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The official project logo for the Citizen Voices initiative.  
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## Cities and Citizens for Digital Rights

The Role for Public Participation in Digital Governance

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Keywords: Digital rights; data governance; public engagement; digital inequalities

## Abstract

Policymakers and institutions are currently struggling to set out the right regulatory framework to guarantee citizens' rights online. Digital norms and standards continue to be set by global technology companies, many of whose business model lies in extracting value from individuals.

This article will present the results of a yearlong intervention called *Citizen Voices for Digital Rights*, which was funded by the Municipality of Amsterdam, as part of the Cities Coalition for Digital Rights, and has engaged people in Milan, Tirana and Bordeaux as well. The project addressed the role of digital technologies and data at the urban scale, working with citizens, experts and policy makers in four European cities. The paper will present a practical approach to improve the active role of citizens in data collection, data governance, and knowledge creation.

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## Introducing the Citizen Voices for Digital Rights programme

*Citizen Voices for Digital Rights* (CVDR) was a citizens participation project that took place from March 2020 to April 2021, coordinated by Democratic Society (a not-for-profit entity that operates Europe wide to advance democracy) and in collaboration with the Cities Coalition for Digital Rights, and the municipalities of Amsterdam, Bordeaux, Milan and Tirana. The Cities Coalition for Digital Rights is a network of cities sharing best practice in the field of digital rights based policy-making (Figure 1). The Coalition is committed to promoting and defending digital rights in urban context through city action, to resolve common digital challenges and work towards legal, ethical and operational frameworks to advance human rights in digital environments. More information is available on the [website](https://citiesfordigitalrights.org/).



Figure 1: Cities Coalition for Digital Rights logo. Source: <https://citiesfordigitalrights.org/home>.

The project was initially supposed to consist of a series of in-person events, in each of the four contributing cities, as well as ‘central’ events in Brussels, which would bring together participants from each of the cities, to work face to face. As this project began at the start of March 2020, this quickly became impossible due to the COVID-19 pandemic. Thanks to the flexibility and understanding of all participating cities, the programme of work was changed to make sure it met all COVID-19 regulations, whilst still remaining true to the initial aims of the project. Moving online a project like CVDR – which was meant to engage residents on conversation about the digital in an inclusive way – presented a big challenge for the ethos and the nature of the project itself. To ensure that the quality and inclusivity of the project were not undermined several measures were taken. These included providing support and guidelines to cities for ensuring the digital events were inclusive, hosting of events in safe places where computers were available for those who did not have other ways of accessing them. The project was closely monitored and feedback from participants and organisers were frequently collected to ensure continued improvements were made.

Digitalisation of cities has incredible potential positive implications for residents and governance, but these processes can also threaten democracy, allow digital surveillance, deepening social inequalities and developing new forms of inequalities that did not exist before (Craglia et al. 2021).

The *Citizen Voices for Digital Rights* project's main aim was to develop a set of methods and guidelines to be used on a wider scale to equip people in European cities with knowledge skills and pathways to advocate for their own, and their communities', digital rights. Digital rights are in fact increasingly acknowledged as human rights (Bechmann 2019). In the digital era this means not only protecting citizens rights in the online space, for example the rights to online privacy, but also rights such as making sure everyone has access to the internet. Due to Covid for instance the issue also emerged that children were denied parts of their education because they didn't have the means to access online resources.

The *Citizens Voice for Digital Rights* project consisted of three phases of work:

- building knowledge of different local contexts;
- understanding the *lived experience* of the citizens;
- finding common threads for how to best advocate for digital rights at local and EU level.

The first phase was delivered through an online workshop in each of the four cities, bringing together local digital rights experts to provide local context and an insight into the priorities and hot topics of the area, as well as any existing work on related topics.

The common aim of the second phase was to understand what the priorities on the topic of digital rights were in each of the cities and from the point of view of the people who lived there, and what they thought the opportunities and challenges for residents and the city working together on these would be. In line with more classic deliberative approaches (Dryzek 2000), the workshops all included an element where participants were able to learn from local digital rights experts and policy makers. This information part ensures citizens had a shared base of knowledge with which to move into the discussion elements of the event – as well as bringing their own experiences.

