



IIAS Public Governance Series Vol. 7

VIKSIT BHARAT

@ 2 0 4 7

GOVERNANCE TRANSFORMED



C.K. MATHEW, SURENDRA NATH TRIPATHI
C. SHEELA REDDY & A.P. SINGH

Viksit Bharat @2047

Governance Transformed

C. K. MATHEW, SURENDRA NATH TRIPATHI, C. SHEELA
REDDY, A. P. SINGH, EDITORS

Mathew, C.K., Tripathi, Surendra Nath, Reddy, C. Sheela, and Singh, A.P. (2025), *Viksit Bharat @ 2047: Governance Transformed*, IIAS Public Governance Series (Vol. 7, 2nd ed.), Brussels: IIAS-IISA, 717+xvi p.

© Mathew, C.K., Reddy, C. Sheela, Tripathi, Surendra Nath, Singh, A.P., and the authors of the individual chapters, 2025. The views expressed in this book are those of the authors, and do not necessarily reflect those of the institutions they were or are associated with.

Published under a CC BY licence agreement by
The International Institute of Administrative Sciences, Brussels,
2025, <http://www.iias-iisa.org/>



IIAS Public Governance Series
Vol. 7, 2nd Edition
Series Editor: Steve Troupin
(IIAS)

ISBN: 9798306547237; DOI: <https://doi.org/10.46996/pgs.v7e2>

Chapter 20. Into the Crystal Ball: Looking Towards 2047

Adil Zainulbhai²⁴⁰

Today, every institution and every individual should move with a resolution that every effort and act will be for Viksit Bharat. The aim of your goals, your resolutions should be only one—Developed India.

Prime Minister Narendra Modi, at the launch of “Viksit Bharat@2047: Voice of Youth.”

Introduction

The 21st century is poised to be India's century. While India's moment of arrival has long been documented by commentators from different specialisations and walks of life (Chandler and Zainulbhai, 2013; Das, 2002; O'Neill, 2001; Panagariya, 2008; Panagariya and More, 2023), due to the reforms engendered in the last decade, there is now a sense of inevitability regarding India's emergence as a fully developed global superpower. The numbers speak for themselves: India is currently the fifth-largest economy in the world (GDP of US\$3.94 trillion), having grown eight times since 1997 and six times in GDP per capita (World Bank, 2023), and is slated to become the world's third largest economy by 2027, once its GDP crosses US\$5 trillion (International Monetary Fund, 2023). At the current rate of economic growth, India's economy is expected to reach US\$30

²⁴⁰ Adil Zainulbhai is the Chairman of the Capacity Building Commission

trillion, with all the attributes of a developed nation, ably supported by an expanding demographic dividend which is expected to stay stable until 2070 (Ladusingh and Narayana, 2012). It will be a “*Viksit Bharat*,” a country that affords the promise of realising capabilities and equality of opportunity for all.

Table 1: India's GDP Projection Compared to Other Countries (Fiscal Year)

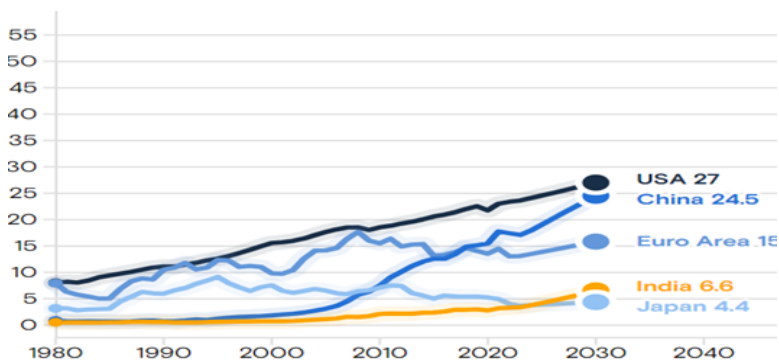
	2022 -23	2023 -24	2024 -25	2025 -26	2026 -27	2027 -28	2028 -29
<i>In US\$ trillion</i>							
<i>US</i>	25.46	26.85	27.74	28.77	29.9	31.09	32.35
<i>China</i>	18.1	19.37	20.88	22.41	24.04	25.72	27.49
<i>Japan</i>	4.23	4.41	4.53	4.73	4.92	5.08	5.34
<i>Germany</i>	4.08	4.31	4.45	4.64	4.82	4.95	5.04
<i>India*</i>	3.39	3.74	4.06	4.4	4.77	5.15	5.58
<i>UK</i>	3.07	3.16	3.38	3.57	3.79	4.02	4.25
<i>In PPP International Dollar trillion</i>							
<i>China</i>	30.22	33.01	35.26	37.39	39.6	41.78	44.03
<i>US</i>	25.46	26.85	27.74	28.77	29.9	31.09	32.35
<i>India*</i>	11.86	13.03	14.17	15.33	16.56	17.88	19.31
<i>Japan</i>	6.14	6.46	6.67	6.83	7	7.15	7.31
<i>Germany</i>	5.35	5.55	5.73	5.96	6.18	6.37	6.57
<i>UK</i>	3.71	3.85	3.97	4.13	4.29	4.45	4.6

