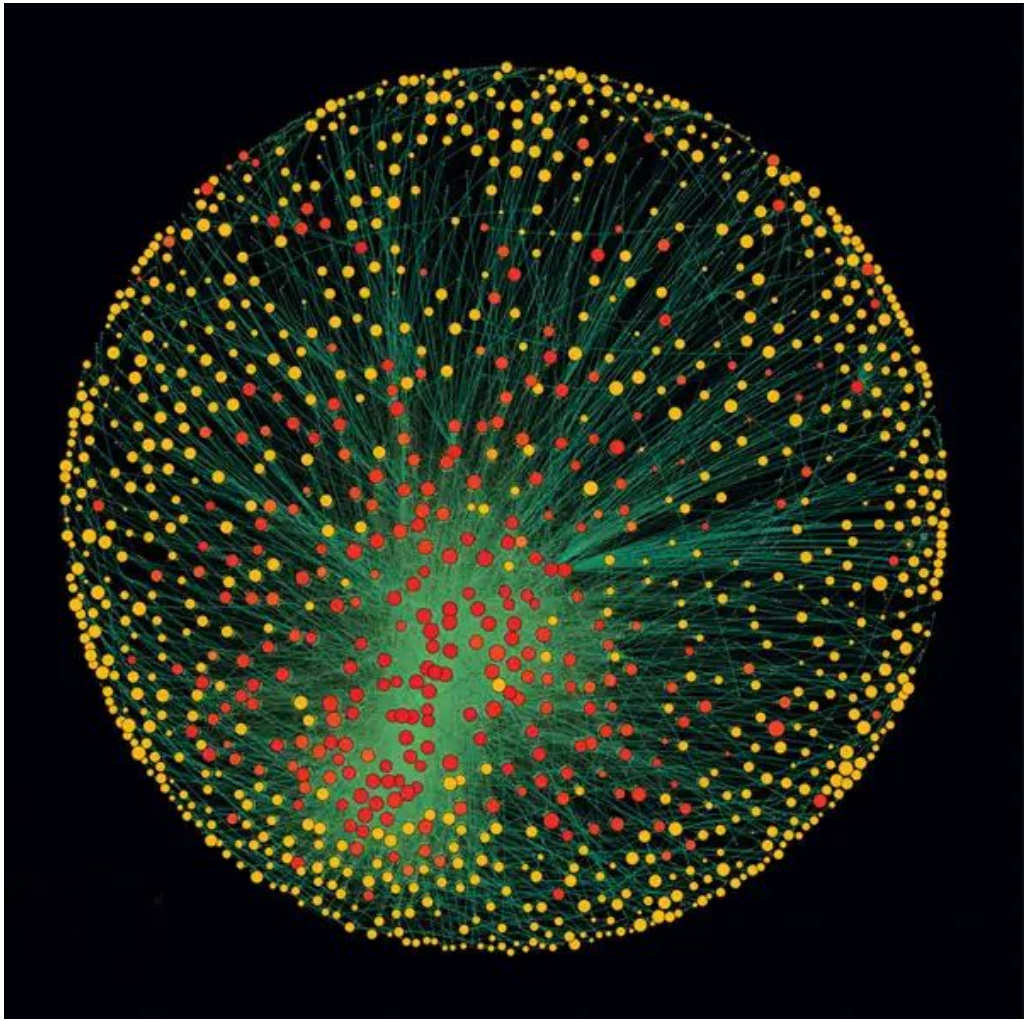
Development and Democracy in the Intelligence Economy

Anita Gurumurthy, IT for Change



Capitalist network: 2011

Of 43000 TNCs, 1318 companies with interlocking ownership

Represented 20 percent of global operating revenues, collectively owning through their shares the majority of the world's large blue chip and manufacturing firms – the "real" economy – representing a further 60 per cent of global revenues.

Super-entity of 147 even more tightly knit companies – all of their ownership held by other members of the super-entity – that controlled 40 per cent of the total wealth in the network. "In effect, less than 1 per cent of the companies were able to control 40 per cent of the entire network,"

Fastforward - 2019 - Digital Economy Report

The economic geography of the digital economy is consistently being led by one developed and one developing country: the United States and China.

account for 75 per cent of all patents related to blockchain technologies, 50 per cent of global spending on IoT, and more than 75 per cent of the world market for public cloud computing.

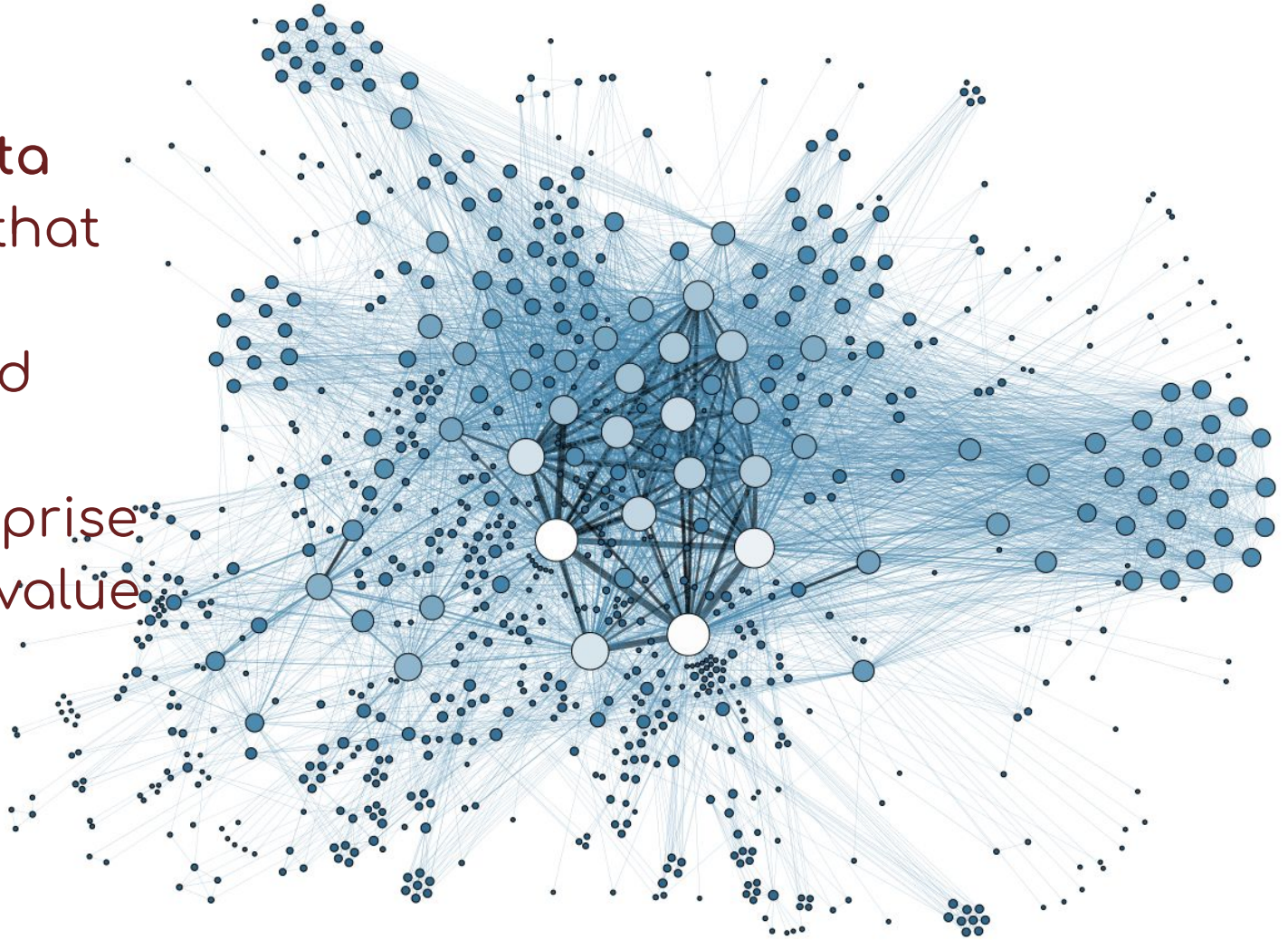
most strikingly, they account for 90 per cent of the market capitalization value of the world's 70 largest digital platforms.