This phase saw each city organising a series of Open Citizens Events. Milan, Amsterdam, Bordeaux and Tirana each approached the design of this workshop slightly differently and cities were responsible for the participants' recruitment. In order to ensure that this was done in an inclusive way and by engaging as much as possible a representative sample, Democratic Society provided recruitment guidelines to inform the process. Recruitment guidelines were based on general recommendations, for example making sure that the demographics of the participants reflected the demographics of the city (perhaps taken from latest census data) and that recruitment paid particular attention to often underrepresented or disenfranchised groups. Specific guidelines, given the subject of the events, included offering participants access to an internet connection or tech equipment to join the online workshop, if they did not have this already, as well as encouraging cities to advertise the event online, as well as offline.

The third phase brought together the participants from all four of the cities at a virtual central event. This event had topic-specific discussions that reflected the main themes that had emerged from the city-level events. This was followed by a wider shared discussion on how these issues could be tackled, and made positive, by residents and cities, and also at the European level.

## **Data governance at city-level: Advocating for residents digital rights**

Policymakers and institutions are finding it difficult to set out the appropriate regulatory framework to guarantee citizens' rights online. Digital norms and standards continue to be set by global technology companies, many of whose business model lies in extracting value from individuals by transforming data of use into behavioural data and profiling (Zuboff 2019). Through getting users to click, share, and swipe, the providers of this digital infrastructure generate wealth by commodifying users' interactions and communications.

From a democratic theory point of view, the interesting question to be asked is what modes of governance should be implemented for improving data sovereignty in cities, that might be inspired by the principles of New Municipalism (Russel 2019) and locally grounded politics. Democratic questions are intimately linked at local level, as citizens are likely to experience a lack of agency if they have little control over their data and their rights. The Citizen Voices project aimed to provide an opportunity to rethink and redefine what it means to be a citizen in a digital democracy.

The Cities Coalition for Digital Rights (CC4DR), partners of CVDR, describe cities as "the closest democratic institutions to the people" (CC4DR n.d.) and certainly it is cities and other local governance institutions that make a large amount of the decisions that affect their residents day to day lives. In the digital realm this is only growing with the increasing enthusiasm for smart cities, using local data through sensors, biometric data collection, internet of things and big data to make decisions on mobility, pollution, health risks, or new infrastructures amongst other policy areas (Tran Thi Hoang et al 2019). Additionally, as more and more interaction with city infrastructure and governance is available to complete digitally, cities are responsible for those processes to be accessible and ethical, protecting their residents digital rights. CC4DR states clearly in their joint declaration, that they are "committed to [...] providing trustworthy and secure digital services and infrastructures that support our communities" (CC4DR n.d.). There is an additional, positive aspect of the city's role in protecting their residents digital rights, which is to ensure they are using opportunities presented by digitalisation and new technologies to the greatest advantage, and improving the lives of their constituents.

Although digitalisation is not fully within municipal governments' competence, it certainly is part of cities public services responsibility to set the vision for how to introduce digitalisation and to address especially the democratic challenges that rise with it. Digitalisation increasingly shapes our neighbours' quality of life, access to rights and even opportunities to participate at city level.

One could argue that data is in fact becoming a new *urban infrastructure* (Tavmen 2020) like water, electricity, public transport and others:

“Data is a key resource in the digital economy, and control over the way it is generated, collected, aggregated, and value is extracted and distributed in society is crucial.” (Craglia et al. 2021: 6)

As a recent study highlights: “While major attention is currently given to the dominant model of corporate platforms collecting and economically exploiting massive amounts of personal data, other actors, such as small businesses, public bodies and civic society, take also part in data governance” (Micheli et al. 2020: 1). Data governance builds on the idea that “[...] how data is collected and processed generates power imbalances and information asymmetries in bringing into being the subjects and objects that such data concerns” (Micheli et al 2020: 3). In the current context, where the private sector is largely in control of “[...] decisions made over data, who is able to make such decisions and thus to influence the way data is accessed, controlled, used and benefited from” (Micheli et al. 2020: 3) the largest imbalance is between those the data is mined from, and those who are using it and can profit of it. There are additional elements to this including the fact that those from lower socio-economic areas may have less choice about the access to data they have to relinquish, adding a further dimension to the imbalance, or those with less prone to think critically or use technology having less understanding of the implications of sharing their data.

