Turning Point 2020: Will it be different this time? Concepts and strategies for a resilient economy

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Digitalisation and sustainable development in the global South

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Institute for Ecological Economy Research (IÖW)

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PART I

Digitalisation in the global South—Opportunities & risks

Opportunities— accelerate SDGs

- Digitalisation is a broad concept—it refers to spread and use of the Internet, mobile phones, and other tools and processes to collect, store, analyse, and exchange information digitally.

- The promise of digitalisation underpins many of the UN's SDGs—which require strong ICT systems.

- The process is not automatic, it has to be sustainable, equitable , and contextually relevant to different groups of people, in order to work for the common good.

- Without the appropriate interventions, digital technologies have the potential to exacerbate current inequalities or even create new socio-economic disparities and ecological problems.

Source: World Development Report: Digital Dividends, 2016
Source: https://www.itu.int/web/pp-18/en/backgrounder/6050-icts-to-achieve-the-united-nations-sustainable-development-goals

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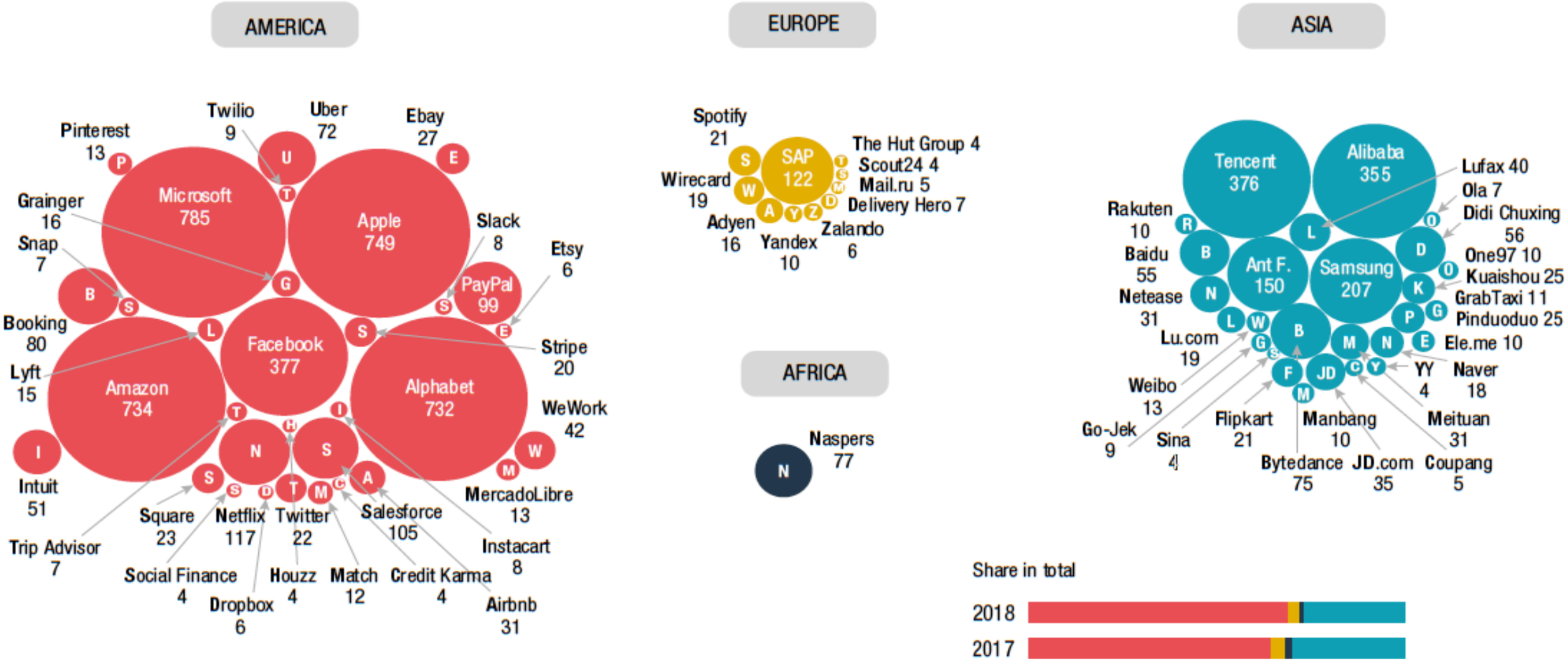
Risks—uneven global ICT landscape



- Uneven distribution of global platforms represents the uneven global ICT landscape—the dominant platforms that reap the benefits of the digital economy widen inequalities and power imbalances between hyper-digitalised and under-connected regions and countries.
- This rising global market power of certain platforms have implications for competition, data protection & ownership, consumer protection, taxation, and labour policies & regulation in the global South.

