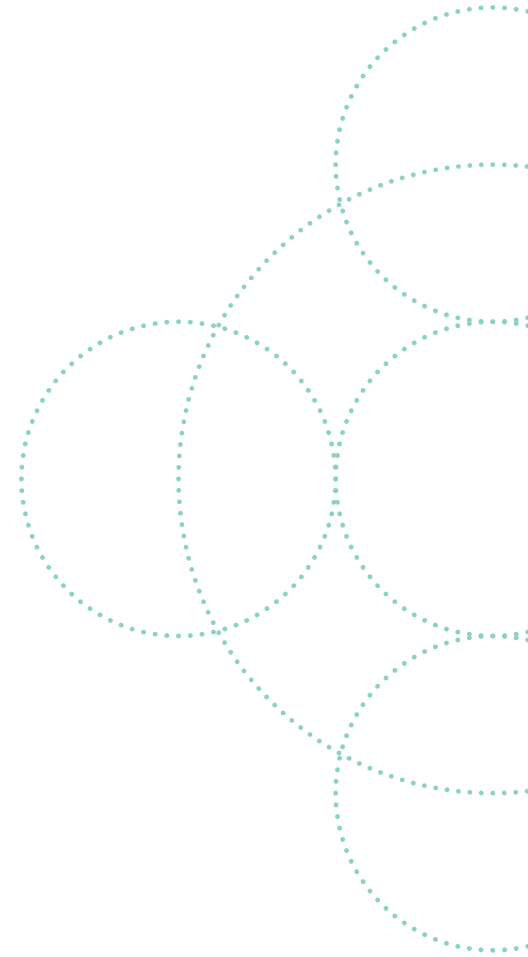
In the eight recommendations below we look at how these can be addressed. A lack of funding was one of the main barriers identified by local governments respondents who took part in our survey. We recognise the need for more strategic and long term funding for participatory approaches as fundamental to their successful use. However, with the following recommendations we look beyond the funding challenge. Instead we focus on the other fundamentals that need to be in place. These range from getting the focus and

objectives for participation right and ensuring the institutional capacity to use approaches such as citizen assemblies and participatory budgeting to ensuring the maintenance and further development of the digital tools that are often a key component of democratic innovations.

As participation is increasingly online or delivered in hybrid formats, often using open source tools, we include a specific recommendation on the maintenance of digital tools for participation. An often overlooked part of what it takes to successfully maintain and scale the use of new approaches to participation. For the same reason, we include a final recommendation on the need to invest in the uses of AI to increase the quality and scale of these tools and how they enable participation and deliberation.

However, as one interviewee reminded us: *"We can keep improving the design of the tools and use new technology like AI, but it is only going to give you incremental improvements compared to changing how institutions use these tools"*.

First and foremost mainstreaming the use of democratic innovations is about culture, process and willingness to share power.



Recommendations

1. Clearly formulate aims and objectives – what is the problem you are trying to solve?

Too often the use of democratic innovations fails to mainstream because there has been too little focus on the actual problems that need to be addressed, how these could be solved through the use of innovative approaches, and the resources that need to be in place to do this well. Flawed approaches often start with a focus on the tool (i.e we want to do a citizen assembly),

rather than thinking about what method or combination of methods is the best fit for the challenge at hand. Similarly, teams and organisations often implement an innovation to comply with a requirement to do citizen engagement, without thinking about why engaging citizens could lead to better outcomes.

The challenge

While it will seem like stating the obvious, the first step in implementing democratic innovation is to have clear aims and objectives. In their public participation framework the Scottish Government highlights the importance of starting any strategic process on engagement with asking two main questions:

- > **The why** – the reasons you have for choosing to open up an issue, question or decision-making process to wider participation
- > **The difference made** – linking the outcomes of these activities to decision-making processes, service delivery and/or social change⁶

These should be communicated to citizens and stakeholders in a clear and concise manner, outlining what the innovation aims to achieve and how it will be implemented.

It is important to be tool or method agnostic. No decision on which approach or participatory process to use should be made before answering these questions and understanding the challenge that needs to be addressed. Here, some research has pointed out how too narrow a focus on one approach, such as citizens' assemblies, risks having a negative impact on creating the wider systemic conditions for better use of participation and deliberative democracy⁷.

Sometimes, if done well, this will lead to a decision or wider strategic focus on a specific method or a combination of methods to address one or more reasons for opening an issue for deliberation.

Similarly, while it is easy to think of different participatory methods as standardised off the shelf solutions, their application and potential

for engagement and impact vary significantly depending on everything from scale and budget, to political commitment, objectives and who is delivering them. For example, when comparing two high-profile climate assemblies in France and the UK, researchers from Carnegie Europe highlight that while the assemblies shared some similarities, they were different in many ways⁸. This ranged from being framed as either a political or apolitical activity, the level of engagement from politicians in the process, funding sources, and overall resourcing. The French budget was nearly ten times that of the UK, for an assembly which fed more directly into the policy development, was less formally structured, allowed for co-design of the process with citizens, and had a formal, active role for civil society representatives.

Linked to this, organisations implementing participatory processes, need to be mindful of the need to situate these within the wider organisational context and political processes. Reflecting on their involvement in local climate citizen assemblies (LCA), researchers from Lancaster University highlight how it is common for local authorities and institutions to present citizen assemblies as a clearly defined process; from commissioning and implementing an assembly, through to local decision-makers working through recommendations and implementing appropriate policies based on these. They argue that 'this narrative smooths over and presents as linear a process that is in fact messy and political. LCAs emerge as a result of political pressure and bargaining. Once LCAs have run their course, the extent to which their recommendations are implemented is dependent on power dynamics and institutional capacities.'. As such, a lack of integration and alignment with wider organisation processes and strategies pose implementation and delivery can pose a significant risk to implementation.

The use of participatory methods should be the product of a wider strategic and political commitment to citizen engagement. The participatory methods or combination of methods will rarely work if they are delivered in isolation and should be chosen to deliver on a strategic focus. One example of taking a strategic and systemic approach to deliberation and citizen engagement is the work done by Camden Council in the UK⁹. To deliver on its ambitious 'We Make Camden' strategy, the borough uses multiple participatory methods ranging from citizen assemblies and participatory

budgeting to citizen assemblies and citizen science. These are aimed at involving different communities and demographics in solving a range of local challenges. The delivery of these is the responsibility of a dedicated unit within the boroughs strategy team, and they are aligned with the wider council approach to citizen engagement, including its work on data ethics and other citizen engagement agendas. Notably, Camden Council has not only committed to using participation to tackle issues faced by citizens, they consulted citizens when shaping the objectives and priorities of the participation strategy.

As part of a wider commitment to citizen engagement, organisations must develop a robust and adaptable communication approach to support effective engagement¹⁰. This will facilitate effective dialogues between institutions and citizens, and avert any suspicion of censorship or manipulation by institutional actors¹¹. Skillful communication strategies cultivate trust and credibility in the procedure, concurrently empowering participants with an enhanced feeling of influence and expression¹². Government organisations should use a variety of channels to support open and reciprocal communication, including forums, email, text messaging, press-release, and blogs, and even the increasingly popular use of live, online project implementation trackers (e.g. Helsinki's OmaStadi service¹³).

To close the feedback loop between citizens' and policy making, stimulate participation and address risks of disillusionment, organisations should commit to developing systems of communication and accountability that keeps citizens informed about the extent and range of their

participation. Emphasising the utilisation of citizen input carries greater significance than the magnitude of its impact¹⁴, albeit individuals are more inclined to engage when a concrete outcome is in sight¹⁵. Similarly, citizens are more likely to take part if they understand who will participate and how, and what the outcomes of previous processes have been¹⁶.

Finally, where possible, the adoption of participatory methods into the process of government should strategically align with the development and implementation of digital innovation, R&D initiatives in cities, and the existing ambitions for these. This can help to ensure the process is resource efficient, embedded into municipal decision making, maximising support/buy-in, and accountable. For example, there remains a significant, largely untapped opportunity in aligning participatory approaches with often well funded smart city and similar city digital innovation initiatives, as a way to address issues concerning trust and citizen engagement in the design and implementation of these programmes^{17, 18, 19, 20}.

"We can keep improving the design of the tools and use new technology like AI, but it is only going to give you incremental improvements compared to changing how institutions use these tools."

Miguel Arana Catania, Former Director of Citizen Participation Project, Madrid City Council.

2. Make sure participation leads to impact and citizens have a real mandate – are citizens recommendations being implemented by government actors?

A common critique of participatory activities is that the use of methods for participation isn't matched by changes by the willingness of institutions to significantly change how power is shared with citizens; or by changes to accountability and processes relating to decision making and idea implementation. At its worst, not

putting the right accountability and process in place risks undermining the process as a whole, reducing the quality and outcomes from deliberation and ultimately exposes institutions to the risk of being accused of 'participation washing'.

The challenge

Any work on participation should be about impact, converting the time, ideas and deliberation into better decision making, public services and products and more engaged communities. As such, any use of participatory methods should start by ensuring that the public institution has the right processes in place for implementation. This includes creating a culture where experts and civil servants can and want to work more directly with citizens; participatory activities are aligned with broader policy objectives; and there is a clearly communicated mandate for what citizens can influence and decide on and how this will be implemented. The goal is the creation of a feedback loop between implementing institutions and citizens.

Recent data collated by the OECD indicates that the implementation rate of recommendations and policies produced by democratic innovations varies considerably. Across a total of 55 analysed cases (drawn from a database of 106 deliberative processes), public

authorities implemented over half of the recommendations in 76% of these cases, and all of them in 36% of these cases. Only in six (11%) of these 55 cases were none of the recommendations implemented²¹. This can cause issues, as participants often enter into participatory processes overestimating the impact and influence they can have on political decision making, and a failure to adequately adjust these expectations or meet them can lead to participatory frustration—a range of feelings that develop when the participatory experience is perceived by participants as falling short of the initial expectations of political influence²².

Examples of such sentiment have been expressed by citizens reflecting on high profile citizens' assemblies in both France and Ireland, where there has been no action on many of participants' recommendations²³, or their recommendations were dropped completely^{24, 25}. Such frustration can lead to distrust towards authorities, negative external political efficacy,

disengagement or political apathy^{26, 27}. In the case of the French Citizens' Convention for Climate (CCC), recent work found that there was significant scepticism towards the value of the process outputs' amongst the general public, with the authors' identifying significant watering down of the government's commitment to implement the generated proposals 'without filter', by vetoing some proposals and reworking others²⁸. This was, in part, attributed to the CCC lacking a clear commitment structure. Despite promoting co-construction, it did not trigger political uptake and the government re-worked the citizens' proposals before submitting them to Parliament. These results call for a strengthening of the commitment structure that determines how follow-up on the proposals from a citizens' assembly should be conducted. Similarly, vTaiwan, Taiwan's often cited digital democracy initiative, has faced criticism for being too constrained by politics and selecting relatively uncontroversial topics for citizen participation²⁹.

To address this challenge, institutions must establish binding commitments in the form of legal or institutional policy, to help ensure that democratic innovations are integrated into existing frameworks and decision-making processes. It helps ensure that shifting power to citizens through increased participation leads to a tangible impact, and builds perceptions of trust, transparency, and accountability in democratic institutions. Where recommendations cannot be implemented, the rationale behind the decision making process should be clearly communicated to participants, and this follow-up should be delivered by decision makers to bolster legitimacy and trust (following established practice for representative deliberative processes³⁰). A long term or legal commitment to the use of democratic innovations, and giving citizens influence over what issues or policy challenges to focus on, such as the establishment of permanent citizens assemblies in Paris and Ost-Belgien³¹, can provide additional legitimacy and mandate for implementation.

