# Multinational Corporations, AI, and Geopolitical Influence

by Isabel Pedersen

## ISSUE

AI technologies are disrupting most spheres of human life. Global multinational corporations developing and deploying AI are increasingly wielding political influence over global populations in multiple ways. How are they poised to undermine people's agency in democratic spheres in the future?

## BACKGROUND CONTEXT

The first *Global Affairs Canada* (GAC) priority is to strengthen the rules-based international order through strategic leadership in partnership with multilateral, international and bilateral partners to influence others in driving positive action on global issues. The G7 Charlevoix Common Vision for the Future of AI's first commitment is the "endeavour to promote human-centric AI"[1]. UNESCO's initiative on AI seeks "to achieve fairness, accountability, transparency, gender equality, cultural diversity in AI, to ensure that AI-driven decisions respect human dignity and protect fundamental human rights"[2]. However, the corporatization of AI seems to be fortifying power through the monopolistic practices of large corporations that will disproportionately influence politics and democratic systems[3].

AI is leveraged by rapid corporate growth and substantial profit in the hands of a few companies in the global digital economy. The five largest companies in the world by market value are Internet companies: Microsoft ($862B), Apple ($821B), Amazon ($806B), Alphabet ($780B), and Facebook ($460B)[4]. Some of these US companies are also the top spenders for government policy lobbying[5, 6]. Analysts view the top ten best stock investments for AI as US companies Nvidia, Alphabet, Twilio, Amazon, Micron Technologies, Microsoft, Intel, and Facebook—and Chinese companies Baidu and Tencent[7].

Future projections for corporate dominance in AI development include patents, experts, global investment financing, and papers published. According to WIPO data, China dominates in two categories for future focus growth and innovation: patent applications (37.1%, over US 24.8%) and global investments (60%, over US 29.1%). Chinese universities in particular excel in AI patents; Japanese companies also hold a significant number of patent applications[8].

Sociotechnical trends point to AI's future impact on human agency[9]. Life is becoming increasingly computer-mediated[10]. Most people come into contact with AI through consumer devices marketed to make life easier. Smartphone assistants, digital home assistants, consumer robots, and embodied/wearable devices contribute to everyday life in homes, schools, care facilities, hospitals, and workplaces. Yet they operate through complex, hidden ecosystems of proprietary, AI-enabled data platforms owned by the world's largest companies, mentioned above.



*This policy brief was prepared by the author for the Geopolitics of Artificial Intelligence Symposium, hosted by the Digital Inclusion Lab at Global Affairs Canada on March 12, 2019. The ideas and opinions expressed belong to the author and do not necessarily reflect the views of the Government of Canada.*

The ability for AI algorithms to influence people's actions, opinions, choices, emotions, and behaviours is significant, and it will only increase in future[11]. The constant proliferation of AI-enabled devices by private companies threatens participation in political and public affairs. With largely unregulated international markets[12,13,14] and monopolistic patterns forming, the situation implies that a few powerful companies will control AI emergence as the future unfolds.

**AI in the public sphere and global media outlets**

People are introduced to AI through hyped news, popular science announcements, government sources, science fiction portrayals, and deliberate, sensational product release information from large corporations. Media outlets generate public sphere information by framing a *global AI race* in three persuasive categories: (1) an AI arms race that will facilitate a global superpower, (2) a corporate AI race for global dominance by large companies, and (3) a race for employing AI techniques to win elections through political influence, often using malicious actors. This reductive lens contributes to fear, public urgency, confusion, and distrust over AI emergence, even when generated through legitimate media sources.

**Distrust in governments deploying technology**

Can people trust governments to maintain standards for political engagement when large tech companies are leading automated decision-making systems in so many sectors? Historically, governments' use of technology erodes trust[15]. A 2019 Pew Research study surveyed people in 26 countries and found that "People around the world think cyberattacks on sensitive government data, public infrastructure and elections are likely in the future"[16]. In terms of AI specifically, others warn that AI could have unpredictable impact on democratic systems and practices due to the fact that it can be used to manage political operations during campaigns in multiple ways[17].

**Large companies and political manipulation**

Facebook has 2.32 billion monthly users[18] and it has recently propelled many political movements in significant deployments. Among those was the 2018 Cambridge Analytica scandal involving manipulation of national elections in the US and UK using Facebook data and algorithmic ad targeting. Other Facebook scandals came to light, including the hosting of masses of fake Russian accounts and cybertrolls associated with Russian disinformation operations to influence the US election.[19] Facebook CEO Mark Zuckerberg faced the US Senate in April and the European Parliament in May to testify. Remarkably, his congressional testimony presented AI as the salve for complex problems such as censorship, fairness, and content credibility,[20] revealing how Facebook is projecting a full agenda for further AI development applicable to the political public sphere. Other AI-fuelled technologies that unhinge public trust include *deepfaking*, a technique that can generate fake content that appears real. Targeted geolocation political advertising across social media platforms may serve to incite news

bubbles, denying people their right to balanced news. All of these factors, in combination with the rise of authoritarianism and totalitarian regimes using AI techniques, erode public trust[21].

**Speculative AI advancement by large companies**

Corporate AI research increasingly reveals plans for speculative technologies involving humans using current digital infrastructures, such as extensive cloud-based services held by large companies. AI patents for functional applications, such as natural language processing, sentiment analysis, predictive analytics, etc. rely on assemblages of related technologies already deployed by these large companies, which are backed by long-term funding, perpetuating AI futures with monopolistic trends.