Source: UNCTAD Digital Economy Report, 2019

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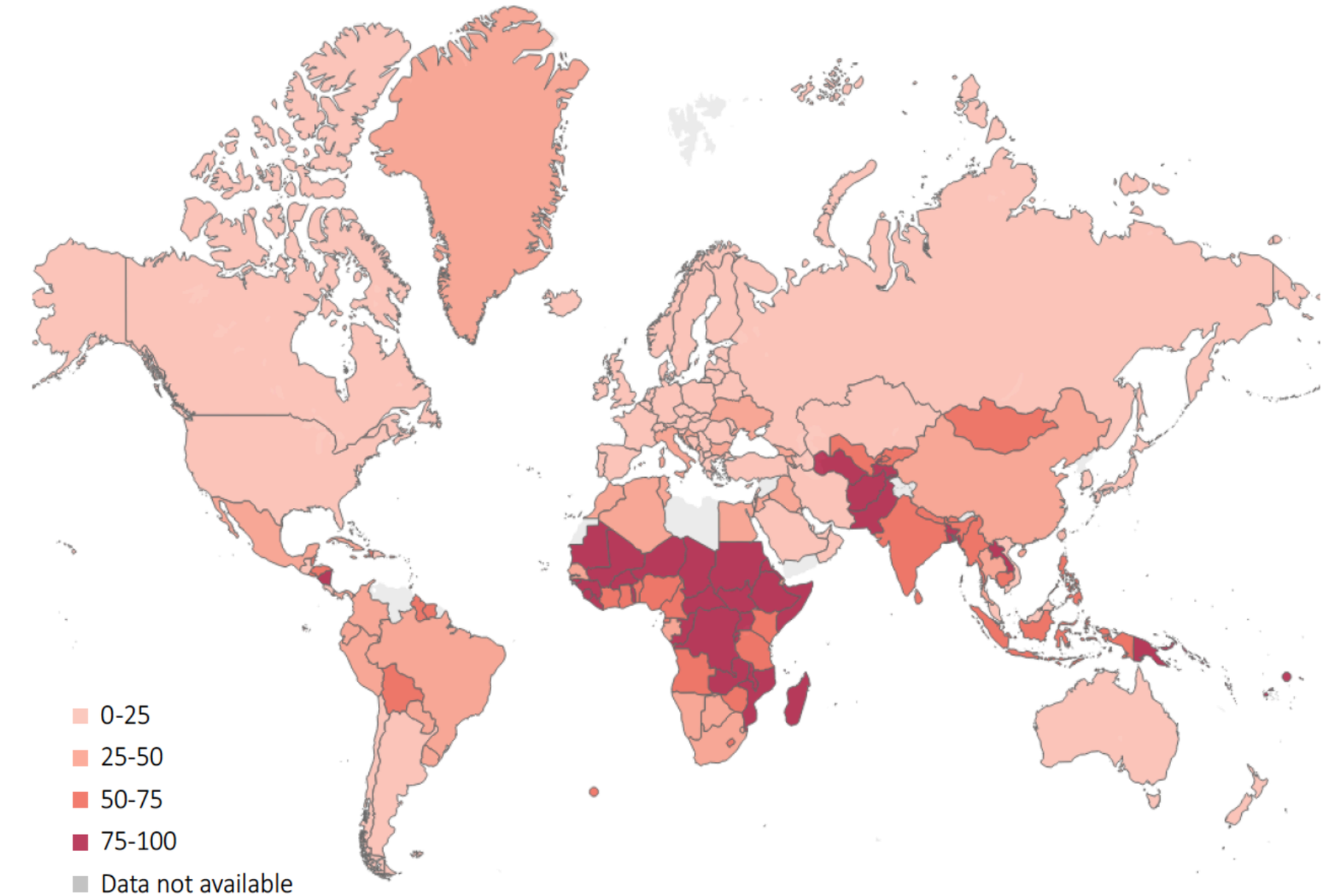
Global Connectivity Overview

Since digitalisation requires the Internet—What percentage of the population is **not** using the Internet?



The 2019* offline population map highlights the regional digital divide in global Internet use.

Countries with the highest proportions of people not using the Internet are mostly in the global South— Africa and South-Asia, although there are inter-regional differences.

Note: * ITU estimate.
Source: ITU.

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Factors affecting Internet use

1. **Policy & regulation:** enabling environment for investment/sector development/new technologies; safe & trusted environments for users—including competition policy, taxation, intellectual property, data standards, interoperability, cybersecurity and data protection.