Source (basic data): IMF World Economic Outlook (April 2023).

This consensus among commentators, economists, think tanks, forecasters, and opinion makers alike was never considered an absolute given earlier. Indeed, from the early 2000s to the mid-2010s, India's developmental transformation

was approached with caution and uncertainty—through studied scepticism in light of geopolitical realities (Malone, 2015); as a schizoid consumer market hyper-sensitive to regional disparities, demographic trends, sectoral deficiencies, and misdirected government spending (Bijapurkar, 2009); and as a “breakout nation” performing an illusory economic feat—replete with countervailing tendencies in demographic inclusion and consumption patterns underlying its macroeconomic growth structure—provocatively labelled as “the great Indian hope trick” (Sharma, 2013). Many of these readings were impelled by a data-driven criticism calling out the hype around the emerging markets hypothesis (O’Neill, 2001) amidst the then global economic tailwinds—the era of easy money, rising commodity prices, and global trade, which came unstuck due to the black swan event that was the global financial crisis of 2007–2008. This was a time when the entanglements between prediction and outcomes were being critically re-examined in the wake of fuzzy forecasts. The Indian economy chugged through a period of average growth rates which have now become robust due to a spate of critical reforms and transformative agenda-building efforts put in place since 2014.

Figure 1: India’s GDP Projection Compared to Other Countries (Fiscal Year)



Source (basic data): IMF World Economic Outlook (April 2023).

With declining poverty (Desai, 2024), emerging global prowess (Baru, 2020), improved governance and public service delivery (especially government schemes like Clean India Mission [NITI Aayog, 2018]) and advances made in new industries, India is poised to become a global superpower as it approaches the 100th year since Independence. The aim of this article is to provide an opportunity to actualise the difference between foresight and prediction, predicated on a shared aspirational vision of a fully developed India—*Viksit Bharat* 2047. In drawing out the far-sighted impacts of key levers of progress, I argue that synchronising this vision, especially across the civil service ecosystem, will propel us to wholly and fully realise our tryst with destiny by the centenary of our Independence. Herbert Simon (1968) famously said, “Prediction is a narrow view, often quantitative. Foresight requires a broader perspective, integrating qualitative insights and understanding system dynamics.” This view is also echoed by noted statistician Nate Silver (2012) who reminds us that the key to making a good forecast is not in limiting yourself to merely quantitative information: “The signal is the truth. The noise is what distracts us from the truth.”

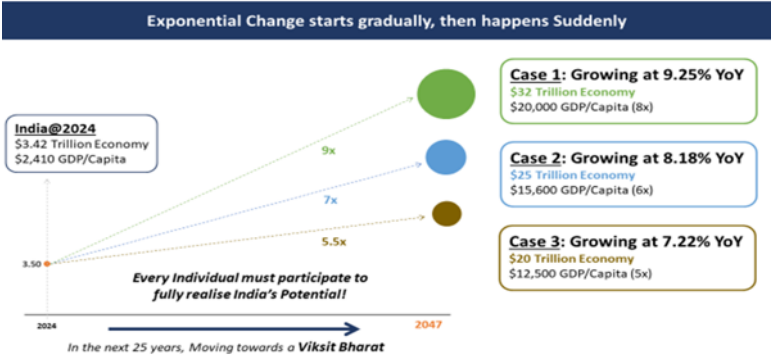
Viksit Bharat is such a visionary orienting signal to all stakeholders and contributors to proactively participate in ushering India’s transformation into a fully developed country by 2047, linking the macro goals to the sectoral targets. It aims to create S.M.A.R.T. goals for designing progressive cycles of modular reform by building participatory platforms for engagement around a shared ideal—rooted in India’s civilisational wisdom and ideas of public service. First championed by the Honourable Prime Minister as a clarion call on India’s 75th Independence Day, it is an iterative agenda-building principle that reminds us that foresight is not about predicting the future, but about minimising surprise through action, feedback, and continuous learning.