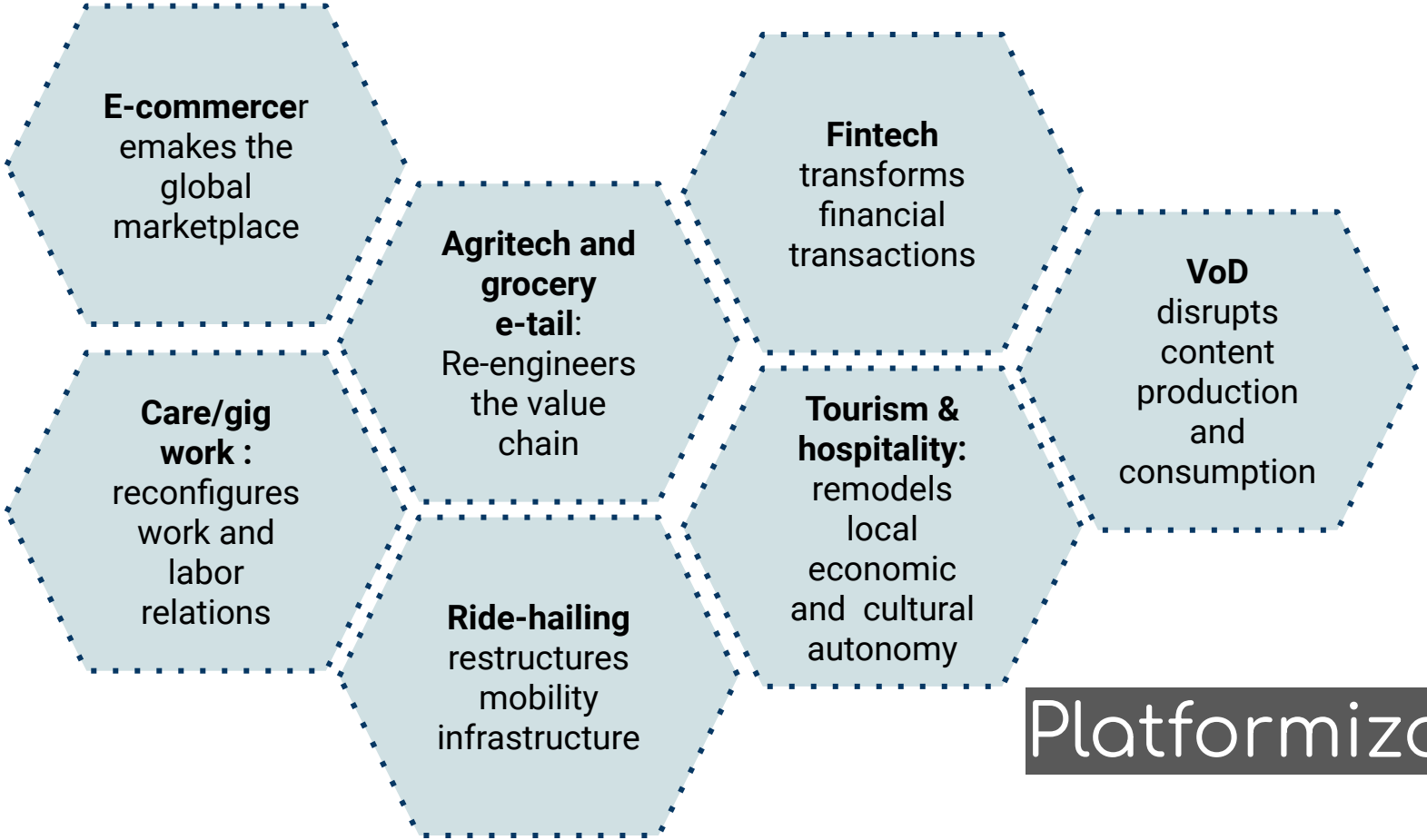
Europe's share is 4 per cent and Africa and Latin America's together is only 1 per cent.

Seven "super platforms" – Microsoft, followed by Apple, Amazon, Google, Facebook, Tencent and Alibaba − account for two thirds of the total market value.

rest of the world, and especially Africa and Latin America, are trailing considerably far behind the United States and China. Some of the current trade frictions reflect the quest for global dominance in frontier technology areas.

As **network-data architectures** that orchestrate production and exchange, **platforms** comprise new modes of value creation and distribution.





