

Digital rights are civil rights

As we grow ever more used to the daily presence of the internet in our lives, it's easy to forget the extraordinary potential this technology offers us.

We stand on the verge of a transformational change; a moment when all people across the face of our planet could have nearly instant access to the sum total of human knowledge, at the touch of a screen. This idea is nothing less than revolutionary, and ours is the privileged generation which has the opportunity to turn it into a reality.

To do so will require more than just continued technological progress. Closing the gap between rich and poor countries, and the educational and wealth gaps within countries, will also be necessary to ensure network access for all.

But even once we enjoy a reliable and affordable connection, there are other barriers to free access to information. Closed and proprietary systems, paywalls, data discrimination, aggressive protection of intellectual property, and incomprehensibly complex terms and conditions can all present such barriers.

These considerations are not only technical; they can be political.
Restrictions on freedom of speech and

association, and surveillance by state and private sector players who use data and metadata to monitor and manipulate citizens; all these factors risk tipping the balance of power in our online lives, away from citizens and communities.

What should be a liberating, democratic and profoundly creative technology risks entrenching centralised power, unless we establish clear protection for our rights and freedoms.

Current situation

Both the Scottish and UK governments acknowledge their responsibilities to develop the country's use of the internet. At both levels, these responsibilities are framed in terms of 'Digital Economy' and 'Digital Participation'.

Scotland's level of home internet access, recently recorded at 76%, is slightly

lower than the UK average, but is growing. The number of connected homes and the theoretical speeds they can access are both improving, but there remain problems in rural and some urban areas.

Scotland's infrastructure is also improving, with the recent announcement of an internet exchange point for Scotland, which is reducing the 'lag time' for data traffic.

"The internet offers extraordinary possibilities for free speech, access to knowledge, creativity, employment and citizen empowerment. To realise these benefits we must carve out and protect a civic space in this exciting digital world and recognise digital rights as civil rights."

Patrick Harvie, Scottish Green MSP



While the Curriculum for Excellence does begin to address programming and computer science, most IT education is focused around the use of commercially available software. We have a long way to go if we're to ensure that all young people leave school with the skills and confidence not only to access the full breadth of products and platforms, but also to be contributors to the development of new ones. We should be teaching our children to be creative people in the online world, as opposed to passive consumers.

The Scottish IT sector already employs some 73000 people, but expects to see that grow over the coming years, with particularly strong demand for software engineers and other skilled professionals. Overall the IT and telecoms sector is seeking nearly 10000 new entrants a year, and this will need focused action from schools, colleges and universities if Scottish young people are to benefit from the opportunities.

As well as chances for young people to gain employment in these sectors, we want them to develop the talent and confidence to be creative leaders rather than just participants.

More than just access

A digital culture based on rights, creativity, and the common good.

There are important issues beyond basic access to the internet. Democratic participation means more than just casting a vote every few years; it means feeling connected to the decisions which affect our lives and having the power to hold decision makers to account. Economic participation isn't just about having an adequate income; it's about the ability to make real choices about our lives and to live them as we'd wish to. Similarly, digital participation can't simply mean having access to the internet and a Google or Facebook account.

Framing this agenda in narrow terms risks losing sight of more fundamental questions about how people use the internet, how power works in our online lives, and what the future holds.

These issues can be addressed through a Digital Bill of Rights, a Scottish communications regulator, democratic control of intelligence functions, and a public forum for debate about the future of society and technology.

A free and open internet

Net neutrality is a contested idea. Many people are drawn to the principle that internet service providers should not discriminate between one 'packet' of data and another, but should treat all data traffic equally regardless of factors like user identity, content or mode of communication. Others, including some large commercial ISPs, claim that some forms of data discrimination are necessary to ensure consistent quality of service.

It seems clear that, as a bare minimum, general standards of openness are required. People have a right to know, in clear and comprehensible terms, whether and how their ISP is dictating the terms of their internet access. We wouldn't allow a newspaper publisher to prevent us from reading a rival paper, or increase its cover price for certain users. We should expect basic freedoms to be protected online. The use of data discrimination to stifle free debate, democratic participation, or citizens' right to choose between rival providers should not be acceptable.

