

# Digital Inclusion for a Good Digital Society: Leveraging the Benefits and Mitigating the Dark Side



#### **Abstract**

This essay discusses both the benefits and the 'dark side' of pursuing digital inclusion, considering how these might inform perspectives on what makes a 'good digital society.' On the one hand, digital inclusion enables more citizens to participate in digital activities and access opportunities across a range of domains, which helps reduce inequalities and promote a fair and sustainable digital society. On the other hand, the wider adoption of digital technologies across society means that people are more exposed to the concrete threats posed by the disintegration of trust (in the media, public institutions, and people in general), a process that may undermine a good digital society. Against this background, we offer a new perspective on digital inclusion, and call for governments to prioritise digital inclusion efforts based on constant discourse and engagement with citizens (i.e., e-participation). If the public can digitally engage with a responsive, efficient, and transparent government, the level of citizens' trust in governments (and other institutions) might be preserved and restored. This is a precondition for building a future in which technology does not turn against the prosperity of society and institutions.

*Keywords*: digital inclusion; e-participation; sustainable development; public engagement; trust

The real problem of humanity is the following: we have palaeolithic emotions, medieval institutions, and god-like technology

**Edward O. Wilson** 

## Digital inclusion: conceptualisation and importance

Digital technologies can generate and exacerbate divisions, prompting the emergence of novel societal inequalities concerning access to digital devices, connectivity, and information. Indeed, social inequality is compounded by the contemporary networked society. Digital inclusion

initiatives aim to respond to this issue. The notion of digital inclusion originates from concepts connected to social justice and equity, mirroring the realisation that information and knowledge disparities aggravate social inequality.<sup>3</sup>

Digital inclusion represents the ability to access, utilise, and leverage ubiquitous information and communication technologies.<sup>4</sup> According to the United Nations<sup>5</sup>, digital inclusion represents "equitable, meaningful, and safe access to use, lead, and design of digital technologies, services, and associated opportunities for everyone, everywhere." Since the diffusion of the Internet, digital inclusion has been the focus of policy-making and interventions across the globe. The main principle of digital inclusion is to not leave individuals, social groups, and communities behind, while every aspect of life in society is increasingly mediated by information and communication technologies (ICTs). The more recent conceptualisations of digital inclusion departed from a binary view (haves vs have nots) and embraced a view of digital inclusion as a continuum along which people have various levels of access to digital technologies and varying levels of digital skills.7

Digital inclusion has distinct dimensions: access to technology, digital skills, attitudes towards technology, and type of technology use.8 Researchers agree that digital exclusion goes hand in hand with social exclusion, as each type of exclusion makes the other more likely., , More recently, the narrative around digital inclusion has expanded to reflect how pre-existing societal issues such as low income, geographic dispersion, gender, loneliness, disability, and others are exacerbated by digital exclusion. 12 Along these lines, a series of contributions from the British Academy's 'Digital Society' programme concentrated on technology and inequality<sup>13</sup>, and explored the topic of digital inclusion via six commissioned projects that assessed the landscape of digital poverty in the UK. This work culminated in the "Understanding Digital Poverty and Inequality in the UK" report which unveiled the link between digital inequalities and social inequalities, along three dimensions of the digital divide: access to digital technologies and internet; digital literacy levels; and conversion of digital resources into tangible social benefits.14

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"Leaving no one behind means leaving no one offline." 15 Interestingly, the United Nations views the notion of 'leaving no one behind' as a crucial focus of the 2030 Agenda for Sustainable Development, covering all 17 Sustainable Development Goals (SDGs). 16 Therefore, sustainable development is not conceivable if certain societal actors are excluded,17 highlighting the link between sustainable development and digital inclusion. This link assumes that digital technologies reinforce and enhance the set of institutions that make society safe, stable, functional, and more sustainable. For example, digital education technologies enhance traditional education; digital health complements the NHS; and digital banking makes financial services more accessible and affordable. Thus far, the focus of digital inclusion efforts has been to reduce the number of digitally excluded citizens by addressing the digital divide (access), improving digital literacy (skills), and the motivation for engaging with digital technologies. 18 However, the exacerbation of grand challenges that have been witnessed in the last few years, coupled with the mass diffusion of social media and artificial intelligence (AI), could provoke unanticipated consequences of technology that undermine societal institutions. The next section explores the dark side of digital inclusion.

