Pew Research Center

Many Tech Experts Say Digital Disruption Will Hurt Democracy

WASHINGTON, D.C. (Feb. 21, 2020) – About half (49%) of technology experts predict that humans' use of technology will weaken core aspects of democracy and democratic representation between now and 2030, according to a new report from Pew Research Center and Elon University's Imagining the Internet Center. At the same time, a third (33%) expect technology to mostly strengthen democracy, while 18% say there will be no significant change on this front in the next decade.

This report, part of a long-running series about the future of the internet, is based on an extensive, nonscientific canvassing in which 979 technology innovators, developers, business and policy leaders, researchers and activists answered this question: *Between now and 2030, how will use of technology by citizens, civil society groups and governments affect core aspects of democracy and democratic representation? Will they mostly weaken core aspects of democracy and democratic representation, mostly strengthen core aspects of democracy and democratic representation or not much change in core aspects of democracy and democratic representation?*

The survey then asked respondents to explain their answers in an open-ended response. This is a nonscientific canvassing based on a non-random sample. The results represent the opinions of individuals who responded to the query and are not projectable to any population other than the individuals in this sample. The canvassing of experts was conducted from July 3 to Aug. 5, 2019.

"Many experts fear humans use of technology will weaken democracy in the next decade," said Lee Rainie, director of the Center's internet and technology research. "They worry about the ways in which bad actors can use social media and other digital technology to distort reality. They fear for the future of journalism. And they think data-driven 'surveillance capitalism' poses its own threats to people's freedom. Almost across the board, they see democratic institutions and processes at risk."

Several major themes along these lines are summarized here:

Themes About the Digital Disruption of Democracy in the Next Decade: Concerns for Democracy's Future

Power Imbalance: Democracy is at risk because those with power will seek to maintain it by building systems that serve them not the masses. Too few in the general public possess enough knowledge to resist this assertion of power.

EMPOWERING THE POWERFUL	Corporate and government agendas generally do not serve democratic goals and outcomes. They serve the goals of those in power.
DIMINISHING THE GOVERNED	Digitally-networked surveillance capitalism creates an undemocratic class system pitting the controllers against the controlled.
EXPLOITING DIGITAL ILLITERACY	Citizens' lack of digital fluency and their apathy produce an ill-informed and/or dispassionate public, weakening democracy and the fabric of society.
WAGING INFO-WARS	Technology will be weaponized to target vulnerable populations and engineer elections.

Trust issues: The rise of misinformation and disinformation erodes public trust in many institutions

SOWING CONFUSION — Tech-borne reality distortion is crushing the already-shaky public trust in the institutions of democracy.

WEAKENING JOURNALISM — There seems to be no solution for problems caused by the rise of social media-abetted tribalism and the decline of trusted, independent journalism.

RESPONDING TOO SLOWLY — The speed, scope and impact of the technologies of manipulation may be difficult to overcome as the pace of change accelerates.

Still, other experts offered hopeful answers and suggested how solutions to democracy's current problems could emerge.

"Those who were more hopeful often started their answers referring to history's lessons," noted Janna Anderson, director of the Imagining the Internet Center at Elon University. "They argue that democracy has faced challenges in the past and people have found ways to overcome its problems. These experts hope that citizens' digital literacy will rise and new tools like artificial intelligence systems will help them take back power from the powerful and attack the bad actors who are tying to exploit and manipulate the public."

The themes of those who sounded more hopeful notes and offered solutions are outlined here:

Themes About the Digital Disruption of Democracy in the Next Decade: Hopes and Suggested Solutions

Innovation is inevitable: Change is beginning to happen at the level of individuals and social systems. History shows how human adaption pays off in the long run.

EVOLVING INDIVIDUALS — Increased citizen awareness, digital literacy improvements and better engagement among educators will be evident in the next decade.

ADAPTING SYSTEMS — Changes in the design of human systems and an improved ethos among technologists will help democracy.

ENSHRINING VALUES — Deep-rooted human behaviors have always created challenges to democratic ideals. Historically, though, inspired people have shown they can overcome these darker tendencies.

Leadership and activist agitation will create change

WORKING FOR GOOD — Governments, enlightened leaders and activists will help steer policy and democratic processes to produce better democratic outcomes.

Technology will be part of the solution: Some of the tech tools now undermining democracy will come to its aid and helpful innovations will be created.

