



Stacie Walsh

Creating an inclusive digital future – urgent action needed

Future-Proofing
our Digital Rights



Digital
Freedom Fund

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Emerging technologies and digital services offer incredible possibilities to create a more inclusive and accessible world. However, unless urgent action is taken to enhance digital inclusion and access, societies will become more polarised, with deepening digital and social divides. Digital exclusion will impact an individual's rights, such as the right to work, access to public services and information, civic participation, and association.

The Digital Divide: Who is at risk?

The 'digital divide' is no longer a dichotomy between who has access to the Internet and who does not. The digital divide has evolved into a broader concept including access to digital services, relevance of content, affordability and education. Factors driving digital exclusion include language, gender, (dis)abilities, age, skillset and income. As a result, offline inequalities are being reflected and accentuated in the online environment.

For example, low income households, minorities, rural populations and women are the **most at-risk of digital exclusion**. On a global scale, women ‘are **12% less likely** to use the internet.’ This **increases to 50%** for people with disabilities. Furthermore, for those who are able to connect, they may lack the digital savvy required to take advantage of the benefits or protect their rights online.

It is likely that the negative impacts of business models, data collection and emerging technologies will be **magnified** for people lacking digital skills and education. Marginalised users may be more vulnerable to algorithmic bias, online abuse, trolling or exploitation of their privacy, and be less likely to create – or even access – digital content. Digital divides are contributing to social and political divides across many countries and may result in **further political and economic destabilisation** within and between nations.

Divides at Every Layer

Research and reports on digital inclusion elucidate the complexity of factors influencing digital divides. For example, the difficulties of connecting to the Internet and digital services may be impacted by affordability, accessibility, or lack of skills. Lack of **affordability** can disproportionately impact women and other disadvantaged groups due to lower incomes and lack of financial inclusion. This includes the funds to connect to the Internet (e.g. mobile data or broadband) or purchase hardware (e.g. mobile phones or computers).

In terms of accessibility, for those living in rural areas, Internet connectivity may come from more expensive mobile broadband or older wired broadband infrastructure resulting in poorer quality connections or data caps which could impact the speed, quantity or quality of content delivery. Those that are able to overcome these hurdles may find a **lack of relevant content** in local languages further impacting the freedoms to seek, receive and impart information in the digital sphere. Additionally, web accessibility for those with disabilities remains low. For example, in Europe, only 37 public service websites across 7 countries were **found to be fully compliant** with European accessibility standards.

Those most at risk of digital exclusion may lack the skills required to fully benefit from the opportunities offered by the Internet or digital services, such as navigating webpages, searching or creating content, and managing user profiles. In the near future, more advanced digital skills will be needed for jobs which are currently considered manual and mid-skilled labour, such as manufacturing, administration, cooking or farming. Additionally, those lacking the educa-

tion required to enter into jobs in science and technology will be blocked from benefiting from employment opportunities in these sectors. The promise of new technologies may be outweighed by their impact on the workforce and the resulting reverberations within society.

In the near future, workplaces will require fewer people with higher level skills.

As automated and robotic technologies continue to develop, countries are already seeing a ‘hollowing out’ of the working class, resulting in a more polarized workforce. The **ability of people** to keep up with technology will influence how this digital divide evolves, and – unless urgent action is taken – will likely widen. Workers who are older or unable to up-skill to remain relevant may find themselves permanently excluded from the workforce. Those that are able to retrain will have the chance to forge a prosperous future. For **women, challenges** such as a poor work-life balance can negatively impact their time for continuing education and can create knock on difficulties re-joining fast-paced industries, such as tech, after maternity leave.

What can Digital Rights Defenders Do?

How can digital rights defenders help to create an inclusive future for the Internet and digital services in Europe? Action is needed to improve access at every layer – for instance, **enhancing** digital skills, relevant content, and inclusive workplaces. Although ‘literacy’ is viewed as a key element of capacity building and education, Europe is still **not good enough** at teaching digital literacy to support broader inclusion for persons with disabilities, the elderly, or other disadvantaged peoples. Resources – either digital or facilitating hardware such as home assistants – can also be developed with marginalised communities in mind to enhance inclusiveness in the digital sphere.

There are increasing concerns around algorithmic bias in digital systems and services. **Research has highlighted** the impact of developers on the resulting technology, and how technological bias **reflects and amplifies existing socio-cultural injustice**. Unless marginalized and disadvantaged persons can be involved in developing technologies, those technologies and associated business models will continue to perpetuate inequalities. Initiatives like the **UK’s CyberFirst Girls** competition are a fun and imaginative approach to promoting greater inclusion in science, technology, engineering and mathematics (STEM) subjects and related fields.

Digital rights defenders can also help to **tackle** online harassment and demand accountability for online actions. This may include campaigning for im-

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proved mechanisms for reporting online abuse, and greater accountability of tech platforms through robust legal frameworks. Digital rights defenders may also advocate for anonymity for dissidents and journalistic sources, within accountable, human-rights respecting online spaces.

What gets measured gets done. To further support digital inclusion, data-driven policy is essential. There have been numerous calls (including from G20 and the UN) for disaggregated data relating to gender inclusion, and the same approach is needed for other factors impacting digital inclusion such as age, (dis)abilities, and education.

Governments can support digital inclusion through **adopting relevant and specific provisions** in national digital strategies. Europe has mechanisms to **promote accessibility online** as well as **guidelines** regarding public sector procurements. These tools could be used to ensure the adoption of technologies that implement **accessibility** standards (such as IETF's standards on text-to-voice in real-time) or '**universal design**' in technical development.

If digital rights defenders do not push for concerted efforts among industry and government to adopt change, today's trends will continue and get worse. There will be increased polarization between the 'haves' and 'have nots'; more technology and services created by unrepresentative elites; and the further engraining of specific values, norms, and abilities into technologies that do not necessarily reflect society as a whole. If issues are exacerbated, European perspectives on digital rights will be threatened and it will be more difficult to find and use technologies that reflect those values. A different, more inclusive future for digital rights is still possible, if proactive steps are taken now to address challenges related to skills, workplace cultures, and digital exclusion.



About Stacie Walsh

Stacie Walsh is Internet Policy and Cybersecurity Consultant at Oxford Information Labs. Stacie is an experienced researcher, data analyst, writer, presenter and project manager, focusing primarily on the Internet addressing (DNS) ecosystem, Internet of Things (IoT), Artificial Intelligence (AI), Over-the-Top (OTT) services, and cybersecurity. Stacie is a C ESG certified CyberSecurity/ Information Assurance Auditor Practitioner and holds a certificate in ISO/IEC 27001 Information Security Management Principles. In 2015, Stacie was an ICANN NextGen participant.

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About the Digital Freedom Fund

The **Digital Freedom Fund** supports strategic litigation to advance digital rights in Europe. With a view to enabling people to exercise their human rights in digital and networked spaces, **DFF** provides financial support for strategic cases, seeks to catalyse collaboration between digital rights activists, and supports capacity building of digital rights litigators. **DFF** also helps connect litigators with pro bono support for their litigation projects. To read more about **DFF**'s work, visit: www.digitalfreedomfund.org.

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