2. **Supply-side:** infrastructure (public and private provisioning) that affect availability, accessibility, and affordability—including electricity and physical communication infrastructure, and foundational digital systems such as identification and payment systems

3. **Demand-side:** users/citizens – knowledge & skills/relevant capacities, as well as open and safe internet use. People, including the skills and capabilities needed in digital economies and evolving labour markets, social protection systems, finances, including the range of instruments needed for households, businesses and governments to access and use new digital technologies.

4. **Lack of critical mass (20%) to enjoy network effects associated with economic growth:** required to improve information flows, reduction in transaction costs and productivity gains from digitalisation.

Source: Wverman, L., Meschi, M. & Fuss, M. (2005). The Impact of Telecoms on Economic Growth in Developing Countries. Africa: the Impact of Mobile Phones.

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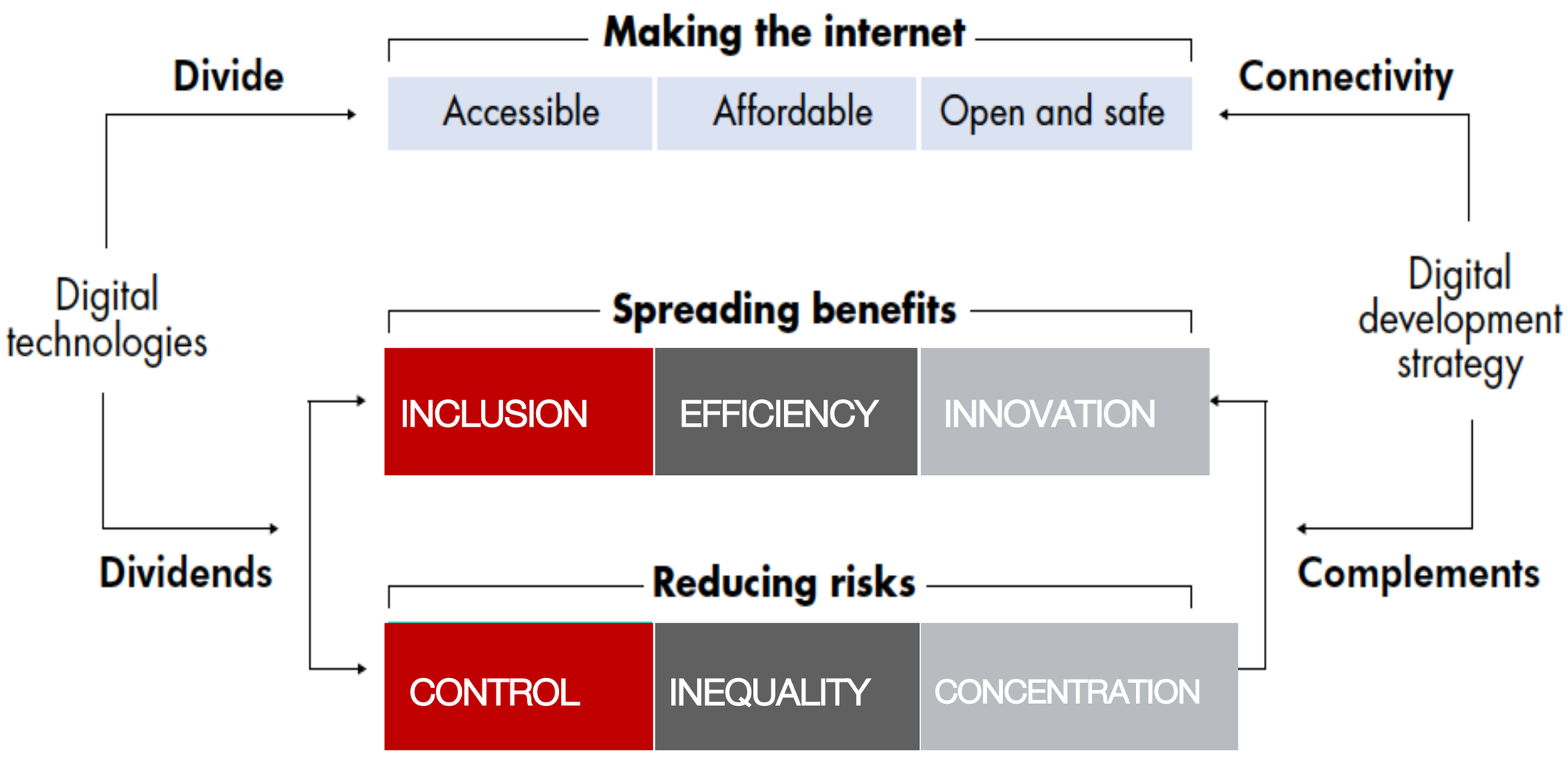
Accessible, affordable, secure and reliable Internet is critical to reducing inequalities



To reap the global digital dividends—the broader development benefits from using ICTs, developing countries will have to overcome the 'digital divide' , the gap between those who are connected to the Internet and those who aren't.

