

Developing countries and the digital economy

– Search for a digital industrial policy

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What is the “digital economy”

- Post-industrial economy, although also called Industrial revolution 4.0
- Industrial capital, then intellectual capital
- Now, data-intelligence capital
- The key factor of production, the key economic organising force, and the key value
- Digital corporations sit at the top of the economic value chain

What is “digital”

- Software phase – standalone software, Microsoft OS, Oracle databases
- Internet phase – Internet companies, Google, Dropbox, Facebook, Twitter
- Digital phase –Uber, AirBnB, Alibaba, Monsanto
- Data and intelligence – “the secret sauce”
- It is more traditional sectors based (beyond info, communication, media, etc)
- It is more local, bec it is “physical” and “located”

Four models of digital industrialisation

- The dominant US model
- The challenger – China
- EU model, struggling between the dominant and an alternative
- India model – triggered by ground “development” realities

US model – One unconstrained global digital market

- Single global digital market
- Data as private resource of intermediaries/ collectors/ platforms
- Private or self regulation, state plays minimal role
- Privatised and globalised digital infrastructure, governments to keep at bay

Embodied in Trans Pacific Partnership ecom chapter

US model - contd

- Entrepreneurial culture, venture capital, tech excellence – Silicon valley
- Easy to do and exit business
- Highest quality tech institutes, and government support for them, and for R&D
- Government procurement, especially military
- Foreign policy support to global digital business, even at the expense of domestic tech policy

China model – Domestic strength for global domination

- Initial phase – Internet protectionism
- Copying successful models, grow them in favourable domestic conditions
- Huge capital available
- Government support
- Huge domestic market, speaking one, non-English language
- Big newly rich middle class, open to tech

China Model - Contd

- Digital phase – a quantum leap, and shift of gear, beyond copying phase
- Huge Chinese Internet companies, highly cash rich, and ready to do R&D and innovate
- Government support, high end R&D, and also direct business promotion (procurements +)
- They understood, “it is about data” - cutting edge work
- Data environment and policies – global AI leadership

EU model – Split focus

- At the highest level, fully with the US dominant model
- BUT, huge concerns at losing out even in traditional areas in the digital phase
- Privacy rights concerns, market power of digital majors
- Alternative thinking, but more in policy papers and projects, then full implementation
- Effort not to upset the global apple cart of dominant digital economy model –
geoeconomic alliance

EU model contd

- Regulating platforms, Some cutting edge views on data rights and ownership, more developed about IoT (!?)
- EU cloud – for researchers, (in theory) to be extended to full economy
- Public health info platform, smart transport platform
- Digital single market – single data regulator, security architecture
- “Insider” strategy- focus on traditional strengths
- Checking takeover of critical economic assets

Indian Model – A developing country reality check

- Doesn't challenge US model – strongly attached to US led global value chains
- Start up phenomenon – IT, to Internet, to digital phase
- Two kinds, tech/ SaaS, and core digital start ups, quite different
- Further two kinds of digital start-ups – “specific problem(s) focus”, marketplace model
- Good startup support policies
- Partnerships with industry incumbents – banking, health

India – Public data infrastructures

- Only country that has gone for society-wide implementation of key data infrastructures
- E-authentication, digital payment gateway, digital locker, e-consent framework
- Personal data management – the key digital age issue
- how to retain data controls while obtaining value from it?
- Sectoral data infrastructures – economy, agriculture, education, health – who owns core data of all sectors?

India – Public data infrastructures

Three kinds of key data infrastructures

- Horizontal - e-authentication, digital payment gateway, digital locker, e-consent framework
- Personal data management – the key digital age issue
- Sectoral data infrastructures – economy, agriculture, education, health

Data as society's commons, national resource - – but
under whose stewardship, what institutions

Digital industrial policy for developing countries

- Start-up support policies, funds, ease-of-business, incubators/ accelerators
- Innovate, but also just copy
- Domestic economy oriented, not every startup need to aim to be a global unicorn, the silicon valley fixation
- Use expertise and funds from traditional sectors that are getting digitalised

Digital industrialisation - contd

Second part

- Investments in public data infrastructures
- Three kinds – as explained before
- Easier to develop data infrastructures than connectivity and IT/ software infrastructure – bottleneck is conceptual and political
- It is local, use traditional sector expertise
- Governments have traditional role on social and economic data sector – and they have one of the biggest sets of it
- Helps access to needed public interest data, and regulation

Digital regulation

Part 3 - Digital regulation

- Platform/ market place monopolies – a more distributed ecology, fair allocations to all players, consumer/ labor rights
- Data regulation – single most important data economy issue
- Who owns, who can use, what terms, outflow of data from a country – data ownership regimes

Government procurements/ PPPs

Digital knowledge and skills

- Digital skill are very different from IT skills, although building on them
- Tech, business, policy institute need to orient to understanding “digital” and to digital skills
- Governments urgently need a different kind of skill set, and institutional evolution
- Digital economy/ society as distinct dept./ ministry – IT ministry could evolve towards it but...
- South South knowledge and policy expertise collaborations

Global digital trade forums

- WTO definition of ecommerce, two narratives, Jack Ma on ecom – “ecom term will soon disappear”
- Dissect what different kinds form the ecom definition. All very different: physical goods, cultural goods, technology flows, and core digital flows – where data-intelligence is the key valuable thing....
- B2B data with clear ownership fundamentally different from general C2B data with unclear ownership – the latter is the main issue

Developing countries and global digital economy

- Replace ecom term with digital trade
- Define it well, and explore all its dimensions, specially the central artefact of data-intelligence, its ownership (personal, national – like of mineral resources ?)
- Shape alternative narrative on digital economy and trade
- Global technology flows very useful, and needed – but data is different
- Develop local digital economy and policy space without disengaging from global value chains
- Look at regional digital single markets

END