Data governance for equitable development

- An action agenda for the UNCSTD

IT for Change[1]

Contribution to the side event at the CSTD 2024-2025 Inter-sessional Panel

Session Title - Pivoting to Inclusive and Equitable Economies – What Elements for an Integrated Approach to Global Data and AI Governance?

21 October 2024

Data governance for development – the challenge before us

The generative value of data as an economic resource is predicated on maximizing the possibilities for aggregation and re-combination of data points to expand the breadth of analytical insights and possible downstream applications. Policy conversations on addressing the 'data for development' challenge, therefore, understandably tend to focus on breaking free from data silos. A range of techno-institutional measures are recommended for this: data portability, technical interoperability standards for data systems, and the facilitation of data flows through data exchanges/common data spaces.

The Global Digital Compact (GDC) also approaches the challenge of "data governance at all levels as relevant for development" from this starting point. In para 48, it requests the UN Commission on Science and Technology for Development (UNCSTD) to establish a dedicated working group to engage in a comprehensive and inclusive multi-stakeholder dialogue on data governance at all levels as relevant for development.

The intent is for the working group to inform the 81st session of the UN GA with "follow-up recommendations towards equitable and interoperable data governance arrangements, which may include fundamental principles of data governance at all levels as relevant for development; proposals to support interoperability between national, regional and international data systems; considerations of

[1] This piece has been prepared by Anita Gurumurthy and Nandini Chami, drawing upon previous research studies and policy analyses of IT for Change. Particularly, https://botpopuli.net/global-digital-compact-back-sliding-to-a-failed-free-market-playbook/ and https://www.apc.org/node/40379

sharing the benefits of data; and options to facilitate safe, secure and trusted data flows, including cross-border data flows as relevant for development" (para 48).
As the UNCSTD begins its work on this agenda, we outline some critical issues that need to be taken on board.

Issue 1. Data solidarity as a core principle of international data governance

The literature on data governance points to three critical considerations: harm minimization, benefit maximization, and the need for individual and collective rights in data resources. Scholarship on data justice, data sovereignty, and data commons delve into the specifics of these in different ways [Parsons and Viljeon (2023); European Parliament: Directorate-General for Parliamentary Research Services (2022); Micheli, M et al. (2022), Sadowski et al (2021); Taylor (2017); Gurumurthy and Chami (2022); Indigenous Data Sovereignty and Open Data (2023)].

The data solidarity principle proposed by Prainsack et al (2022) straddles these three considerations. This principle extends to the governance of data resources the international solidarity principle proposed in the Draft Declaration on the Right to International Solidarity in 2017 (A/HRC/35/35). The international solidarity principle spells out the right of all "to participate meaningfully in, contribute to, and enjoy a social and international order in which all human rights and fundamental freedoms can be fully realized" (Article 4). The meaningful participation of all people in the 'data order' is a precursor to the achievement of freedoms for all. Further, the Draft Declaration defines international solidarity as "the expression of a spirit of unity among individuals, peoples, States and international organizations, encompassing the union of interests, purposes, and actions and the recognition of different needs and rights to achieve common goals" (Article 1). From this starting point, data solidarity in relation to development can be seen as a composite principle with four foundational pillars[2]:

Pillar I. Maximising public value: Data sharing must produce public value, rather than enabling the appropriation of private value by digital behemoths. This means that in the case of international data exchanges and data commons, licensing regimes for fair use, including public licensing of downstream innovation, and stewardship mechanisms, are necessary to maximize the public good. For example: vaccines produced from research on digital microbial sequences sourced from different country contexts must be made available as a global public good, rather than enabling the consolidation of Big Pharma IP regimes. The proposal of the UN HLAB on AI (2024) to develop a global data stewardship

[2] We have built upon and extended the schema proposed by Prainsack et al (2022)

regime for training data in AI systems may be a good starting point for a set of international guiding principles to maximize public value in data.