Platformization

1. Datafication of the economy

Can you engineer a better cow? In 2014, Jack Ma becomes a dairy farmer. In 2018 he acquires the leading milk Chinese milk importer and 2019, sets up a blockchain based system between NZ and China

In 2016, Alibaba teams up with China's largest automaker, the state-owned SAIC Motor Corporation, to jointly develop driverless cars. The same year, it also announces plans to help state-owned oil giant, Sinopec, on Big Data analytics officially extending its tentacles into the highly sensitive energy sector.

Google's burgeoning ties to Big Pharma have been exposed with the disclosure of its new pharmaceutical division, which just happens to be led by the former head of GlaxoSmithKline's global vaccine business. Google today is not only a weapon for promoting the pharmaceutical agenda but now also a drug company itself.

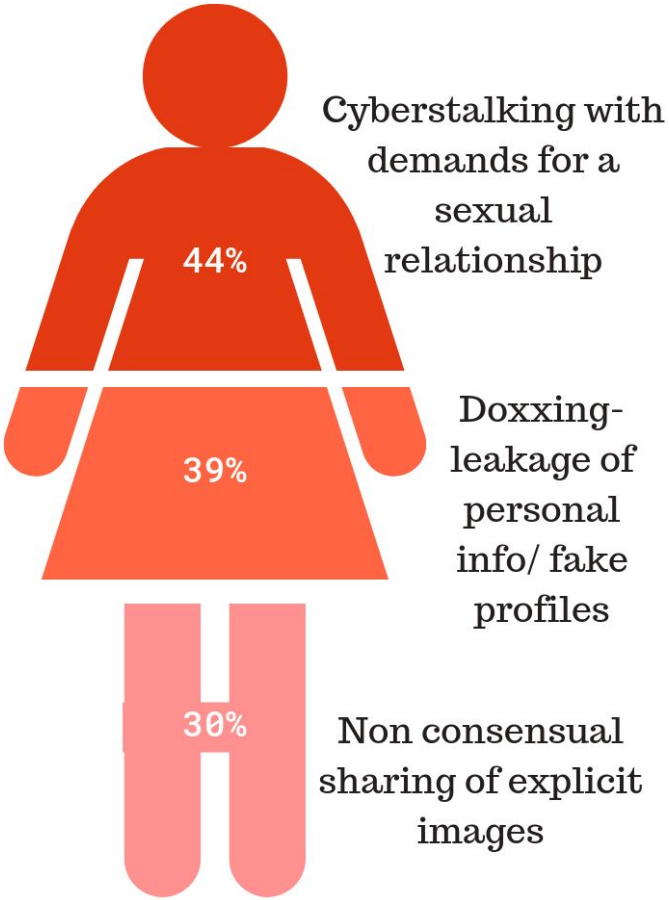
2. Datafication of social interactions

The subsumption of society into capital - the ad model and hyper targetting

Normalization of misogyny - Cyberviolence is ubiquitous

Subjectification the new objectification

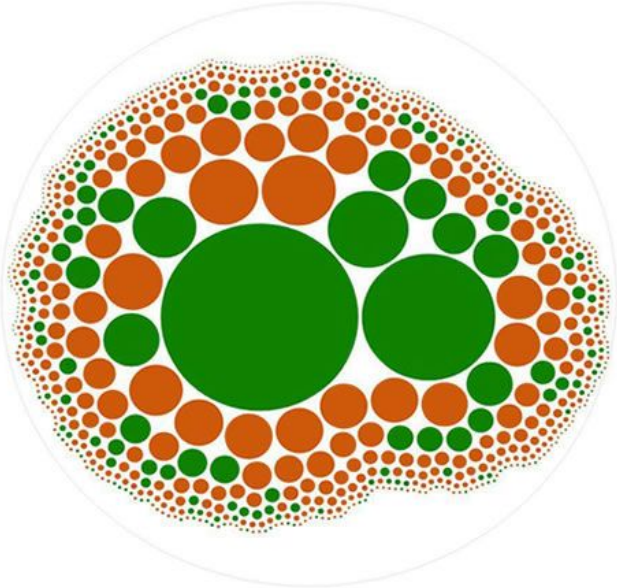
Political manipulation - disinformation as industry



IT for Change's survey with 900 young, adult women:

- Stalkers many times are former partners
- Women also reported receiving unsolicited 'dick picks'
- FB and other intermediaries usually unresponsive; tend to remove posts of dissenting women
- All over the world, gender not a ground for hate speech

Brazilian study on Facebook during the week of the 2018 International Women's Day - Hegemonic (and anti-equality) discourses on women and their demands continue to have considerable reach in the conversations between Facebook page administrators.Even though more counter discourse content was produced, conservative narratives continue to be heard more.



Green: posts from pages from the conservative side; orange: posts from pages from the progressive side

3. State surveillance

Ant Financial's Sesame Credit - a credit-scoring system based on transaction data, captured and integrated by Alibaba through its various e-commerce and financial services, as well as related third-party services such as ride-sharing.

Calculated according to users' credit history, fulfillment capacity, personal information, behavioral habits and social networks.

Playing too much video games or buying diapers would potentially lower or boost the score

AI tools being built all over the world - Face recognition

Platform economy models

- US, platforms such as Google, Facebook and Amazon, have rapidly grown into monopolies by riding on network effects and amassing data on a global scale.
- China’s digital economy model with its focus on ‘techno-nationalism’ has afforded impetus for domestic platforms through a strong state-capital alliance.
- Other regional models - that are endogenous - eg. Mercado Libre, in Argentina/Uruguay; African models - Jumia and Konga
- Alternatives based on a ‘public good’ and solidarity economy/social enterprise models

Platform capitalism as the new avatar of capitalism

From ‘size-scale’ economies

To ‘intelligence-scale’ economies

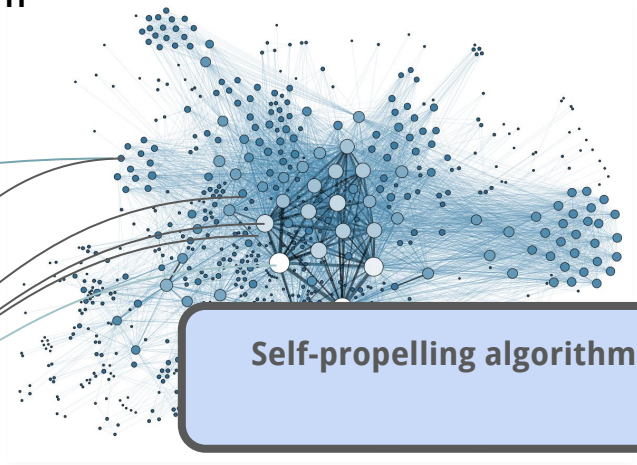
Intelligence scale economies

Technologies at the basis of productivity and labor performance in traditional size-scale economies were mechanical.