Feasibility studies should be conducted prior to the implementation of any democratic innovation to understand what can be achieved/implemented, given the resources available to the institution to avoid overpromising and under delivering. The criteria of these can subsequently be used to screen proposals, as was previously done in Paris' participatory budgeting initiatives (a process that

received media attention when it resulted in the disqualification of a proposal to bulldoze Sacre Coeur, a Roman Catholic church and minor basilica in Paris³²). Aiming for feasibility should not mean abandoning ambition and 'playing it safe' with scope, as this can lead to citizens becoming disillusioned with the process. Participatory budgeting, for example, does not work well where central targets and restricted budgets limit the amount of power that can be given to citizens³³.

Democratic innovations should be designed in such a way that they generate actionable recommendations, and avoid situations whereby the outcomes of the process cannot interface with existing policy-making processes of the state (e.g. the parliamentary process), something which proved an issue and limited the impact of Ireland's citizen's assembly on climate change³⁴. A risk assessment should also be performed to identify potential barriers to implementation that arise due to external factors. For example, a collapse in Northern Ireland's governing executive stalled an increase of funding for elderly care, one of the recommendations by a citizens' assembly on the future of the social care system³⁵.

Time and resource limitations should be identified, and should shape the scope of the initiative – an organisation should make sure they only commit to implementing a feasible number of policy recommendations in a realistic

timescale. This will mitigate the risk of failure to implement citizens' recommendations and subsequent participation frustration. This process of evaluation and adjustment of time-scales is one that has proved necessary even in very successful initiatives, such as when Helsinki's participatory budgeting initiative was extended from one to two years based on lessons from an evaluation of the programme³⁶. The same evaluation recommended that 80% of successful proposals on participatory budgeting are implemented within two years to avoid citizens losing interest.

“Changing the mentality around citizen participation has been quite a challenge on both sides, both on the side of the political decision makers, many of whom didn't see the benefits of citizen participation, and also on the side of the citizens, as most French citizens are not used to being asked for their opinions.”

Paris City Council official

3. Set up dedicated teams and institutions responsible for digital participation – has your organisation got the capacity and resource to work on participation?

Often participation is a side job rather than the primary responsibility for civil servants and other working institutions running participation activities, and the involved processes are not given the right resources or manpower to succeed. Participation must be the main responsibility for an individual or team. They must be

well resourced, represent a diverse skill set, and have mandates linked to wider decision making processes and governance within an organisation. Without having dedicated teams in place participation risks being deprioritised and an activity happening on the periphery rather than at the core of public institutions.

The challenge

At its core, the use of dedicated teams enables an organisation to foster the growth of consistent expertise and support, which enables long-term embedding of new knowledge³⁷. Successful implementation of Democratic innovations require specialised knowledge and skills in areas ranging from navigating complex political landscapes to on the ground community engagement. Dedicated teams who possess expertise in fields such as public policy, community engagement³⁸, participatory governance and specific participatory methods, can focus exclusively on designing, implementing, and evaluating democratic innovations—ensuring that the initiatives are well-planned and effectively executed—their specialised knowledge allows them to navigate the challenges associated with democratic processes and help curate participation³⁹.

Democratic innovations are complex processes that often involve multiple stages including planning, recruitment, deliberation, decision-making, implementation, and evaluation^{40, 41}. In a municipal organisation, budgets and decision-making are divided and the person

responsible for implementing new projects cannot be mandated to singularly make decisions across departments and levels of the organisation. Dedicated teams provide an efficient concentration of the skills and knowledge that can help form business strategy and enhance results and outputs⁴², and these competencies and benefits can be applied to the implementation, evaluation, and iteration of democratic innovations across their life cycle. Arguably, the concentration of expertise and focus of dedicated teams also helps cultivate potential public champions of democratic initiatives—individuals who have the knowhow and connections to support the implementation of such initiatives (e.g. city council members Graciela Reyes and Mayor Miguel Treviño who championed the DesafíosSP initiative in San Pedro Garza García, Mexico)⁴³.

In addition, dedicated teams can provide continuity and institutional memory. Through diligent preservation of knowledge, experiences, and lessons learned, they enable their application in future endeavours⁴⁴. This institutional memory enables the replication and adaptation of

democratic innovations in different contexts. Dedicated teams can also play a crucial role in engaging citizens effectively. They can dedicate time and resources to reaching out to diverse groups, fostering inclusive participation, building skills, and creating spaces for meaningful dialogue. By building relationships with diverse groups of citizens, such as community organisations, advocacy groups, and marginalised populations, dedicated teams can ensure that democratic innovations represent and address the needs of the people, and provide consistent engagement with them⁴⁵.

The benefits of using dedicated teams are apparent in the ambitious community engagement and participation work done by Camden Council⁴⁶. Camden Council has supported the development of a dedicated participation team that has delivered a wide range of democratic innovations, including the UK's first Citizens' Assembly on the climate crisis (2019)⁴⁷; establishing a residents panel to co-develop a data charter for Camden (2021)⁴⁸; establishment of a participatory grantmaking program (ongoing)⁴⁹ to fund local community-building projects; and

most recently a series of community summits that involved the community in the development of Camden Council's broader mission statement 'We Make Camden'⁵⁰.

Similarly, the burgeoning tradition of participatory democracy in Paris (which held its first round of participatory budgeting in 2014⁵¹) is now coordinated by a dedicated team who oversee the continued delivery and iteration of annual participatory budgeting cycles⁵². The team has also recently run a high-profile Citizens assembly in assisted dying⁵³, and citizen participation is now embedded as a permanent Citizens' Council with powers to set the participatory budgeting agenda; shape the agenda of citizen's juries that can develop local council bills; launch policy-scrutinising enquiries; and draft questions that can be submitted to the local council⁵⁴.

To build effective dedicated participation teams, institutions should ensure hiring cycles target individuals with the right skills and experience, and that there is capacity to train new individuals where required. At the very least, much like government organisations appoint chief officers for core processes (e.g. people, digital)⁵⁵, organisations should appoint a chief/lead participation officer who can help shape the broader team's goals and strategy.

The delivery of a participatory process can vary in terms of scale and budget and the team size can range from a single individual to a large group of people, and the team size and structure should vary according to available resources and the complexity of the initiative to be delivered⁵⁶. Note, it is also important that the senior management the team reports to is able to effectively connect the team to other parts of the organisation so resources can be allocated

efficiently. If the team is not sufficiently integrated into the wider organisation, and resourcing is not taken seriously, it risks becoming siloed and ultimately ineffective.

Participation teams should build competence in stakeholder management. Given the complexity of running democratic innovations, resource and logistical requirements will draw from a range of individuals within a given government organisation. Thus, building and maintaining institutional buy-in and mutually beneficial relationships will help maintain continued support for democratic innovations⁵⁷. Teams should ensure the benefits and outcomes of democratic innovations are communicated internally early, often, and with an emphasis on wider organisational benefits; avoid pursuing partisan partnerships that may create political resistance during changes in government; and involve experts from specific departments where relevant to design and evaluation of projects (e.g. parks, transport, health).

Teams must be built in an interdisciplinary way, recruiting experts from a range of disciplines and backgrounds (applied and theoretical). This will facilitate knowledge sharing, diversity of opinion, and a decentralisation of key competencies—factors central to the emergence of collective intelligence^{58, 59, 60}. This should be accompanied by the development of materials to record and share key learnings from each innovation cycle, which must be summarised, filed, and distributed throughout the team.

Participatory teams must have the ability to effectively engage with a wide range of communities within the wider community. This includes having the knowledge of how to reach different groups and convey the purpose and benefits of participation; research indicates

that the most successful outreach initiatives (in terms of maximising citizen participation) involve using a combination of traditional citizen engagement approaches (phone calls, flyers, and door knocking) with multiple social media platforms⁶¹.

Organisers need to reach citizens using the platforms and channels they use, and targeted outreach strategies may be required to engage with groups who are typically under-represented or face unique barriers to participation. For example, translators will be required to overcome language barriers; use of conventional outreach channels (e.g. flyers, newspapers ads) will help avoid digital exclusion; reliable communication of project updates and outcomes will help mitigate erosion of trust in political processes and technology⁶²; basing initiatives in local communities and funding participation will help address barriers to participation stemming from socio-economic factors (e.g. income⁶³).

"We have created a complex, strong participatory system and after seven years we have developed a strong collective memory, a huge archive, and the history of the democracy of the city since 2016. This has a lot of value because it creates transparency and integrity of participation."

Arnau Monterde Mateo, Director of Democratic Innovation in the City of Barcelona, and co-founder of Decidim project

4. Develop participation skills and capacity building programmes – has your organisation got the right skills to engage with and implement participatory programmes and do citizens have the skills and resources to participate in these?

The success of participatory programs relies heavily on the capability and readiness of both implementing bodies and participating citizens. To achieve this, the development of skills and capacity-building programs is crucial, enabling citizens to engage meaningfully and institutions to facilitate participatory processes

proficiently. This training encompasses equipping citizens with expertise and tools for effective participation and training practitioners in process delivery and specific roles, such as impartial facilitation. Decisions on training should consider factors like time, resources, team size, and existing expertise.

The challenge

The success of democratic innovations to a large extent depends on the capability and readiness of both institutions and citizens to use and engage in different participatory activities. The development of skills and capacity building programs are therefore crucial in ensuring that citizens can engage meaningfully, and institutions can facilitate participatory processes.

The importance of training as a component for the successful development and delivery of democratic innovations is explicitly recognised by the OECD in its guidelines for citizen participation processes⁶⁴. The guidelines recognise the need to equip citizens with expertise and tools that facilitate effective participation

(e.g. training in data collection methods in citizen science⁶⁵), and the need to train practitioners in both process delivery (e.g. see democracy society's video-overview of participatory budgeting⁶⁶) and competencies required for specific roles (e.g. the training of impartial facilitators). Similarly, the ISWE Foundation in their discussion on challenges concerning mainstreaming of citizens assemblies emphasise that 'at the heart of a new theory of change for citizens' assemblies must be developing a literacy of political power and of how change really happens'. For participatory processes such as Citizen Assemblies to have impact, there needs to be focus not just on the activity itself, but also on enabling

civil society to influence framing, hold power to account and lobby on the results generated through deliberation and participation⁶⁷.

Deciding on how best to address capacity building needs will depend heavily on the availability of both time and resources, the size of your participation/citizen engagement team, and the extent of existing expertise and training infrastructure (e.g. dedicated training department; experienced team members). Moreover, focus, commitment and what form of resources that should be needs to be identified. The recommended actions below are designed to provide a practical starting point for those seeking to engage in training and capacity building, for both institutional actors and citizens.

Building Organisational Skills:

Organisations should develop specialised training courses and modules for public officials and civil servants responsible for designing, implementing, and managing participatory programs. These modules should cover facilitation skills, public engagement, and project management and implementation^{68, 69}. The contents of training courses can vary considerably, organisations with sufficient resources to develop their own training courses can consult published toolkits^{70, 71} to identify topics to cover and specific aspects of the process they want to focus on. These toolkits often provide an accessible overview of how to run a democratic innovation, such as Democracy Next's three-stage guide to running a citizen's assembly⁷². Following the example of successful projects, such as the recent participatory budgeting initiatives in Gothenburg⁷³, training sessions should be designed with availability in mind (e.g. accessible scheduling) and take place throughout the project lifespan as required. It is important to understand that this training is resource intensive, the demands of which are underestimated in even large, well-funded initiatives.

We recommend fostering collaboration among multidisciplinary teams within government organisations – including experts from diverse fields like policy, communication, data analysis, and community engagement – to facilitate interdisciplinary innovation. Interdisciplinary teams should be set-up early in the process and team-evaluation processes should be put in place to help overcome communication and goal-related barriers that arise from individuals from different specialisms⁷⁴.