Pillar II. Prevention and mitigation of data harms: It is clear, today, that in pan-global AI value chains, the mitigation of data harms can be effective only if there is a coordinated global response rather than fragmented national-level responses. Transnational digital corporations must be required to contribute a certain percentage of their global operating profits to an international fund for data harm mitigation managed by the UN. Due diligence frameworks (such as the EU law and OECD guidelines) need to be updated to hold multi-national enterprises (MNEs) accountable for data harms in their extraterritorial operations. The ongoing multilateral process to explore a legally binding instrument for transnational corporations should devote a segment to the prevention and mitigation of data harms in global data value chains.

Pillar III. Distributive justice: There must be a robust international data taxation framework to enable "some of the profits that emerge from commercial data use to come back to the public domain, which has enabled the data use via the data work of individuals and public infrastructures" (Prainsack et al 2022). This could take the form of a data dividend tax (whose efficacy is contingent on an effective strategy for the valuation of data resources held by companies in different jurisdictions) or mandatory data sharing as a form of a tax paid in data, where large platform companies are obligated to contribute aggregate, anonymized data to data pools and exchanges created by public authorities (see Marian 2022). Another proposal that could inform thinking on an international data taxation framework is the Digital Development Tax, proposed by the UN Secretary-General as a mandatory contribution from transnational platform companies who have profited from the internet to close the connectivity gap.

Part IV. Common But Differentiated Responsibilities for a just and sustainable digital transition. The principle of common but differentiated responsibilities underscores how digital economy leaders have a duty to contribute to the development of sustainable digital industrialization and digital economy development in the majority world. The mandate of the Global Fund on AI (proposed in the GDC) must be expanded to include non-market mechanisms so that public digital infrastructure is completely under public oversight. Public finance should span a range of digital infrastructural goods – from connectivity to platform protocols, open data initiatives, and data exchanges – as well as AI innovation ecosystems in the Global South. Principles for public financing of

a non-extractivist, equitable, and inclusive data economy must guide the common but differentiated responsibilities of member states for a just and sustainable digital transition.

Issue 2. National data policy sovereignty as integral to global data interoperability

Interoperability is a term that originated in technical literature to describe the ability of two or more digital systems to work together. Data interoperability as technical terminology refers to the use of common data formats and protocols that enable information technology systems to communicate with each other. Maintaining technical interoperability is necessary and useful for datasets and data regimes to be compatible with each other and to maximize the development benefits of data sharing.

However, extending the minimum technical interoperability approach to the entirety of data governance is not desirable. This will only drive standards to the lowest common denominator, anchoring everyone to an acceptable benchmark for consumer rights and privacy protections, thus ignoring a whole gamut of rights and principles necessary for a holistic data governance system.

Data governance needs to be understood as a systemic framework, a techno-political regime, incorporating constituent elements of "data handling rules, consumer rights, oversight institutions, and enforcement mechanisms that jointly enable the safe and trustworthy exchange of data flows across jurisdictions." Needless to add, there can be no monolithic approach to determining the most effective techno-political regime of data, as this is a strategic policy choice that each country must make independently, based on political, cultural, and economic realities of its context.

As UNCTAD's Digital Economy Report 2021 (p.131) argues, "While access to data is a necessary condition to benefit from data, it is not sufficient." The economic benefits of data flows are not evenly distributed among countries. In the absence of a globally accepted framework for valuing data resources, developing countries have no recourse for a fair share in the gains of the digital economy. Without the capabilities for data-based innovation, they are in the unenviable position of importing digital products and services built on the exodus of their own data resources at exorbitant costs. Data resources, in and of themselves, also do not fetch significant export earnings.

Calibrating the appropriate politico-economic balance for data governance involves considerations of national security, privacy protection, freedom of expression, cybersecurity, and consumer

protection, in addition to oft-forgotten issues of socio-economic rights, the right to development, access to information, freedom to pursue science, and sustainable knowledge societies.