In emerging intelligence-scale economies, network effects combine with an agile algorithmic apparatus, fusing manual tasks and cognitive functions, optimizing this ecosystem of interconnected nodes for profit maximization.

Thus, the value proposition in economies of intelligence involves transferring mental processes and skill requirements away from workers and onto the platform infrastructure.

Step 1. Platform monopolies entrench their network-data advantage



Data accumulation/enclosure

Self-propelling algorithmic intelligence

Platform establishes defacto ownership over data

Builds first level competitive advantage

Harvests data incessantly

Step 2. Platforms reap an ‘intelligence premium’ and deploy it in various ways

Data accumulation/enclosure

Self-propelling algorithmic intelligence

Optimizes the platform’s operations

Games and nudges interactions

Transfers value upstream

Impacts on social relations

Reinforcement of market place hierarchies - gender segregation of the labour market.

Commodifying geography - transferring value to and from places and spaces.

Hollowing out of local pockets of capital and deskilling - cooption into the global platform economy

The contentious issue of governance of data

Not all countries are equally well-placed to reap the benefits of data and/or pursue intelligence-driven pathways towards structural transformation.

E-commerce chapters/proposals (WTO, CPTPP, RCEP, Mercosur-EU)

- mandate free cross-border flows of data,
- Prohibit source code disclosure and local presence requirements on digital companies
- Prohibit government intervention to set digital standards such as e-payments and e-authentication.

The possibilities to manage data as a non-private economic resource seem to be foreclosed with a planet-scale enclosure of the data commons

The platform epoch

Emerging as the defining ‘infrastructures of value’, platforms effect a paradigmatic shift in global economic organization.

Outcomes of platformization are firmly located within the international political economy of data and development.

As the future ecology of ‘choice’, whether platformization will open up and expand choices for all, is an open question.

Platformization with a big P

The ‘intelligence premium’ engine is rapidly changing the way economic and social relationships are configured.

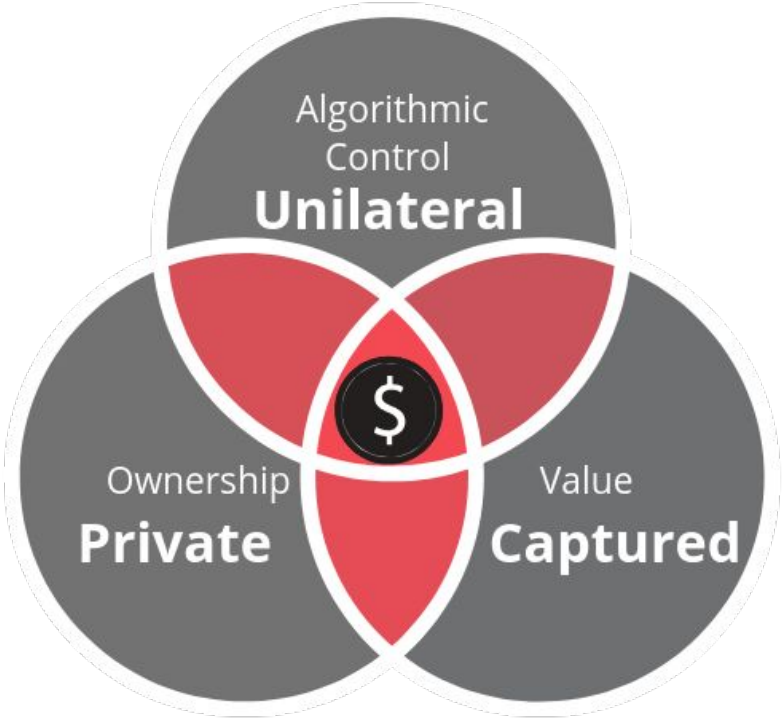
The reality is one of planetary data dispossession - the ruthless enclosure of the data commons.

Over 2018, we have seen major Silicon Valley platforms including Facebook, Apple and Uber lose their share value. China's tech industry led by Alibaba, Tencent, and Baidu is also witnessing a slow-down. Experts and industry actors have for some time pointed to the possibility of a tech bubble – artificially propped up by large venture capital – that is likely to burst, taking down the global economy along with it.

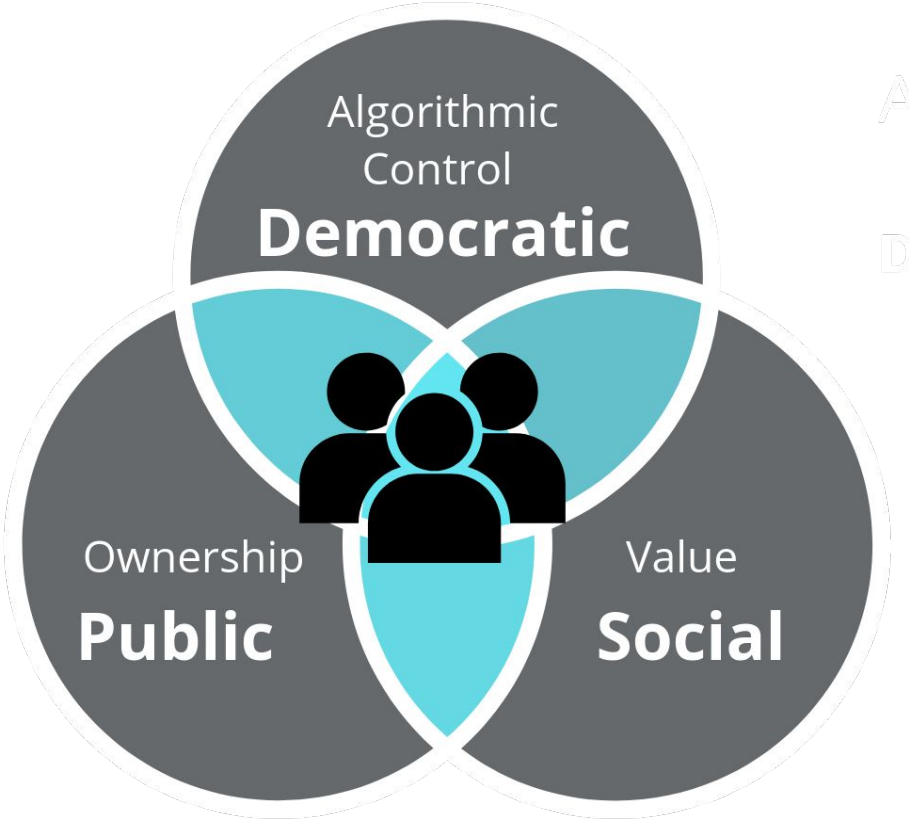
The question is how do we address the dialectic between data dispossession and the self-propelling power of the intelligence premium engine?