Source: World Digital Report, 2017

Why is the digital divide a problem?

- Global public goods, such as the Internet are not available to a vast majority in the global South—many developing countries are below the 20% critical mass to enjoy network effects (penetration and use).
- Policy uncertainty, little effective regulation of ICT markets to make them competitive—negative impacts on ICT infrastructure investments and consumer welfare.
- Low levels of human development prevent harnessing digital technology for personal wellbeing and entrepreneurial production.
- Little contribution to national prosperity (value add to GDP and development).

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PART II

Demand side analysis of digital inequality in the global South

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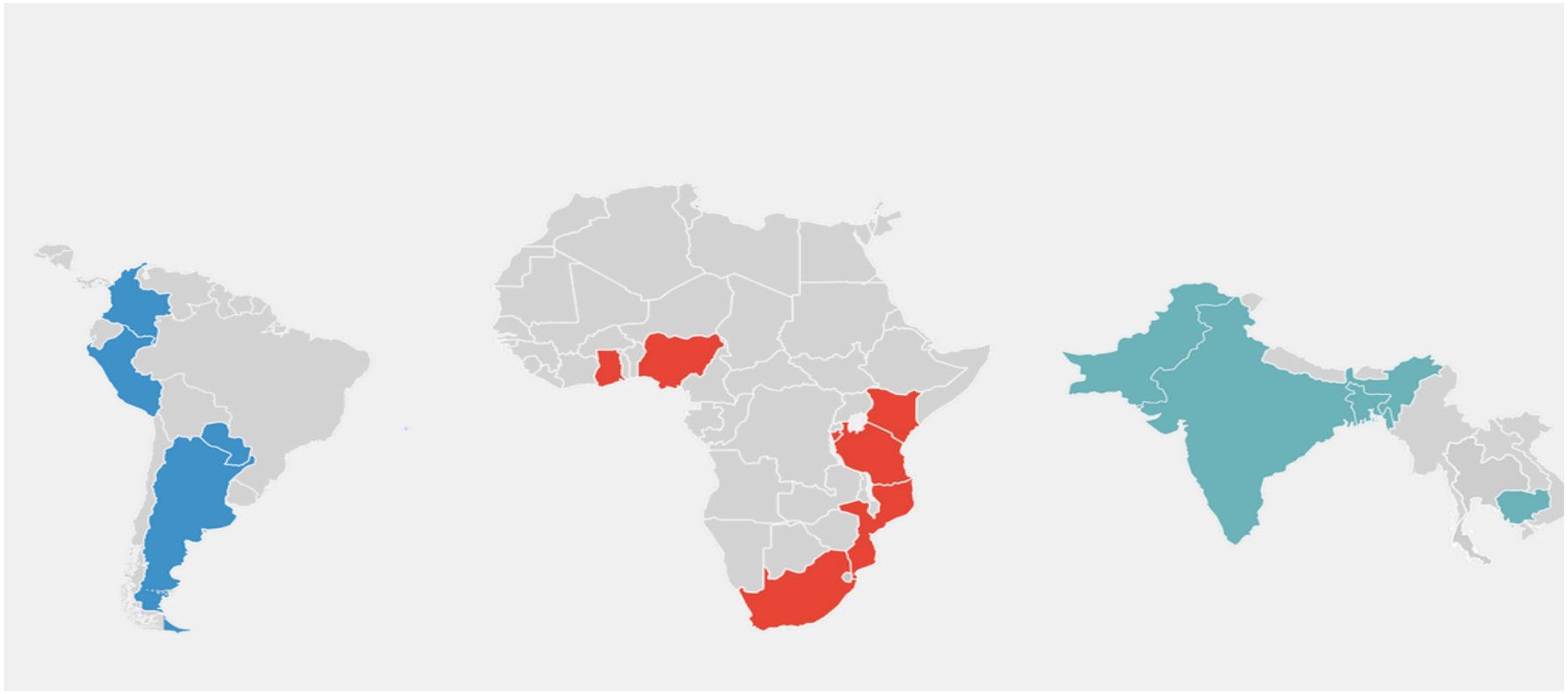
After Access Survey—research on 16 countries in the global South

National representative demand side surveys provide accurate and reliable Internet penetration figures



- Widely used supply-side data provided by operators and collected by ICT regulators has limitations for policy or planning in developing and emerging economies.