This article frames the premises of a Viksit Bharat based on five key pillars of India's economic performance, which will enable us to elevate ourselves to full development from this take-off stage. In discussing the fifth pillar, which involves improvements to governance through harmonising state capacity, I draw on my own recent experiences and efforts in enhancing the civil service capability ecosystem initiated through the National Programme on Civil Service Capacity Building (NPCSCB), popularly known as "Mission Karmayogi." I conclude by arguing that the three Cs of *collaboration*, *commitment*, and *capabilities* are key to steering institutional performance towards this ideal of holistic and transformative development that inspires collective and concerted action.

Five Pillars of India's Development Transformation

India's current growth impetus is a continuation of post-liberalisation trends which have begun to mature into a stage of high mass consumption consistent with technological innovation, rapid urbanisation, and hyper-connectivity. This has been ushered in through reforms that have reinvigorated private investment and infrastructural development, spurring better interlinkages between the manufacturing and service sectors, which will support sustained endogenous growth (Chhibber and Soz, 2021; Panagariya, 2020, Panagariya and More, 2023). India has managed to come out of the pandemic with a K-shaped recovery and has recorded a steady growth rate of 6% to 8% in the past decade, according to various national and international GDP estimates (International Monetary Fund, 2023). Unfolding within this pattern of longer macroeconomic change are *five crucial pillars* that provide a platform for a decisive take-off towards the Viksit Bharat milestone of a US\$30 trillion economy (US\$18,000–US\$20,000 per capita), for which India needs an annual growth rate in excess of 9%.

Figure 2: Moving Towards a Fully Developed Viksit Bharat by 2047
(Projections Based on Three Scenarios of Nominal GDP Growth Rates CAGR)



These five trends, which are outlined below, serve as both growth levers and productive social currents in New India’s aspirational growth story: networked patterns in infrastructural development; advancing India’s ongoing digital revolution; upskilling its labour force to improve GVA and sustain human capital formation; and improvement in our state capacity and the quality of citizen services.

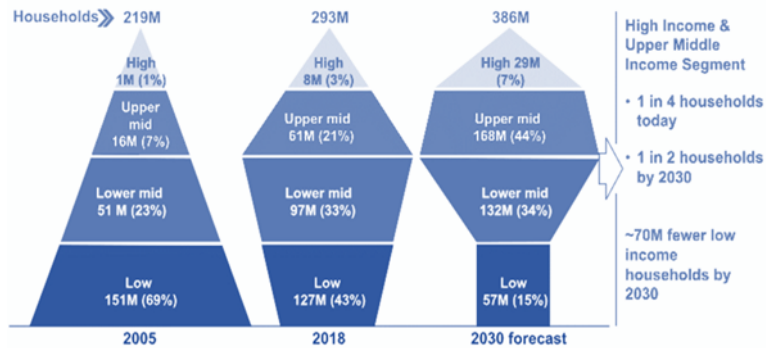
Trend One: The New India Growth Story

The source code of India’s future architecture can be found in the growth mindset of its aspirational society—a generational story of middle-class expansion, gains in wealth creation, and entrepreneurial prosperity, along with large-scale poverty reduction driven by its steady economic growth since liberalisation (Bhagwati and Panagariya, 2013).

Currently numbering about 432 million households and defined as having a household income between ₹5 lakh and ₹30 lakh in 2021 (17–100 US\$/day), a more recent survey by the Indian think tank People Research on India’s Consumer Economy (PRICE) found that this category of Indians increased

to 41% of the population in 2020–2021, up from 30% in 2004–2005.