Take advantage of the learning opportunities generated by working with external organisations. This includes attending discreet training courses provided by external organisations that focus on upskilling relevant skills such as facilitation skills⁷⁵, project implementation^{76, 77}, and data management⁷⁸. Looking beyond training focused on specific skills or capabilities there is also the opportunity to take organisations and teams through longer term programmes that help them build a wide range of skills for participation and use these to develop new participatory projects. One example of this is the Design Studio Programme run by Nesta's Centre for Collective Intelligence Design (CCID) for the United Nations Development Programme (UNDP)'s network of Accelerator Labs⁷⁹. These helped local teams in 16 countries use and apply a diverse range of methods to engage the public in their climate change and sustainability projects.

More informally, when commissioning external organisations with deep expertise in participation, such as Involve (UK), We Do Democracy (DK) and Digidem Lab (S) public sector organisations should seek to engage in how these organisations design and deliver participatory processes. This can help build internal expertise and skills in participatory methods, as well as potentially confidence in undertaking future participatory projects. Such a strategy was used by the Swedish Food Agency, who collaborated with the democratic innovation consultancy organisation, Digidem labs, to deliver Sweden's first ever national citizens' panel to deliberate a sustainable, healthy food provision strategy⁸⁰.

Engage in platforms and communities that facilitate the exchange of knowledge, experiences, and best practices between different government bodies engaged in democratic innovations. Existing networks, such as OECD's Innovative Citizen Participation Network, bring together government actors interested in implementing democratic innovations.⁸¹

Empowering Citizens for Meaningful Participation:

Organisations should develop structured training programs to equip citizens with the skills required for effective participation. These programs should cover essential aspects such as communication skills, critical thinking, digital skills, policy making and any domain-specific knowledge related to the policy areas. Implementation of training for citizen participants' is still relatively rare, but prominent examples from successful initiatives demonstrate the feasibility of such an approach⁸². These include a dedicated citizen-training phase, in citizens assemblies run by Newham Council⁸³ (London, UK), that equips citizens with key policy and communication skills; and UCL's Citizen Science Academy⁸⁴ which offers practice-led training, and a certificate recognising participants skills, in research methods for citizen science participation.

Create user-friendly resources, guides, and implement online platforms that provide citizens with information about ongoing democratic initiatives, terminology, and the decision-making context. These resources ensure inclusivity by making participation more comprehensible and inviting for a diverse range of citizens.

5. Make diversity and representation in participatory exercises a key objective – do your participatory projects represent the communities you are trying to serve?

In spite of their ambitions and aims, democratic innovations often only make marginal progress in the diversity and inclusion of who takes part in decision making, or fail to address it entirely. A diverse

representation of citizens in democratic innovations is crucial to ensure that all sections of society are represented in the process and its outcomes and key to the long term success and sustainability of initiatives.

The challenge

Increasing the diversity of participants in the democratic process is crucial for ensuring that the government is representative of the population it serves. The underrepresentation of certain groups in the democratic process is well documented. In the UK for example, voter turnout has been consistently lowest among younger voters (i.e. 18-34 years of age) in the last three general elections, at around 50%. This contrasts with voter turnout of around 80% for the over 65s⁸⁵. In addition, voter turnout is higher among the more educated and the wealthy⁸⁶. In spite of their ambitions and best intentions, democratic innovations often fail to significantly move the dial in terms of diversity and inclusion.

Analysing participatory budgeting initiatives in Peru, recent work has demonstrated that the number of women participating in participatory budgeting initiatives was approximately 30% between the years of 2008-2014⁸⁷. Extending these findings, research examining the socio-demographic breakdown of participatory budgeting in Chicago found voters were more often white and older than typical residents, were also much more likely to own their home, far more likely to have a college degree, and were far less often from low-

income households. Voters were less often Hispanic, and African American residents were also underrepresented in three of four wards⁸⁸.

It should be noted that achieving a fully representative sample of participants in democratic innovations may not always be feasible⁸⁹. On the one hand, participatory budgeting initiatives involving large numbers of participants, such as the participatory budgeting initiatives in Paris that engaged over 40,000 citizens⁹⁰, can hope to reach broadly representative samples. With such numbers, government organisations can make use of randomised-stratified sampling techniques and targets or quotas to ensure a degree of representation. However, in situations where the sample size of a given initiative is small, e.g. mini-publics that typically engage with samples of 70-200 people, it is impossible to fully represent a target population in the hundreds of thousands or millions^{91, 92}. Similarly, different stages of democratic innovations can involve different numbers of participants (e.g. policy ideation vs. voting vs. final approval), and thus require different considerations and strategies to address diversity and inclusion.

Exclusionary practices in open participatory processes often stem from a lack of diversity among participants and institutional facilitators. Typically, those who participate have the resources of *“time, money and knowledge”*⁹³, resulting in the underrepresentation of certain groups including women, racial and linguistic minorities, young people, low-paid workers, and the unemployed – particularly in online participation. Studies of non-participation in deliberative mini-publics have found that non-participation is driven by the way individuals conceive their own roles (people already feel politically disengaged), abilities and capacities in the public sphere (lack of time and skills to participate), as well as in the perceived output of the process (lack of belief that participation will have an impact)⁹⁴.

Institutions often fail to establish diversity as an objective or to measure participant diversity, and collecting diversity data can be exclusionary by forcing marginalised groups to select categories that do not represent their identity⁹⁵. When there is a lack of diversity in the democratic process, certain groups may be underrepresented or even completely ignored. This can lead to policies and decisions that do not take into account the needs,

perspectives, and experiences of diverse communities⁹⁶. However who participates is not necessarily the primary determinant of who benefits. As one study looking at inequality in a variety of online participatory processes (participatory budgeting in Brazil; online local problem reporting in the UK; crowdsourced constitution drafting in Iceland; and online petitioning across 132 countries), found that 'The assumption that inequalities in participation will always lead to the same inequalities in outcomes is not borne out in practice'⁹⁷.

When there is a diverse range of participants in the democratic process, different voices and perspectives can be heard, leading to more inclusive and effective decision-making. At a fundamental level, diversity has been recognised as a pivotal factor in the achievement of successful group outcomes across diverse areas of collective behaviour⁹⁸.

Additionally, increasing the diversity of participants in the democratic process can help to address systemic inequalities and promote social justice – addressing calls of major international organisations such as the UN commission for Social Development and the World Bank⁹⁹. Marginalised communities are often the most impacted by policies and decisions made by the government¹⁰⁰, but they may not have equal access to the democratic process. By increasing the participation of diverse groups, it is possible to promote greater equity and ensure that everyone has a say in the decisions that affect their lives. This can help to promote a more just and fair society, where all individuals have equal opportunities and access to resources.

Organisations should ensure their desired goals and outcomes sufficiently account for the needs

of underrepresented groups in their communities, use inclusive eligibility requirements, and ensure meetings are held in accessible locations. For example, the municipal government in Paris first began allocating a dedicated portion of the participatory budget to working-class districts in 2016, when €30 million were dedicated to these districts. During this year, 6,370 people from working-class districts voted for projects – representing approximately 14% of Paris' total population (of which approximately 16% are working class)¹⁰¹. During implementation of participatory budgeting in San Francisco¹⁰², organisers included requirements for budget assemblies focused on specific communities (e.g. Filipino and African American communities); ensuring 51% of program recipients were from low-or moderate income; and the reduction of the voting age from 16 to 14. In addition, associated meetings took place in accessible venues rather than at city hall, such as schools, libraries, senior centres, and community organisations.

We recommend training community-based organisers, and collaborate with skilled external consultants to address gaps in any diversity-related competencies. In San Francisco, events were facilitated by skilled participatory budgeting organisers (trained for the event), resulting in community-based groups actively facilitating meetings, organising events, and emphasising participatory budgeting's equity goals throughout the process. This was in addition to a range of measures designed to make the process more accessible to those from a range of groups, including providing interpreters to aid those who did not speak English as a first-language, as well as providing an online portal to enable participation for those unable to attend events in-

person. During implementation of participatory budgeting in Gothenburg, local authorities took advantage of expert consultancy services provided by Digidem labs, who helped organise outreach to groups of marginalised migrant residents by identifying key people and arranging meetings with them prior to the start of the process. They also coordinated meetings with migrant residents (a process often requiring interpretation of 4-5 languages)¹⁰³.

Organisations should employ measures to remove the resource-related barriers to participation, especially for community members who wish to be involved as staff and steering committee members. In San Francisco, this involved setting limits on the number of proposed projects during the early stages of review and support was provided to participants to cover costs relating to childcare, food, and transportation.

The combined use of these measures seems to have had a positive impact on diversity of participation and resulted in positive outcomes that benefit marginalised groups¹⁰⁴. The relatively strong levels of youth engagement, as well as the success in securing projects for schools and young people in multiple project cycles, was partially attributed to the effective targeting of outreach efforts towards school sites. Additionally, the high turnout of women, many of whom are mothers, also seemed to play a significant role in these achievements. Moreover, an analysis of the geographic distribution of winning projects and patterns of participation in the idea proposal and vote phases of the initiatives revealed that the winning projects were located in areas with the highest populations of marginalised groups.

6. Experiment with democratic innovations and evaluate what works best – how will you know if what you are doing works?

There is a relative dearth of evidence about what works in participation, and there is little funding for rigorous experimentation to really test what works. To measure the success of a democratic innovation, metrics must

be applied to evaluate its performance. These metrics should include both quantitative and qualitative data and should be regularly reviewed to ensure that the initiative is achieving its intended outcomes.

The challenge

To mainstream and scale the use of democratic innovations we need a better idea of what works and crucially, what doesn't work. A burgeoning field of research is embracing quantitative measurements and experimentation to try and quantify the outcomes of participation, using qualitative metrics. For example, recent research investigated the impact of participating in participatory budgeting initiatives on individual voter turnout in ordinary elections¹⁰⁵. It was found that, compared to a control sample. Individuals who had participated in participatory budgeting had an increased probability of voting by an average of 8.4 percentage points. In addition, it was found that these effects were greater for those who often have lower probabilities of voting—young people, lower educated and lower income voters, black voters, and people who are the minority race of their neighbourhood. More recently, ongoing research funded by the European Commission is using policy experiments to test what measures can help

increase participation and citizen engagement in achieving the five EU missions¹⁰⁶. However, much more can be done to build the evidence of what works.

Broadly speaking, experimentation and evaluation are crucial during the implementation of democratic innovations¹⁰⁷. Through a comprehensive evaluation of both the process of participation and the impact of its outcomes, can we truly ascertain the advantages and drawbacks of engaging the public and facilitate iterative design¹⁰⁸ research suggests that for routine projects, under 1% of a budget can be allocated to evaluation but that for innovative projects with great learning potential, 5-10% is necessary¹⁰⁹.

The challenge faced by government actors is choosing what to test and which metrics to focus on from the sheer variety that could be implemented. These range from testing the impact of different interventions on the quality of democratic innovations, which interventions can help increase the diversity and volume of

participation and the quality of ideas and deliberation generated through the process and impact on policy and behaviour change. Reviewing approximately 300 democratic innovations, a recent report by the OECD¹¹⁰ presented a framework outlining four key indicators of best practice in successful implementation of democratic innovations (with a focus on deliberative processes). These include: integrity of design – the procedural criteria which ensure that a process is perceived as fair by the public and in line with principles of good practice; high deliberation quality – the elements that enable quality deliberation that results in public judgement; resulting recommendations and actions – including immediate impact on institutional processes and decision making; and impact on the wider public – secondary and long term effects on public learning and attitudes. Subsequently, the OECD developed a formal set of evaluation guidelines, with accompanying questionnaires for participants and organisers¹¹¹.

The 'co-creation radar' provides an alternative approach to evaluation of participation consisting of 12 main indicators (e.g. planning, motivation, sustainability, and impact)¹¹². The co-creation radar's indicators cover four areas: objectives, implementation, actors, and results, and it can be used to evaluate democratic innovations during inception (for planning), during implementation (to enable dynamic allocation of resources), and for post-process evaluation (to assess impact). We recommend organisations adopt the OECD's guidelines for Innovative Citizen Participation or the Co-creation Radar as a basis for evaluating their democratic innovations.