## The dark side of digital inclusion: disinformation, disengagement and distrust

In the digital society, an increasing number of people are turning to social media influencers and peers to gain access to information instead of journalists and subject experts.<sup>19</sup> In fact, 'reading news stories' is the third most common driver (34.2%) of social media use globally.<sup>20</sup> However, the sharing of social media content lacks reliable 'fact-checking,' third-party sifting, or editorial acuity, which makes it a fertile ground for the dissemination of faulty, biased, and non-factual content.<sup>21</sup> Thus, the more people become digitally included,

the higher the number of people exposed to 'echo-chambers' of information that is less accurate, misleading, deliberately fabricated, and potentially harmful. Online "echo-chambers" are bubbles of like-minded people who interact with each other in secluded virtual settings where their views and beliefs continuously get reinforced, leading to the spread of misinformation, polarisation, and social isolation.<sup>22</sup>

AI supercharges this process by enabling the production of deepfake content and misinformation at scale. Deep fakes represent superficially realistic yet forged audios, videos, and/or images generated via the utilisation of artificial intelligence.<sup>23</sup> The increasing prevalence of deep fakes can result in a 'post-truth' society in which citizens cannot distinguish true images, audio, and videos from fabricated and distorted ones.<sup>24</sup> Key to our argument is the strong link between 'trust in news media' and the manner in which the public looks at political institutions, especially in politically polarised settings.<sup>25</sup> In particular, the erosion of trust in the information environment can contaminate the relationship between citizens and institutions, with the consequence of undermining the foundations of a digital society. As summarised by the UN Secretary-General Guterres "[...] it is already clear that the malicious use of AI could undermine trust in institutions, weaken social cohesion and threaten democracy itself."26

Researchers have examined the decline in citizens' trust in government for several years, <sup>27,28</sup> highlighting the need for governments to promptly address this decline for the sake of future national safety. <sup>29</sup> Recent events such as the COVID-19 pandemic and the January 6 assault on Capitol Hill have shown how social media are already driving an erosion of trust in mainstream media, scientific knowledge, and the democratic process. For example, a recent national survey by the Office of National Statistics (ONS) found that only 27% of those surveyed rated their trust in the UK government as 'high or moderately high.'<sup>30</sup>

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- According to Westerlund (2019, p. 40): "A combination of "deep learning" and "fake", deepfakes are hyper-realistic videos digitally manipulated to depict

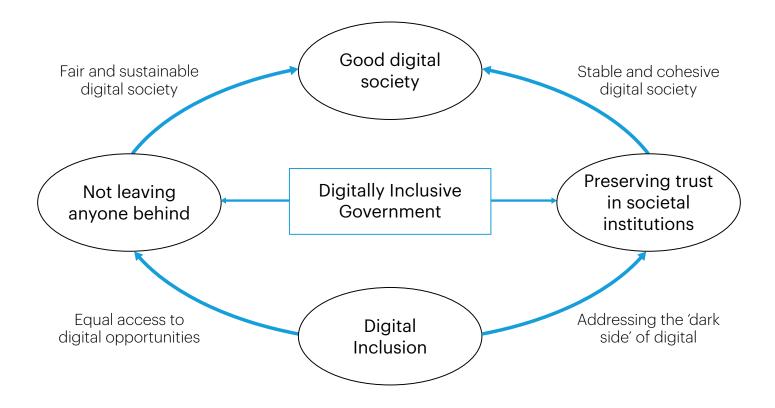
- people saying and doing things that never actually happened [...]. Deepfakes rely on neural networks that analyze large sets of data samples to learn to mimic a person's facial expressions, mannerisms, voice, and inflections."
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Moreover, the news media were highly or moderately trusted by 19% of the ONS surveyed sample. Widening the horizon to the international level, the OECD Survey on the Drivers of Trust in Public Institutions (popularly known as the 'Trust Survey')<sup>31</sup> found that in the surveyed 22 OECD countries, about half of the respondents do not have trust in their national government and believe they 'do not have a say' in what their government does. This evidence indicates that governments (in the surveyed 22 OECD countries) fail to meet people's expectations of participation, representation, and responsiveness. The same OECD survey also found that vulnerable societal groups such as those experiencing socioeconomic inequalities, experience lower levels of trust in governments.