Issue 3. Domestic innovation capabilities a precondition for the development benefits of cross-border data flows

The dominant policy wisdom on 'data flows with trust' assumes that the liberalization of cross-border data flows with some safeguards for privacy protection and data security is the magic bullet for maximizing the development benefits of data.

Infrastructural and innovation capabilities are hugely unequal among countries, today. Just two countries, the United States and China, dominate the global digital economy. They account for "half the world's hyperscale data centers, the highest rates of 5G adoption in the world, 94 percent of all funding of AI start-ups in the past five years, 70 percent of the world's top AI researchers, and almost 90 percent of the market capitalization of the world's largest digital platforms"(UNCTAD 2021). They also hold over 80% cumulative share in the AI patents granted worldwide (Stanford AI Index 2024).

The majority of developing countries lack the productive capacities that are critical to leveraging data dividends. A 2024 research by UNCTAD highlights that foreign direct investment (FDI) trends in global value chains are steadily shifting towards investment in high-value knowledge-intensive, services both upstream (real-time production) and downstream (marketing). This tends to be predictably concentrated in advanced and emerging economies with digital infrastructural and data/AI innovation capabilities.

Also, digital MNEs, typically, service foreign markets without really establishing a presence in those markets. This means that there is little to gain for digital latecomers in the form of inward FDI by foreign digital MNEs.

There is a double whammy here for the countries playing catch-up. Lacking data innovation capabilities, they have no choice but to be net data exporters, supplying data for analysis and commoditization. While their dependence on foreign digital MNEs goes up, they simultaneously risk getting trapped in low-value manufacturing and services, with no clear pathway to move into high-value segments of global digital value chains.

Quite clearly, under the current political economy of data flows, there seems to be a hollowing out of local capacity in most countries of the South, with innovation dividends accruing to and consolidating the power of a handful of super-large firms. The pertinent question for a solidarity-based international data governance therefore is about how data flight that intensifies distributive inequity can be avoided.

As a report published by the Mandela Institute (2022) argues; "who controls the data and where the data is controlled influences the benefits that economic actors and consumers are able to reap from cross-border data flows and digitally-enabled trade. We, therefore, recommend focusing on the various data ownership and control aspects when regulating cross-border data flows. This necessitates not only consideration of levels of data localization, but also building capacity for data collection, storage, and processing, as well as investing in data centers, which will facilitate the development of domestic digital infrastructure and the industries that require such infrastructure to thrive."

Issue 4. Data equity as a function of a just international economic order

As UNCTAD's 2023 Report on 'Data for Development' underscores: "If data can be perceived as a common good, akin to clean air or natural resources, it necessitates a corresponding framework for its protection and management that encompasses more than just individual control. While acknowledging the significance of personal agency in managing one's data, a fair and just digital economy requires an overarching paradigm shift from private data contracts to social contracts, transcending purely market considerations." Here, benefit sharing from data is recognized as more than the idea of output data equity – the idea that "those who contribute to the development of the [data and AI] system deserve to participate in the sharing of the profits or benefits generated by it". Instead, data equity is recognized to be the much broader project of building a data order that promotes equality of autonomy, by shifting structures of choice to enable the expansion of strategic life choices for all peoples.

This calls for an overhaul of International economic laws in trade, IP, and investment regimes that impede ecosystems for digital innovation and generative digital economies in the South. A global data constitutionalism grounded in development justice will enable nations and communities to build data capabilities for the knowledge societies of their choosing. Only then can we build a global digital economy where the benefits of data innovation dividends are universally realized.

Conclusion

To evolve a global data constitutionalism rooted in principles of equity, inclusion, and rights, the UNCSTD should take on board the issues discussed here. These are important starting points to also define the TOR for the multistakeholder working group. Equally, in terms of composition, selection, and work process, the spirit of the WSIS outcome documents that enable all stakeholders to participate in their respective roles and responsibilities must be effectively operationalized, with particular attention to prevent the elite capture of the process.