More extreme examples of cognitive AI startups include Neuralink, a neurotechnology company established by Elon Musk (of Tesla and SpaceX) that promotes the claim that human intelligence will require brain-implanted AI. The neurotechnology company Kernel is also working on AI brain implants with a $100 million investment. Research by the non-profit OpenAI has led to GPT-2, which can produce context-driven AI-generated text that could deceive a person into believing it was written by a human. Companies could develop it for political tactics. Large companies participating in "unmonitored forms of AI experimentation on human populations" is an AI accountability and human harm issue[22]. They base justifications for development on speculative future forecasting[23]. Disruptive AI technologies are developed largely outside of government oversight. In a few cases, employees have campaigned against their employers for using AI systems in ways that erode rights.

**Positive participation with international organizations**

On the other hand, many companies are working with the UN's multi-agency, multi-stakeholder, interdisciplinary approaches, including the *AI for Good* program and Global Summit. Large companies, including Microsoft, Apple, Amazon, Google, and Facebook, contribute to Partnership for AI (PAI), along with non-profit organizations, such as Human Rights Watch. World Bank Group partners "with Amazon and Google AI scientists in compiling the diverse data sets and developing the algorithm" for early famine detection[24].

**CONSIDERATIONS**

- Large technology companies impose political presence indicative of an AI monopoly;
- The global AI race is not just hype; it is a powerful persuasive engine that is altering public opinion and affecting sociotechnical trends;
- Projections of disruptive and even speculative AI technology, entrepreneurs, startups, and funding sources could help inform future political influence over global populations;
- AI technologies under development should be accountable to Algorithmic Impact Assessment (AIA) tools, within UN's multi-agency, multi-stakeholder, interdisciplinary approaches. AI Now provides an Algorithmic Impact Assessment (AIA) framework.

## References

[1] G7 Charlevoix Common Vision for the Future of Artificial Intelligence, 2018.
[2] International Telecommunications Union (ITU). United Nations Activities on Artificial Intelligence (AI), 2018.
[3] Akın Ünver, Artificial Intelligence, Authoritarianism and the Future of Political Systems, Cyber Governance and Digital Democracy, Edam — The Centre for Economics and Foreign Policy Studies, 2018.
[4] Financial Data, Nasdaq.com, Mar 2 2019.
[5] US companies are the top spenders for government lobbying, pressing lawmakers who are trying to rein in the power of large internet service providers with new privacy and antitrust rules.
[6] Dave Paresh, "Google, Facebook spend big on U.S. lobbying amid policy battles" Reuters, Jan. 22 2019.
[7] John Divine, "Artificial Intelligence Stocks: The 10 Best AI Companies," U.S. News & World Report, 19 Mar. 2018.
[8] WIPO. WIPO Technology Trends 2019: Artificial Intelligence. Geneva: World Intellectual Property Organization, 2019.
[9] Jan-Philipp Steghofer, Ada Diaconescu, Steve Marsh, and Jeremy Pitt, "The Next Generation of Socio-Technical Systems: Realizing the Potential, Protecting the Value [Introduction]" IEEE Technology and Society Magazine, vol. 36, no. 3, pp. 46-47, Sept. 2017.
[10] Andrew Iliadis and Pedersen, Isabel, "The Fabric of Digital Life: Uncovering Sociotechnical Tradeoffs in Embodied Computing Through Metadata" Journal of Information, Communication and Ethics in Society, June 2018, 16(3), pp. 311-327.
[11] Mark Latonero, "Governing Artificial Intelligence: Upholding Human Rights and Dignity" Data & Society, 2018.
[12] Miles Brundage, Shahar Avin, Jack Clark, Helen Toner, Peter Eckersley, Ben Garfinkel, Allan Dafoe et al., The Malicious Use of Artificial Intelligence: Forecasting, Prevention, and Mitigation Report, Feb 2018.
[13] International Telecommunications Union (ITU). United Nations Activities on Artificial Intelligence (AI), 2018.
[14] The Case for Extended Intelligence: Technological Advancement in Service of People and Planet. The Council on Extended Intelligence, February 2019.
[15] Gianluca Misuraca, David, Clara Centeno, Yves Punie, Fenareti Lampathaki, Yannis Charalabidis, Dimitris Askounis, David Osimo, Katarzyna Szkuta, and Melanie Bicking. Envisioning Digital Europe 2030: Scenarios for ICT in Future Governance and Policy Modelling. JRC Scientific Reports, European Union, 2010.
[16] Pew Research Center, "International Publics Brace for Cyberattacks on Elections, Infrastructure, National Security," 9 Jan. 2019.
[17] Aviv Gaon and Ian Stedman, "Call to Action: Moving Forward with the Governance of Artificial Intelligence in Canada," Alberta Law Review 56, no. 4 (2019): 22.
[18] Number of monthly active Facebook users worldwide as of 4th quarter 2018," Statista, 6 Mar. 2019.
[19] Scott Shane, "The Fake Americans Russia Created to Influence the Election," New York Times, 7 Sep. 2017.
[20] AI Now Report 2018, AI Now Institute, Dec. 2018.
[21] AI Now Report 2018, AI Now Institute, Dec. 2018.
[22] AI Now Report 2018, AI Now Institute, Dec. 2018.
[23] Isabel Pedersen and Quinn Dupont "Tracking the telepathic sublime as a phenomenon in a digital humanities archive" Digital Humanities Quarterly Vol 11 (4), 2017.
[24] World Bank Group Activities, International Telecommunications Union (ITU). United Nations Activities on Artificial Intelligence (AI), 2018, p. 59.