Alternative models for data governance are numerous, with the most popular including data commons, data cooperative, data trust, data collaborative, data fiduciary, indigenous data sovereignty and data marketplace (van Geuns and Brandusescu 2020). A data cooperative is a system where members pool and co-own their data and manage it democratically. The cooperatives may all be managed slightly differently but maintain transparency and are governed by legal agreements. Data commons is similar, however rather than the data being managed outwards democratically, it is pooled and used by the group themselves as a resource. The most well-known example of this is Wikipedia (Karasti et al. 2006). Data collaboration is most commonly used in collaboration between the public and private sector, where the latter shares information with the former to “act as responsible data stewards to empower their members or the general public to solve societal problems” (van Geuns and Brandusescu 2020). These concepts and the remaining four are not completely distinct, often overlapping in principle and use, and can often be used in tandem.

When it comes to data governance, governments – also at municipal level – can set the rules that shape how digitalisation happens and its impact on society, based on principles of human rights and the protection of fundamental freedoms and digital rights: local governments’ “[...] role is not just facilitating and supportive by repairing social inequalities as inevitable collateral damage of datafication as we now know it. That role is to proactively protect public interests based on the type of society we want” (Luitjens 2021: 35).

## Shades of digital inequalities

Digitalisation at city level has many positive, but also very problematic implications when it comes to democratic principles and questions of social justice (Milan and Treré 2020, Costanza-Choc 2020, Hoffmann 2019). As a result of the digitalisation process existing social inequalities can be exacerbated, whilst completely new forms of inequality also start emerging. Digital inequalities, despite what their name suggests, are social inequalities that because of the widespread use of the digital touch potentially every aspect of our lives (Van Dijk 2020). For one to speak about digital inequalities, there needs to be both difference and disadvantage (Wyatt et al. 2000). Not only do inequalities refer to imbalances in how users may access or use digital technologies, but they also need to critically affect how – as a result of these differences – certain users are disadvantaged while others might instead take advantages from digital technologies (Van Dijk 2020, Costanza-Choc 2020).

Initially focused on the so-called digital divide, questions of digital inequalities among and within countries were initially framed as questions of having and having not (Jurich 2000), as in having or not a computer, having or not an internet connection, and so on. Since that time, the literature has moved towards a more sophisticated understanding of digital inequalities, which includes questions of access, engagement and outcomes as well.

In talking to citizens in our project we heard issues of usage gaps (Van Dijk and Hacker 2003), which are gaps that can arise from a lack in possession, lack in the technology design or differences in digital skills. But we also found inequalities in accessibility of content, as what content different people might or might not encounter is different and also geographically determined, as issues of geofencing or geoblocking show. In our work, we found that it was instead more appropriate to talk about access rainbows (Selwin 2004) or shades of inequalities to fully describe the different issues that digital inequality can entail and that could emerge from the digitalisation process in cities.

Citizens were also concerned about how their data were collected, stored and used at city level. In cities, data can be collected ubiquitously about those who are online and access online platforms, but also about every resident that simply is present in a digitally surveilled area, uses public transport or accesses online services for public goods. Research also shows how certain groups and neighbourhoods, which tend to be the poorest ones, risk to face higher levels of data collection as a result of where they live, the services they use and their higher level of interactions with public services, specifically social and welfare related services (Eubanks 2017).

As large amount of data are collected questions of data justice come to the fore, which examines the risks of digital tools used in public services. Citizens using digital and public services are in fact made visible, represented and treated differently as a result of their digital activities and records (Heeks and Shekhar 2019, Taylor 2017). This so-called „third wave of digital inequalities“ (Daly et al. 2019, van Deursen and Helsper 2015) needs to be understood and addressed as a new form of inequality that can affect citizens living in certain places more than others, based on the spread of digital tools in the urban space and their use within public services.



Finally, inequalities can also appear between cities, as municipal governments compete in an environment shaped by private corporations and interests, where the cities with more advanced knowledge and expertise in the field of digitalisation and data governance are even more likely to find companies willing to collaborate with them: “The more “experienced” a city is, the more it has to offer to private companies in terms of data and support” (Micheli 2021: 103).

## **“I have nothing to hide”: Raising awareness on privacy**

CVDR had a clear stance about valuing and eliciting the lived experience of participants as a way to build the picture of what the implications of digitalisation are in cities. The project explored what was worrying for residents as well as how they felt the cities could act to advance digital rights.