- For example, it can't be used to measure several basic indicators – like gender, age and income levels – in the predominantly prepaid mobile markets of the global South.

- After Access is uniquely positioned to disrupt the current narratives of homogeneity in mobile and Internet access and use, illustrate the multifaceted challenges faced by the developing world, and identify precise points of policy intervention.

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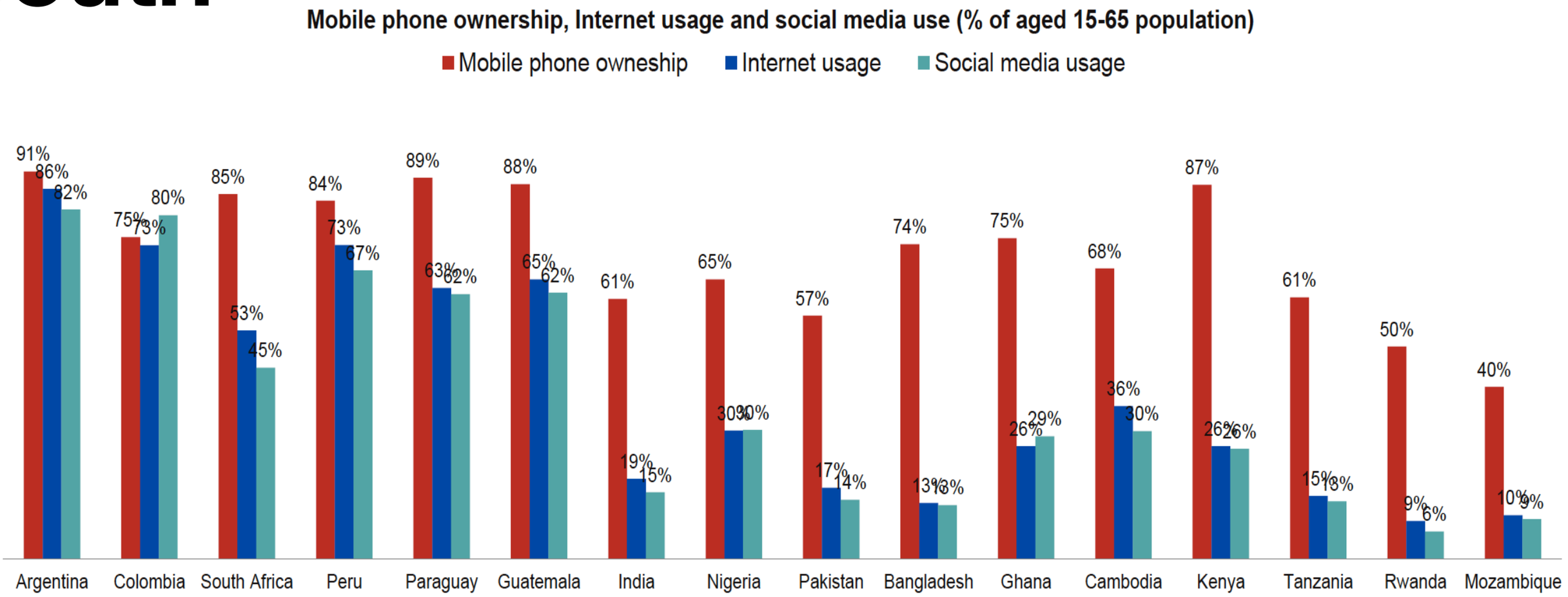
Variations in mobile ownership and Internet connectivity in the global South



- Mobile penetration is relatively high across all three regions, but just owning a mobile phone is not enough.
- Demand-side challenges such as literacy, affordability of services & devices, and low awareness of the Internet are some of the obstacles to Internet uptake in all three regions.
- Supply-side factors such as electricity deficits and lack of mobile coverage are a big challenge to overcome in parts of Asia and Africa.
- Policy & Regulation—Spectrum allocation and cost and quality of broadband are not conducive to innovation.

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The social, political, economic and developmental factors at play in the global South are complex

It is clear that a 'one-size-fits-all' global strategy and blanket policymaking for digitalisation will not be successful. Countries that create an enabling environment for:

1. Digital market development and user well-being,
2. Efficient network and digital infrastructure,
3. People equipped with the appropriate digital literacy and skills

Will be better equipped to benefit from digital dividends.