Figure 3: Middle-Class Consumer Expansion in India

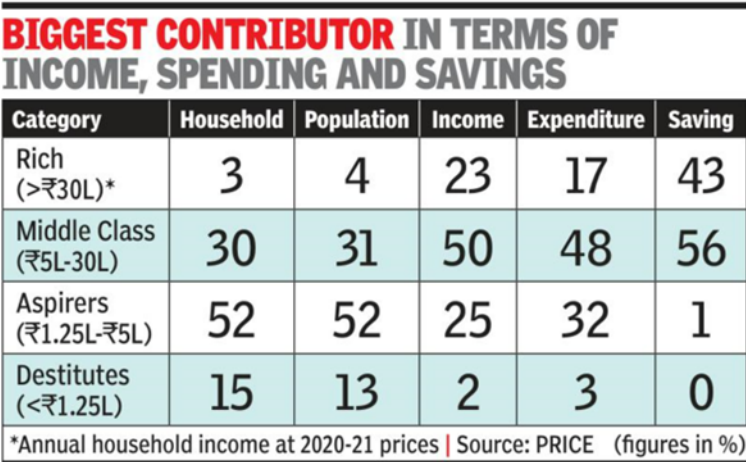


Source: PRICE Survey (2022).

New businesses need to understand how layers within the middle class constitute discrete market segments as catalysts for funnelling mass consumption and learn to address this cross-section of consumer demand. This approach will boost greater private investment in the economy while also spurring entrepreneurship and value-added services.

These macro-statistics can equally be dovetailed with India Inc.'s growth story, reflected in the emergence of a robust capital market (Figure 4), as well as the improved performance of its banking sector, which has reduced its cost of banking intermediation through the resolution of NPAs and stressed assets. This has been aided by improved corporate solvency (Figure 5) through reforms initiated by enacting the Insolvency and the Bankruptcy Code (2016). Further soft-touch regulatory steps in this direction have been taken through the recent amendment to the Competition Act (2023).

Figure 4: Contribution of Middle Classes to Marginal Propensity to Save and Consume (in %)



Source: PRICE Survey (2022).

Figure 5: India’s Capital Market Growth over Three Decades in a Comparative Global Context

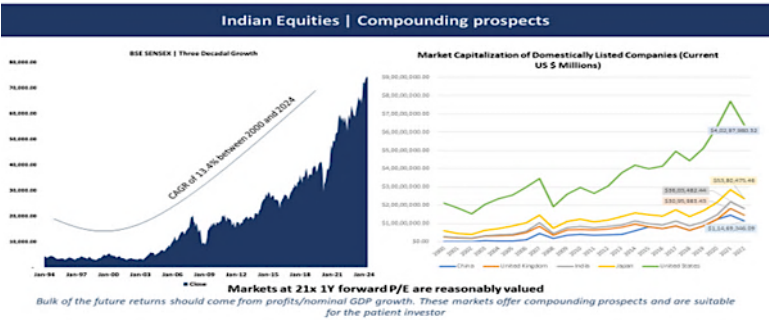
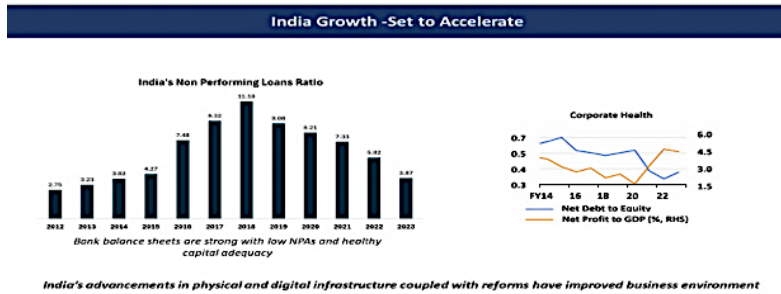
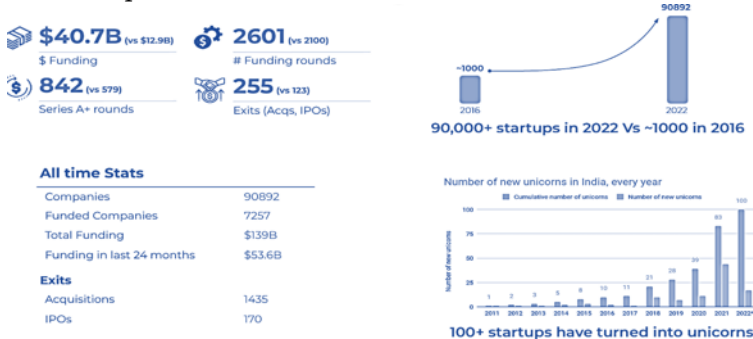