This approach is very central in theories and practice of democratic participation and citizens engagement (Mulinari and Sandell 1999) particularly on technical subjects such as digital rights. Whilst the citizens who participate may not be experts on human rights, international law, AI or data harvesting, they are best placed to understand their needs as citizens and communities existing in an increasingly digital world. By discussing complex policy areas in tangible ways – communicating how these issues intersect with daily life – participants can communicate their experiences, perspectives and ideas. This can be combined with an educational element to a process, for example having participants hear from a subject-area expert, or asking them to consume informative briefing materials, prior to any discussion, so that they have a solid base of introductory knowledge.

To open up what has been defined the black box of algorithms (Pasquale 2015) scholars have interestingly suggested a phenomenological approach (Bucher 2018) as an alternative methodology based on harvesting the lived experience of users to break the opacity of digital technologies, how these are designed, what logics they follow and what they actually do. Our approach to residents engagement was not just functional as a method to harvest the lived experience of digitalisation processes, but it was very much rooted in the democratic ideal that involving the public “Whilst it can be a difficult process [...] is a key part of securing the legitimacy of public institutions and serves to advance more sustainable and fairer policy processes” (Data Justice Lab 2021: 6). With adequate attention to best-practice for recruitment within engagement processes and by building trust over the process and beyond, this may also be a better way to hear the voices of those who are frequently underrepresented in democratic processes, and may feel disenfranchised.

During our programme and through workshops and other events four topics emerged as relevant and as areas of concern, interest or hope for citizens, namely: access to digital; digital education and skills; privacy vs transparency and the use of data; and democracy and disinformation. The project consisted of a series of different workshops and central final event. The workshops were of two types. The first were workshops to map the landscape and issues regarding digitalisation from a local point of view. Experts were invited in



each city to share their knowledge and do collaboratively map the issues to address. The second type of workshops involved citizens in each city. These workshops addressed the same questions and introductory briefing material were prepared and shared with participants in advance. Each city organised the workshop independently and therefore the groups invited slightly differed. All workshops – except for Bordeaux – were held online. We will go into more details about our findings in each of these areas.

Access to digital emerged as a key issue – perhaps also given the time in which the project was carried out during the COVID pandemic – as throughout the city-level events participants discussed the level of technology accessibility to certain groups of society (e.g senior citizens or young people) and how this impacts their everyday lives. It was often raised during the research that access to tools and the internet should be universally provided, and participants pointed out to the role of local authorities regarding enhancing accessibility and the need to provide digital literacy rather than focusing on solely providing digital tools.

Digital literacy was a key topic, which residents described through the role this was playing in their everyday lives, like allowing users to take advantage of the opportunities of digitalisation – be it using bank services or surfing the internet – whilst understanding how to stay secure and empower themselves. It was noticed that there is an insufficient level of knowledge and awareness among the general population on how to best use digital tools. Recommendations on improving digital skills and competencies covered through education in schools, as well as the idea of training social service agents to make them aware of the digital difficulties encountered by people were mentioned by participants at different points.

Interestingly, when participants were asked to consider what it meant for them to be empowered and have their rights upheld in digital spaces, they mentioned the need to map different needs in this space first, to be able to then develop the right kind of capabilities and capacities. In line with studies and resources produced in the field of digital literacy (Ragnedda 2018), residents in our research mentioned the need to include critical thinking and problem solving skills as essential parts of a digital literacy curriculum for all ages.

Privacy was discussed as an area where more awareness is needed. It was remarked by many how people often do not care about securing their personal information for the sake of enjoying popular digital platforms. This is particularly due to a lack of understanding of the full implications of accepting the terms and conditions for digital services or a lack of alternative options, which meant that accepting the conditions was the default choice. Transparency on how personal data is collected, stored and used was also a concern raised by many and made more visible during the pandemic, as for example the shift to online work and education involved using several popular digital platforms that required users to agree to data surveillance to take part in their education or employment.

A challenge that emerged from our work was how to get people to take their privacy seriously, without inhibiting their access to digital platforms and services, for leisure or for work. This is an area where participants felt the cities hold a huge responsibility to inform

residents, possibly through public awareness programmes, about how to handle one's own data, or by imagining ways to handle data at a city-level, for instance by establishing the public values that inform data collection and data use in the city. Participants were in fact keen on envisioning positive ways for how data collection could be used for public good – through making city information such as air quality, mobility and energy data – a common property.

