

Efforts to develop online social norms or to address violent extremism online will challenge certain tenents of the Internet, namely, anonymity, privacy and free expression.

Automation-driven changes to the labor market will cause considerable anxiety in the short term as people worry about the future of work and whether they have the skills to succeed in the new economy.

The changing media ecosystem is democratising access to information while also raising concerns about the implications of fake news and disinformation for public discourse.

The data-driven economy will blur the lines between the public and private sectors, creating challenges for accountability and transparency. Government policies and processes could chip away at the global Internet and lead to its fragmentation.

Overview

As the Internet integrates itself further into all aspects of our daily lives, it will affect how we work, communicate and govern ourselves. It has a tremendous ability to connect disparate groups around the globe to each other and to

an astounding amount of information. In fact, Cisco estimates that global IP traffic will increase by 300 per cent over the next five years, and that it will reach 3.3 zettabytes (270 bytes) annually by 2021.1 Deployments of IoT will mean that Internet connected devices will be found in almost everything that is part of our daily lives — buildings, homes, cities, medicine, food, and even the human body. This level of connectivity will have enormous implications for society, for social institutions and for social norms.

The ability for anyone, anywhere to share content with the rest of the online world is a powerful democratising force. However, it also will present challenges to society. In the future, the community of Internet users will need to take proactive steps to protect itself from threats such as censorship and fake or biased news. Access to sound information may become a luxury, dividing the society along socioeconomic lines. Technological changes, such as AI and automation will change the labour market, displacing some jobs while creating new ones. All this means that it will be critical for society to plan for these disruptions in order to adapt and to mitigate the negative impacts on people and communities.

One thing is certain — in the future, the line between our online and physical lives will blur, if not merge together.

¹ http://www.cisco.com/c/en/us/solutions/collateral/service-provider/visual-networking-index-vni/vni-hyperconnectivity-wp.html





The emergence of a global, Internet society

The Internet has always held the promise of expanding access to information and building an open and opportunity-rich society. It empowers individuals to connect, speak, innovate, share, be heard, and organise. In the Internet's earliest days one of its founding fathers, Vint Cerf, believed that a society would emerge from the Internet — an 'Internet society'. At the same time, there is an increasing awareness that the Internet's promise as a force for good may be fundamentally undermined going forward, a result of increasing cyber threats and governments' reactions to those threats, as well as decreasing levels of trust in the Internet.

There is an increase in virtual communities, like religious, art or social, which can be a good thing for the world since it can help bring more openness and for people to know each other and learn to tolerate each other. This will be especially important for Africa.

Technologist, Africa

Overall, respondents feel that there already exists a strong ability to use the Internet to facilitate social change today, which will only get stronger in the future.2

There are big forces at work that challenge the promise of the Internet, including:

- The deterioration of online behaviour that undermines collaborative dialogue and deepens polarisation within society
- The impact of automation on work and play
- Divides across society between those who are able to adapt to an ever-changing world and those who are not

Norms of online behaviour

As this global Internet society emerges, we should not be surprised that the problems in society — hate, violence, bigotry — are finding their way online. U.S. Internet experts participating in a 2016 Pew Research Center and Elon University survey predicted that uncivil behaviour will persist online and possibly worsen in the coming years. As Vint Cerf noted, the Internet is like holding up a mirror to society — with all of the good and bad that goes with it.

² Future of the Internet Survey 2 - Question 21: "To what extent can individuals use the Internet in [RESPONDENT'S REGION] to facilitate social movements that affect significant change"?

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The Internet changed concepts and things that were not acceptable before became acceptable — due the dehumanization. Being rude became easier. It took away the human element of interaction.

Government, Middle East

User behaviour on the Internet, from social media activism to cyberbullying, from crowdsourcing to cyberterrorism, from political mobilization to criminal dark web activities. The Internet is being used for the good, as we originally know, the bad, and now the ugly. Illiberal forces and pressures will increase unless the Internet community itself can demonstrate self-regulation fast enough. The negative forces currently using or abusing the system have demonstrated powerful impact that begs for reaction far more than the positive impact of technological, scientific, humanitarian, social progress wrought by the Internet in its early years.

Technologist, Asia

Anonymity is often cited as an enabler of bad behaviour, allowing users to adopt behaviours they'd never think of using when interacting face-to-face. And yet anonymity also allows people to speak freely without fear of retribution or harassment.