A Strategic Choices Framework for Platform Models

Ownership	Private	Community	Public
Control of algorithmic assemblage	Unilateral	Group	Democratic
Value	Captured	Collective	Social

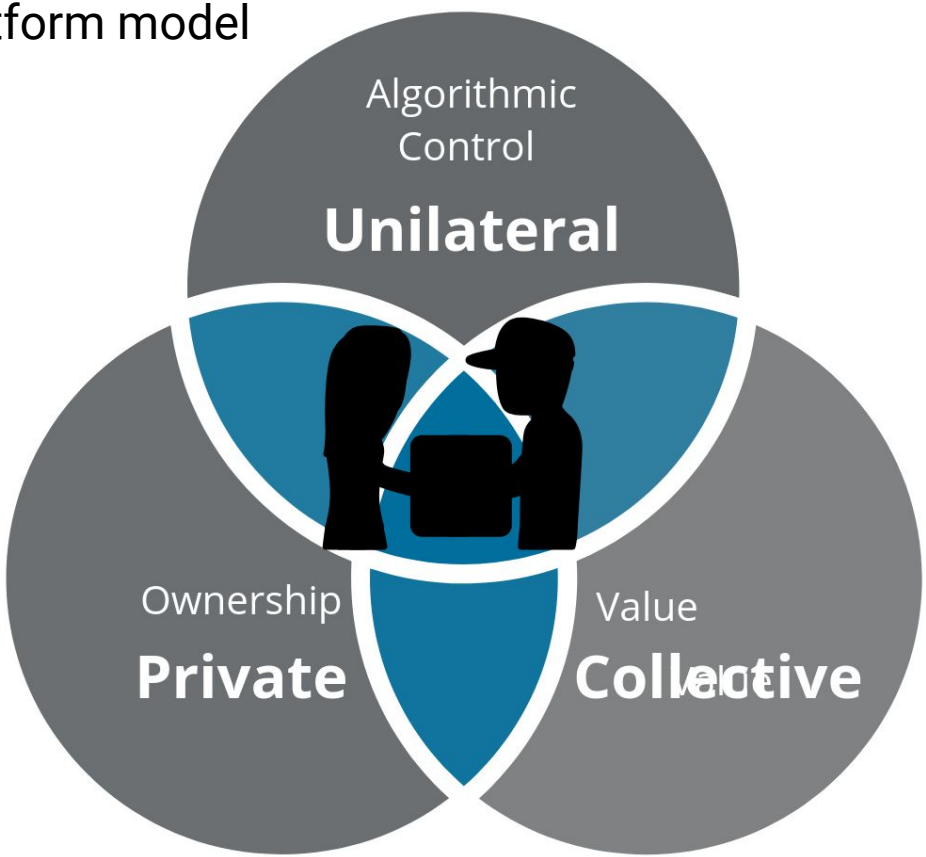


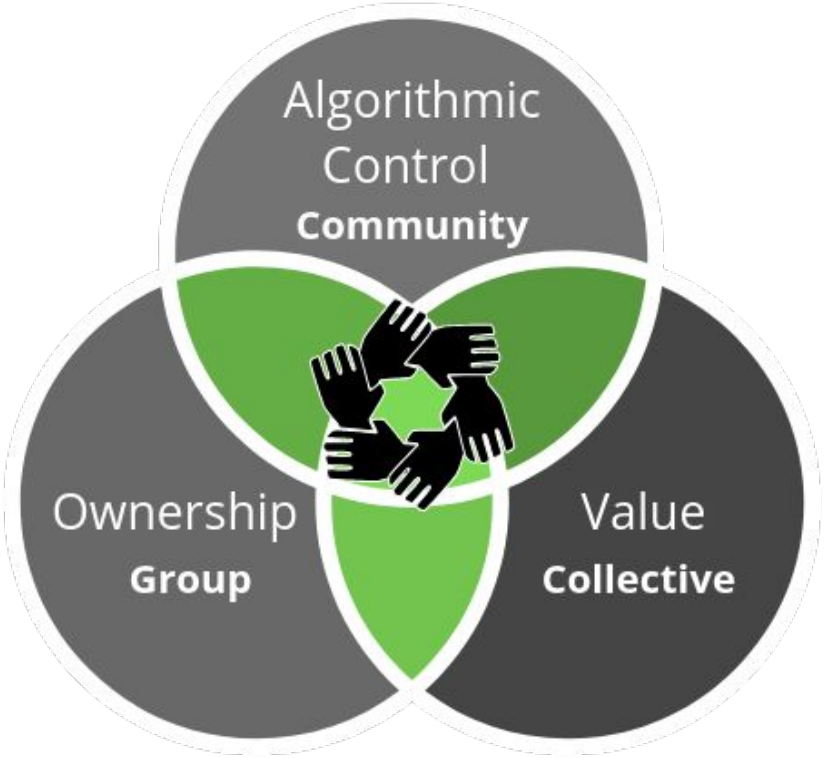
Dominant platform model



Public goods platform model

Social enterprise platform model





Solidarity economy platform model

How to govern?