The final point that was discussed in all four cities was the issue of misinformation and manipulated content and the ways in which digitalisation can affect democracy and democratic practice. A trend that was identified by many, and which is widely reflected in the academic literature as well (van Dijk 2013), is the increased role that social media platforms play in the political realm. What participants observed was the formation of the now well-known phenomenon of echo-chambers, which create a digital environment where pieces of information are provided that reflect and reinforce one's own opinion, therefore amplifying misinformation and reinforcing existing beliefs that end up increasing the polarisation process in the public space.

Participants mentioned the role of fake news and conspiracy theories, and how they could potentially influence electoral processes, people's choices and their viewpoints. There were concerns about how difficult, confusing and frustrating it can be to find reliable information, which became especially noticeable during the pandemic. Concerns over the polarisation of the political sphere were raised, alongside concerns around the decline of civil rights in democratic space, when governments and other institutions use digital tools as systems of control, for example with facial recognition, widespread surveillance or automated decision-making (AMD) systems introduced for access to social services.

Discussions also covered how digital tools could be used to improve democracy at local level, for instance to connect representatives directly to citizens, to allow for public debates to be openly held and as participatory decision-making tools (e. g. of the like of Decidim in Spain). Expanding options for civic tech (Saldivar et al. 2018), that is technology used to directly improve or influence governance, politics, or socio-political issues was also considered as relevant. These technologies can encapsulate a wide range of tools, including but not limited to petition sites (to support advocacy), citizen portals (to improve government efficiency and service delivery), and civic engagement platforms (to enable deliberative and participatory engagement).

**The potential of using digital tools to allow for more participative forms of democracy at scale has currently reached a point never seen before.**

Digital tools can in fact be used to amplify more traditional forms of participation and new tools have emerged that allow for expanding democracy in new ways. Digital democracy and the use of digital tools or new technologies in civic processes has been considered a more convenient, time-efficient and cost-effective way of engaging with these processes for both citizens and public sector staff. However, we must note that these processes can only be thought as democratic or respectful of people's digital rights if they are accessible,

and ethical and adhering to high standards, for example on user privacy. There must also be alternative offline methods to engage with any process, so that they are still reachable for those without access to an internet connection or technology, or for those who choose not to participate online.

## Advocating for digital rights

The digitalisation of our cities raises critical questions about the quality of life and the democratic quality that we want our cities to ensure. The impact of the digitalisation on our democratic lives becomes very tangible at local level and raises new challenges for civil servants and elected officials as well: “Leaders who want to help their citizens by modernizing their cities while strengthening democracy have had few resources outlining a better approach to government technology” (Bhatt et al. 2021: 5). Developing these resources for supporting municipal officials to design better technology for their cities and connecting different cities – like in the Cities Coalition for Digital Rights – to learn from mistakes already made and successes, is something that will need more development and that is likely to be a growing trend in coming years.

The need to open these processes and debates to the wider public participation, and how to do this, is what CVDR focused on and in this final part of the paper we are going to focus on the challenges and opportunities of building digital strategies at local level with citizens at their centre:

“It can be tempting to think that if an issue isn’t raised through existing channels, then no one cares about it. However, it may also be that the public do not know about a particular issue which, if offered the required information and avenues for involvement, they would otherwise want to have a say on. Research has shown that when it comes to questions of data and technology, for example, a lack of knowledge is not due to apathy or ignorance, but is often an outcome of the obscurity of the processes surrounding algorithmic decision-making and a sense of disempowerment that anything can be done about their uses.” (Data Justice Lab 2021: 6)

Our programme of work across the four cities provided some practical approaches on how to improve the active roles of citizens to ensure a more just, democratic and inclusive data collection, data governance and digital rights. Three elements emerged as more prominent: the importance of the lived experience; the role for digital literacy; the role of the municipality in allowing for democratic ways for citizens engagement. We are going to go through each of these points in our final remarks.

Centring the lived experience of residents in making decisions and policies about how we access digital platforms and services was the starting point of the CVDR project. Citizens experience was positioned as a valuable alternative knowledge source. Through this knowledge one can appreciate the nuances and the scale of the challenges and opportunities ahead when cities are designing and deploying digital strategies and data gover-

nance structures. When using traditional methods of governance, municipal officials have no access to the hopes and fears that residents have for their digital rights and those of their communities, or how digital rights materialise in the everyday of different groups and individuals. The conversations that informed this programme have delivered clear priorities, recommendations and calls to action on digital rights, centring citizens' voice from the start.