Figure 6: India's Private Sector Scenario Reflected Through the Profitability and Creditworthiness of Corporates Compared to the Capital Adequacy and Quality of Credit of India's Banks



At the other end, it is India's startup story that truly defines this aspirational growth mindset. Within a mere six years (2016 to 2022) of initiating the Digital India and Startup India missions, Indian startups have grown by an astronomical 900%, boasting the third-highest number of unicorns in the world.

Figure 7: India's Startup Scenario Since the Advent of Digital India and Startup India



For context, we may note that India has the third-highest number of unicorns in the world, substantially behind the US and China, but ahead of the UK and Germany. According to the most recent Hurun Global Unicorn Index (2024) (Hurun Research Institute, 2024), the number of unicorns registered in India has slipped to 67, while India has the highest number of

offshore unicorns at 109. New India's aspirational growth story also requires continued reform to improve access to financial services and capital markets, a segment where new wealth management tools and investment management applications have a formative role to play. These *fintechs*²⁴¹ need soft-touch regulation, requiring de-siloed working and smooth coordination between the RBI, SEBI, and the Finance Ministry to unlock India's intellectual dividend and create foundational technology platforms that funnel middle-class savings frictionlessly into sources of value creation for India and the world (Elevation Capital, 2023).

Trend Two: Infrastructural Networks— Connecting People and Places to Aspirations of Mobility

India's ambitious infrastructure development initiatives are rapidly propelling the nation closer to its vision of a *Viksit Bharat@2047*. Over the past decade, the country has witnessed a remarkable surge in infrastructure spending, reflecting its commitment to modernise and expanding crucial sectors. The overall expenditure on infrastructure has increased more than fivefold in recent years, marking a significant leap towards sustainable economic growth (*Economic Survey 2023*; Ministry of Finance, 2023a).

In the fiscal year 2023–2024 alone, India allocated a staggering ₹10 lakh crore (a 37.4% increase) towards capital expenditure, underscoring its aggressive stance on

²⁴¹ India is home to more than 10,000 fintech companies, ranking third highest in the world, behind the US and the UK (12,500), and ahead of China (3,600). This is a market segment that needs openness and creativity to attract greater global fintech funding (which grew to 6.5% in 2022 before tailing off last year) in order to build on the rails of India's digital public infrastructure and to harness the huge potential of the swelling middle-class aspirations (see *The Elevation Bottomline report on fintechs 2023* [Elevation Capital, 2023]).

infrastructure investment (see Figure 8 drawn from Union Budget 2023; Ministry of Finance, 2023b). This substantial funding is intended to bolster key sectors such as transportation, energy, and urban development, laying the foundation for future economic prosperity.

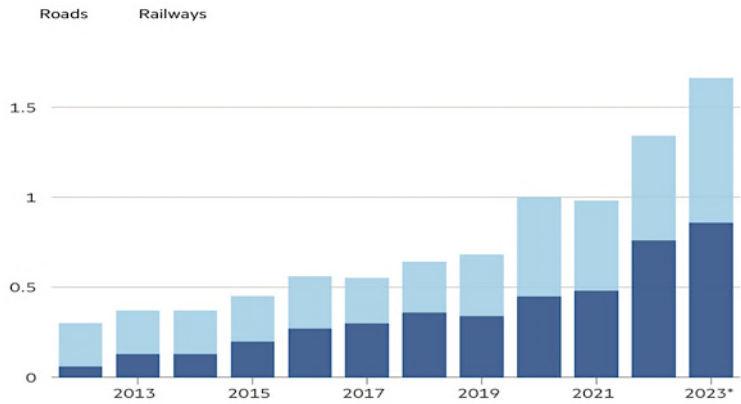
One of the standout achievements has been the massive expansion in metro connectivity across urban centres. India currently boasts 17 operational metro systems. Metro rail networks have seen a remarkable increase in coverage, facilitating seamless and efficient transportation options for millions of commuters. This expansion not only eases urban congestion but also enhances connectivity, driving economic activities and promoting sustainable urban development. Today, India operates metro rail, suburban rail, and monorail systems. Among these, metro rail has shown remarkable expansion, growing from 222 km across three cities in 2011 to 697 km in 13 cities by 2021. An additional 1,032 km of metro rail network has been approved, which will extend metro services to 27 cities (Union Internationale des Transports Publics, no date).

