

NINE PRINCIPLES FOR INDIA'S DIGITAL ECONOMY



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ABOUT THE AUTHORS

This note is authored by the Esya Centre in partnership with the Digital India Foundation. The Esya Centre (www.esyacentre.org) is focussed on empirical research on technology policies, whereas the Digital India Foundation (www.digitalindiafoundation.org) works closely with the Indian Government on a range of public policy issues impacting IT governance.

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FOREWORD

In the 1970s, Gordon Moore suggested that computing power would double every 18-24 months. His hypothesis has held true over the last fifty years, wherein computers have come to define every aspect of society. The computer age has democratised access to information and knowledge, and unlocked new efficiencies and new industries. Consequently, the digital ecosystem which is built on the foundation of exponential increases in computing power, is integral to the growth and development of human civilisation. The modernisation of laws and regulations to reflect this central technological paradigm is therefore an imperative. However, rulemaking rarely keeps pace with technology. Conversely, frenetic changes to governance frameworks without appropriate focus on first-principles, can erode value, precipitate disputes and disincentivise innovation

I am delighted to have presided over a working group of eminent corporate leaders, technologists, civil society experts and lawyers, to brainstorm over changes required to India's Information Technology Act, 2000. This seminal legislation helped to shepherd the growth of the country's digital economy. However, many commentators have articulated the need for a fundamental overhaul of legal design, in order to achieve the Prime Minister's target of a trillion-dollar digital economy. This document outlines nine principles that can help the government create a new-age legal framework, where the interests of consumers, industries and the state are balanced. It is through multi-stakeholder exercises such as this, that India can design statutes that are fit to purpose for 21st century markets. I hope that the suggestions echoed here, are given due consideration.

- Justice Arjan Kumar Sikri

EXECUTIVE SUMMARY

Global mobile data traffic was around 456 exabytes in 2019, of which India accounted for around 75 exabytes or around 16 percent, according to Ericsson. Around 14 percent of the global population resides in India and, consequently, the country punches slightly above its weight in terms of mobile data consumption. The size of India's opportunity to unlock value through such consumption, is perhaps without parallel in the developing world. This can be achieved through a principles-based framework for governance of information technology (IT). The nine principles detailed in this brief can also aid the design of a new-age IT legislation, that fosters innovation, competition and growth:

Principle 1: Legal Recognition

Provide adequate legal recognition and clarity to new digital businesses

Principle 2: Level Playing Field

Level the playing field for small digital businesses and entrepreneurs to compete effectively, through deregulation

Principle 3: Risk-Based Regulation

Encourage regulations that are activity-specific and prioritise consumer welfare over state control

Principle 4: Functional Classification of Intermediaries through Co-Regulatory Model

Leverage coregulation to help digital intermediaries evolve, innovate and scale

Principle 5: Transparent and Accountable Self-Regulation

Employ self-regulatory and co-regulatory bodies to offset the need for legacy regulatory constructse

Principle 6: Platform Neutrality

Ensure that large businesses do not discriminate between equal business partners, and consequently reduce the probabilities of gatekeeping

Principle 7: Privacy and Security by Design

Promote product and platform design that helps local companies access global markets with low compliance costs

Principle 8: Fair, Reasonable and Non-Discriminatory (FRAND) Terms

Guide business conduct through the FRAND principle, to minimise the need for economic regulation

Principle 9: Trust and the Global Internet

Promote the use of standards and protocols that build trust in the internet and leverage the wealth of Indian experience in multi-stakeholder collaboration and open design

PROBLEM STATEMENT: A BIPOLAR DIGITAL WORLD ORDER

Platforms that offer multiple functions, products and services to users, will create a large share of the economic value generated in India's digital markets. Seven of the top eight global companies in terms of market capitalisation, use platform-based business models¹ and they are based either in the US or in China. The two countries dominate the global digital economy landscape and are likely to continue to be at the frontiers of technology driven innovation. Illustratively, there are five Chinese and 13 American counterparts for every digital business in India, that generates over a billion dollars in annual revenues. The global digital economy seems to be a caricature of the traditional goods and services economy, where the US and China also account for a large share of industrial revenues.