ASSISTING REFORMS — Pro-democracy governance solutions will be aided by the spread of technology and innovations like artificial intelligence. Those will work in favor of trusted free speech and greater citizen empowerment.

Following is a sample of thoughts shared by experts through this survey:

- **danah boyd,** principal researcher at Microsoft Research and founder of Data & Society, wrote, "Democracy requires the public to come together and work through differences in order to self-govern. That is a hard task in the best of times, but when the public is anxious, fearful, confused or otherwise insecure, they are more likely to retreat from the collective and focus on self-interest. Technology is destabilizing. That can help trigger positive change, but it can also trigger tremendous anxiety. Technology also reconfigures power, at least temporarily. This can benefit social movements, but it can also benefit adversarial actors. All too often, technology is designed naively, imagining all of the good but not building safeguards to prevent the bad. The problem is that technology mirrors and magnifies the good, bad AND ugly in everyday life. And right now, we do not have the safeguards, security or policies in place to prevent manipulators from doing significant harm with the technologies designed to connect people and help spread information."
- **Gina Neff,** senior research fellow, Oxford Internet Institute, "Western democracies are grappling with the power from the increased concentration of financial capital and its response in the form of the rise of populism. Without attention to strengthening our core technology and communications infrastructure, those forces will continue to damage how people participate in – and indeed make – democracy."
- **Ben Shneiderman**, distinguished professor and founder of the Human Computer Interaction Lab at University of Maryland, said, "Limiting malicious actors will require newly designed technology, social structures and government policies. New forms of independent oversight, regulatory strategies and community pressure will be helpful."
- **Henning Schulzrinne,** Internet Hall of Fame member and former chief technology officer for the Federal Communications Commission, wrote, "Unless changes are made, many citizens will increasingly see their role as diminished and inconsequential, as the tools of democracy will no longer work and will have obviously failed – voting, protest, contacts with representatives, the media."
- **Gry Hasselbalch,** co-founder of DataEthicsEU, wrote, "Which interests will dominate over others in the design standards, laws, education and culture of technology development? Commercial interests in profiting from data intensive technologies? States' interests in technological control and efficiency? Or the human interest in terms of agency, self-determination and dignity? The answer to this question will shape our world in the future."
- **Leila Bighash,** assistant professor of communication, University of Arizona, expert in online public information, news and social media, said, "By 2030 … the truth and falsity of claims made will constantly be questioned. Evidence will be faked or destroyed to support claims. People will wonder: How do we make democracy work if we can't even be sure of objective truth and facts? How can we hold our elected officials accountable if we can't get accurate or full information? Technology plays a role in this because, as we've already seen, there are sophisticated methods for creating and spreading disinformation and misinformation. Democratic elections, the fundamental essence of democracy, are already being threatened with technologically sophisticated operations by various actors."
- **Craig Watkins,** a professor at the University of Texas at Austin, wrote, "The spread of these technologies around the world is happening faster than the knowledge and efforts to apply them in ways that support rather than weaken democracy. The spread of disinformation, deepfake videos and conspiracy theories requires a level of digital and civic literacy that, unfortunately, is underdeveloped around the world. This is true in even the most 'developed' countries like the U.S. and the UK. Democracy is under assault, and the deployment of technology is a key asset in the undermining of public discourse, civic engagement and voter participation. And while the pressure to assert greater regulatory authority over big tech is ramping up the pace of change – data rights, corporate responsibility and designing algorithms that address disparities and

efforts to weaken democracy – it does not appear to be sufficient to contain the looming threats to a more democratic and inclusive civic sphere."

- **Beth Noveck,** director of New York University's Governance Lab, wrote, "The public will be able to inform the agenda-setting process by sharing what they know about problems as they experience them. They will be able to do more than identify problems. They can contribute solutions to problems and deliberate with other citizens to craft and refine those solutions. They can and should be able to participate in drafting policies and proposals. Perhaps most important, they will be able to collectively hold government to account by tracking the effectiveness of the implementation of new policies and services. Finally, they will be able to exercise decision-making authority, voting on how money is spent and power wielded. With new technology, we can experiment with new ways of doing such things, too, including comparing the impact of having people volunteer to participate in such online processes versus selecting a sample of people to participate. There is much work to be done to test what will work to improve the impact of new technology on democracy in 2030."