The challenge for the Internet going forward is whether society can harness the power of technology and the ingenuity of the private sector to develop norms of behaviour so that people can interact safely within their networked communities. While concerns about bullying, hate speech and violent extremism are not new to the Internet, it is only recently that a concerted effort has arisen to see how Internet solutions can be brought to bear to reverse the tide.3

There is a tension between an open society and a closed society as espoused by extremists. The Internet is becoming a battleground for the larger societal ideas/tensions. The extremists have an online strategy — this should be paid attention to. There will be question around control and ethos of the Internet. Are there going to be new norms on the Ethos of the Internet and how does the political establishment view this?

Private Sector, Africa.

But these Internet solutions may require tradeoffs for Internet users. Anonymity and free expression may fall by the wayside in the drive to develop technology solutions and social norms to moderate online behaviour.

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I think of the old days when the Internet was like a village. We seemed to have ethical guidelines in our email community! We learned what would be considered our ethics. This is missing now that the Internet has been introduced to the general public. People simply enjoy the freedom but with a loss of respect. They leave codes of conduct in the real world when they are in the cyberworld.

Technologist, Asia

http://www.pewinternet.org/2017/03/29/the-future-of-free-speech-trolls-anonymity-and-fake-news-online

Changing nature of work

As automation and Artificial Intelligence fundamentally reshape the nature of work, leisure time and many other aspects of life, the basic fabric of society will be tested. Economic transformation, driven by automation and big data, will generate a host of new challenges around job displacement and economic inequality. Yet, economic transformations at this scale have precedents in history — it is no coincidence that current developments have been popularised with the term "the Fourth Industrial Revolution". And while there is no consensus about how fast the change will come, there is widespread agreement, and even anxiety, that major shifts are on the horizon that will have widespread implications for workers and society.

As more and more jobs are automated, people will push for a guaranteed minimum income. If machines are doing all the work, we still need an income.

Civil Society, North America

Workers, communities and governments are unprepared for how to deal with the society-wide implications of AI and automation. As new jobs appear, the future of some workers will be thrown into doubt as old jobs either evolve or disappear. Management roles and specialist skillsets will not be immune from replacement or augmentation by AI, leaving us with some difficult questions to answer, including 'how do we train the next generation when we don't know which jobs we are training them for?

As society struggles to absorb and adapt to these changes and their ramifications, new divides will appear between those who are suitably trained for current and future employment and those whose employment is dependent upon sectors that are no longer sustainable.

There will be job destruction (outsourcing, IA, disintermediation) but also the creation of new jobs, including in the "local economy" based on 3D printing, renewable energy (smart grid) and Internet of Things. The big question is how societies will manage to handle the redistribution between the winners and the losers in the transition period. Interesting ideas include the universal allowance granted to all citizens pioneered in countries such as Finland.

Private Sector, Europe.

We cannot predict the final impact of emerging technology, especially on employment, but we do know that the pace of change will continue to accelerate and that many are ill-prepared to deal with the shifts in the short term. Flexibility, adaptability and real-time reskilling across economy and society will be key to thriving in the future. The solutions do not lie in holding back the tides of innovation but rather in preparing now so that society can fully benefit from an Al-enabled future.

Related to: <u>Artificial Intelligence</u>; <u>Personal Freedoms</u> & Rights; The Internet Economy





A changing media landscape

Internet technologies and social media platforms built on new business models will continue to reshape journalism and the media industry, impacting communities, trust in institutions and overall social cohesion.

The growth in citizen journalism, and the use of social media and online video platforms have already redefined the media landscape. Today, anyone can post "news" to these platforms, be they traditional media companies, a teenager in a remote community, or one of the many new online media outlets that have emerged in recent years.

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The online version of Gresham's law (bad money chases out good money). In this case, social networks and commentary are increasingly impacted by the loudest voices, that are drowning out the rest. This will significantly influence how websites are designed, comments are mediated, and how the Internet is used in political and social discussions.

Private Sector, Europe

As we move to seamless connectivity across different platforms and networks, users will leverage all manner of devices to share stories whenever and wherever they happen. With new forms of media emerging, more Internet users from all around the world will become de facto journalists, uncovering corruption or disclosing attempts by institutions and governments to limit basic rights. This will be especially important in countries where citizen journalism is an important alternative to government-controlled media.

Question is if it will continue to exist or government will clamp down. One track is that the traditional media will need to adapt to the Internet — "non-traditional self publishing" media in the middle east will continue to grow.