We also recommend organisations involve citizens in the evaluation process itself, as a means of leveraging the collective intelligence of those participating in democratic innovations as means of assessing their efficacy, value, and impact¹¹³, while further facilitating citizen participation, motivation and empowerment¹¹⁴. Such an approach was successfully implemented by Newham Council, who asked local residents (who had participated in their participatory budgeting program) to participate in focus groups, and complete surveys,

to evaluate the initiative across seven key dimensions ranging from impact of the outcomes (i.e. how the money was spent) to diversity. Notably, such an approach may require development of basic capacity-building programs to ensure citizen evaluators have sufficient knowledge of the process to evaluate it¹¹⁵.

Organisations should designate evaluation officers who can also utilise multiple channels and formats to maximise the validity of their evaluations. Recent research highlights the importance of utilising both traditional/conventional means for evaluating participatory processes (e.g. surveys, qualitative interviews), in combination with digital platforms and social media¹¹⁶. The use of digital platforms, in particular, enables the evaluation of processes and impact over time – such as identifying the impact of process changes at key initiative milestones^{117, 118}. Organisations should also embrace qualitative methods in their evaluation processes; the value of which was evidenced by insights provided by both citizens and government official interviews conducted as part of the COLDIGIT pilot city evaluations¹¹⁹.

Finally, we recommend using quantitative metrics to engage in the implementation of experimental approaches to process and policy evaluation¹²⁰. Combined with robust sortition, implementation of baseline measures, and standardised measurement instruments across innovations and process cycles, such approaches will give participation officers/teams the means to directly analyse the causal impact of deliberative processes on citizens' policy support and budget assignment (see recent initiatives involving deliberation and policy polling^{121, 122}). Effects of participation on secondary/incidental factors can also be investigated, potentially providing insights into impact on factors as diverse as political and social trust, political efficacy, political knowledge, and readiness for political participation^{123, 124}. Demonstrating the value of experimental approaches, recent research found that participation in deliberation (discussing aspects of medical practice) had positive effects on participants' knowledge of and attitudes towards medical evidence¹²⁵, and increased the variety of opinions expressed across the groups involved in deliberation¹²⁶.

7. Invest in both the use and maintenance of digital tools for participation – who is in charge of making sure tools are fit for purpose and work and are the resources in place for this?

In the era of 'digital democracy,' the integration of digital tools into democratic practices offers both opportunities and challenges. These tools empower citizens by facilitating informed participation, issue framing, ideation, deliberation, and collaborative policy development. Their use is becoming increasingly widespread, offering a wide range of functionality across a wide range of innovation domains. However, with this increase in capability, comes an increase in operational complexity and capacity requirements. Moreover, there are few 'one size fits all' solutions and organisations must

be prepared to adjust and learn, so they can tailor these tools to fit their needs. To harness the potential of digital democracy responsibly and effectively, organisations should prioritise upskilling their participation teams in digital skills, leverage existing tools and repositories, collaborate across institutions, and ensure inclusivity for citizens with varying digital literacy levels. By doing so, organisations can navigate the digital wave to foster inclusivity, citizen empowerment, and innovative policy development in our democratic processes.

The challenge

Digital technologies have ushered in a transformative era, reshaping industries, redefining social interactions, and are rapidly redefining how we approach democratic practices and governance—ushering in a new era of 'digital democracy'¹²⁷. Indeed, large 21st participation requires use of digital tools, and there is a broad range of platforms and services available in the market that provide a wide range of functions and services. Some of these focus on delivery of specific innovations or services, such as participatory budgeting (e.g. Stanford's Participatory Budgeting Platform¹²⁸) or crowd-sourcing of ideas and their evaluation (e.g. Polis¹²⁹), while others seek to offer a broad range of functionality that can be tailored for use according to an organisations needs (e.g. Decidim¹³⁰). However, using these is rarely a case of plug and play/off the shelf solutions, as they need to be adapted to the context they are being used and paired with existing processes for participation. Digital

platforms need to be maintained and if using open-source software, which many of the platforms in this domain are, it is important to ensure that the core digital product is supported via regular patches and updates¹³¹.

Within the democratic domain, digital tools have exhibited a remarkable range of capabilities, which have evolved to encompass a typology of tasks that span the breadth of civic engagement¹³². At its core digital technology serves as a conduit for informing citizens, ensuring timely notifications of debates, votes, and consultations through live-streaming, dedicated websites and apps. Beyond information dissemination, digital tools facilitate the intricate process of issue framing, empowering citizens to raise awareness about crucial matters and set the tone for public discourse (e.g. the use of petition sites). Moreover, citizens' involvement extends to providing information and ideas, whether sharing personal insights or technical expertise on

specific problems or contributing to broader patterns and trends through citizen-generated data and ideation platforms. Deliberation, a cornerstone of democratic deliberative processes, has also found a virtual home in online forums and debating platforms¹³³,¹³⁴. Importantly, digital tools facilitate the entire lifecycle of policy development, allowing citizens to collaboratively draft proposals, scrutinise options, make decisions, and even engage in the vigilant monitoring and assessment of public actions and services.

This technological wave presents both opportunities and challenges for democracies. On the one hand, the widespread dissemination of misinformation and data misuse threatens the foundations of trust and active participation—necessitating a critical evaluation of the tools that underpin our democratic processes¹³⁵. Use of digital technology has also been associated with political polarisation, with algorithms driving exposure to personalised content

that reinforce existing beliefs, while suppressing media necessary for healthy democracy (e.g. news about socially relevant topics)¹³⁶. Concurrently, digital tools offer innovative pathways for enhancing collaboration, deliberation, and collective decision-making—key aspects of open government and collaborative democracy¹³⁷.

Recent experiments in digital democracy, as observed in parliaments and local governments worldwide, showcase the potential of digital tools to foster inclusivity, citizen empowerment, and innovative policy development^{138, 139}. Platforms facilitating citizen-led proposals, collaborative policy drafting, and crowdsourced solutions exemplify the evolving landscape of democratic engagement. For example, Stanford's Participatory Budgeting Platform provides a customisable, open source tool for running participatory budgeting initiatives, and provides features designed to enhance diversity and decision making such as data analytics, multiple language support, and support for both desktop and mobile devices. The tool has now been used to deliver participatory budgeting initiatives across Canada (e.g. Dieppe) and the US (e.g. Boston, Chicago, New York)¹⁴⁰. Another prominent example is Decidim, a digital platform that aims to provide a comprehensive suite of tools and capabilities (as 'modules') for running a range of democratic innovations. Functionality provided includes online assemblies and consultation spaces supporting debate and discussion, proposal submission, user surveys, sortition, accountability, and participatory budgeting¹⁴¹. Moreover, Decidim is free, based on open-source code,

and managed by a democratic community of international users. It has been used to deliver democratic initiatives in over 300 cities internationally, including participatory budgeting in Helsinki¹⁴² and Barcelona¹⁴³, and participatory national planning across Brazil¹⁴⁴.

There is now a wide variety of digital tools available that facilitate participatory processes, ranging in cost, functionality, and resources required to run and maintain them. The potential to leverage these tools for bolstering democratic engagement and transparency is substantial. To help organisations capitalise on this potential, we have summarised a series of strategic actions that should be taken to ensure the responsible and effective implementation of digital tools in democratic processes.

First, we recommend organisations make solid commitments to upskilling digital skills within their participation teams. Government employees are typically receptive to such training, with results of a recent survey showing that 75% of civil servants (in the UK) would like to receive more digital skills training¹⁴⁵, and government organisations should capitalise on this enthusiasm. The scope for this may vary depending on resource constraints, but teams should have at least one 'digital expert' who possesses a broad knowledge of the features, capabilities, and limitations of digital tools in the democratic innovation space. Better resourced organisations can be more ambitious, and integrate training programs and materials specialising in digital democratic initiatives, and campuses. The development of these materials should be accompanied by up-

skilling targets, such as those set out in the UK government's 'Transforming for a digital future' strategy¹⁴⁶, in which the government has committed to upskilling at least 90% of senior civil servants on digital and data essentials, with learning embedded into performance and development standards.

Institutions should review and use existing tools and infrastructure to reduce operational costs. There is a large, rapidly developing ecosystem of digital tools capable of servicing a broad range of initiatives and projects. As one study looking at inequality in a variety of online participatory processes. To help choose the correct tools, participation teams should take full advantage of existing repositories and databases. For example, the COLDIGIT repository 'Collective Intelligence Tools and Case Studies' contains information on more than 70 digital tools, and users can filter these by language; maturity of development, functions (e.g. gamification, survey, voting); governance process supported (e.g. problem identification, drafting, decision making); methods for co-creation (e.g. participatory budgeting, citizen science, deliberative citizen panels); and overall purpose (e.g. co-construction of policies and decisions, co-funding and co-innovation)¹⁴⁷. These are accompanied by over 50 case studies providing examples of how these tools were used. Another resource is People Powered's ratings for digital participation platforms¹⁴⁸, which lists, rates, and ranks 32 digital platforms according to a range of features including cost, capacity requirements, features, accessibility, ethics and reliability, and track record (as judged by an expert committee).

We recommend participation teams collaborate broadly within and across organisations to develop their capacity to deliver digital democracy. The general benefits for capacity building were described above, with networks like the European Capital of Democracy¹⁴⁹, and the Convention of Scottish Local Authorities¹⁵⁰ offering accessible networks that organise training, networking events, and offer free advice on the implementation of democratic innovations (both more broadly and in the digital domain). In Norway, the municipalities organised in 'Smartbyene' (Smart CitiesNetwork)¹⁵¹ work together to adapt and deploy tools for their needs, something that small municipalities would not have the resources and the competence to do so on their own. There are also communities specialising in supporting the use and development of digital tools. For example, Metadecidim is an international community that collaborates in the design and construction of the Decidim project (providing a channel to influence the features and capabilities of the platform). Organisations should make use of digital participation consultancies to support the implementation and use of digital platforms, a strategy adopted by local authorities who contracted Digidem Labs¹⁵² to assist in the deployment of the Decidim platform when running participatory budgeting initiatives in Gothenburg¹⁵³.

When using digital tools to engage with citizens, organisations should engage with individuals on the platforms and applications they are already accustomed to/

using—this facilitates smooth 'first interactions' which are critical for sustaining engagement¹⁵⁴. It is also recommended that organisations use digital tools with built in language translation capabilities to translate participants' input and feedback (e.g. Decidim uses the Crowdin platform to offer translation in more than 18 languages¹⁵⁵). Your digital strategy should also complement, not replace non-digital approaches and should build in capacity for offering assistance and training for citizens with low digital literacy. Digital literacy varies widely across countries and between rural and urban populations, with recent statistics showing that just over one quarter (26%) of the EU population aged 16–74 years reported above-basic overall digital skills. A higher share was recorded for people living in cities (33%), while a lower proportion of people living in towns and suburbs (24%) and in rural areas (20%) had above-basic overall digital skills¹⁵⁶. With dedicated support¹⁵⁷, hybrid approaches can help address this, as was demonstrated during the development of Barcelona's Municipal Action Plan. Here 87% of the proposals that were formulated through a hybrid offline/online process were implemented compared to 42% of those proposals that were only developed online¹⁵⁸.

Finally, organisations should explore novel tools for more creative citizen engagement beyond the mainstream platforms that focus on co-creation of policy and budgets, primarily through community management and communication through text based mediums. There is an emerging landscape

of tools which seek to offer novel forms of co-creation and collective problem solving. For example, Sapelli is an open-source project that facilitates data collection across language or literacy barriers through highly configurable icon-driven user interfaces¹⁵⁹. Built on open-source mapping technology (OpenStreetMaps¹⁶⁰), Sapelli has been used to provide a way for forest communities to report on illegal wildlife crime; map wheelchair accessibility; and provide workers in Ghana up-to-date information on different types of logging permits and their legal requirements. Another example is Block by Block, which uses Minecraft to gamify urban planning, providing a tool that communities in developing countries can use to help visualise how people want to see their cities develop in the future. Augmenting the participatory process with these tools can help make the process more engaging for citizens¹⁶¹.

