Future of Institutions

DIALOGUE SUMMARY

Title/topic:
The maturation of privacy enhancing technologies

Organizers:
RadicalxChange Foundation

Key takeaways:
One common thread of this Dialogue was summarized by Divya Siddarth: “Regulation alone will not get us the precise data ecosystem we want, so to what extent do we need to think about viable incentives for corporate actors moving in these directions?” There is no consensus answer. Legal and sociotechnical elements are likely required for data coalitions to relate to corporate actors.

For data coalitions to aptly serve as civic actors, they require a regulatory framework that places them “at the top of the data funnel,” said Matt Prewitt. In this way, corporate actors will be forced to work with data coalitions to access the information. Privacy enhancing technologies (PETs) can be leveraged to situate coalitions at the top of this funnel, by collecting more and better data, and channeling that information through data pipelines. As such, Dialogue participants suggested that data coalitions pilot approaches which harness PETs.

The challenge(s):
As PETs emerge, this new mode of data sharing will affect the balance of power between the institutions of governments, corporations, and citizens. We will be faced with data collection overload. PETs are likely to create new incentives for massively consolidated data networks and unprecedented opportunities for monopoly. We must anticipate and prepare for the tremendous governance challenges that PETs will present.

Insights for the Future of Institutions:
The data economy is reliant on networks that produce and monetize data. An individual’s data contains deep, predictive insights about those with whom they associate. What one person chooses to disclose will thus affect countless others in important ways, in a feedback effect termed, “disclosure externalities.” Herein lies the problem.

Thus, data must be the subject of shared, democratic decisions rather than individual, unilateral ones. To this end, data coalitions – democratically and mutually accountable consortia for data governance – are a promising solution for institutions. Data coalitions would allow individuals to bundle their data interests, moving beyond the paradigm of individual data disclosure, to one where social groups co-determine shared data disclosure. Such institutions would give individuals meaningful collective bargaining power over their data interests. Individuals would be afforded shared rights to protect their privacy, control information usage, and share in the profits they co-create.

Solutions:
A legal, regulatory, and technological landscape is emerging that could enable PETs to thrive. Now the work is about advancing regulatory and sociotechnical fronts: researching and designing concrete architectures for data coalition governance and technical data sharing, and anticipating where new regulatory measures are needed to support this emerging ecosystem.

Regulation. For data coalitions to become novel organizations within jurisdictions (e.g., EU, USA, US States), we need to address basic threshold issues including delegability and portability. One approach could involve existing trust laws, which flexibly manage rights and provide institutional protections for accountability and fiduciary duties. As a model of this approach, the Data Trusts Initiative is piloting coalitions in the form of legal trusts.

Also needed is comprehensive oversight to govern relations between data coalitions. Like how individuals impose disclosure externalities on other individuals, coalitions will impose externalities on each another. Bundling externalities into coalitions will at least make the problem tractable, but this likely requires overarching regulation that permits coalitions to make claims on one another. Exactly how data coalitions can best interoperate, both to prevent races to the bottom and to cooperate for better leverage and benefits, is an open question.

Governance. Dialogue participants questioned how data coalitions can gather information from their members and serve their interests. The degree to which members are involved in governance will depend on context. Coalitions will need a reasonable amount of discretion to invite participation from members without overburdening them.

Ongoing pilot projects like Mozilla Rally and the Data Trusts Initiative, in which legal trustees are aggregating and serving the interests of those with data assigned to the trust, will discover just how individuals relate to coalitions and participate in their democratic governance.

Technology. Well-governed data coalitions still lack ways to control downstream data uses. Currently, if a coalition makes a deeply democratic and legitimate decision to share their pooled data with a trusted third-party, the coalition must give wholesale access to a copy of that data, losing all control of downstream uses. New data sharing architectures leveraging PETs (e.g., the OpenMined community) will upend this model and only offer third-parties concise answers to specific questions. As a model, government agencies are already using these tools to carefully share their data with academic researchers for privacy-preserving machine learning.

Overall, progress on all three landscapes – governance, technology, and regulation – will be necessary to nurture new data institutions that unlock massive public value and collective intelligence while ensuring contextual integrity, shared ownership, and checks and balances.

Participants:
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