Effects of Digitalization on Workers, Public Services, and the Economy

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These are indeed, strange times; we live amidst the tools that can alleviate drudgery, augment human cognition, and revolutionize the knowledge commons. Yet, we are besieged. These tools — data, AI, and platform technologies — seem to march ahead with an agency that undermines our co-existence, and our public values.

How do we frame the challenges we face and how must we act to dismantle them?

The first challenge is that digital corporations, as the owners of humanity's data and algorithms, wield enormous infrastructural power.

In this changing social contract, monopoly structural power is transmuting into a more insidious problem — a parasitic behavior that erodes our institutions, but something we seem to be unable to replace.

Let's take the case of healthcare. The race to build AI models in diagnosis and treatment recommendation is a huge business. However, the capability to process data for public innovation is not distributed.

Data alone is not the only factor for AI models. Contemporary AI is increasingly driven by the inputs of computing power and highly skilled labor. Amazon (AWS), Google (Google Cloud), and Microsoft (Azure) own two-thirds of the cloud infrastructure on which computing systems run.

What this means is that we have a de facto social contract that is coercive — public sector innovation is wholly dependent on these tech services that they must pay for. Quite ironically, such innovation requires that we part with public datasets created through civic-public collaboration so that these companies can train their algorithms. The public sector thus ends up paying twice.

The infrastructural power of Big Tech undercuts the very public space of the market and of innovation as a public good. Furthermore, digital public goods provisioned by the state are invariably captured by private players. India's Unified Payments Interface protocol is used by two large payment platforms, PhonePe and Google Pay. They hold the market share but do not pay any transaction fee to use the protocol.

It cannot also be forgotten that the digital connectivity infrastructure that powers everything is not public enough. In India, the public sector has less than a 10% share in the country's telecom and internet infrastructure.

What we confront is a smartification of factories, homes, and cities, with research studies indicating that the lack of public alternatives can lead to increased financial costs, inappropriate risk allocation, misallocation of resources, over-engineered products, and underprovision of citizens' needs.

We need a realignment of the relationship between public and private values — a shift back to public law logics from purely market logics, and new public norms for data ownership, use, and sharing. AI models can be built by the public sector and managed through civic stewardship models.

A second challenge is that with data and algorithms as the ordering principle in public services, there are new risks for human agency and autonomy. These risks are transferred to the human edges of the system while authority is centralized within the algorithm. This has direct consequences for public trust, labor rights, and democratic ideals.

The Robodebt scheme in Australia, as we know, is a tragic instance of techno-solutionist responses. The scheme was proposed by the Department of Human Services (DHS) in 2015, designed to recover supposed overpayments from welfare recipients retrospectively. It relied heavily on algorithmic processes for "income averaging" to assess income and entitlement to benefit.

Today, after causing extraordinary stress to pensioners and to the bureaucracy and frontline staff, there seems to be a moment of reckoning. A [report](#) by a special commission in July 2023 clearly expresses the need for legislative reform. It questions the free data sharing between the Taxation Office and the Human services, recommends that the departmental websites should contain information advising that automated decision-making is used and explaining in plain language how the process works. It argues that business rules and algorithms should be made available to enable independent expert scrutiny. What the Robodebt case tells us is that the discourse of the ungovernability of AI should be challenged.

We also know that platform firms use narratives of flexibility to hide the ruthless exploitation of workers in digitalized workplaces. The independent gig worker is an invention of capitalism to displace hard-won labor rights and steadily disenfranchise workers. Through workplace and social surveillance technologies, including monitoring social media accounts, workers are subjected to pervasive surveillance, discipline and punishment. Unsurprisingly, a disproportionate burden of such violation is borne by women and racial minorities.

Entire ministries are being outsourced today to techno-managerial firms in the name of minimizing operational expenses. Big Tech firms also peddle the myth of job creation but contribute little to domestic value creation and job opportunities in developing countries.

Even if jobs are indeed being created, what we observe is a shift towards contractualization and the lack of protections against unfair practices, abuse, accidents, as well as erosion of data rights.

The regulatory context can also sometimes work to the detriment of labor organizing and unionizing. For instance, as per amendments to the law, flash strikes are now outlawed in India.