A New Digital Deal is required which enables developing countries to be better equipped in order to leverage innovation and the emergence of industries linked to new technologies in the digital economy.

Source: Research ICT , 2020, New digital deal for (South) Africa
https://researchictafrica.net/2020/06/24/new-digital-deal-for-south-africa/

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PART III

Data driven value creation

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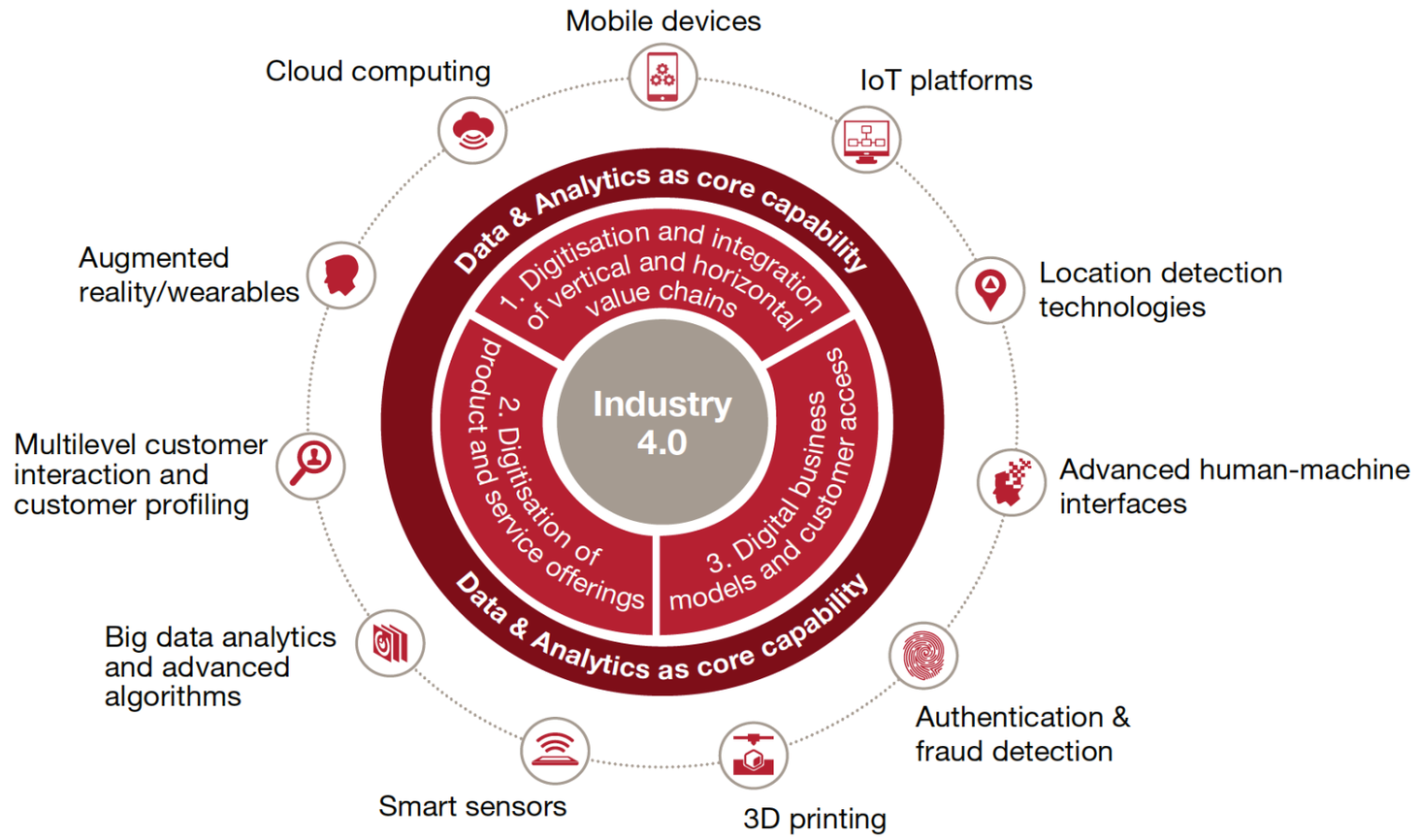
The data revolution is not restricted to the global North

The spread of mobile phone technology into the hands of billions of individuals may be the single most significant digital innovation that has affected developing countries in the past decade.

The evolving digital economy

is closely associated with technology advancements fuelled by data



A data driven economy paves the way for a new stage of capitalism; where information is extractable for economic value by those (multinational platforms and governments) that are already digitally equipped to monetise this value, while creating little to no data ownership (control, privacy , access and rights over the data) for those with nascent digital economies.