Governing the platform economy: a multi-level policy challenge for developing countries

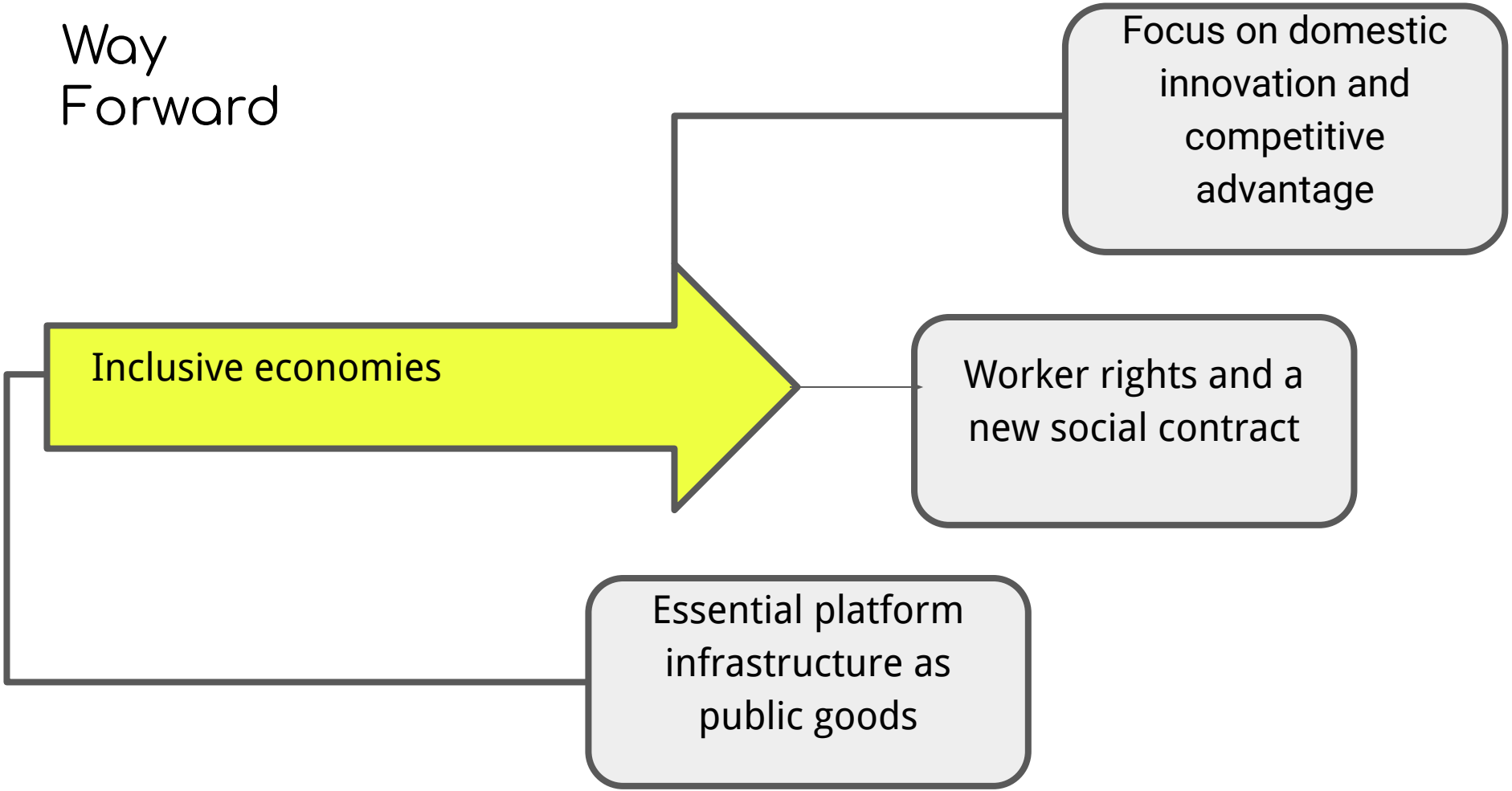
Sectoral transformations on account of platformization make old regulatary approaches obsolete.

Current approaches fragmented

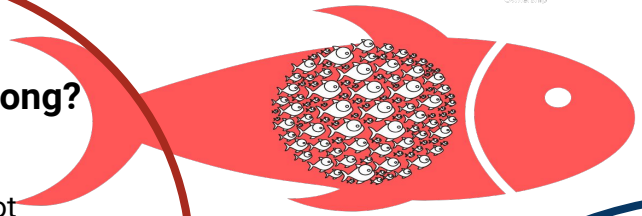
Big platforms mythified as route to growth

Data governance frameworks lack thinking around data's economic value

Way Forward

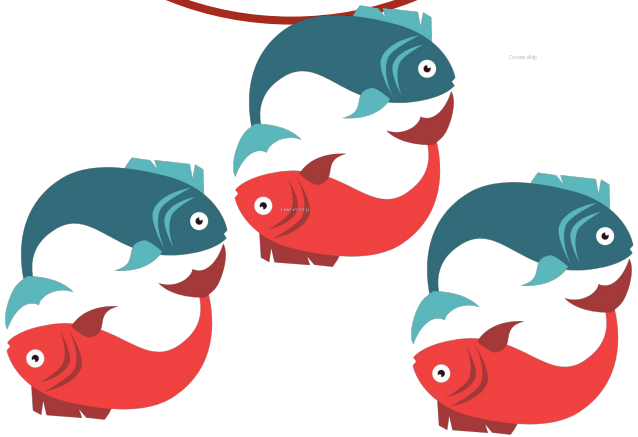

Focus on domestic innovation and competitive advantage
Inclusive economies
Worker rights and a new social contract
Essential platform infrastructure as public goods

Competition



What's wrong?

- Pricing is no longer an indicator of market competition as it does not account for the unique vantage that platforms have for upstream and downstream price manipulation.
-Data advantage as a factor in market dominance is not recognized.



What policy must do

Move from consumer welfarism to economic structuralism:

-Adopt 'control over data' as a criterion in merger assessment (suggested by Indian competition law review committee

-Introduce a structural separation not just between platforms and commerce but also between businesses providing digital intelligence services and businesses deploying such services in different economic sectors.

- Rethink how FRAND can be introduced in AI patents

Taxation

What's wrong?

With virtualized commercial transactions, transnational digital corporations are able to shift profits from high to low tax jurisdictions.