Civil Society, Middle East



However, while the Internet can have a democratising impact on the media, this new environment also gives rise to some unintended consequences. A media landscape based on view-based revenue models will continue to challenge the revenue models of traditional media institutions. The old model of advertising and subscription revenue is being replaced by "clickbaits" and the dissemination of "fake news", a trend that undermines trust in online content. A Stanford University study found that 82 per cent of U.S. middle school students could not tell the difference between a real news story and "sponsored content".4

Traditional media is disrupted by the digital age. In-depth reporting is not strong now, and this hurts democracy. Yet the media is a pillar of democracy.

Civil Society, Europe

New media divides will appear between, for example, citizens informed through free or lowcost populist and social media news sites on the one hand, and networks and paywall news on the other. This divide will be exacerbated by populist politicians playing with echo chambers, promoting extremism, and undermining discourse and critical thinking. It will feed conspiracy theories and weaken democracies. Media's role in society as a counterweight to the excesses of power and corruption will be challenged.

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Will Internet be used as an information-sharing opportunity, bringing the people closer, OR would it be used a lobbying or media tool to capture people's minds and divert their attentions from serious issues by keeping them busy in "fun"?

Academia, South Asia

Already, media companies and Internet platforms are under pressure to invest in tools to ensure that news remains credible and fact based as well as a positive force for society. Technology, in particular Al, will make news delivery faster and more efficient, with algorithms not only selecting and compiling news stories, but also being used to fact and sourcecheck. AI will also facilitate the generation of stories that are more tailored to algorithmically-determined societal or community sentiment — responding in real-time to catastrophes and other human interest stories. It may bring efficiencies to traditional journalism by freeing up journalists to do more in-depth and nuanced writing.

Related to: <u>The Internet Economy</u>

⁴ https://sheg.stanford.edu/upload/V3LessonPlans/Executive%20Summary%2011.21.16.pdf

Governments in search of their roles in the new digital era

In the next five to seven years, governments will be challenged to evolve and adapt to new technological and economic changes and the implications they have for society.

The roles and responsibilities of governments and the private sector will blur as the private sector takes on responsibilities traditionally assumed by governments. For example, the deployment of so-called smart city infrastructure, while offering a wide range of benefits to constituents, will also enable the collection of vast amounts of data, largely by private entities. Citizens and society will need to adapt to the changing role of governments, as the privatisation of public services and public spaces threatens to obscure accountability and responsibility.

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I think in the future people will be more dependent on mobile technology and the Internet of Things so governments will seek ways to use this technology to achieve their goals.

Academia, Latin America





Privatization of Governance — private sector is displacing governments as the local of policymaking (inc. policing/law enforcement, intellegence) — including in the enjoyment of human rights.

Civil Society, North America

Governments will also be pressured to step up in areas traditionally led by the private sector. For instance, some countries may attempt to counterbalance the weight of dominant media platforms, stimulate the emergence of accurate information or limit the influence of fake news on citizens.

As governments use the Internet to deliver more services, the relationship between governments and citizens will become less human. Voting, identification and other services will be automated, resulting in the more efficient delivery of higherquality services. While this will offer tremendous potential in terms of efficiencies and broadening access to government services, it will also create anxieties in the short term, as the institutions that have governed societies for generations evolve.

Overall, respondents feel that there already exists a strong ability to use the Internet to facilitate social change today, which will only get stronger in the future.5

Finally, as the Internet permeates every aspect of society, politics and the economy, the role of government vis-à-vis the Internet will necessarily shift. Many in our community believe that governments will seek a much stronger role in the development, deployment and use of the Internet and that existing policy tools are ill-suited for the Internet age. Inward focused government policies could stifle cross-border information flows and threaten the global digital economy. Ever stronger claims of cyber sovereignty and protectionist policies will increase risks of technical, policy and commercial fragmentation of the Internet. And a growing number of countries will purposely use the technology to monitor and isolate their people from the rest of the world. This changing role of government will have implications for networked societies around the world that are based not on national borders but on communities of interest that span the globe.

With increasing international data flows, services and goods will come a need to agree on international norms. Some predict that, in the absence of an agreement on universal norms, regional agreements will multiply and accelerate the emergence of a multipolar world organised around new blocs of countries and societies.

Related to: The Internet & the Physical World; The Role of Government

⁵ Future of the Internet Survey 2 - Question 21: "To what extent can individuals use the Internet in [RESPONDENT'S REGION] to facilitate social movements that affect significant change"?