IP reform

The state's role in protecting the monopoly use of intellectual property is important, but will only serve the common good of society if the key objectives are properly balanced - stimulating the creation and dissemination of new output, and ensuring fair recompense for creative

work. These objectives are not well served by current IP laws, in which dominant players in several markets can generate vast wealth from relatively few IP assets and exploit their legal foothold to restrict the power of the internet to disseminate creative works. Newer business models in which IP is less aggressively protected, but alternative revenue streams such as equity crowdfunding and additionality of paid-for content are pursued, can strike a more effective balance in the public interest.

Open standards

A great deal of public money is spent at every level of government and throughout the public services, in procuring software and generating data. There is huge potential to promote Free and Open Source software standards, and open data formats, to ensure freer access to information and the greatest public benefit from public spend.

Freedom of speech

As public debate, comment and gossip have moved online, so too have issues of abuse, offence and free speech. Online behaviour often crosses lines of acceptability in ways which does not commonly happen in face-to-face encounters, but interventions in this area by the courts have sometimes been heavy-handed or oppressive. Freedom of speech has never been absolute, but we clearly suffer from a lack of shared expectations about what constitutes acceptable behaviour online. This is a cultural phenomenon to which legal



solutions alone will be inadequate, but a Bill of Rights can help to establish shared norms across society.

Surveillance

Covert gathering of intelligence about citizens, such as the harvesting of email and mobile phone records and the active surveillance of innocent citizens, have been more widely debated since the Edward Snowden revelations. Governments need both the political will and the technical ability to protect their citizens from such surveillance, and the UK Government appears to lack both. Probably as a result of the reserved nature of the issues, Scotland has seen little debate over the political and technical questions, however both will need to be addressed in the event of a Yes vote this September. The current Scottish Government proposes to create a single intelligence and security agency for Scotland, and the legislation to create this agency must establish clear limits on its power, as well as meaningful democratic oversight.

Privacy

The use of data and metadata by corporate as well as state players has extended far beyond most people's understanding, and takes place with little or no oversight. Whether the aim is to keep tabs on citizens, to manipulate consumer choices, or merely to improve the organisations' own efficiency, there are serious risks to personal liberty. Even where the activity itself is not malign, we have seen many examples of data being lost or illegally accessed, compromising the privacy of those who never knew how their data was being collected and used. There must be a clear principle that people's data belongs to them, and can only be used without their informed consent for genuine reasons, such as when there is good reason to believe that a specific individual is involved in a serious crime.

Consent

Most internet users are very familiar with the experience of clicking 'I agree' without even trying to read or understand terms and conditions. The provision of lengthy, complex and legalistic terms and conditions may protect providers, but does not represent true informed consent. Clarity is needed around 'fair use' assumptions relating to personal data, and common privacy standards.

Future developments

As connected devices proliferate we will continue to face new questions which challenge society's relationship with technology, and how it changes us. Just as earlier technologies such as clocks, motors and basic electronics began with a visible presence before merging seamlessly into our everyday lives, so devices with sophisticated software and permanent internet connections will disappear into our clothes, our vehicles, our buildings and our environment. In the near future wearable devices which can unobtrusively record video look set to raise issues of privacy and consent.

We will never arrive at a final, fixed settlement of the debates provoked by new technology. The issues will continue to change as our society's values change, and as the more rapid technological advances continue.

A public Technology and Society Forum is needed, independent of political control and corporate vested interests, to consider these issues in their technical, political and ethical aspects, and to engage with the public in drawing up recommendations for government and industry. The internet itself offers the tools to make such a forum open, inclusive, participative and deliberative.

It should not be left to the Googles and Apples of the world to dictate the future and entice the rest of us to come along for the ride; government and society must create the space for shared consideration of the challenges and opportunities which lie ahead.