Data Cooperatives: Digital Empowerment of Citizens and Workers

A Whitepaper by
Pentland, A., Hardjono, T., (MIT Connection Science)
Penn, J., Colclough, C., (UNI Global Union)
Ducharme, B., Mandel, L. (MIT Federal Credit Union)

During the last decade, all segments of society have become increasingly alarmed by the amount of data, and resulting power, held by a small number of actors. Data is, by some, famously called ‘the new oil’, and comes from records of the behavior of citizens. Why then, is control of this powerful new resource concentrated in so few hands? During the last 150 years, questions about concentration of power have emerged each time the economy has shifted to a new paradigm; industrial employment replacing agricultural employment, consumer banking replacing cash and barter, and now ultra-efficient digital businesses replacing traditional physical businesses and civic systems.

As the economy was transformed by industrialization and then by consumer banking, powerful new players such as Standard Oil, J.P. Morgan, and a handful of others threatened the freedom of citizens. In order to provide a counterweight to these new powers, citizens joined together to form trade unions and cooperative banking institutions, which were federally chartered to represent their members’ interests. These citizen organizations helped balance the economic and social power between large and small players and between employers and worker.

The same collective organization is required to move from an individualized asset-based understanding of data control to a collective system based on rights and accountability, with legal standards upheld by a new class of representatives who act as fiduciaries for their members. In the U.S. almost 100 million people are members of credit unions, not-for-profit institutions owned by their members, and already chartered to securely manage their members’ digital data and to represent them in a wide variety of financial transactions, including insurance, investments, and benefits. The question then is, could we apply the same push for citizen power to the area of data rights in the ever-growing digital economy?

Indeed, with advanced computing technologies it is practically possible to automatically record and organize all the data that citizens knowingly or unknowingly give to companies and the government, and to store these data in credit union vaults. The MIT Trust Data Consortium has built and demonstrated pilot versions of such systems already. In addition, almost all credit unions already manage their accounts through regional associations that use common software, so widespread deployment of data cooperative capabilities could become surprisingly quick and easy.
As a consequence, it is technically and legally straightforward to have credit unions hold copies of all their members’ data, to safeguard their rights, represent them in negotiating how their data is used, to alert them to how they are being surveilled, and to audit the companies using their members’ data. The power of 100 million US consumers who are practically and legally in control of their data would be a force to be reckoned with by all organizations that use citizen data and would be one very decisive way to hold these organizations accountable. The same potential for credit unions to balance today’s data monoliths exists in most countries around the world.

It is critical to note that credit unions and similar organizations have fiduciary responsibilities to protect the sensitive information that is shared by members, as this is a central element in bringing data rights to the membership. As a consequence, members will gain privacy, transparency, and empowerment as to data use and can direct the use to their collective best benefit as they see fit.

Who will lead this historic, and necessary transformation? The answer could well be trade unions. Many credit unions are directly associated with trade unions, have the same membership pool, and are chartered to represent their members in transactions related to their employment. Worldwide, this transformation could be led and coordinated by national and global trade unions. A critical first step will be to affirm worker’s data rights into legislation and regulation through primarily collective bargaining but also legislation and regulation. Such rights would protect against manipulation, discrimination, and unreasonable surveillance. This dialogue would also address those aspects of decent work that should not be quantified.

The ability to balance the world’s data economy depends on creating a balance of stakeholders. Today citizens and workers have no direct representation at the negotiation table, and so lose out. By leveraging cooperative worker and citizen organizations that are already chartered in law virtually everywhere in the world, along with technology that has already been demonstrated, we can change this situation and create a sustainable digital economy that serves the many, and not just the few.

---

1 Viljoen, Salomé. Forthcoming.