Source: UNCTAD Digital Economy Report, 2019
Source: PwC Industry 4.0 framework.2016

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PART IV
How are digitalisation pathways of different countries interrelated?

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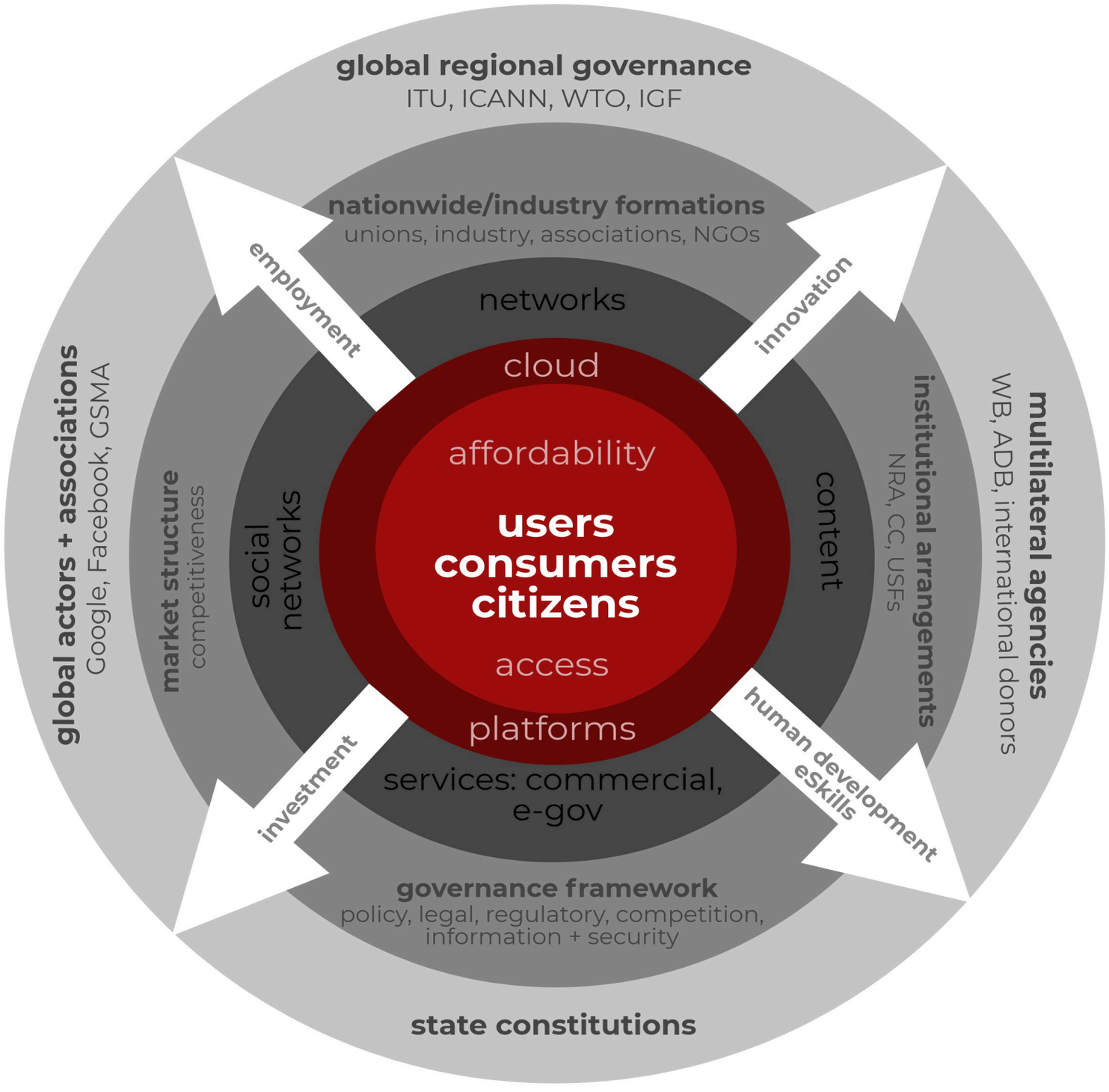
The digital ecosystem