### Digital inclusion for a good digital society: an expanded view

While a commonly adopted definition of good digital society may not have emerged yet in the literature, we advance that in a good digital society a digital ecosystem of technologies and actors works for the public interest by supporting the relationship between people and the core societal institutions or pillars (e.g., public services, political, legal, financial, and cultural institutions). When these pillars are weakened by digital technology, society's functioning and stability are negatively affected. Therefore, it is important for a 'good digital society' that digital technology affords a positive reinforcement of societal institutions, for the benefit of the public and both current and future generations. Thus, our core argument points to the need to reconcile the tension between leveraging the benefits and mitigating the dark side of digital inclusion (see Figure 1).

Figure 1. Digital Inclusion for a Good Digital Society



OECD 2022. Building Trust to Reinforce Democracy: Summary brief presenting the main findings from the OECD Trust Survey, Building Trust in Public Institutions

We argue that digital inclusion enables more citizens to participate in digital activities and opportunities across a range of domains, which helps reduce inequalities and promote a fair and sustainable digital society. However, in doing so, digital inclusion makes more people exposed to the concrete threats posed by the disintegration of trust (in the media, public institutions, and people in general) caused by the growing inability to make sense of the digital information environment. This phenomenon exacerbates the already visible trend whereby people have less trust in public institutions, particularly in governments. In sum, digital inclusion efforts aimed at "not leaving societal members behind" produce double-edged results from the perspective of building a 'good digital society.'

This inherent tension represents a threat to a 'good digital society' but, at the same time, an opportunity for governments to enhance digital inclusion efforts to counter the process through which breakaway technologies such as AI undermine societal institutions. In particular, we build on existing evidence that a 'participatory' approach between government and citizens, which complements other dimensions of digital inclusion (access, skills, motivation, confidence), can represent a 'solution space' to be explored by policymakers. If the public can digitally engage with a responsive, efficient, and transparent government, the level of citizens' trust in governments (and other institutions) might be preserved and restored. This approach is especially timely and salient in the UK, given successive governments' ambition to increase digital technology utilisation in the UK public sector.32

In the next section, we develop this argument into a series of policy-oriented recommendations based on the concept of "digitally inclusive government."

### Digitally inclusive government

Based on the previous discussion, we advance the idea that governments can leverage digital inclusion to prioritise trust-based participatory engagement within a digital society. This 'participatory' approach differs from a 'regulatory'

one, whereby the role of government and public actors is to sharpen and effectively enforce regulations, legal safeguards and penalties to counter disinformation and other forms of disruptive actions involving digital technologies. In addition, our approach differs from a 'digital policing' approach, based on the technical ability of both public and private organisations to detect, and block malicious uses of digital technology in real time (i.e., dissemination of fake news or cyber-attacks). Instead, we answer academic calls originating from scholars such as Monaco (2018, p. 112): "leading researchers have highlighted that solutions to misinformation online cannot be purely technological - social solutions are also crucial." We acknowledge that these different approaches are all necessary to establish and maintain a good digital society; therefore, they are not mutually exclusive.