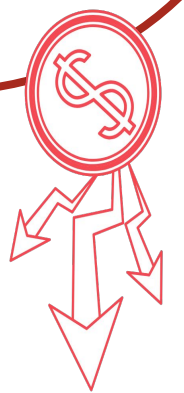
What policy must do

Move from national, physical presence to substantive economic presence through new criteria:
- existence of a user base and associated data input
- volume of digital content derived from the jurisdiction
- sustained marketing and sales promotion activities

FDI regimes

What's wrong?

Industrial era rules for trade and investment are unable to prevent extractive FDI in data/AI sectors that are inimical to national security and global competitive advantage.



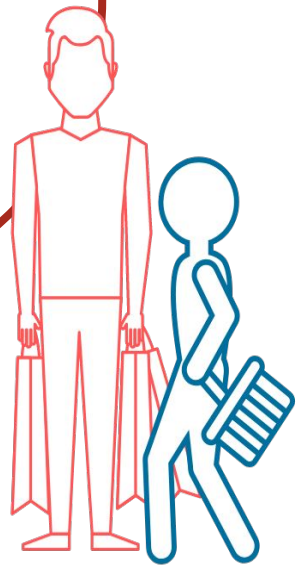
What policy must do

Protect strategic data and AI assets through appropriate scrutiny of FDI proposals

Consumer Protection laws

What's wrong?

Arbitrary Terms of Service agreements that exploit the information asymmetry between consumers and platforms



What policy must do

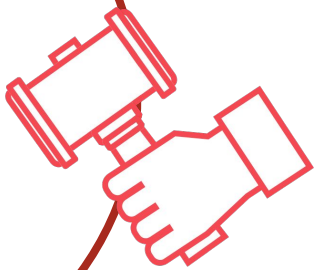
-Update consumer protection law to make platforms accountable to consumer rights, including, privacy, security, safety and grievance redressal.

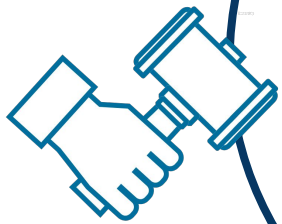
- Stipulate digital enforcement of rights through smart disclosure systems for platform users to obtain personalized pre-contractual information.

Sectoral legislation

What's wrong?

Legacy laws in different economic sectors are anachronistic.





What policy must do

Reform commercial laws pertaining to specific business sectors to address digital intelligence-enabled transformations for inclusion, equality and justice.

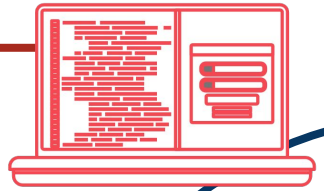
Techno-design

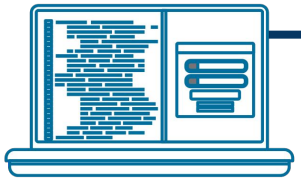
What's wrong?

-Dominant platforms lock in users and do not offer room for user experimentation and switching across services.

- Design is not privacy-centric.

- Datasets and algorithms are fraught with intended/unintended bias.





What policy must do

Platform neutrality, protocol & data interoperability must be mandatory.

- Privacy-by-design must be ensured in default options, search filters, and feedback and recommendation systems

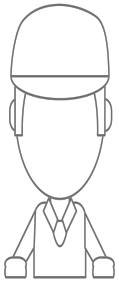
- Algorithms must be scrutinizable.

Labor

What's wrong?

- The traditional binary of employment and self-employment does not account for the context of gig work.

- Platforms use data-driven techniques for remote management of workers through unfair algorithmic control that can be exploitative.

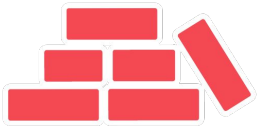


What policy must do

- Treat on-demand work as a new form of employment, 'dependent self-employment', as ILO has suggested.

- Update laws to protect workers' rights, including their data rights, in the platform economy.