In rural India, the focus has been on improving connectivity through road infrastructure. The government's ambitious targets include constructing rural roads at an average rate of 91 km per day (totalling 7.4 lakh km of rural roads under the Pradhan Mantri Gram Sadak Yojana) (National Rural Development Infrastructure Agency, 2023).

These efforts aim to enhance accessibility, reduce logistical costs, and integrate rural economies more effectively into the national framework, acting as a connectivity bridge between people, places, and their aspirations. Another crucial aspect of India's infrastructure enhancement is the development of natural gas pipelines. A comprehensive National Gas Grid has been planned to ensure sufficient availability and equitable distribution of natural gas across the nation. Currently, there is an operational natural gas pipeline network spanning approximately 17,000 km in India (see Natural Gas Pipelines entry in Ministry of Petroleum and Natural Gas, 2023-24).

Championing a sustainable development push, the government has committed an outlay of ₹17,490 crore to the National Green Hydrogen Mission (MNRE 2023), out of which ₹400 crore will be allocated to the identification of regions suited to becoming National Green Hydrogen hubs. This mindset towards clean energy transitions is geared towards promoting industrial growth while reducing dependency on traditional fuel sources and aligns with India’s global commitments to achieving concurrent Sustainable Development Goals (SDGs).

Figure 8: India’s Capital Expenditure on Mobility Infrastructure (% of GDP)



Source: *Economic Survey, 2023 (Ministry of Finance, 2023a)*.

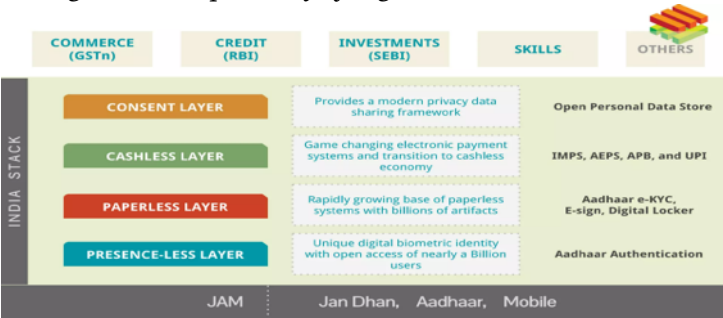
Ranked the third-largest startup ecosystem in the world (*Zinnov-NASSCOM India tech start-up landscape report, 2023*; see Gupta et al., 2023), India prides itself on having over 136,075 DPIIT-recognised startups (Ministry of Commerce and Industry, 2024) steadily contributing to the country’s growth story. In the maritime sector, India has made substantial strides. In the fiscal year 2023, major ports in India managed 783.50 million tonnes of cargo, indicating a compound annual growth rate (CAGR) of 3.26% from fiscal year 2016 to 2023 (Ministry of Ports, Shipping and Waterways, 2023). This expansion not only enhances trade efficiency but also positions India as a maritime hub in the

region. Improved port infrastructure is crucial for facilitating international trade and integrating India into global supply chains.

Furthermore, the establishment of mega food parks and agro-market reforms has revolutionised the agricultural sector. These initiatives facilitate direct farm-to-fork product movements, ensuring better price realisation for farmers and enhancing food security. By modernising agricultural infrastructure, India aims to boost rural incomes, reduce wastage, and strengthen the overall agricultural value chain. The significant increase in infrastructure expenditure, coupled with targeted projects in transportation, energy, and agriculture, underscore the country's commitment to sustainable growth and inclusive development. This is reflected in India's improvement in the World Bank's Ease of Doing Business rankings (63 in 2020 from 142 in 2014) and the Logistics Performance Index (up to joint 38th in 2023) which has been boosted since the launch of multimodal Network Planning Group (NPG) set up under PM Gati Shakti to facilitate close coordination among key infrastructure-related government departments throughout the project planning and execution phases. As these initiatives continue to unfold, they promise to propel India towards becoming a global economic powerhouse while improving rural-urban connectivity to enhance the quality of life for all its citizens.