"We are at the end of being small - things are starting to get bigger and bigger and this brings new challenges. At the beginning, no one thought its impact would grow on this scale. So questions of funding are complicated."

Maarja-Leena Saar, Estonian Cooperation Assembly

8. Use AI to develop new approaches to how citizen assemblies and participatory budgeting are implemented

While the biggest impact on organisations ability to implement and scale up the use of democratic innovations will come from getting the processes, skills, teams and culture that we discuss in the previous recommendations right, there is undoubtedly also a big current and future opportunity in the application of AI to democratic innovations. We explore and discuss this opportunity below.

AI is often seen, primarily, as a tool for automating tasks that humans would normally do, or supporting individuals to solve tasks, however it can also aid how

groups deliberate and work together. In spite of the potential of this technology and its capabilities in the domain of democratic innovations, this application gets only a fraction of the investment and political interest than more mainstream uses of AI. As a result we are missing out on significant opportunities to reduce cost and improve the quality of democratic innovations.

As a final recommendation, we look ahead to the future opportunities in using AI in democratic innovations and how we can make the most of this.

The challenge

Recent advances and experiments in the use of artificial intelligence in digital democracy tools highlight four main opportunities. Some of these, such as the use of AI to increase efficiency are well established and implemented in many existing tools, whereas others, such as the use of AI to aid group deliberation, are more experimental with few mainstream applications. Below, we describe three potential applications of new and emerging AI technologies.

Using AI to make tools more efficient and reduce costs.

As demonstrated by its use in platforms such as Consul and Citizen Lab, AI can enhance the efficiency of tools and help tackle the problem of information overload – a common challenge when dealing with large amounts

of crowdsourced data from citizens in tools such as participatory budgeting.^{162, 163} For example Natural Language Processing (NLP) can be used to analyse and interpret large volumes of text data, enabling quicker and more accurate understanding of public sentiment. This reduces the time and cost associated with manual analysis. Similarly machine Learning models can predict trends based on historical data, aiding in decision-making processes using predictive analysis¹⁶⁴ and detect fraud^{165, 166}.

Recent advances in the application of large language models are also showing a potential to optimise processes and reduce costs. A recent experiment by the Polis platform explored the opportunities and risks associated in applying Large Language Models found a significant potential in using AI

to augment human intelligence to help more efficiently run Polis conversations, in particular when it comes to using summarisation¹⁶⁷.

Another use case is how the Citizens Foundation has used AI to improve participatory budgeting and policy crowdsourcing on its Better Reykjavik platform. This includes using AI for translation into Icelandic and the development of the experimental tool called 'Policy Synth,' where users can enter the problems they would like addressed and with support of generative AI identify potential causes or related challenges and as well as potential solutions¹⁶⁸.

By automating various administrative tasks and optimising user experience, speed and accuracy all of these uses of AI can help cut costs and allocate resources more efficiently.

Using AI to recruit diverse participants, such as using AI for better better sortition in citizen assemblies.

By using algorithms that consider various demographic factors AI can assist in a more efficient and unbiased random selection of participants (sortition), a crucial component in the design of citizen assemblies. This not only strengthens the legitimacy of the outcomes but also enhances the collective intelligence of the assembly.

AI-driven outreach and engagement strategies can identify and target underrepresented groups, encouraging their active involvement in the democratic process. By addressing historical inequalities and biases, AI can contribute to a more equitable and diverse pool of participants, fostering a richer and more inclusive discussion of community needs and priorities.

One of the most prominent examples of this is the algorithm used by the Sortition Foundation in the StratifySelect open-source software, to select participants for citizens' assemblies by lottery, which was found by a study published in *Nature* to be the fairest selection algorithm possible^{169, 170}.

Using AI to enable new forms of deliberation, discussion, and collaboration in groups.

Experiments with AI and group deliberation have shown a potential for AI to facilitate more effective group deliberation by providing real-time insights, identifying common ground or disagreements, and suggesting areas for further discussion. It can also help manage large-scale discussions by filtering out irrelevant or inappropriate content, making the deliberation process more focused and productive.

For example, recent research published by DeepMind demonstrated how a large language model (LLM) could be fine tuned to produce consensus-driven statements that maximise the expected approval for a group of people with potentially diverse opinions. These statements were based on a synthesis of written opinions provided by human participants reflecting on thousands of questions touching on moral and political issues (e.g., 'should we raise taxes on the rich?')¹⁷¹. In another example, researchers used an LLM to intervene in text-based conversations between individuals holding opposing views on contentious issues (e.g. gun control in the USA), and suggest alternative messages to those submitted by the users that were reframed/ reformulated to be more polite, validating, and understanding. Researcher's report that these

interventions improved conversation quality and tone, while reducing political divisiveness¹⁷².

This technology would have clear applications as a means of facilitating large discussions of contentious political issues on digital crowd-ideation platforms (e.g. Polis¹⁷³), potentially acting as a means of reducing conflict and helping to build consensus.

Of course, many of the technologies above are at a nascent stage, needing more development before they can be considered mainstream tools that do not require considerable expertise to implement. This is a fast moving field, and it is important to be aware of current trends and technologies on the horizon that could impact the scope and impact of democratic innovations for when these tools become widely available and intuitive to use.

"AI will transform democracy in the next ten years. At the Citizens Foundation, we're already integrating AI with collective intelligence to enhance public decision-making processes."

Robert Bjamason, Citizens Foundation

Endnotes

1. Economist Intelligence Unit (2023, November 5). Democracy Index. Economist Intelligence Unit. 2022 <https://www.eiu.com/n/campaigns/democracy-index-2022/>
2. Open Society Foundation (2023). Open Society Barometer: Can Democracy Deliver? Open Society Foundation. <https://www.opensocietyfoundations.org/publications/open-society-barometer-can-democracy-deliver>
3. Nesta (2023, November 5). Collective Intelligence through Digital Tools (COLDIGIT) for Democratic Innovation. Nesta. <https://www.nesta.org.uk/project/collective-intelligence-through-digital-tools-coldigit-democratic-innovation/>
4. Whittington, O. (2022). Democratic Innovation and Digital Participation. Nesta, London. <https://www.nesta.org.uk/report/democratic-innovation-and-digital-participation-report/>
5. Whittington, O. (2022). Democratic Innovation and Digital Participation. Nesta, London. <https://www.nesta.org.uk/report/democratic-innovation-and-digital-participation-report/>
6. The Scottish Government. (2023). Participation Framework. The Scottish Government, Edinburgh, ISBN: 9781805254775. <https://www.gov.scot/publications/participation-framework/pages/12/6>
7. O'Flynn, Ian (2021). Deliberative democracy. Medford, MA: Polity Press.
8. Carnegie Europe. (2020, November 5). Getting Climate Citizens Assemblies Right. Carnegie Europe. <https://carnegieeurope.eu/2020/11/05/getting-climate-citizens-assemblies-right-pub-83133>
9. Camden Council. (2022). We Make Camden, Camden Council. London. <https://www.wemakecamden.org.uk/wp-content/uploads/2022/04/We-Make-Camden-Vision.pdf>
10. de Zeeuw, A., & Pieterse, J. (2020). Digital Democracy: A guide on local practices of digital participation. Netwerk Democratie, Amsterdam. <https://netdem.nl/wp-content/uploads/2020/03/Digital-Democracy-Guide.pdf>
11. Whittington, O. (2022). Democratic Innovation and Digital Participation. Nesta, London. <https://www.nesta.org.uk/report/democratic-innovation-and-digital-participation-report/>
12. Simon, J., Bass, T., Boelman, V., & Mulgan, G. (2017). Digital Democracy: The Tools Transforming Political Engagement. Nesta, London. <https://www.nesta.org.uk/report/digital-democracy-the-tools-transforming-political-engagement/>
13. City of Helsinki. (2023, November 5). The Helsinki of dreams is created together. OmaStadi, City of Helsinki. <https://omastadi.hel.fi/pages/information?format=html&locale=en>
14. de Zeeuw, A., & Pieterse, J. (2020). Digital Democracy: A guide on local practices of digital participation, Netwerk Democratie, Amsterdam.
15. Naranjo-Zolotov, M., Oliveira, T., Cruz-Jesus, F., Martins, J., Gonçalves, R., Branco, F., & Xavier, N. (2019). Examining social capital and individual motivators to explain the adoption of online citizen participation. *Future Generation Computer Systems*, 92, 302-311. <https://doi.org/10.1016/j.future.2018.09.044>
16. Ianniello, M., Iacuzzi, S., Fedele, P., & Brusati, L. (2019). Obstacles and solutions on the ladder of citizen participation: a systematic review. *Public management review*, 21(1), 21-46. <https://doi.org/10.1080/14719037.2018.1438499>
17. Baeck, P., Berditchevskaia, A., & Reynolds, S. (2023, November 5). Collective intelligence and the smart city. Nesta. <https://www.nesta.org.uk/feature/collective-intelligence-and-smart-city/>
18. Bingöl, E. S. (2022). Citizen participation in smart sustainable cities. In *Research Anthology on Citizen Engagement and Activism for Social Change* (pp. 967-987). IGI Global.
19. Lewandowska, A., & Chodkowska-Miszczuk, J. (2022). The role of participation in the development of the smart city idea: frameworks, opportunities, mechanisms. *Bulletin of Geography. Socio-economic Series*, (57), 93-111.
20. Sweeting, D., de Alba-Ulloa, J., Pansera, M., & Marsh, A. (2022). Easier said than done? Involving citizens in the smart city. *Environment and Planning C: Politics and Space*, 40(6), 1365-1381. <https://doi.org/10.1177/2399654422108064>
21. OECD (2020). Innovative Citizen Participation and New Democratic Institutions: Catching the deliberative wave. OECD Publishing, Paris. <https://doi.org/10.1787/339306da-en>
22. Fernández-Martínez, J. L., García-Espín, P., & Jiménez-Sánchez, M. (2020). Participatory frustration: the unintended cultural effect of local democratic innovations. *Administration & Society*, 52(5), 718-748. <https://doi.org/10.1177/0095399719833628>
23. O'Leary, N. (2019, June 18). The democracy fix: The myth of the citizens' assembly. *Politico*. <https://www.politico.eu/article/the-myth-of-the-citizens-assembly-democracy/>
24. Phalnikar, S. (2021, February 2). France's citizen climate assembly: A failed experiment? *Deutsche Welle*. <https://www.dw.com/en/frances-citizen-climate-assembly-a-failed-experiment/a-56528234>
25. Mellier, C., & Wilson, R. (2023, November 5). Getting Climate Citizens' Assemblies Right. Carnegie Europe. <https://carnegieeurope.eu/2020/11/05/getting-climate-citizens-assemblies-right-pub-83133>