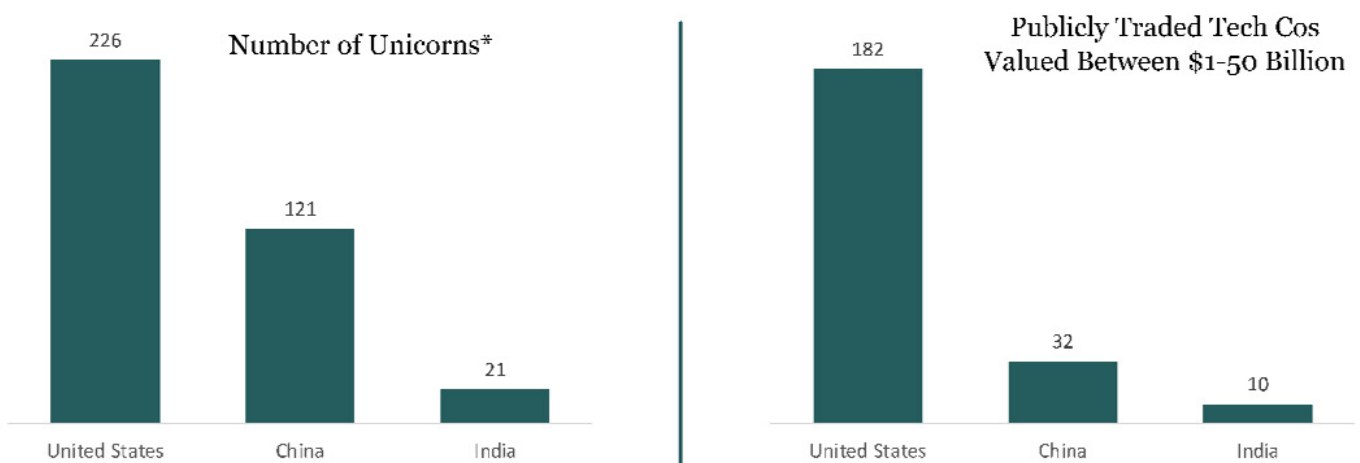
India can draw two key lessons from the emergence of large American and Chinese companies, even as it moves towards its own target of a trillion-dollar digital economy. First, digital businesses require data and content innovation to succeed. The combination of organised datasets and compelling content unlock network effects that help platforms achieve scale. Specifically, datasets allow companies to anticipate

market dynamics, tailor custom offerings, minimise transaction costs and maximise enterprise efficiency. Content precipitates a virtuous cycle of consumption and production, and links digitalisation to the knowledge economy. Second, it is important for digital economy start-ups to be able to take risks. Scholars say that this is an important ingredient of the sector's success in the US and China. While Europe leads the world in internet regulation, it lags behind in value creation because of a risk averse governance framework.

India's ability to create more value in the digital ecosystem depends on its ability to modernise laws. The Information Technology (IT) Act, 2000, a 20-year-old law amended just once in 2008, governs digital applications. It grants legal recognition to eCommerce and is the legislative basis for fundamental rules and regulations. Parliament enacted this omnibus legislation to promote the early digital economy's growth in India. Indian regulators have traditionally controlled the quantity and quality of goods and services, by regulating specific business activities. This vertical regulation ethos is no longer feasible because digital businesses need to rapidly morph and evolve to survive.

A new IT act must be agile, pro-competition, pro-innovation, harmonised with sectoral statutes and will require a concerted focus on legal design.

FIGURE 1: LARGE DIGITAL ECONOMY BUSINESSES IN INDIA, US AND CHINA (2020)



*Unicorns are privately held startup companies with a valuation of over USD 1 billion

SOURCES: CB INSIGHTS, MONEYCONTROL, TRADINGVIEW

¹ https://unctad.org/en/PublicationsLibrary/der2019_cn.pdf

LEGAL DESIGN

During the last decade, digital businesses have prompted fundamental shifts in the Indian and global economy. As a result, there now exist new modes of communication and information-sharing, new business models and new sources of job growth. These shifts have also led to new policy paradigms and regulatory concerns. A key characteristic of innovation-driven digital businesses is their ability to nimbly evolve their products and services, which allows them to shift from one regulatory category to another.