The programme provided practical steps and approaches to open up civically the black box of big data (Couldry and Powell 2014), which interestingly revealed how very much citizens concerns are in line with the key issues that policy makers – as well as scholars – are debating in this field, like the danger of monopolies, the so called data for profit model, the lack and need of alternative digital choices, the importance of data for the public good and open-source options.

Digital literacy includes, as we have seen above, not simply the access to technologies and the skills to use that effectively, but should reflect on critical skills as key elements as well. As the most recent literature on the digital divide highlights, diversity in levels and competencies around digital literacy has the potential to produce tangible outcomes online that will also impact the social sphere (Ragnedda 2018). Ragnedda interestingly correlates digital inequalities to the digital capital that an individual or a group has, and explores the interrelations with social, economic, personal, political and cultural capitals. The theme of inclusivity and social inclusion came up frequently, as residents even suggested the need to find creative ways of mapping digital exclusion and the obstacles that different groups might encounter (including on connectivity, equipment, uses), as a first step to build an inclusive digital strategy.

In the CVDR project we also learned that spreading awareness of the fact that vast data sets are collected, aggregated and used without much accountability was perceived as critical by residents. Acquiring a good level of digital literacy would in fact be a pre-condition for developing the knowledge and being able to recognise where and when citizens' digital rights are being infringed, and which systems and institutions they can trust and address to demand justice. It has in fact been argued that it is the lack of transparency, knowledge, and control over what happens to personal data online that has led to what has been defined as "surveillance realism" (Dencik and Cable 2017), a feeling of widespread resignation which does not equate to consent to the status quo in terms of data governance, but that speaks to a condition of loss of agency. Future proposals for how to address the issue of digital literacy also centred on creating a bridge between organisations, educational institutions and governments, working with a range of different stakeholders to create an informative curriculum on digital rights for digital critical skills – to start informing people of their digital rights, and to allow them to advocate for these rights going forward.

Finally we learned how much public participation and engagement were considered to be at the centre of these processes for digital inclusion, and the importance of participatory processes to be embedded in the design of cities' digitalisation strategies from the onset – rather than being an afterthought – and properly resourced. As recent studies have shown: "[...] the 'smartness' of a (smart city) project is directly related to the level and nature of participation from people" (Kuster and Scholten 2021: 143).

Finding innovative and participatory governance solutions is critical to ensure that the task of advancing digital rights is not simply left to the individuals.

Many residents in our programme highlighted the need for designing broader systems of accountability, which included municipal but also national and EU level systems of governance. New models for data governance and better understanding of the existing ones are in fact needed in order to address “the structural power imbalances between corporate platforms and other actors, such as data subjects, public bodies, third parties, civil society and researchers” (Micheli et al. 2020: 10).

Drawing on the concept of data sovereignty (Hummel et al. 2021) our work highlighted some key elements that can help defining this concept, based on the literature but also emerging from lived experience of citizens dealing with data on a day to day basis:

- the importance of appreciating the idea of data as something situated in specific geographical and cultural contexts,
- the idea that data sovereignty is a right, as well as an ability – as the two things from a citizen’s point of view could not be separated,
- the need for understanding data as both *stakes*, as objects of political struggle, as well as *repertoires*, as tools for political struggle (Beraldo and Milan 2019).

Finally data sovereignty clearly emerged as something that results from and requires particular modes of deliberation and representation that purposefully include a variety of stakeholders. For each city designing the process of developing their digital strategies our project has highlighted the need to deal critically with the key points above. In this way cities’ digital strategies can be understood from a democratic point of view as a key tool for advancing digital rights; and digital literacy can be framed as a condition of the ability to critically partake in the digital transformation.

As more cities are designing, developing and delivering their digitalisation strategies two joint actions seem to become more critical: on the one hand, the need to develop approaches for the digitalisation processes that embed participatory governance in order to improve the active role of citizens in data collection, data governance, and knowledge creation. On the other hand, our work also made clear the importance of growing the confidence of municipal civil servants and elected officials, in order for them to foster discussions and negotiations about the different ways in which digital technologies can be used and introduced in our cities, embracing the advantages they can bring whilst being aware of making sure they benefit everyone and not just the few.

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