26. Goodwin, J., Jasper, J.M. (2006). Emotions and Social Movements. In: Stets, J.E., Turner, J.H. (eds) *Handbook of the Sociology of Emotions*. Handbooks of Sociology and Social Research. Springer, Boston, MA. https://doi.org/10.1007/978-0-387-30715-2_27
27. Van Stekelenburg, J., & Klandermans, B. (2013). The social psychology of protest. *Current Sociology*, 61(5-6), 886-905. <https://doi.org/10.1177/0011392113479314>
28. Giraudet, L. G., Apouey, B., Arab, H., Baeckelandt, S., Begout, P., Berghmans, N., ... & Tournus, S. (2022). "Co-construction" in deliberative democracy: lessons from the French Citizens' Convention for Climate. *Humanities and Social Sciences Communications*, 9(1), 1-16. <https://doi.org/10.1057/s41599-022-01390-3>
29. Aspinwall, N. (2023, November 1). Taiwan Tried to Digitize Democracy. It Was a Huge Flop. *The Daily Beast*. <https://www.thedailybeast.com/taiwan-tried-to-digitize-democracy-with-vtaiwan-it-was-a-huge-flop>
30. OECD (2020). *Innovative Citizen Participation and New Democratic Institutions: Catching the deliberative wave*. OECD Publishing, Paris. <https://doi.org/10.1787/339306da-en>
31. Pope, H. (2023, February 26). The region that's experimenting with government by lottery. *The New European*. <https://www.theneweuropean.co.uk/the-region-thats-experimenting-with-government-by-lottery/>
32. Clement, M. (2019, October 3). Pissiors and public votes: how Paris embraced the participatory budget. *The Guardian*. <https://www.theguardian.com/cities/2019/oct/03/pissoirs-and-public-votes-how-paris-embraced-the-participatory-budget>
33. Involve. (2023, November 5). *Participatory Budgeting*. Involve. <https://involve.org.uk/resource/participatory-budgeting>
34. McGeown, C. (2021, May 21). Citizens' Assemblies Won't Save Us. *Green European Journal*. <https://www.greeneuropeanjournal.eu/citizens-assemblies-wont-save-us/>
35. O'Leary, N. (2019, June 18). The democracy fix: The myth of the citizens' assembly. *Politico*. <https://www.politico.eu/article/the-myth-of-the-citizens-assembly-democracy/>
36. Whittington, O. (2022). *Democratic Innovation and Digital Participation*. Nesta, London. <https://www.nesta.org.uk/report/democratic-innovation-and-digital-participation-report/>
37. Kiteley, R. J., & Ormrod, G. (2009). Towards a team-based, collaborative approach to embedding e-learning within undergraduate nursing programmes. *Nurse Education Today*, 29(6), 623-629. <https://doi.org/10.1016/j.nedt.2009.01.010>
38. Elstub, S., & Escobar, O. (2017, April). A typology of democratic innovations. In *Political Studies Association's Annual Conference*. <https://www.psa.ac.uk/sites/default/files/conference/papers/2017/A%20Typology%20of%20Democratic%20Innovations%20-%20Elstub%20and%20Escobar%202017.pdf>
39. Roberts, J., & Lightbody, R. (2017). Experts and evidence in public decision making. *ClimateXChange Policy Brief*. <https://strathprints.strath.ac.uk/59767/>
40. COLDIGIT. (2023, November 5). Collective intelligence through digital tools. COLDIGIT. <https://blogs.helsinki.fi/collective-intelligence-through-digital-tools-coldigit/themes/pilots/>
41. Cain, L., & Moore, G., (2019). *Evaluation of Camden Council's Citizens' Assembly on the Climate Crisis*. University College London. <https://www.camden.gov.uk/documents/20142/0/FINAL+UCL+Evaluation+of+Camden+Council%27s+Citizens%27+Assembly+on+the+Climate+Crisis.pdf/e3f39960-76ce-111d-656b-6154465fc095?t=1579799081501>
42. Gilley, J. W., Morris, M. L., Waite, A. M., Coates, T., & Veliquette, A. (2010). Integrated theoretical model for building effective teams. *Advances in Developing Human Resources*, 12(1), 7-28. <https://doi.org/10.1177/1523422310365>
43. Ryan, M., Gambrell, D., & Noveck, B. S. (2020). *Using Collective Intelligence to Solve Public Problems*. Nesta. London. https://media.nesta.org.uk/documents/Using_Collective_intelligence_to_Solve_Public_Problems.pdf
44. Alvarado, M., Bañares-Alcántara, R., & Trujillo, A. (2005). Improving the Organisational Memory by recording decision making, rationale and team configuration. *Journal of petroleum science and engineering*, 47(1-2), 71-88. <https://doi.org/10.1016/j.petrol.2004.11.009>
45. Hayduk, R., Woo, E., Marinez Estrada, J., & Adriano, A. (2023). *Two Steps Forward, One Step Back: Participatory Budgeting and the Quest for Empowered Participatory Governance*. *New Political Science*, 45(1), 1-32. <https://doi.org/10.1080/07393148.2022.2164667>
46. Camden Council. (2016). *Statement of Community Involvement*. Camden Council. London. <https://www.camden.gov.uk/documents/20142/2247044/Statement+of+community+involvement+July+2016.pdf/c293584c-f270-d852-8462-2ffd64d9f718>
47. Camden Council. (2023, November 5). *Citizens' Assembly on the climate crisis*. Camden Council. <https://www.camden.gov.uk/citizens-assembly-climate-crisis>
48. Camden Council. (2023). *Camden Council's Data Charter*. Camden Council. London. <https://consultations.wearecamden.org/corporate-services/camdens-data-charter-residents-panel-recruitment/>
49. Camden Council. (2023, November 5). *Camden Giving*. Camden Council. <https://www.camdengiving.org.uk/>
50. Camden Council. (2022). *The Way We Work*. Camden Council. London. <https://www.wemakecamden.org.uk/wp-content/uploads/2022/03/The-Way-We-Work.pdf>
51. Harrison, R. (2014, October 8). Parisians have their say on city's first €20m 'participatory budget'. *The Guardian*. London. <https://www.theguardian.com/cities/2014/oct/08/parisians-have-say-city-first-20m-participatory-budget>

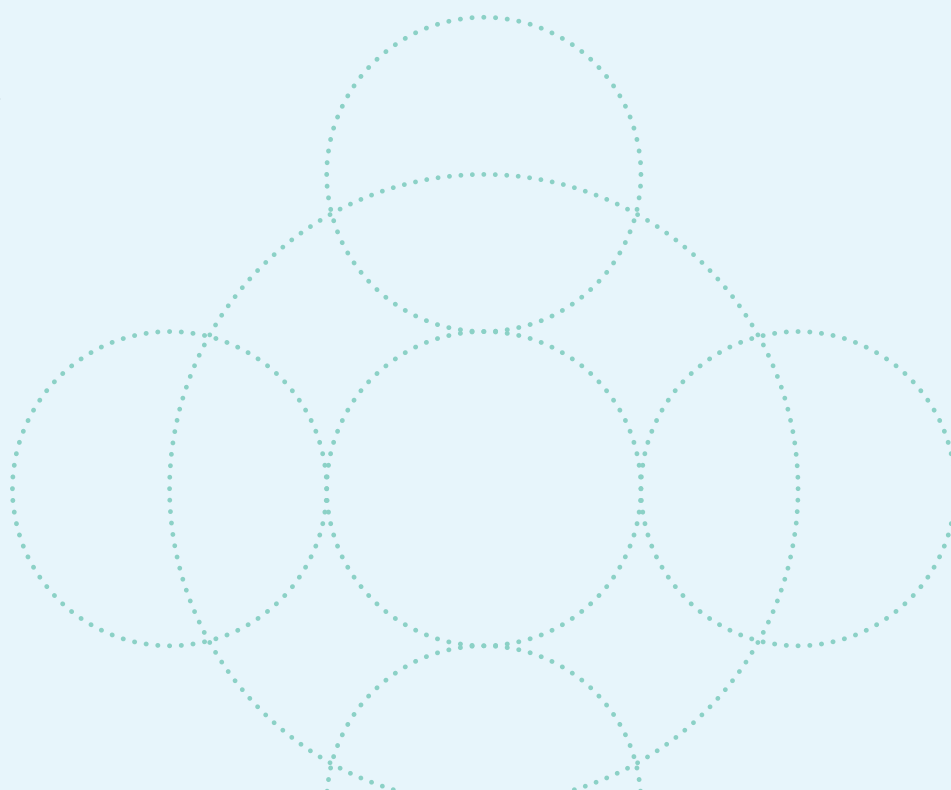
52. Participedia. (2023, November 5). Participatory Budgeting in Paris, France. Participedia. <https://participedia.net/case/5008>
53. Cummings, M. (2023, May 3) Yale scholar helps steer French citizens' assembly on euthanasia. New Haven. Yale. <https://news.yale.edu/2023/05/03/yale-scholar-helps-steer-french-citizens-assembly-euthanasia>
54. Phalnikar, S. (2021, February 2). France's citizen climate assembly: A failed experiment? Deutsche Welle. <https://www.dw.com/en/frances-citizen-climate-assembly-a-failed-experiment/a-56528234>
55. Cabinet Office. (2022, July 11). New Chief People Officer and Chief Digital Officer appointed. Cabinet Office. <https://www.gov.uk/government/news/new-chief-people-officer-and-chief-digital-officer-appointed>
56. People Powered. (2023, November 5) Guide to Digital Participation Platforms: When to Use Them, How to Choose & Tips for Maximum Results. People Powered. <https://www.peoplepowered.org/digital-guide-home>
57. Whittington, O. (2022). Democratic Innovation and Digital Participation. Nesta, London. <https://www.nesta.org.uk/report/democratic-innovation-and-digital-participation-report/>
58. Kameda, T., Toyokawa, W., & Tindale, R. S. (2022). Information aggregation and collective intelligence beyond the wisdom of crowds. *Nature Reviews Psychology*, 1(6), 345-357.
59. Woolley, A. W., Aggarwal, I., & Malone, T. W. (2015). Collective intelligence and group performance. *Current Directions in Psychological Science*, 24(6), 420-424.
60. Riedl, C., Kim, Y. J., Gupta, P., Malone, T. W., & Woolley, A. W. (2021). Quantifying collective intelligence in human groups. *Proceedings of the National Academy of Sciences*, 118(21), e2005737118.
61. Gordon, V., Osgood Jr, J. L., & Boden, D. (2017). The role of citizen participation and the use of social media platforms in the participatory budgeting process. *International Journal of Public Administration*, 40(1), 65-76. <https://doi.org/10.1080/01900692.2015.1072215>
62. Lerner, J. (2011). Participatory budgeting: Building community agreement around tough budget decisions. *National Civic Review*, 100(2), 30-35. DOI: 10.1002/nrcr.20059.
63. Gordon, V., Osgood Jr, J. L., & Boden, D. (2017). The role of citizen participation and the use of social media platforms in the participatory budgeting process. *International Journal of Public Administration*, 40(1), 65-76. <https://doi.org/10.1080/01900692.2015.1072215>
64. OECD. (2022). OECD Guidelines for Citizen Participation Processes, OECD Public Governance Reviews, OECD Publishing, Paris, <https://doi.org/10.1787/f765caf6-en>.
65. University College London: Institute for global prosperity. (2023, November 5). UCL Citizen Science Academy. University College London: Institute for global prosperity. <https://www.ucl.ac.uk/bartlett/igp/research/ucl-citizen-science-academy>
66. Democratic Society. (2022, November 5). PB Training. Democratic Society. https://www.youtube.com/watch?v=j8BClck-9Mk&list=PLVxJ_b_jwQNcws94O4FXCNriqqdhtNc-A
67. Wilson, R., & Mellier, C. (2023, October 10). Getting Real About Citizens' Assemblies: A New Theory of Change for Citizens' Assemblies. European Democracy Hub. <https://europeandemocracyhub.epd.eu/getting-real-about-citizens-assemblies-a-new-theory-of-change-for-citizens-assemblies/>
68. Involve. (2023, November 5). Public Engagement Training. Involve. <https://involve.org.uk/our-work/public-engagement-training>
69. UK Government. (2020). How to run a citizens' assembly – a handbook for local authorities. UK Government. London. <https://www.thersa.org/globalassets/reports/2020/IIDP-citizens-assembly.pdf>
70. East, North and South Ayrshire Council. (2020). Participatory Budgeting Toolkit. East, North and South Ayrshire Council. <https://drive.google.com/file/d/1ky6LWSCCOuUDFkhk0yWcJonm128Yowbx/view>
71. National Assembly for Wales (2014). Public Engagement Toolkit. National Assembly for Wales. Cardiff. https://senedd.wales/NAfW%20Documents/public_engagement_toolkit_2014.pdf%20-%2007052014/public_engagement_toolkit_2014-English.pdf
72. Democracy Next. (2023, November 5). Assembling an Assembly Guide. Democracy Next. <https://assemblyguide.demnext.org/>
73. Measure, P., Hermansson, A., Nordling, & Ghotbi, S. (2023). WP 4 | Housing PB in Biskopsgården and Hammarkullen – Case studies in Gothenburg, Sweden. COLDIGIT. <https://blogs.helsinki.fi/collective-intelligence-through-digital-tools-coldigit/files/2023/03/COLDIGIT-WP4-Gothenburg-Report-D4-3-V1.pdf>
74. Blackwell, A. F., Wilson, L., Boulton, C., & Knell, J. (2009). Radical innovation: crossing knowledge boundaries with interdisciplinary teams (No. UCAM-CL-TR-760). University of Cambridge, Computer Laboratory. Doi: 10.48456/tr-760
75. Involve. (2023, November 5). Public Engagement Training. Involve. <https://involve.org.uk/our-work/public-engagement-training>
76. Council of Europe. (2023, November 5). Training for coordinators of Citizens' Assemblies. Council of Europe. <https://www.coe.int/en/web/participatory-democracy/-/training-for-coordinators-of-citizens-assemblies>