Trend Three: Leapfrogging Using Technology—
Advancing India’s Revolutionary Digital Public
Infrastructure (DPI) Approach

Figure 9: The India Stack Concept Enabling e-Commerce Services
Through the Interoperability of Digital Public Goods



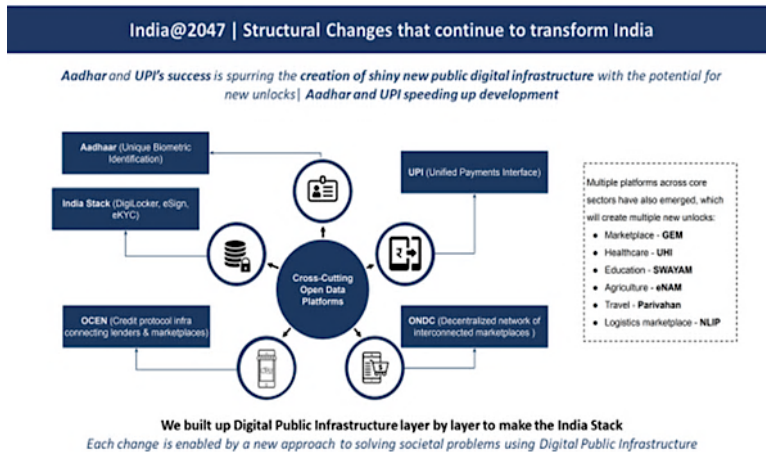
India’s most exciting prospect of leapfrogging into an elevated global superpower status lies in advancing the Digital Revolution that began with the Aadhaar Revolution. Providing a presence-less layer of biometric identification linked to a unique 12-digit social security number has established a foundational layer to seamlessly enable direct beneficiary transfers of government benefits to individuals, cutting out leakages and reducing unnecessary red tape. Building on this foundational layer through the renowned JAM trinity,²⁴² enables a genuine revolution by *stacking* interoperable databases involving cashless (IMPS/UPI), paperless (DigiLocker/eKYC), and consent layers designed to decentralise e-commerce and customise financial services.

This “India Stack” approach can help us leapfrog directly from being a data-poor country to a data-surplus country, becoming a capabilities enabler for the world economy through the provision of our digital public goods. This enables the

²⁴² Thanks to the JAM trinity, the amount disbursed through DBT was ₹5.52 trillion in 2020–2021, compared with a mere ₹7,367 crore in 2013–2014 (*Economic Survey*, 2022; Ministry of Finance, 2022).

building of solutions through a set of open-source Application Programming Interfaces (APIs), interlocking consumers to access digital marketplaces via cross-cutting open data platforms (Figure 9). This advantageous form of decentralised “protocol thinking” can generate considerable network effects for our domestic platform economy, further enhancing our reputation as a global ITeS (information technology enabled services) exporter and solutions provider.

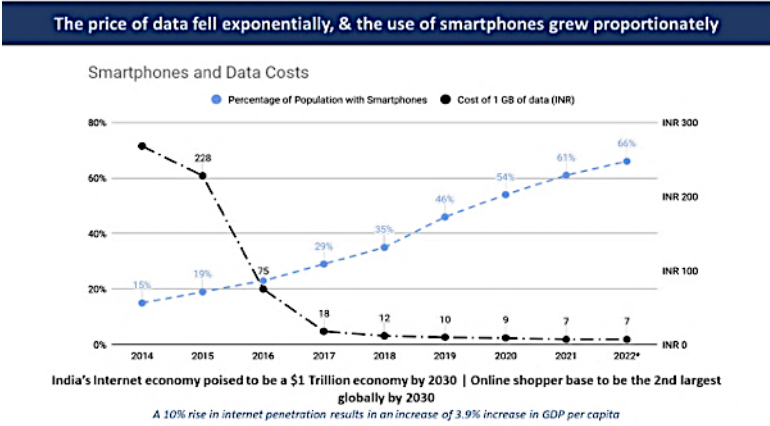
Figure 10: India’s Digital Public Infrastructure Integrating Cross-Platform Marketplaces through Stack Economisation



This ongoing Digital Revolution is, in no small part, owed to India’s efforts in building resilient connectivity infrastructure through the erstwhile mobile phone revolution in India (see Figure 10). This is, in itself, an exemplary case of a second-order change which has led to an increased density of smartphone penetration in India (two-thirds of India’s population). Spurred by the lowering cost of mobile data, we now have GSM mobile phones exceeding 900 million, owing largely to India’s indigenous capabilities in 4G/5G communication, thanks in large part to the Digital India Mission and India’s Atmanirbhar push in the telecom sector. With the growing increase in rural

internet penetration, India’s digital transformation is set to assume a revolutionary status.

