The SDG Digital Acceleration Agenda Amid Data Colonialism

John Banks, graduate of the *University of Guelph*

Conversations on technology's role in implementing global Sustainable Development Goals (SDGs) are almost exclusively centered around the Digital Acceleration Agenda and the stated benefits that digitalization offers developing countries. The Digital Acceleration Agenda (DAA) has since spawned several Digital Acceleration Projects (DAPs) across the developing world dedicated to improving communications infrastructure and government services. There is considerable merit to its argument that the Fourth Industrial Revolution allowed states to expand their administrative capacities and the accessibility of government services. The defining characteristic of the Fourth Industrial Revolution is the newfound ability to collect and process unprecedented amounts of data, generate new information and insights from that data on an industrial scale, and make these processes increasingly accessible. As a result, surveillance has become both an industry and a primary method of extracting value in digital economies. New communication platforms using industrialized surveillance have created advertising spaces that now seek to inform and influence behaviour, swaying elections around the world and even pushing people towards genocidal violence in places such as Myanmar. A global, digitalized financial system and cryptocurrencies have enabled organized crime, oligarchs, and other ill-intentioned actors to conceal corrupt transactions and hide their income



from authorities far better than ever before. In a trade-off with benefits for government services, what the Fourth Industrial Revolution offers developing states are enduring challenges to their sovereignty in exchange for overpromised development outcomes.

Data Colonialism in Action

On June 30th, 2022, the CEO of Mauritius Telecom, the principal provider of internet services in the island nation of Mauritius, announced their resignation to the company's board of directors with a bombshell in tow: that the Prime Minister of the country had asked them to allow technicians working for the Indian government's Research and Analysis Wing to tap into the island's online traffic and collect data through key infrastructure. According to statements made by Indian intelligence sources to the Indian news site, The Print, the stated purpose of the measure was to ostensibly counter efforts (alleged by the Indian government) of the Chinese firm Huawei to conduct its own data surveillance and espionage on the island and in India (Swami 2022). These admissions mark a politically explosive example of how regional powers are utilizing surveillance and data management technologies to jockey for greater influence over other states in their orbit, like past colonial resource scrambles. Data centres such as the ones at the landing station are an increasingly relevant driver of digital economies. The Data Center Coalition industry trade association and the professional services consultancy firm PricewaterhouseCoopers asserts the



industry produces tens billions of dollars in GDP growth annually and tens of thousands of skilled jobs in the economy of the United States (PWC, 2023, p. 17). However, these gains are entirely unrealized in countries where data resources are extracted, imitating the colonial extractivism of previous centuries. The Mauritius scandal took this logic a step further, allowing India unfettered access to these resources with the express intent of shutting out a rival power from accessing the same.

Typically, this sort of infrastructural power has been the domain of states within their borders. However, technology companies today stake their claims to this power, leading to "digital sovereignties," defined by Kelton et al. (2022) as emerging from "commercial development of and control over critical software and hardware, and the consequent effects on human behavior." (p. 1977). While scholars like Kelton et al. (2022) recognize this sovereignty operates alongside state sovereignty, they also offer the means for governments to leverage their technology sectors to undermine the sovereignty of other states, often with negative ramifications for the development of impacted states. In the case of Mauritius, it must navigate the regional power competition between India and China over its data resources.

Economic Subordination in the Global Knowledge

The examples outlined above are only preliminary uses for technologies in their infancy to affect high-stakes political



events. However, mass adoption opens the floodgates for the economic subordination of weaker states or of market activity entirely. In an example of the latter, the Iranian government has significantly experimented to leverage its disinformation capabilities to wage "pump-and-dump" schemes, bolstering domestic assets in precious metals to evade sanctions (Goldenberg et al., 2022, p. 3). Subordination of developing states is already happening in the global knowledge economy, which asymmetrically concentrates the possession of data collected from developing economies into the hands of foreign technology companies. These asymmetries have profoundly developing poor impacts on economies' capacities commercialize their data at a time when Big Data is commonly regarded as the "new oil." This is especially true relative to the Global North and Asia's rising powers, which commercialized their data for domestic industry without such asymmetries.

South African scholar Michael Kwet (2019) offers the example of Uber extracting not just incredible amounts of geolocation and travel data from South African users but also displacing domestic taxi services in addition to extracting millions of dollars in revenue flows from the country through a 25% commission on sales. In 2019, it was estimated that Uber had a market share of 75% throughout South Africa's ridesharing industry, demonstrating its dominance in an extremely uncompetitive market (Toyana & van de Berg 2019). All of this is possible with Uber's immense investor backing and resources, enabling it to engage in predatory practices to expand its market share (Kwet, 2019, p. 6). In South Africa, Uber had the resources to undercut



its rivals to build a supply of drivers through financial incentives, and then steadily increased its commission to pressure driver incomes downwards (Macmillan 2022). Through this market dominance, Uber is able to collect and commercialize an incredible amount of data on South Africans' rides, reinforcing these asymmetries over rival, domestically-based ridesharing enterprises. Kukutai and Cormack (2021) refer to economic relations based on this asymmetry (which they refer to as an epistemic or knowledge hierarchy) as foundational to "data colonialism" (p. 122), or in other words, the extraction of the experiences of the Global South for the commercial use of developed states. Under colonial surveillance, "Indigenous peoples are always known, never able to be unknown, and never the knower" (Cormack & Kukutai, 2021, p. 131), a dynamic that holds true under data colonialism. Kukutai and Cormack (2019) recognize the use of surveillance to control and politically divide colonized populations has been a feature of colonialism since its inception, drawing a continuity between past colonial projects and our current global digital economy. Indeed, the pioneering information technology firm IBM was an instrumental contractor in the creation of apartheid South Africa's punch card surveillance system (Kwet, 2019, p. 15).