77. Mesure, P., Hermansson, A., Nordling, & Ghotbi, S. (2023). WP 4 | Housing PB in Biskopsgården and Hammarkullen – Case studies in Gothenburg, Sweden. COLDIGIT. <https://blogs.helsinki.fi/collective-intelligence-through-digital-tools-coldigit/files/2023/03/COLDIGIT-WP>
78. LOTI. (2023, November 5). Recommendations for Data Ethics Capabilities. LOTI. <https://loti.london/toolkit/recommendations-data-ethics-capabilities/skills-culture/recommendation13/>
79. Nesta (2023, November 5). Collective intelligence research and design studio for climate action. Nesta. <https://www.nesta.org.uk/project/collective-intelligence-research-and-design-studio-for-climate-action/>
80. Digidem Lab. (2023, April 27). The Swedish Food Agency organises the first Swedish citizens' assembly! Digidem Lab. <https://digidemlab.org/news/livsmedelsverket-gor-sveriges-forsta-nationella-medborgarpanel-en/>
81. OECD (2023, November 5). About the OECD Innovative Citizen Participation Network. OECD. <https://www.oecd.org/gov/open-government/about-the-oecd-innovative-citizen-participation-network.pdf>
82. Citizens' Assemblies. (2018, November 5). Basic standards for organising citizens' assemblies. Citizens' Assemblies. <https://citizensassemblies.org/standards/>
83. Newham Council (2023, November 5). Citizens' Assemblies: Newham Citizens Assembly. Newham Council. <https://www.newham.gov.uk/council/citizens-assemblies>
84. University College London: Institute for global prosperity. (2023, November 5). UCL Citizen Science Academy. University College London: Institute for global prosperity. <https://www.ucl.ac.uk/bartlett/igp/research/ucl-citizen-science-academy>
85. The British Election Study Team. (2021, January 1). Age and voting behaviour at the 2019 General Election. British Election Study. <https://www.britishelectionstudy.com/bes-findings/age-and-voting-behaviour-at-the-2019-general-election/#.ZCW6nbMluU>
86. OECD. (2023, November 5). OECD Better Life Index. <https://www.oecdbetterlifeindex.org/topics/civic-engagement/>
87. McNulty, S. L. (2015). Barriers to participation: Exploring gender in Peru's participatory budget process. *The Journal of Development Studies*, 51(11), 1429-1443. <https://doi.org/10.1080/00220388.2015.1010155>
88. Pape, M., & Lim, C. (2019, December). Beyond the "Usual suspects"? Reimagining democracy with participatory budgeting in Chicago. In *Sociological Forum* (Vol. 34, No. 4, pp. 861-882). <https://doi.org/10.1111/socf.12550>
89. Deliberative Democracy Digest. (2023, August 28). How representative is it really? A correspondence on sortition. *Deliberative Democracy Digest*. <https://www.publicdeliberation.net/how-representative-is-it-really-a-correspondence-on-sortition/>
90. Participedia. (2023, November 5). Participatory Budgeting in Paris, France. Participedia. <https://participedia.net/case/5008>
91. Deliberative Democracy Digest. (2023, August 28). How representative is it really? A correspondence on sortition. *Deliberative Democracy Digest*. <https://www.publicdeliberation.net/how-representative-is-it-really-a-correspondence-on-sortition>
92. Griffin J. & Abdel-Monem T. & Tomkins A. & Richardson A. & Jorgensen S., (2015) "Understanding Participant Representativeness in Deliberative Events: A Case Study Comparing Probability and Non-Probability Recruitment Strategies", *Journal of Public Deliberation* 11(1). doi: <https://doi.org/10.16997/jdd.221>
93. Sgueo, G. (2020). Digital democracy: Is the future of civic engagement online? <http://www.gianlucassgueo.it/wp-content/uploads/2020/02/Digital-democracy-is-the-future-of-civic-engagement-online.pdf>
94. <https://ejpr.onlinelibrary.wiley.com/doi/10.1111/1475-6765.12195>
95. D'Ignazio, C., & Klein, C. (2018, November 5). *What Gets Counted*. MIT Press. <https://mitpressonpubpub.mitpress.mit.edu/pub/rykakh1/release/4>
96. Gross, T. (2017). A 'Forgotten History' Of How The U.S. Government Segregated America. NPR. <https://www.npr.org/2017/05/03/526655831/a-forgotten-history-of-how-the-u-s-government-segregated-america>
97. Mellon, J., Peixoto, T. C., & Sjoberg, F. M. (2022). The Haves and the Have Nots. The World Bank. <https://openknowledge.worldbank.org/server/api/core/bitstreams/5befa2ab-26b9-542b-b336-3f4e5465a347/content>
98. Mann, R. P., & Helbing, D. (2017). Optimal incentives for collective intelligence. *Proceedings of the National Academy of Sciences*, 114(20), 5077-5082. <https://doi.org/10.1073/pnas.161872211>
99. Brown, T. (2021). *Building an inclusive society in the post-pandemic world*. House of Lords Library. London. <https://lordslibrary.parliament.uk/building-an-inclusive-society-in-the-post-pandemic-world/>
100. Williams, D. R., & Rucker, T. D. (2000). Understanding and addressing racial disparities in health care. *Health care financing review*, 21(4), 75. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4194634/>
101. Open Government Partnership (2023, November 5). *A More Inclusive Participatory Budget: City of Paris Final Report 2017*. Open Government Partnership.
102. Hayduk, R., Woo, E., Marinez Estrada, J., & Adriano, A. (2023). *Two Steps Forward, One Step Back: Participatory Budgeting and the Quest for Empowered Participatory Governance*. *New Political Science*, 45(1), 1-32. <https://doi.org/10.1080/07393148.2022.2164667>
103. Mesure, P., Hermansson, A., Nordling, & Ghotbi, S. (2023). WP 4 | Housing PB in Biskopsgården and Hammarkullen – Case studies in Gothenburg, Sweden. COLDIGIT. <https://blogs.helsinki.fi/collective-intelligence-through-digital-tools-coldigit/files/2023/03/COLDIGIT-WP4-Gothenburg-Report-D4-3-V1.pdf>

104. Hayduk, R., Woo, E., Marinez Estrada, J., & Adriano, A. (2023). Two Steps Forward, One Step Back: Participatory Budgeting and the Quest for Empowered Participatory Governance. *New Political Science*, 45(1), 1-32. <https://doi.org/10.1080/07393148.2022.2164667>
105. Johnson, C., Carlson, H. J., & Reynolds, S. (2023). Testing the participation hypothesis: Evidence from participatory budgeting. *Political Behavior*, 45(1), 3-32. <https://link.springer.com/article/10.1007/s11109-021-09679-w>
106. European Commission. (2023, January 25). Innovating through Experimentation: The European Commission's new project promoting more experimental innovation policy. European Commission. https://research-and-innovation.ec.europa.eu/news/all-research-and-innovation-news/innovating-through-experimentation-european-commissions-new-project-promoting-more-experimental-2023-01-25_en
107. Bundi, P., & Pattyn, V. (2022). Citizens and evaluation: a review of evaluation models. *American Journal of Evaluation*, 10982140211047219. <https://doi.org/10.1177/1098214021104721>
108. Rask, M., & Ertiö, T. P. (2019). The Co-creation Radar: A comprehensive public participation evaluation model. University of Helsinki. Helsinki. https://bibu.fi/wp/wp-content/uploads/2019/08/Bibu-Policy-Brief-2_englanti_verkkoversio-1.pdf
109. Rask, M., Ertiö, T. P., Tuominen, P., & Ahonen, V. L. (2021). Final evaluation of the City of Helsinki's participatory budgeting: OmaStadi 2018–2020. University of Helsinki. Helsinki. https://bibu.fi/wp/wp-content/uploads/2021/05/BIBU_OmaStadi_English.pdf
110. OECD (2020). Innovative Citizen Participation and New Democratic Institutions: Catching the deliberative wave. OECD Publishing, Paris. <https://doi.org/10.1787/339306da-en>
111. OECD (2021). Evaluation Guidelines for Representative Deliberative Processes, OECD Publishing, Paris, <https://doi.org/10.1787/10ccbfcb-en>.
112. Rask, M., & Ertiö, T. P. (2019). The Co-creation Radar: A comprehensive public participation evaluation model. University of Helsinki. Helsinki. https://bibu.fi/wp/wp-content/uploads/2019/08/Bibu-Policy-Brief-2_englanti_verkkoversio-1.pdf
113. Bundi, P., & Pattyn, V. (2022). Citizens and evaluation: a review of evaluation models. *American Journal of Evaluation*, 10982140211047219. <https://doi.org/10.1177/1098214021104721>
114. Murphy, J. W., Evans, S. D., & Minutti-Meza, M. A. (2023). Introduction: Participatory budgeting as community-based work. *American Behavioral Scientist*, 67(4), 467-475. <https://doi.org/10.1177/000276422210869>
115. Wegscheider, C., & Stark, T. (2020). What drives citizens' evaluation of democratic performance? The interaction of citizens' democratic knowledge and institutional level of democracy. *Zeitschrift für Vergleichende Politikwissenschaft: Comparative Governance and Politics*, 14(4), 345-374. <https://link.springer.com/article/10.1007/s12286-020-00467-0>
116. Gordon, V., Osgood Jr, J. L., & Boden, D. (2017). The role of citizen participation and the use of social media platforms in the participatory budgeting process. *International Journal of Public Administration*, 40(1), 65-76. <https://doi.org/10.1080/01900692.2015.1072215>
117. Shin, B., Rask, M., & Tuominen, P. (2022). Learning through online participation: A longitudinal analysis of participatory budgeting using Big Data indicators. *Information Polity*, (Preprint), 1-22. DOI: 10.3233/IP-211551
118. Shin, B., & Rask, M. (2021). Assessment of online deliberative quality: New indicators using network analysis and time-series analysis. *Sustainability*, 13(3), 1187. <https://doi.org/10.3390/su13031187>
119. COLDIGIT (2023, November 5). COLDIGIT Collective Intelligence Through Digital Tools: Pilots. <https://blogs.helsinki.fi/collective-intelligence-through-digital-tools-coldigit/themes/pilots/>
120. Grönlund, K., & Herne, K. (2019). Using experiments to study democratic innovations. In S. Elstub, & O. Escobar (Eds.), *Handbook of Democratic Innovation and Governance* (pp. 515–526). Edward Elgar. <http://urn.fi/URN:NBN:fi-fe2020102788523>
121. Nesta. (2023, November 5). The Strategy Room. Nesta. <https://www.nesta.org.uk/project/strategyroom/>
122. Stanford Deliberative Democracy Lab (2023, November 5). What is Deliberative Polling? Stanford Deliberative Democracy Lab. <https://deliberation.stanford.edu/what-deliberative-pollingr>
123. Grönlund, K., & Herne, K. (2019). Using experiments to study democratic innovations. In S. Elstub, & O. Escobar (Eds.), *Handbook of Democratic Innovation and Governance* (pp. 515–526). Edward Elgar. <http://urn.fi/URN:NBN:fi-fe2020102788523>
124. Karlsson, M., Åström, J., & Adenskog, M. (2021). Democratic innovation in times of crisis: Exploring changes in social and political trust. *Policy & Internet*, 13(1), 113-133. <https://onlinelibrary.wiley.com/doi/epdf/10.1002/poi3.248>
125. Carman, K. L., Mallery, C., Maurer, M., Wang, G., Garfinkel, S., Yang, M., ... & Chao, A. S. (2015). Effectiveness of public deliberation methods for gathering input on issues in healthcare: results from a randomized trial. *Social Science & Medicine*, 133, 11-20. <https://doi.org/10.1016/j.socscimed.2015.03.024>
126. Whitty, J. A., Littlejohns, P., Ratcliffe, J., Rixon, K., Wilson, A., Kendall, E., ... & Scuffham, P. A. (2023). Impact of information and deliberation on the consistency of preferences for prioritisation in health care—evidence from discrete choice experiments undertaken alongside citizens' juries. *Journal of Medical Economics*, (just-accepted), 1-20. <https://doi.org/10.1080/13696998.2023.2262329>
127. Simon, J., Bass, T., Boelman, V., & Mulgan, G. (2017). *Digital Democracy: The Tools Transforming Political Engagement*. Nesta, London.