Traditional legal-regulatory frameworks, based on licences and controls, suffer from a lack of agility and leeway to accommodate the increasing pace of technological developments in the digital economy. Governments around the world are exploring ways to address this problem. They are debating the merits of wider goals-based or principles-based regulations versus narrower rules-based ones. The former requires thoughtful calibration and state-capacity for enforcement, but is more resilient to changes in technology and business models. The latter allows for easier enforcement but is rigid and disallows innovation.

A lack of guiding principles can result in the absence of a whole-of-government approach towards digital economy regulation. For instance, it is quite possible that six different regulators may oversee digital markets in India. The draft Policy on E-Commerce of the Department for Promotion of Industry and Internal Trade, the Personal Data Protection Bill, 2019, and the expert Committee on Non-Personal Data Governance, all propose the need for a new regulator. These are in addition to the formation of a new regulator under the Consumer Protection Act, 2019, an existing antitrust authority (CCI), and the telecom regulator's attempts to also participate actively in digital economy regulation.

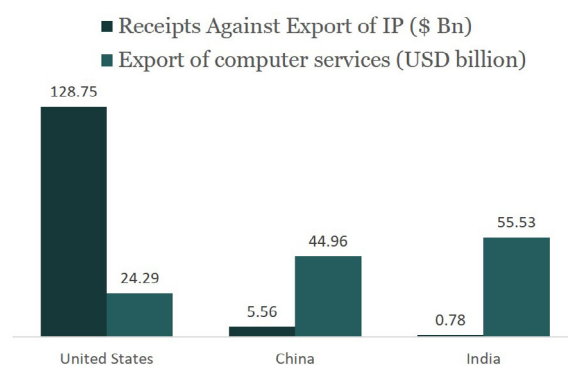
In addition to this likely proliferation of regulators, line ministries and departments are also throwing their hats in the ring. For instance, the Ministry of Road Transport and Highways [wants](#) to regulate taxi aggregators, the Ministry of Tourism wants to [regulate](#) hospitality applications, and the Ministry of Information and Broadcasting has [considered](#) the regulation of over-the-top video streaming services. However, a sectoral

framework, with heavy focus on legacy regulatory toolkits, may not be appropriate to deal with the market. The remedy lies in a unifying framework within a new-age legislation for IT.

A modern IT law must incentivise innovation in India's digital economy, so that IP exports can mimic the success of computer services (Figure 2). The US and China account for 75 percent of all patents related to blockchain technologies, 50 percent of global spending on IoT, more than 75 percent of the global market for public cloud computing and 90 percent of the market capitalisation of the 70 largest digital platforms in the world. India must catch up but to do so, it will have to leverage private sector growth, rather than lean on state support. The country will have to encourage fair competition in digital markets so that the distributional gains from economic activity are spread out and lift all boats.

A new legislation will also have to enable platformisation, so that Indian companies can compete on the global stage without protections. This is essential because India's IT and ITeS ecosystem is already export oriented, and Indian platforms can ride on their coattails to access markets. The government must provide the private sector with three key levers: (a) the ability for product businesses to become platforms, (b) the ability for single utility platforms to transition to multi-utility ones and (c) the ability for local multi-utility platforms to become global multi-utility platforms. These three levers or steps can be achieved through nine principles for an agile and modern IT legislation as discussed below.

FIGURE 2: EXPORT OF COMPUTER SERVICES VERSUS EXPORT OF IP (2018)



