

Diversifying economies in a world of accelerated digitalisation

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IT for Change input to the 28th
session of the UN CSTD



Monday, 7 April 2025



Questions the presentation reflects on:

What inclusive policies for innovation and economic diversification can serve better the goals of developing countries?

How can international digital cooperation mechanisms promote industrial and innovation policies that lead to inclusive digital transformation and mitigate inequality?

Imperative here is the context of digital innovation path-dependency – and a global context of the ‘innovation divides’

**Why developing countries need
to move beyond the 'open innovation'
paradigm?**

The open innovation approach

Para 30, E/CN.16/2025/2

It's about combining the power of ideas and knowledge from different actors to co-create new products and find solutions to societal needs, as well as creating shared economic and social value, including a citizen and user-centric approach.

Connected, interoperable open data repositories and open source models for tech-design and source code – when made available through trusted and secure global hubs that ensure their quality and security – seen as enabling transparent, fair and democratic innovation.

The open innovation approach: assumptions about how public value is created

An open digital innovation culture based on multi-stakeholder collaboration automatically generates positive externalities/spillovers through a feedback loop that encourages future innovation.

Its public value proposition is maximised by policy measures that encourage “innovative entrepreneurship” (para 38c, E/CN.16/2025/2) and promote “market competition” (para 26, E/CN.16/2025/2).

The negative externalities of digital innovation – such as social harms of particular data and AI-based innovation trajectories – are seen as something separate and not directly related to society’s collective capacity for socially beneficial innovation (Stephanie Bair 2022). “Effective regulations need to balance supporting industrial growth with protecting the rights of citizens” – (para 25, E/CN.16/2025/2)

The net public value of open innovation, in this view, is the aggregate of the multiplier effects of market-based innovation minus the negative externalities.

Interrogating the assumptions of the open innovation approach

1. Is market-led innovation a sufficient condition for positive externalities?
2. Are negative externalities of innovation unrelated to the sphere of innovation? That is, are they just unintended consequences/ market failures that can be fixed through tweaks?

- 1. Is market-led innovation a sufficient condition for positive externalities?**

Fact 1

Venture capital funding in AI ecosystems not only prioritizes dominant actors and incumbent monopolies but also results in hasty divestment from local companies in developing countries that are creating contextually grounded AI models. There is a hollowing out of local productive capabilities (Gurumurthy and Chami 2024).

Fact 2

Rules on free cross-border data flows, bans on data localizations, and bans on source-code sharing can curtail the ability of tax authorities to collect data and other pertinent information, thereby reducing their capacity to monitor and implement tax measures aimed at the digital economy (Banga et al 2025). This reduces fiscal capabilities for economic and social investment in developing countries.

Economic activity directed through an utilitarian calculus – that looks at a simple aggregate of individual interests, does not automatically generate socially beneficial outcomes.

The role of the state in innovation trajectories is not just about stepping in to "fixing market failures". Instead, it is about putting public value at the centre of production, distribution and consumption. That is, shaping – what Mazzucato calls – “the common good”.

A paradigm of innovation for the ‘common good’ is one where the state actively plays the role of an orchestrator, shaping the trajectories of data and AI innovation in a manner that leverages collective intelligence for the pursuit of collectively identified social goals (Mazzucato 2023)

Thus, there is a blindspot here.

Inference #1

Market-led innovation does not always produce multiplier effects that are socially beneficial

2. Are negative externalities of innovation unrelated to the sphere of innovation?

The mainstream innovation policy discourse tends to narrowly define negative externalities of innovation as harms that are **exogenous** to the institutional ecosystem of innovation. A question that is rarely asked is – how is a particular innovation pathway harming the potential for future innovation that produces social value?

2.1. Mainstream digital innovation today is based on a path-dependency where market concentration is not an anomaly. It is a structural condition.

In data and AI innovation powered by network efforts, there is run-away market concentration.

As Dan Ciurak (forthcoming) observes: “the more data the market leader has, the better the AI models that can be trained, the better the quality of inferences extracted, the stronger the network effects in inducing users to come on board, the greater the data edge, and so on – a self-reinforcing loop that continuously widens the gap between entities with extensive data and those without”.

Literature has highlighted how openness and interoperability in standards and datasets end up exacerbating market power of dominant market players in the current digital paradigm of “power of scale”.

2.2. The digital innovation discourse is based on a normative framework of ‘disruption’ and not ‘value creation for the common good’

Digital innovation is currently focused on leveraging the power of data and AI for strengthening forces of distribution – advertising and marketing; transport and warehousing; control and prediction – in other words finding new ways of value realization in the market rather than strengthening forces of production – finding new ways of enhancing economic output. (Sabine Pfeiffer 2022. Digital Capitalism and distributive forces)

The over-valorisation of the ‘enterprise value of data’ (market capitalisation stemming from data speculation) obscures the public value potential of data.

As Worker Info Exchange has highlighted in its research (2025), the public data deficit – of vital transportation data remaining locked-up in ride-hailing and food delivery platforms’ private enclosure has facilitated a very costly opacity. The Report, ‘Dying for Data’ estimates a ‘wage theft’ of over 1.8 billion dollars (driver earnings lost due to inability of public systems to audit Uber fare and price setting), not to forget other factors that undercut public value – such as urban congestion, poor air quality and so on.

Inference#2

The dominant digital innovation paradigm actively enables the transfer of public value to private hands, enabling a free-riding of the innovation commons, entrenching monopolies, and celebrating cavalier business practices that disregard the social, ecological and economic costs of innovation. This paradigm erodes public value consistently and deliberately!

Recommendations for recentering public value in open innovation policy

Recommendation 1. A methodology to evaluate/assess the public value potential of a particular data innovation trend

From “eliminate social harms and maximise data benefits through encouraging more innovation”, we need to evolve an assessment framework that will evaluate the public value implications of a particular data innovation trajectory: What are the collective goals of this trajectory?

- What is the governance scaffolding to enshrine this?
- Are its various components shaped and co-created through deliberative democratic consensus? How is public legitimacy obtained?
- Who bears the risks of this trajectory? How is it distributed across society?
- Are the rewards of this trajectory equitably distributed?
- What are the accountability mechanisms to hold the powerful actors in the innovation ecosystems to account?

The UN CSTD Data Governance Working Group should take this up as an area for exploring recommendations. We need forward-looking data governance that is tied to an idea of building data innovation trajectories for net public value maximisation. Only then will we have equitable benefit sharing from data (as is the mandate of the WG).

Recommendations for recentering public value in open innovation policy (contd.)

Recommendation 2. Shifting from a focus on DPI development through multistakeholder collaboration to a new paradigm of “innovation public goods” and “purpose-oriented partnerships that drive collective intelligence and sharing of knowledge” (Mazzucato 2023)

- Digital public goods that are **publicly financed and democratically** governed are vital to galvanise people’s stewardship of the digital commons, achieve fair distribution of value, and stimulate an entrepreneurial culture.
- Policies must promote public provisioning of connectivity, cloud services, common data spaces, digital intelligence, licensing standards, and other digital infrastructure.
- The collective right of communities to the knowledge generated from their data and a say in the governance of their data must be protected at all times.