As services transition to platforms, unscrupulous private actors steadily encroach into traditional public services. Byju's, a large EdTech monopoly in India, was recently in the news for its shocking treatment of teachers. The model is built on casualization and extraction, but for many teachers laid off during the pandemic, the market presents a Hobson's choice. Edtech companies also make the precious labor of teachers seem irrelevant — teachers are just facilitators, and learners, it is purported, can be self-sufficient.

Thankfully, we are now understanding more about the algorithmic workplace about the games of the gig economy. A new civic rights framework on data is urgently needed so that the public sector and the market are bound by a data constitutionalism for workers.

The third challenge is that laws are still playing catch-up, and courts are not fully able to grapple with the connection between decent work, data rights, and public values.

Traditional legal frameworks don't meet digital reality even halfway. Competition, antitrust, and tax laws are not really able to go very far. The problem is that in most countries, workers do not have access to data about what kinds of information the algorithm collects and generates about themselves.

Yes, this issue has been fought in cases in the EU, and limited rights have been granted by courts, but data rights are not yet part of labor rights in a foundational way.

Once again, while national laws have some impact, the fact that Transnational Corporations (TNCs) operate globally, and there is no regulation at that level, like a binding treaty, makes it easy for them to evade actual accountability to workers.

Nowhere do laws see data as a democratic resource, as a collective right of workers and people — going beyond personal data protection. In the Uber case, the Amsterdam court unfortunately opined that the right to data access does not extend to the objective that the workers who took Uber to court wanted to

achieve. This was the goal of understanding the algorithm for price determination, but the court didn't see this as legitimate.

The fourth challenge is addressing the questions of what to do about collective bargaining and how to organize for the new context.

We have witnessed some extraordinary grassroots power in the platform workers' context. The beautiful declaration from the Homeless Worker Movement in Brazil that talks about the struggle for digital sovereignty, the AIGWU, the UK Cabs and Couriers Union, and the Amazon union are great examples. These successes in organizing, collective bargaining, litigation are remarkable.

And the final frontier is hard to reach — these are workers who toil for web-based platforms, dispersed across different jurisdictions. However, research indicates that in countries where the collective bargaining coverage is traditionally high, it is relatively easier to launch social dialogue in the platform economy ([Lamannis 2023](#)). We see this in the case of India as well, where the subnational governments have made inroads along with workers.

We cannot wear these laurels complacently. Public sector workers need to examine, in a forward-looking manner, the nature and role of data and digital intelligence in their work. The EU's proposed [Platform Work Directive](#) is encouraging as it starts with the presumption of employee status. It also recognizes how algorithms impact basic labor rights such as wage, working time, leave, collective bargaining, social security, and benefits. The useful takeaways offered to workers are:

(i) increased transparency on algorithms;
(ii) ensuring human monitoring of working conditions; and
(iii) workers' right to contest automated decisions.

Public sector workers are uniquely positioned to develop an articulation about the connections between decent work, public interest, and data rights — not limited to political rights alone but also economic rights. This is not only for platform workers but for the trade union movement in general.

The task is to reclaim digitalization as a force for the public good and to assume leadership in framing data as a social resource to be governed democratically.

Additionally, we all need to keep an eye on global developments. The [ILO's experts committee came out with an initial report](#) on decent work in the platform economy last year, and discussions are ongoing for further deliberation.

The fifth and final challenge is to achieve cross-border solidarity.

We stand at a crossroads. The powers that be know where the rubber meets the road. The OECD updated its due diligence Guidelines on corporate conduct earlier this year. We fought hard, but the Guidelines in the tech chapter simply don't recognize data value; they negate the data power that corporations wield. There is also an absence of considerations beyond data privacy. Questions of digital intelligence and aggregate data do not find a place in the Guidelines. The chapter also fails to mention any emerging or frontier technology, in the nature of generative AI models, cryptocurrency, or metaverse, and their regulation. They don't protect government open data from private capture. There is no mention of digital taxation in the tax chapter nor downstream value chain impacts. These blind spots are damning. What this means is that the world will be divided into one set of territories where governments can rein in big tech and protect their citizens, and the other where people are condemned to extractivist neocolonialism.

Today, trade agreements are used to delegitimize local authorities from bringing Big Tech to book for opaque algorithms. This signifies that unless we forge a solidarity across regions, we will be stuck in defensive actions, forced to talk only about risk mitigation and redressal of harms in AI value chains. Where we need to move is a solidarity politics to proactively build the language on the public value of AI — for enriching civic life, enabling inclusion, and preserving the social commons of knowledge — so that work can produce meaning.