SOURCE: WTO INTERNATIONAL TRADE STATISTICS

STEP 1: FROM PRODUCT TO PLATFORMS

- **Legal Recognition:** The IT Act was designed for the old ITES/ BPO ecosystem – to provide legal recognition to digital signatures and enable eCommerce. Today, India is at a fundamentally different juncture, where digital applications and products are ubiquitous and there are several outstanding challenges linked to lack of legal recognition. For instance, the RBI [banned](#) cryptocurrency in 2018, a decision which the Supreme Court [overturned](#) in 2020. The initial ban resulted in ambiguity about the use of blockchain technology in various other applications. Similarly, while digital applications or over-the-top (OTT) services ostensibly fall under IT Act, the Telecom Regulatory Authority of India has [held](#) regulatory consultations to consider a licencing regime for OTT services, which compete with telecom services. Indian courts regularly deal with public interest litigations linked to calls for bans on new applications, or censorship of online content. The new digital ecosystem requires a new framework to provide legal recognition, so that businesses, consumers and governments don't have to turn to courts for clarity. This could be based on a light-touch registration mechanism within MeitY.
- **Level Playing Field:** As a good legal and economic policy design principle, India must think both vertically and horizontally. In other words, the country needs to think not just about how small businesses and entrepreneurs can catch up with larger counterparts and overcome natural monopoly barriers associated with the data economy, but also how enterprises, with similar functionalities yet distinct underlying engineering, can compete with each other. Taxation policy is a case in point. Observers have [noted](#) that tax planning by multinational entities (MNEs) allows them to artificially reduce taxable profits via low-tax jurisdictions, where they undertake little or no economic activity. Such restructuring puts domestic companies at a disadvantage. Levelling the playing field will require more inclusive participation in international discussions on taxation and digital economy. Such efforts should include [strengthening](#) multilateral forums such as the United Nations Committee of Experts on International Cooperation in Tax Matters. It will also require nuance, so that regulators don't use the principle to constrain innovation.
- **Risk-Based Regulation:** Digital businesses must be able to take risks. This is [understood by scholars to be an important ingredient](#) of market dominance by the US and China. Therefore, the IT Act should encourage risk-based regulations because they target activities that pose the highest risk to consumer welfare and, in turn, minimize burdens on lower risk businesses. Risk can be [understood](#) as the combination of the likelihood of an adverse event (hazard, harm), and of the potential magnitude of associated damage (itself combining the number of people affected, and severity of the damage for each). In contrast to a one-size fits all approach, a risk-based one offers a tailored approach that provides benefits to consumers and businesses alike. Several countries have increasingly adopted this approach to tackle challenges posed by new-age technologies. The US's National Institute of Standards and Technology (NIST), [maintains](#) that risk based approaches help ensure network security, as more effective investment decisions are made with better measurements of risks, costs and benefits of cybersecurity strategies. Similarly, America's Food and Drug Administration (FDA) has [proposed](#) risk-based regulations for digital health products.

STEP 2: FROM SINGLE UTILITY PLATFORMS TO MULTI-UTILITY PLATFORMS

- **Functional Classification of Intermediaries through Co-Regulatory Model:** Under the present IT law, digital intermediaries are clubbed together, no matter what their underlying business models, incentive structures and potential for harm. This must change so that the liabilities associated with one aspect of a business or function, don't spill over and jeopardise the existence of the platform altogether. Most platforms are multi-functional. For instance, the same platform may offer social media functions, video on demand and gaming, all through one digital application. Without narrower functional reclassifications, it will be increasingly harder to govern such platforms without overregulating them and stifling innovation and competition. Therefore, it is important to regulate platforms for what they do and not attempt to regulate them for what they are. The latter may not have a static or unchanging answer in a dynamic technological and business world. This would involve industry led bodies developing common codes of practice and standards with facilitation, supervision and feedback from the government. Unlike a top-down regulatory approach, coregulation involves constant and continuous dialogue, offering informational and adaptability advantages.
- **Transparent and Accountable Self-Regulation:** The complexity of multi-utility platforms or intermediaries will demand sectoral oversight, and even regulation at times. No matter how light-touch a future IT governance framework is, there will always exist a need to harmonise with other legal-regulatory constructs. For instance, the central bank will always want oversight over financial products and services. Similarly, the drug controller will supervise the standards and practices of e-pharmacies. The greater the fiduciary responsibility or potential for harm of a digital business, the more sectoral regulators and supervisory bodies may be

involved. However, well-designed self-regulatory and co-regulatory bodies can offset the state's need for traditional oversight. For instance, organised self-regulatory structures are already in place in the video-on-demand and fantasy gaming industries. The key is for such self-regulation to be transparent and accountable, which requires the appointment of an independent ombudsman, effective grievance redressal and good governance. The government could also work with industry to establish such bodies or to recognise them within sectoral laws, just like the self-regulatory body for advertising, the Advertising Standards Council of India (ASCI) is recognised in the Cable TV Network Rules' Advertising Code.