Data

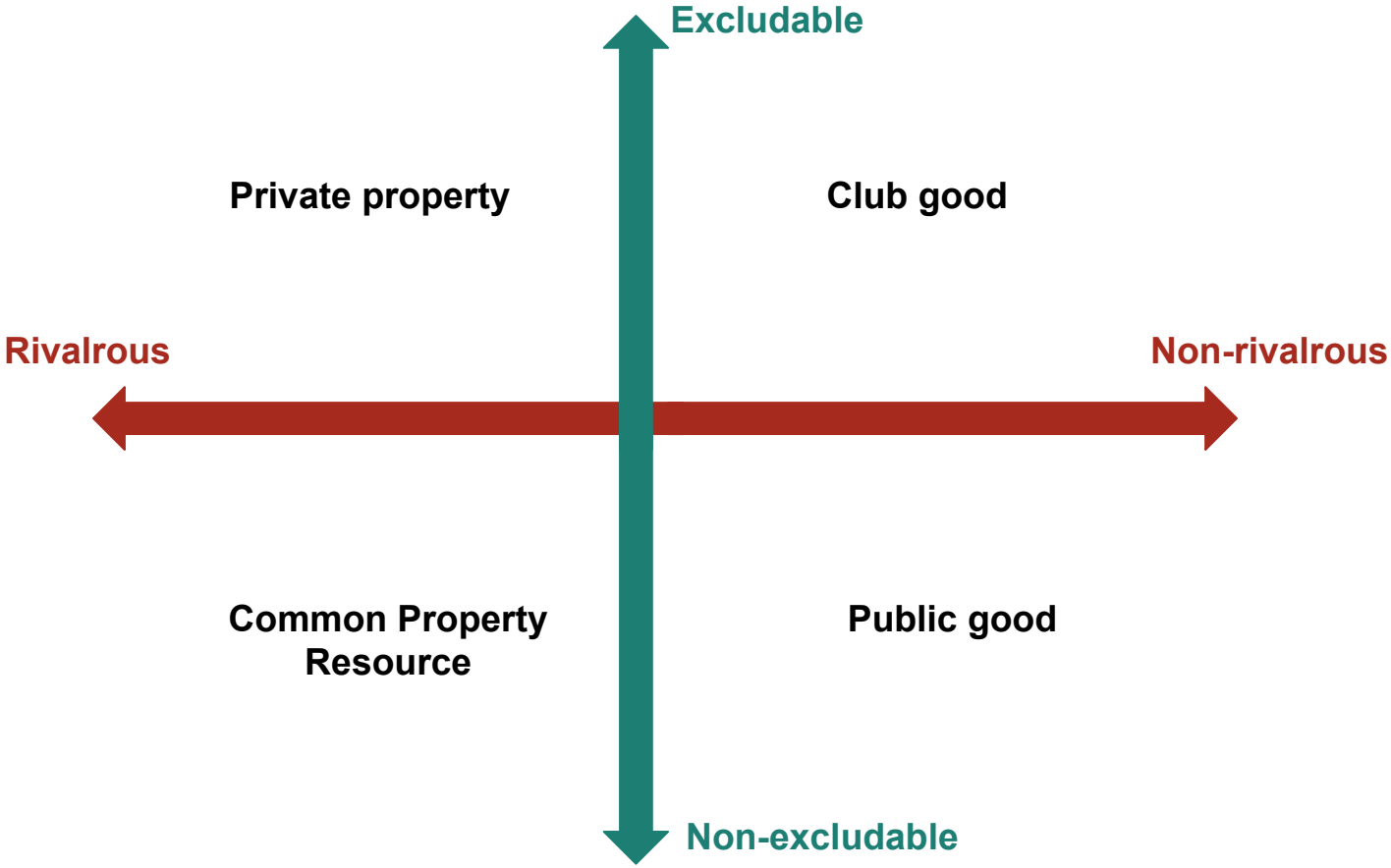


The building blocks of a data ownership regime that furthers human rights

Data ownership and control regime that:

Is based on a ‘mixed-data economy’, where data types are on a continuum from public good to private property.

Acknowledges different bundles of rights wrt access, use and management of different data types.


Excludable
Private property
Club good
Rivalrous
Non-rivalrous
Common Property Resource
Public good
Non-excludable

Currently, data is a club good that is enclosed by a few powerful transnational corporations.

Private good

- Rights of business owners over data compiled and managed under the law of contracts
- Individuals' right to determine the conditions under which personal data enters the data marketplace whose boundaries are determined on the basis of societal/public interest and not on individual preference alone
- Ownership rights in personal data not to be confused/conflated with an absolute agency to part with one's data

Common Property Resource

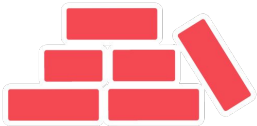
- Rights of a political/ interest-based community over the community data of its members -- that is the sum total of aggregate, de-identified personal datasets; data about natural resources; infrastructural artifacts etc., that cannot be traced back to individual data principals.

- Nagoya Protocol on Genetic Resources is a useful starting point to imagine/conceptualise this set of rights

Public good

- Data resources that are publicly owned and managed to support the development of digital intelligence solutions that provide social value and expand development choices
- Privacy-public interest trade off to be managed effectively when channeling data resources into public data pools
- Rules of access to be carefully designed to prevent private capture of public data resources

Globally - A new data constitutionalism



The indivisibility of civic-political and economic rights in data

Just and fair data markets that:

Recognize the limits of consent-based framings of privacy and personal data protection.

Exclude certain aspects of personal identity from being datafied.

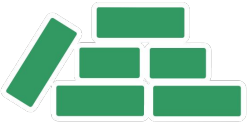
Global consensus for:

An international human rights based governance framework for data.

Data ownership and control regime that:

Is based on a ‘mixed-data economy’, where data types are on a continuum from public good to private property.

Acknowledges different bundles of rights wrt access, use and management of different data types.



Data sovereignty as integral to the right to development

Global consensus that:

Recognizes the sovereign right of peoples to the governance of their data resources as integral to their right to development.

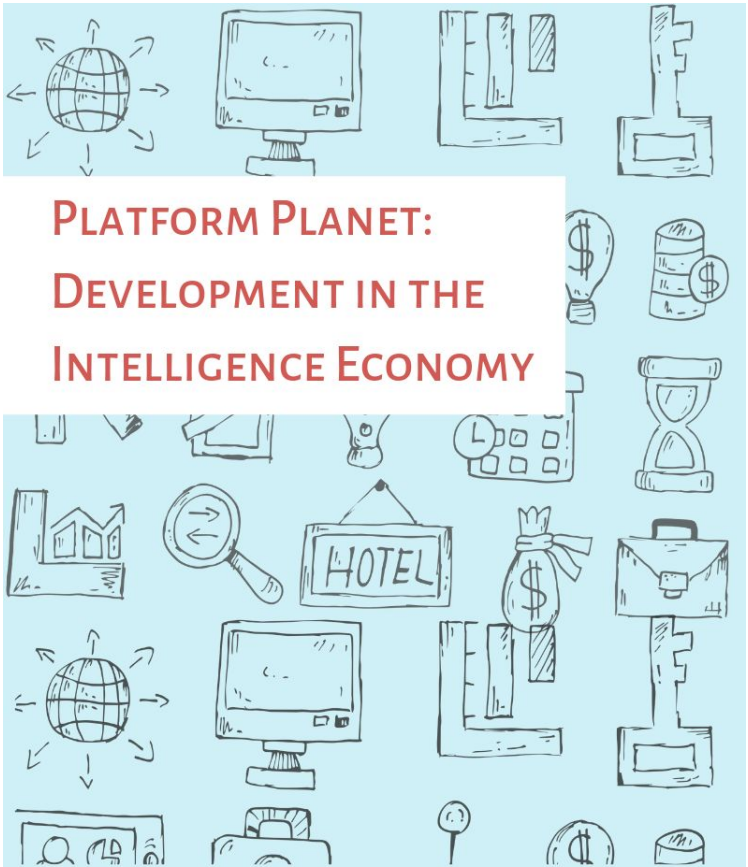
Enables all countries to self-determine their national data strategies, benchmarked on a human rights framework.

Globally - A new data constitutionalism

California Bill Makes App-Based Companies Treat Workers as Employees

Margrethe Vestager European Union’s competition commissioner has a new role, which combines digital regulation and antitrust enforcement

Economic rights over data and digital intelligence may therefore require sui generis frameworks, enabling data subjects – individuals and groups/ communities – to control how the data about them are used; they could license certain trusted parties to derive value from them in a manner that ensures that the interests of the data subjects remain primary, but without ever fully relinquishing their basic rights to the data. - UNCTAD 2019



Platform Planet: Development in the Intelligence Economy

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with Jai Vipra & Ira Anjali Anwar

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Thank you