This data-colonial epistemic hierarchy and its impact on development prospects is evidently detrimental, or at the very least, exploitative. From the perspective of international political economy, Susan Strange (1988) defines the "knowledge structure" as "determining what knowledge is discovered, how it is stored, and who communicates it, by what means, to whom



and on what terms" (p. 117). On the micro-level of political economy, Yale political economist Shoshanna Zuboff (2019) referred to the economic logic of this epistemic hierarchy between individuals and technology firms as the "division of learning," analogous to Marx's division of labor, and premised on "who knows," "who decides," and "who decides who decides" (p. 181). In both frameworks, Western and Chinese multinational corporations dominate all points of inquiry for most digitalizing economies and thus can commercialize these data resources with scant positive developmental impacts relative to the value extracted. This is infrastructural power at its core, enshrined by dependence on proprietary software and technologies that are often monopolized by foreign firms. In the context of the DAA and DAPs, these points of inquiry must be explored as these programs' proposed solutions are considered.

SDGs Under the Digital Acceleration Agenda

In the sniffing scandal, Prime Minister Pravind Kumar Jugnauth extralegally ordered Mauritius Telecom to allow for Indian surveillance. Under Zuboff's (2019) framework, the government of India is demanding access, Jugnauth ultimately decides who knows, and the Research and Analysis Wing decides who knows. The public has no idea about what information is being scrutinized or why, a division of learning actively reinforced by a total lack of transparency from domestic authorities. When asked in Parliament about details of the scandal, the Prime Minister had the microphone of the



opposition leader muted (Mitra, 2022). From India's stated perspective, Huawei had the potential to contest its regional dominance and control over the division of learning to further Chinese power projection in the region. To put it another way, the difference between commercial surveillance and military information operations, according to Dr. Major Jessica Dawson for the West Point Cyber Defence Review, is "who is doing the targeting and who is the target" (2021, p. 69), demonstrating the blending of these interests.

With this clear relationship between power projection and the expansion of commercial surveillance in mind, several proposed digitalized solutions to the SDGs proposed by the Digital Acceleration Agenda become questionable. Its SDG2 solution to ending hunger places control over food security to advanced foreign agrobusinesses capable of data management at scale (UNDP, 2023, pp. 29, 32). Moreover, the agricultural data collected during such operations would be owned, stored, and controlled by those businesses, with no real prospect for their commercialization by domestic firms.

Or consider the impacts of these economic relations on SDG 3 (UNDP, 2023, p. 33). Developing countries lack vaccine manufacturing capacities. Manufacturing and distribution data are possessed by advanced biomedical firms and are not available to developing states looking to build these manufacturing capacities. Similarly, biotechnology firms harvest biometric data from developing countries to advance their own scientific research and commercial products and services (DNI, 2021, p. 1), without much of a real benefit for developing economies.

Even the lofty results of a digitalized SDG1 have proven elusive. Many of the example solutions in the Digital Acceleration Agenda are platform services from NGOs and businesses. There are already obvious dependency issues evident, and the availability of these services is entirely dependent on foreign capital's continued interest in funding and expanding these services. Technology sectors are already extremely volatile, with many firms unable to survive long-term. Thus, these long-term solutions are rather precarious and entirely removed from domestic stakeholder interests. Other examples, especially fintech solutions, overpromise their capacity to facilitate development. Take the proposed private solution for SDG1, M-PESA, a fintech service facilitating microfinancing solutions for bankless users through cell phones (UNDP, 2023, p. 31). In 2019, a study conducted on the effects of the service found that the seminal paper celebrating M-PESA as a robust fintech solution and acclaimed by global development did not account for the ramifications of service withdrawals or even enterprise exit (Bateman, 2019, p. 483). Bateman et al. (2019) are quite critical of the methodology and conclusions of that paper. Not mincing words, they write that M-PESA hype helped "catalyze into existence a largely false narrative surrounding the power of the fin-tech industry to advance the cause of poverty reduction and sustainable development in Africa (and elsewhere)" (Bateman et al., 2019, p. 390), and relate pushes for fintech solutions to the failed microcredit movement of the 1980s (Bateman et al., 2019, p. 482). Furthermore, the study criticized the replication of colonial



extraction logics through M-PESA, with the overwhelming majority of generated wealth by the service instead going to the shareholders of the UK firm Vodaphone (Bateman et al., 2019, p. 487). Referring to the points of inquiry offered by Zuboff (2019), the divisions of learning are entirely dominated by Western firms and their stakeholders, while the public is in the dark about the real benefits of the service.