128. Stanford PB (2023, November 6). Stanford Participatory Budgeting Platform: A platform for running online participatory budgeting elections. Stanford PB. <https://pbstanford.org/>
129. Polis (2023, November 5). Polis: Input Crowd, Output Meaning. Polis. <https://pol.is/home>
130. Decidem (2023, November 5). Decidem is a digital platform for citizen participation. Decidem. <https://decidem.org/>
131. Gill, I., & Baeck, P., & Whittington, O. (2022). Designing the Collective Intelligence Commons. Nesta. London. <https://www.nesta.org.uk/report/designing-the-collective-intelligence-commons/>
132. Simon, J., Bass, T., Boelman, V., & Mulgan, G. (2017). Digital Democracy: The Tools Transforming Political Engagement. Nesta, London. https://media.nesta.org.uk/documents/digital_democracy.pdf
133. Kialo (2023, November 5). Explore Debates. Kialo. <https://www.kialo.com/>
134. Stanford Deliberative Democracy Lab (2023, November 5). Online Deliberation Platform. Stanford Deliberative Democracy Lab. <https://deliberation.stanford.edu/tools-and-resources/online-deliberation-platform>
135. Confessore, N. (2018, April 4). Cambridge Analytica and Facebook: The Scandal and the Fallout So Far. The New York Times. <https://www.nytimes.com/2018/04/04/us/politics/cambridge-analytica-scandal-fallout.html>
136. Pariser, E. (2023, November 5). Did Facebook's Big Study Kill My Filter Bubble Thesis? Not really — and here's why. Wired. <https://www.wired.com/2015/05/did-facebooks-big-study-kill-my-filter-bubble-thesis/#.e7f0nOp5i>
137. European Committee on Democracy and Governance (2021). Study on the impact of digital transformation on democracy and good governance. Council of Europe. Strasbourg. <https://rm.coe.int/study-on-the-impact-of-digital-transformation-on-democracy-and-good-go/1680a3b9f9>
138. Simon, J., Bass, T., Boelman, V., & Mulgan, G. (2017). Digital Democracy: The Tools Transforming Political Engagement. Nesta, London. https://media.nesta.org.uk/documents/digital_democracy.pdf
139. Whittington, O. (2022). Democratic Innovation and Digital Participation. Nesta, London. <https://www.nesta.org.uk/report/democratic-innovation-and-digital-participation-report/>
140. Stanford PB (2023, November 6). Stanford Participatory Budgeting Platform: A platform for running online participatory budgeting elections. Stanford PB. <https://pbstanford.org/>
141. Decidem (2023, November 5). Modules. Decidem. <https://decidem.org/modules/>
142. <https://omastadi.hel.fi/>
143. Decidem (2023, November 5). Decidem Barcelona. Decidem. <https://www.decim.barcelona/>
144. Núñez, T., & Jardim, L. (2023, June 13). Brazil launches participatory national planning process. People Powered. <https://www.peoplepowered.org/news-content/brazil-national-participatory-planning>
145. Devlin, M. L. (2022, November 29). The Civil Service's digital skills imperative. Central Digital and Data Office. <https://cddo.blog.gov.uk/2022/11/29/the-civil-services-digital-skills-imperative/>
146. Central Digital & Data Office (2023, September 28). Transforming for a digital future: 2022 to 2025 roadmap for digital and data – updated September 2023. Central Digital and Data Office. London. <https://www.gov.uk/government/publications/roadmap-for-digital-and-data-2022-to-2025/transforming-for-a-digital-future-2022-to-2025-roadmap-for-digital-and-data>
147. COLDIGIT (2023, November 5). Collective Intelligence Tools and Case Studies. COLDIGIT. <https://coldigitkp.pory.app/>
148. People Powered (2023, November 5). Ratings for Digital Participation Platforms. People Powered. <https://www.peoplepowered.org/platform-ratings>
149. European Capital of Democracy (2023, November 5). ECoD City Network. European Capital of Democracy. <https://capitalofdemocracy.eu/ecod-city-network/>
150. COSLA (2023, November 5). About COSLA. Cosla. <https://www.cosla.gov.uk/>
151. Smartbyene (2023, November 5). Smartbyene: Norwegian Smart Cities. Smartbyene. <https://sites.google.com/trondheim.kommune.no/smartbynettverket/forsiden>
152. Digidem Lab. (2023, November 5). Designing Participatory Democracy. Digidem Lab. <https://digidemlab.org/en/>
153. Measure, P., Hermansson, A., Nordling, & Ghotbi, S. (2023). WP 4 | Housing PB in Biskopsgården and Hammarkullen – Case studies in Gothenburg, Sweden. COLDIGIT. <https://blogs.helsinki.fi/collective-intelligence-through-digital-tools-coldigit/files/2023/03/COLDIGIT-WP4-Gothenburg-Report-D4-3-V1.pdf>
154. Schafer, J. G. (2019). A systematic review of the public administration literature to identify how to increase public engagement and participation with local governance. *Journal of Public Affairs*, 19(2), e1873. <https://doi.org/10.1002/pa.1873>
155. Decidem (2023, November 5). Translations. Decidem. <https://docs.decim.org/en/develop/contribute/translations.html>
156. Eurostat (2023, March 23). EU digital skills divide: cities outpace rural areas. Eurostat. [https://ec.europa.eu/eurostat/web/products-eurostat-news/w/ddn-20230320-2#:~:text=In%202021%2C%20more%20than%20three,a%20lower%20share%20\(71%25\)](https://ec.europa.eu/eurostat/web/products-eurostat-news/w/ddn-20230320-2#:~:text=In%202021%2C%20more%20than%20three,a%20lower%20share%20(71%25))
157. Ertiö, T. P., Tuominen, P., & Rask, M. (2019). Turning ideas into proposals: A case for blended participation during the participatory budgeting trial in Helsinki. In *Electronic Participation: 11th IFIP WG 8.5 International Conference, ePart 2019, San Benedetto Del Tronto, Italy, September 2–4, 2019, Proceedings 11* (pp. 15-25). Springer International Publishing. <https://inria.hal.science/hal-02446021/document>

158. Fuster Morell, M., & Senabre Hidalgo, E. (2022). Co-creation applied to public policy: a case study on collaborative policies for the platform economy in the city of Barcelona. *CoDesign*, 18(3), 378-397. <https://doi.org/10.1080/15710882.2020.1854313>
159. Sapelli (2023, November 5). Sapelli. <https://www.sapelli.org/>
160. OpenStreetMap (2023, November 5) Welcome to OpenStreetMap! OpenStreetMap. <https://www.openstreetmap.org/#map=6/54.910/-3.432>
161. Nesta (2023, November 5). Minecraft: Block by BLock. Nesta. <https://www.nesta.org.uk/feature/10-people-centred-smart-city-initiatives/minecraft-block-by-block/>
162. Davies, J., Arana-Catania, M., Procter, R., van Lier, F. A., & He, Y. (2021, October). Evaluating the application of NLP tools in mainstream participatory budgeting processes in Scotland. In Proceedings of the 14th International Conference on Theory and Practice of Electronic Governance (pp. 362-366). <https://doi.org/10.48550/arXiv.2111.11766>
163. Arana-Catania, M., Lier, F. A. V., Procter, R., Tkachenko, N., He, Y., Zubiaga, A., & Liakata, M. (2021). Citizen participation and machine learning for a better democracy. *Digital Government: Research and Practice*, 2(3), 1-22. <https://doi.org/10.1145/3452118>
164. Castro, R. H., & Kamiya, M. (2021). Innovation and digital technology to re-imagine Participatory Budgeting as a tool for building social resilience. UN-Habitat. https://unhabitat.org/sites/default/files/2021/08/innovation_and_digital_technology_to_re-imagine_participatory_budgeting_august.2021_mp57813rh_1.pdf
165. Cunha, E. S., Allegretti, G., & Matias, M. (2011). Participatory Budgeting and the Use of Information and Communication Technologies: A Virtuous Cycle?. *RCCS Annual Review. A selection from the Portuguese journal Revista Crítica de Ciências Sociais*, (3). <https://doi.org/10.4000/rccsar.316>
166. Wetherall-Grujić, G. (2023, August 22). AI in Digital Citizens' Participation – Where Do We Stand? *Democracy Technologies.org/participation/ai-in-digital-citizens-participation-where-do-we-stand/*
167. Small, C. T., Vendrov, I., Durmus, E., Homaei, H., Barry, E., Corneise, J., ... & Megill, C. (2023). Opportunities and Risks of LLMs for Scalable Deliberation with Polis. *arXiv preprint arXiv:2306.11932*. <https://doi.org/10.48550/arXiv.2306.11932>
168. Wetherall-Grujić, G. (2023, August 22). AI in Digital Citizens' Participation – Where Do We Stand? *Democracy Technologies.org/participation/ai-in-digital-citizens-participation-where-do-we-stand/*
169. Flanigan, B., Gózl, P., Gupta, A., Hennig, B., & Procaccia, A. D. (2021). Fair algorithms for selecting citizens' assemblies. *Nature*, 596(7873), 548-552. <https://doi.org/10.1038/s41586-021-03788-6>
170. Procaccia, A. (2022, November 1). Citizens' Assemblies Are Upgrading Democracy: Fair Algorithms Are Part of the Program. *Scientific American*. <https://www.scientificamerican.com/article/citizens-assemblies-are-upgrading-democracy-fair-algorithms-are-part-of-the-program/>
171. Bakker, M., Chadwick, M., Sheahan, H., Tessler, M., Campbell-Gillingham, L., Balaguer, J., ... & Summerfield, C. (2022). Fine-tuning language models to find agreement among humans with diverse preferences. *Advances in Neural Information Processing Systems*, 35, 38176-38189.
172. Argyle, L. P., Busby, E., Gubler, J., Bail, C., Howe, T., Rytting, C., & Wingate, D. (2023). AI Chat Assistants can Improve Conversations about Divisive Topics. *arXiv preprint arXiv:2302.07268*. <https://doi.org/10.48550/arXiv.2302.0726>
173. Polis (2023, November 5). Polis: Input Crowd, Output Meaning. Polis. <https://pol.is/home>



58 Victoria Embankment
London EC4Y 0DS

+44 (0)20 7438 2500

information@nesta.org.uk

 [@nesta_uk](https://twitter.com/nesta_uk)

 [nesta.uk](https://www.facebook.com/nesta.uk)

www.nesta.org.uk