- **Platform Neutrality:** As platforms assume vast influence in an increasingly interconnected business environment, they should not discriminate between equal commercial partners, in providing technical access to their service. Private companies' gatekeeping functions, for instance in relation to app-stores on mobile devices, also need to be monitored. App-store guidelines can often be arbitrary, with smaller players subject to loss of market at the whims of the larger platforms. This issue is being tackled head on around the world, with antitrust investigations in the US and EU in particular. Entities that operate and control such platforms may be required to abide by fairness and transparency requirements. These include publishing clear and accessible terms of use, providing reasoning and rationale behind any ranking/rating system they employ, disclosing contractual or other commercial relationships that may impact such ratings and disclosing details of advertising deals.²

² These are some of the obligations imposed on 'online platform operators' in the French Digital Republic Law to ensure an environment of trust and transparency

STEP 3: FROM LOCAL MULTI-UTILITY PLATFORMS TO GLOBAL MULTI-UTILITY PLATFORMS

- **Privacy and Security by Design:** The future of the Indian digital ecosystem rests on the ability of local companies to create a global footprint. This requires a regulatory framework that doesn't compromise or straightjacket product/platform design. A case in point is the regulation to govern privacy of data. India must promote "privacy by design", so that local product/platform standards are interoperable with their counterparts in advanced countries. Consequently, local entrepreneurs and businesses will not have to redesign their offerings for global market access. The absence of an interoperable regulatory regime can [significantly](#) increase operational costs for businesses, and small enterprises are the worst affected. A [survey](#) of 370 firms in the EU and US revealed that the cost of compliance (per employee) with the EU specific General Data Protection Regime was - \$207 for a firm with less than 5,000 employees, \$73 for a firm with 5,000-24,999 employees, \$24 for a firm with 5,000-74,999 employees and \$11 for a firm with more than 75,000 employees.
- **FRAND Terms:** India must encourage digital businesses to invest in innovation to compete globally. Therefore, local laws and regulations must have a pro-competition bias, which don't transfer legacy economic regulations and controls to the governance of the digital economy. The new IT law should clearly privilege FRAND terms for regulation of business conduct, wherever applicable. Moreover, it should prioritise the adoption of a graded and proportional approach to economic regulation. For instance, the [European Commission](#), and scholars³ have started exploring the context of FRAND with respect to the digital economy. It has been argued that FRAND Policy for dominant digital platforms can give fair access to critical data platforms, while allowing a fair compensation for the sharing of the technology (encouraging further investment in future innovation).
- **Trust and the Global Internet:** There is a need for a global internet governance system that has common standards. Democracies need to envision this together and develop a common set of protocols/principles/rules that they will follow when it comes to internet governance and amend/formulate laws accordingly. For instance, in June 2019, Japanese Prime Minister [announced](#) the initiative to work towards the Data Free Flow with Trust (DFFT) vision. The vision is part of the [Osaka Declaration](#) (Osaka Track) which aims to facilitate international rulemaking on digital trade. The initiative is based on the premise that trust and openness in data flows co-exist and complement each other. Two key pillars of the DFFT initiative are: the need to keep personal data, intellectual property, and data related to national security under careful protection; and call for the free flow of certain data like medical, industrial, and traffic to enable economic growth. Many of these goals can be achieved through collaborative, multi-stakeholder approaches to internet governance and design. India will also have a wealth of experiences to share as it builds its open data architecture for various industries. .

³ https://www.jipitec.eu/issues/jipitec-8-4-2017/4636/IIPITEC_8_4_2017_257_Drxl; and <https://link.springer.com/article/10.1007/s40319-018-00777-7>

CONCLUSION

The digital ecosystem is a breeding ground for the creative destruction of old modes of doing business. It must also prompt a revisit of old approaches to economic regulation. In its early days, the use of the automobiles was heavily restricted on British streets. The Locomotive Acts, passed in 1865, laid out a series of prescriptions for vehicle owners, including a speed limit of two miles per hour. A person would have to waive a red flag to horse carriages and pedestrians as a sign of the vehicle's passage. These overbroad restrictions earned the moniker of "red flag laws". India's digital economy requires a diametrically opposite approach. Speed limits should only be imposed in cases of market failures. The latest Economic Survey, which correlates economic freedom and innovation, also encourages such an approach. The IT and telecom revolutions show that, when allowed to, Indian entrepreneurs can take high risks, innovate and improve consumer welfare. Policymakers must therefore set out a responsive digital economy framework, in the public interest.