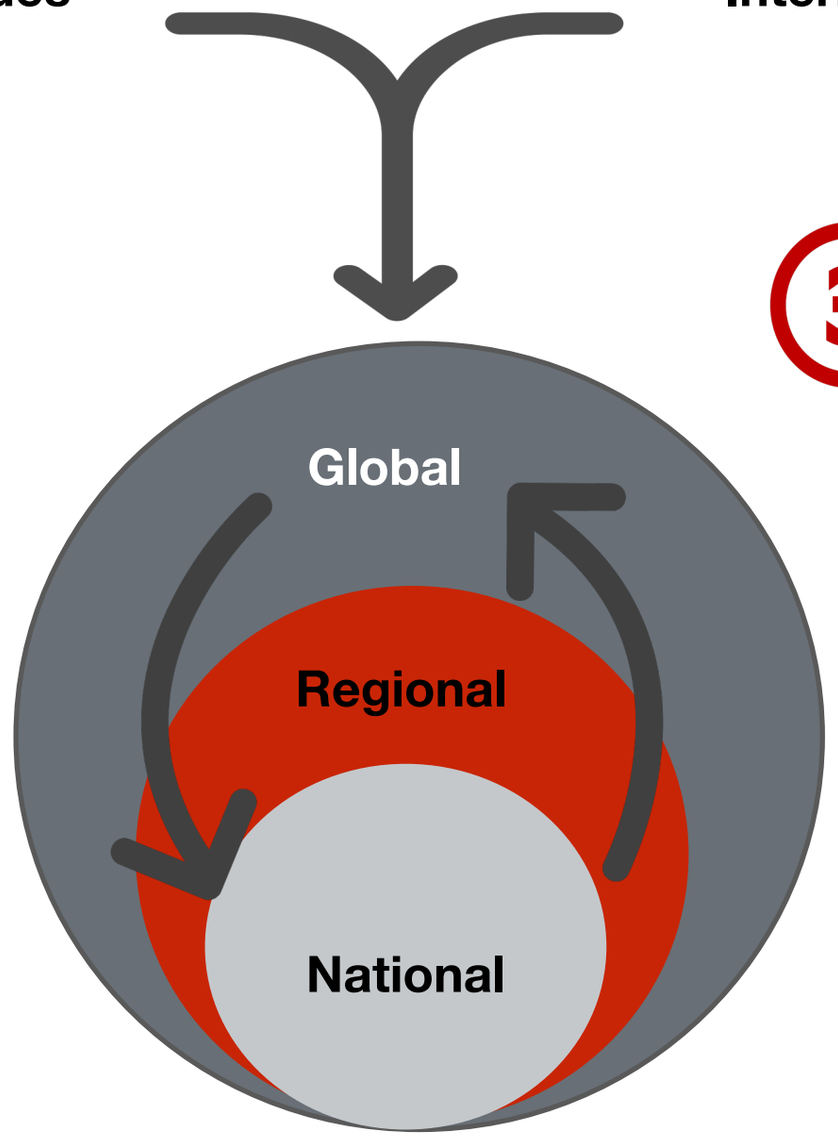
- Conceptualising the digital economy as an ecosystem marked by inter-connection emphasises the need for multi-stakeholder cooperation and holistic regulatory and policy frameworks to facilitate shared prosperity from digital dividends.
- This approach places users, citizens, and consumers at the centre of the ecosystem and represents the holistic approach required to leverage the digital economy.
- This highlights that countries need a holistic approach to digital inclusion to mitigate the negative indirect effects that widespread Internet adoption has on economies and societies, including those segments and communities that remain unconnected.

Source: Gillwald, A. Moyo, M. & Stork, C. (2012). Understanding what is happening in ICT in South Africa: A supply- and demand-side analysis of the ICT sector
:http://www.researchictafrica.net/publications/Evidence_for_ICT_Policy_Action/Policy_Paper_7_-_Understanding_what_is_happening_in_ICT_in_South_Africa.pdf

Pathways towards sustainable digitalisation in the global South

Public policy issues (Broad)

Internet policy issues (Narrow)



1 Global processes of digitalisation and datafication cut across economy and society requiring non-sectorally siloed, transversal national & international supply and demand side policy interventions. International policy coherence and coordination is essential to address the challenges that arise as a result of the digital economy.

3 Greater cooperation & regional market integration can facilitate an interoperable, dynamic, and competitive regional digital ecosystem and unlock the potential of regional digital economies and provide developing countries with scale and network effects.

2 Addressing digital inequality isn't a technology problem. It's a classical development challenge. The 2018 After Access Survey data shows that offline education, gender, income and locational inequalities are simply being mirrored online – and arguably amplified, as the economic and social value of being digitally networked increases exponentially, COVID-19 has highlighted this. Developing countries therefore need to simultaneously address 'analogue' and on-line inequalities and structural deficits that hamper the achievement of digital dividends.

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Thank you.

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