The nature of what counts as a 'good digital society' is not universally agreed upon.<sup>34</sup> However, we suggest that two of the key features of a 'good digital society' are citizen participation and institutional responsiveness. Citizen participation is a vital feature of modern governance and democratic decision-making practices and can benefit public authorities in several ways.<sup>35</sup> For example, citizen participation leads to identifying novel solutions to social problems, elevates the legitimacy of decisions, and supports the creation of trust between citizens and public authorities.<sup>36</sup>

Fostering citizen participation leads to increased collaboration with citizens. Collaboration with citizens alters the traditional mechanisms of bureaucracy, as power is redistributed, information sharing improves, and innovation is embraced. <sup>37,38</sup> Collaborations with citizens have previously resulted in the co-production of public services; <sup>39</sup> citizen co-production has been linked to well-being, increased political accountability, and the ability to cope with budget deficits. <sup>40</sup>

The level of citizen participation can potentially be increased using digital technologies (e.g., e-participation). 41,42,43 E-participation is one of the concepts used to drive the "internet-facilitated coproduction" agenda of the government. 44 The notion of e-participation originates from the notion of e-democracy. 45 Hence, e-participation

- 32 Central Digital & Data Office 2023. <u>Transforming for a digital future: 2022 to 2025 roadmap for digital and data</u> updated September 2023 [Accessed: 10 January 2024].
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represents an online participatory process that includes relevant stakeholders in public decision-making and policymaking. <sup>46</sup> Indeed, e-participation is often seen as the usage of "information and communication technologies to widen and deepen political participation by enabling citizens to connect with one another and with their elected representatives". <sup>47,48</sup> Thus, e-participation is an information and communication tool that facilitates various dialogues (e.g., online consultations, deliberations) between citizens and their governments in the public decision-making process. <sup>49</sup>

Governments may activate different e-participation platforms (e.g., blogs, online community consultations, social media campaigns) based on their requirements and objectives.<sup>50</sup> The two main requirements for e-participation are: the presence of "digital skills" (e.g., adequate PC and internet skills) and "traditional skills of citizenship" (e.g., knowledge of how the government operates).<sup>51</sup>

Several countries employ e-participation tools. For example, Indonesia has developed a custom-made social media platform called 'LAPOR!' in an effort to improve citizen involvement in policy-related matters, thereby powering data-driven policymaking on a national scale.<sup>52</sup> The devolved Welsh government employed their 'Digital and Data' blogs for e-participation purposes from December 2020 to March 2021. An observed change in "The 'Wellbeing of Wales' annual report for 2022 was a growth in "people feeling that they can influence decisions in their local area which continues to reverse the downward trend seen prior to the pandemic."<sup>53</sup>

E-participation can influence public trust in the government. <sup>54</sup> Trust in government is ingrained in the "management of government-citizen relations" <sup>55</sup> and is influenced by a number of factors, such as the level of social capital (i.e., civic engagement in a community, readiness to ascribe nonthreatening intentions), government performance, tackling corruption, etc. <sup>56,57,58</sup> The OECD recognises trust as the main pillar through which the legitimacy of public institutions is constructed; as such, trust enables "countries to govern on a daily basis". <sup>60</sup> The OECD has recognised five key public governance drivers of trust in government institutions facilitated via e-participation: integrity, responsiveness, reliability, openness, and fairness. <sup>61</sup>

#### Conclusion

This work directly responds to calls from The United Nations, 62 as they stated that "as the digital world and technologies keep developing, so must the way we define inclusion in it. Reaching equitable digital inclusion requires constant and conscious re-thinking of the digital world, the actors excluded from it and the barriers within it." The extended view of digital inclusion we propose relies on the ability of all members of society to participate in constant discourse with responsive government entities, through access to digital technologies. Thus, a 'good digital society' is one in which the benefits of digital inclusion are harnessed, while the dark side of digital technology is successfully mitigated with the help of social capital built via constant discourse and connections between government and citizens (e-participation).

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