



Societal drivers

Society adapts to the positive and negative effects of a hyperconnected digital lifestyle.

Living with technology's dark side

Some negative effects of rapid technological assimilation intensify. Indiscriminate sharing, surveillance, and hyperconnectedness prevail at the expense of privacy. In an age marked by open data and transparency, some technology users rebel, seeking new ways to restore anonymity. Cybercrime tracks technology's advance, leaving everything that's connected—from basic household gadgets to unmanned vehicles—vulnerable. The clash between sharing and surveillance reaches new heights as the Internet of Things brings more and more of our lives online. Average citizens face a choice between using connected technologies and maintaining their anonymity. Privacy itself becomes a currency for which users are willing to pay or go to great lengths to protect. Meanwhile, regulation of technologies such as 3D printing, which anyone can use to print weapons, presents a growing challenge to government authority.

Economic losses from cyberattacks rise to \$3 trillion by 2020.

See: Cyber Crime Fighting

Empowered citizen-consumers

Since the advent of the Internet, futurists have repeatedly promised a new kind of citizen—one who is proactive, connected, collaborative, and aspiring to contribute to a better society. By 2020, these citizens are finally beginning to appear in significant numbers. Businesses, nonprofits, and governments spur the movement with the right data and tools. Some of the earliest examples are already visible in the sustainability space, where energy agencies spearhead efforts to simplify electricity bills and visualize data from the smart grid. In doing so, they

Nearly half of adults today are inclined to buy eco-friendly products, and 4 in 10 would pay more for them.

help consumers make better decisions for themselves, while the consumers—perhaps unknowingly—contribute toward policy goals that benefit the public good.

See: Government and the Publicly Accountable Enterprise

The “hyperconnected” vs. the barely connected

In 2020, most people are networked across numerous platforms, digital and physical. But a significant share of the population—predominately the poor, the elderly, and those living in areas with limited connectivity—remains barely connected. This poses continuing challenges for the delivery of public services: Governments must use the latest technologies to meet the rising expectations of hyperconnected citizens while still reaching those offline.

In 2012, the European Union had a 73 percent Internet penetration rate, versus 16 percent in Africa.

Today, 38 percent of two-year-olds have used a mobile device. The average age for a first cellphone is 13.

Expanding human potential

Unprecedented advances in health care, neuroscience, technology, computing, nanotechnology, and learning begin to allow human beings to expand their physical and mental faculties, with the range of possibilities including enhanced longevity, improved IQ and learning abilities, and the restoration of hearing and vision. Early signs of this included President Barack Obama’s \$100 million BRAIN initiative to advance the study of the nature of the brain, particularly how brain function is linked with behavior, learning, and mental disease. But potential innovations in cognitive capacity also pose new regulatory and ethical challenges for government, social institutions, and international organizations.

In the United Kingdom, life expectancy is increasing at the rate of six weeks every year; 11 million people alive today—17.6 per cent of the UK population—can expect to live to be more than 100.

“Supersoldiers” with exoskeletons can run at 10 miles per hour and cover 200 miles in a day.

See: Diversity’s new frontier

The conscious consumer

The trend toward more mindful consumption becomes a dominant force in the West and makes inroads in emerging markets as an increasing number of consumers demand responsibly sourced and environmentally friendly products. Consumers and corporations work toward transparency, openness, and social responsibility. Consumers use apps to align their purchases to the companies that support their values and social causes.

According to a 2013 survey, 2.5 billion consumers worldwide, representing 36.4 percent of the global population, are “aspirationals”—they define themselves in part through brands, and yet believe they have a responsibility to purchase products that are good for the environment and society.

See: A roadmap for sustainable consumption

Chipping away at pervasive corruption

Digitization of services and open-government initiatives make a dent in corruption, but it continues to persist in most of the world. Rampant corruption in emerging economies prevents the benefits of development programs from reaching the poor. Early innovations in harnessing the power of citizens to track corruption at the lowest levels of government, such as India’s “I Paid a Bribe” platform or Global Youth Against Corruption, give way to more systemic approaches. Conveners such as Transparency

Initiatives such as Nigeria’s still-evolving Anti-Corruption Internet Database could be one among the first steps toward an end-to-end solution for corruption.

International bring together anticorruption activists and technology experts in hackathons to build tools to fight corruption on the ground. Anticorruption efforts go beyond tracking to provide training and advocacy tools that allow citizens to connect on corruption issues and take legal action against perpetrators.

Resolving the privacy debate

In 2020, the clash between privacy and convenience hasn't been fully resolved, but significant headway has been made. Individuals increasingly accept the idea that technology can serve them better when it knows about their lives, and rules and norms governing this information exchange have finally begun to crystallize. The remaining battle lines are drawn around innovations that digitize entirely new aspects of life. Advances such as self-driving cars and smart homes force us to consider how much our possessions know about us, what they actually "report back" and to whom. At its core, this is a debate about individual independence. As with past trends, most people are willing to sacrifice some privacy for convenience.

By 2012, 89 nations had passed data privacy laws.

See: Gold Rush

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