Conclusion: The Empty Promises of Digitalization

development outcomes offered by the Digital Acceleration Agenda are far too lofty and based on far too many assumptions to take at face value. The benefits offered by digitalization are certainly real but overpromised and difficult to measure in the short term, particularly among services offered by private enterprises. Many of the arguments for digitalized solutions to the SDGs are rooted in utopian and ideological visions of a future economy that often find themselves divorced from reality. Development actors leading the charge often ignore the very real asymmetries of power and resources between developing states and foreign technology companies that their solutions both create and enshrine. Moreover, certain prominent development actors such as the Gates Foundation have strong financial incentives to push these solutions regardless of the outcome. Development outcomes are infamous for preceding promises that rarely materialize, and current actors must be more lucid about the exploitative and dependent relations the current global knowledge economy fosters. As it stands, there is



little to show that the development outcomes are either sustainable in the long-term, that they provide opportunities for equitable wealth generation, or that they will provide comparable benefits experienced by developed economies that digitalized over the past 50 years. Digitalization is not enough for development outcomes, developing states must be able to develop domestic technology sectors to maximize the benefits of digitalization.



References

- Bateman, M., Duvendack, M., & Loubere, N. (2019). Is fin-tech the new panacea for poverty alleviation and local development? Contesting Suri and Jack's M-Pesa findings published in Science. Review of African Political Economy, 46(161), 480–495.
 - https://doi.org/10.1080/03056244.2019.1614552
- Cormack, D., & Kukutai, T. (2022). Indigenous Peoples, Data, and the Coloniality of Surveillance. In Transforming Communications Studies in Cross-Media Research.

 Springer International Publishing. https://doi.org/10.1007/978-3-030-96180-0_6
- Dawson, J. (2020). Microtargeting as Information Warfare. SocArXiv. https://doi.org/10.31235/osf.io/5wzuq
- Goldenberg, A., Reid Ross, A., Stark, L., Farmer, J., Donohue, J., Sohn, A., Finkelstein, J., Ramos, C., Sudhakar, P., Glover, T., Perth, K., Modi, M., Newton, H., Kofford, A., & Hopkins, M. (2022, March 9). On the diseconomy of memes: Stonks, crypto and the Wager Against Democracy. Network Contagion Research Institute. https://networkcontagion.us/reports/3-4-22-on-the-diseconomy-of-memes-stonks-crypto-and-the-wager-against-democracy/



- International Telecommunication Union, United Nations
 Development Programme. 2023. SDG Digital Acceleration
 Agenda. https://www.sdg-digital.org/accelerationagenda
- Kelton, M., Sullivan, M., Rogers, Z., Bienvenue, E., & Troath, S. (2022). Virtual sovereignty? Private internet capital, digital platforms and infrastructural power in the United States. International Affairs (London), 98(6), 1977–1999. https://doi.org/10.1093/ia/iiac226
- Kwet, M. (2019). Digital colonialism: US empire and the new imperialism in the Global South. Race & Class, 60(4), 3–26. https://doi.org/10.1177/0306396818823172
- Macmillan, D. (2022, July 11). Uber promised South Africans better lives but knew drivers risked debt and Danger.

 Washington Post. https://www.washingtonpost.com/business/2022/07/11/uber-driver-south-africa-attacks/
- Mitra, D. (2022, July 15). Snooping storm brews in Mauritius over Indian team accessing internet landing station. The Wire. https://thewire.in/diplomacy/mauritius-snooping-storm-india-internet



- National Counterintelligence and Security Center. (2021, February). CHINA'S COLLECTION OF GENOMIC AND OTHER HEALTHCARE DATA FROM AMERICA: RISKS TO PRIVACY AND U.S. ECONOMIC AND NATIONAL SECURITY. https://www.dni.gov/files/NCSC/documents/Safeguarding OurFuture/NCSC_China_Genomics_Fact_Sheet_2021revis ion20210203.pdf
- PWC. (2023). Economic, Environmental, and Social Impacts of Data Centers in the United States Including Statewide Impacts for Arizona, Ohio, and Virginia. The Data Center Coalition. https://static1.squarespace.com/static/63a4849eab1c756a1d3e97b1/t/65037be19e1dbf4493d54c6e/1694727143662/DCC-PwC+Impact+Study.pdf
- Strange, S. (1988). States and markets: Susan Strange. Pinter.
- Swami, P. (2022, July 28). How fears of Chinese Digital Espionage "got raw involved in Mauritius, led to snooping scandal."

 ThePrint. https://theprint.in/world/how-fears-of-chinese-digital-espionage-got-raw-involved-in-mauritius-led-to-snooping-scandal/1055705/
- Toyana, M., & van de Berg, K. (2019, December 4). Bolt expands South African operations to small towns. Reuters. https://www.reuters.com/article/bolt-safrica-idUSL8N28E4AU/
- Zuboff, S. (2019). The age of surveillance capitalism: the fight for the future at the new frontier of power. Profile Books.

