# India's Techno-Nationalist Budget

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## Summary

*India's 2022-23 budget accelerates the ongoing move to create and upgrade digital public infrastructures in areas like retail, logistics, health, travel and education. The end result will be a more digitised India with citizens transacting and interacting with one another and the government on digital interfaces.*

The COVID-19 pandemic has accelerated digital adoption in India. Open Digital Ecosystems (ODEs) now signify the dominant paradigm in New Delhi's thinking on supporting technology development. Across several areas like health, skills, logistics, transport and travel, the current policy thrust is toward developing open digital platforms consisting of digital registries that enable citizens to share information and interact and transact with each other for different purposes. These ODEs have found prominent mention and backing in India's 2022-23 budget unveiled last week.

India's Finance Minister Nirmala Sitharaman announced the government's pledge to invest ₹7.5 lakh crore (S$134.56 billion) in India's digital economy and digital infrastructures. The budget has funding to launch the Digital Ecosystem for Skilling and Livelihood (DESH) that creates a portal through which citizens can skill, re-skill and upskill by taking online training programmes. This platform will also eventually provide skill credentials, options to make payments between actors and relevant mechanisms to find employment opportunities. A digital education and employment gateway becomes important, given the challenges students have faced with respect to schooling and the increasing need to rely on online classes. DESH could herald a major shift towards digital education pathways. Like education, the government is prioritising digital health through the budget. The recently announced National Digital Health Ecosystem receives a fillip to improve health facilities and access digitally, including procuring insurance. This funding could be directed toward ensuring more segments of Indian society can access better healthcare. The budget's emphasis on expanding the network of optical fibers in rural areas will also likely expand broadband and mobile services, enabling citizens to use ed-tech and tele-health applications.

The budget also helps producers get their goods to markets, distributors and consumers through the creation of the United Logistics Interface (ULIP), which should alleviate logistics costs for businesses already struggling with supply chain constraints. The hope is that ULIP will help make distribution of goods seamless with digital tools that can help track their movement from production to delivery while easing onerous documentation. Data and digital tracking can help producers figure out how to best plan last mile delivery for a range of goods and services, since Indian consumers have become accustomed to using various online apps to purchase goods. The budget also introduced plans to create an open-source mobility stack for organising seamless travel for Indian passengers.

Since Aadhar's launch in 2010, these ODEs have become a mainstay in India's quest towards building and operating digital public infrastructures that can be used by the government, private firms and citizens to deliver 'citizen-centric' services to the Indian population. The political and socio-economic impact of these ODEs are tremendous. Once fully operational, they could potentially transform governance, the state-citizen as well as state-business relationship. These ODEs consist of three layers – the technological layer or the digital interface; the community layer which involves the developers, users and civil society organisations that engage in and use these interfaces; and the governance layer or the institutions and rules that govern the digital ecosystem.

India's record in building these 'digital highways' represents a pioneering accomplishment that allows the state to drive technological change for citizens instead of relying on big tech companies to spearhead this process. We live in an era where big tech firms are largely responsible for driving the creation and deployment of digital platforms. This reality makes the development of the ODEs all the more necessary and relevant in giving citizens options when regulating their digital lives. Yet, problems do exist. A big cause for concern is the rising spate of risks online – ranging from phishing, fraud, ransomware and theft to misinformation that affects all users alike, including government agencies, private firms and citizens. India's online population appears extremely vulnerable to cyber threats. With the government looking to scale new digital pathways and ecosystems that will bring more new users, threats to online harm and safety could hinder or stall India's economic progress. Besides the government, the Indian private sector also has to become more cyber resilient. Sectors like banking, finance and telecommunication have been prioritising this issue but other industries lag in bolstering their security. The time has come to firmly shore up India's cyber preparedness and defences.

The 2022-23 budget's emphasis on technology in areas like finance, healthcare, education, logistics and agriculture signal that India's trajectory as a leading economy will be powered by the embrace of digital tools and technologies. The ODEs could potentially form a major part of that transformation. Analysts expect these digital ecosystems to present opportunities worth US$700 billion (S$940.73 billion) for India across sectors like health, education, agriculture and logistics, involving both big, small and medium sized firms. The demand has arrived. Since the pandemic in 2020, India has seen a large proportion of the population use and leverage a range of digital tools and services to manage their daily lives that have rebooted India's startup ecosystem, driving digital economic growth. With this budget, the Modi government has signalled that India's economic future will be digital.

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