- **Bryan Alexander,** a futurist and consultant at the intersection of technology and learning, wrote, "There are numerous possibilities, and it's likely each will take hold in different places to varying degrees. Some will push to build transnational alliances to grapple with climate change and other issues, while others will encourage more local politics at the level of nation, region or city. Technology gives us more opportunities for direct democracy, possibly via rolling plebiscites. It also increases connections between officials and citizens through polling, sentiment analysis and surveillance. We should expect a role for artificial intelligence as political analyst and campaign assistant. The speed of political action should ramp up. So many things should remain, unless something extraordinary occurs: the practice of voting, most political boundaries, judicial review, constitutions."

- **Mary Alice McCarthy,** senior policy analyst, Higher Education Initiative, New America, said, "Whether technology strengthens or weakens democracy depends fundamentally on the political will of representatives from both parties and their voters to support robust rules and regulations to govern how the internet can be used to spread information and how efforts to spread misinformation will be identified and penalized. I firmly believe that technology and the internet can strengthen democratic processes and institutions. They can do so by making voting easier and more convenient; enabling citizens to communicate more directly and immediately with their representatives; supporting organizing efforts by community-based organizations, unions and political parties; and enabling greater access to information on issues of importance to voters. But, as we have learned over the last decade – and particularly since the 2016 election, technology can also be a source of disinformation, radicalization and polarization. It can be used to spread lies, sow hate and create confusion about what is real and what is not."

- **Stephen Downes,** senior research officer for digital technologies with the National Research Council of Canada, commented, "The internet is gradually moving society from representative democracy to participatory democracy. It does this by creating the capacity for individuals or small groups to do things for themselves. People can educate themselves as a distributed community, they can mobilize themselves as a decentralized social network, and they can finance themselves using a digital currency. As always, it's the extreme and sometimes criminal cases that capture the headlines. But the real change to society is taking place among the rest of us, as day by day we become more capable of organizing ourselves, and less reliant on the rich and powerful to do the organizing for us."

- **Amy Webb**, founder of the Future Today Institute, wrote, "There are too many variables in play to predict just one plausible trajectory for the future of our democratic institutions. If we enter a decade of synthetic media without restrictions, increased algorithmic determinism and financial incentives that favor competition over collaboration, the core strengths of our democracies will have eroded. Citizens will be more

vulnerable to misleading information and will be served the kinds of content that capture their attention. However, if we develop guardrails, norms and standards now that encourage transparency, authenticity and collaboration, our democratic institutions could be significantly strengthened. I see movement along both trajectories."

- **Neal Gorenflo,** co-founder of Shareable, a nonprofit news outlet, said, "Tech monopolies and culture are profoundly shaping our lives and perceptions. This is done for profit at the expense of our ability to understand the world, relate to one another constructively, feel valued and have some control over our circumstances. If this monopolist regime and the gaping power asymmetry between platforms and users continue, we'll see a continued decline of democratic institutions."

- **Henry Lieberman,** research scientist, MIT Computer Science and Artificial Intelligence Lab (CSAIL), "The original design criteria for U.S. democracy still are great: government by the people; life, liberty and the pursuit of happiness. But the details and mechanisms of government were designed for the agricultural and industrial age, not today's digital age. By 2030, this will become so obvious, and so appreciated especially by younger people, that we will have begun the debate about how to redesign our political and economic institutions."

- **Susan Etlinger**, an industry analyst for Altimeter Group, "Today we have the ability to amass massive amounts of data, create new types of data, weaponize it and create and move markets without governance structures sufficient to protect consumers, patients, residents, investors, customers and others – not to mention governments – from harm. If we intend to protect democracy, we need to move deliberately, but we also need to move fast. I'm less worried about sentient robots than I am about distorting reality and violating the human rights of real people at massive scale. It is therefore incumbent on both public and private institutions to put appropriate regulations in place and on citizens to become conscious consumers of digital information, wherever and however we find it."

- **Jonathan Grudin**, principal researcher for Microsoft, wrote, "Digital media overwhelm people with a sense of the complexity of the world and undermine trust in institutions, governments and leaders. Many people seize simplistic unworkable solutions offered by actual and wannabe tyrants. Add to this the ease of spreading false information and the difficulty of formulating effective regulations for a global system and it is difficult even to envision a positive outcome.

Read the full report: [LINK]

For more information or to arrange an interview, please call 202.419.4372 or email Haley Nolan at hnolan@pewresearch.org

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