Figure 11: Telecom Revolution in India Encapsulated by the Inverse Relationship Between the Price of Data and Smartphone/Internet Penetration



Finally, a cornerstone of India’s digital transformation that is most directly a consequence of the Pradhan Mantri Jan Dhan Yojana (PMJDY) is the digital payments revolution, which has made India a world leader in the digital transactions space. This “cashless” revolution has boosted merchant payments and resulted in a faster multiplier effect in absorbing consumer demand, while also formalising large segments of small and micro-enterprises (see Figure 10). The next step in expanding the fintech sector is to address rural micro-finance and smooth retail lending for small businesses, thereby further boosting directed and customised financial services. The India Stack approach (Figure 12), centred on the consent architecture of account-aggregator (Figure 13), is a vital step towards this direction (see Figure 14 for its trajectory). Digital India has enabled the creation of open-network protocols as public-interest technologies that have a far-reaching impact on how public goods are created and public services are performed. They have enhanced the delivery of services to our citizens by

digitalising trust through the platform of governance—endowing rules and structures to the mantra of perform, transform, and reform (see Figure 14 for Open Network for Digital Commerce [ONDC]).

Figure 12: Digital Payments Scenario in India

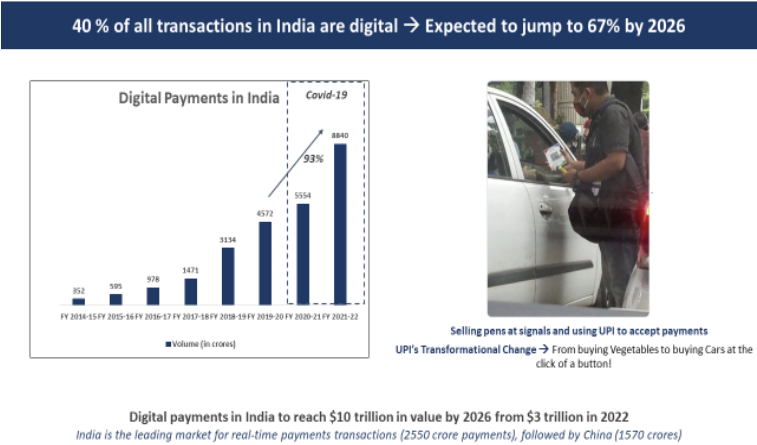


Figure 13: The Decadal Success of Direct Benefit Transfers Has Been Positively Reinforced by Digitalisation

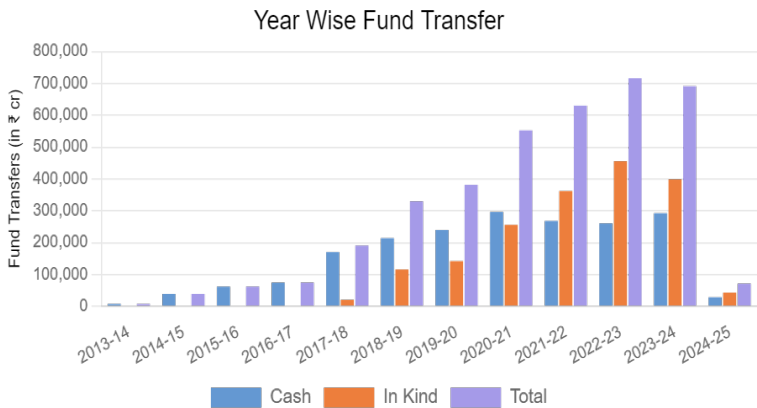


Figure 14: The India Stack Approach to Creating Open Digital Ecosystems Enabling Multi-sector Digitisation

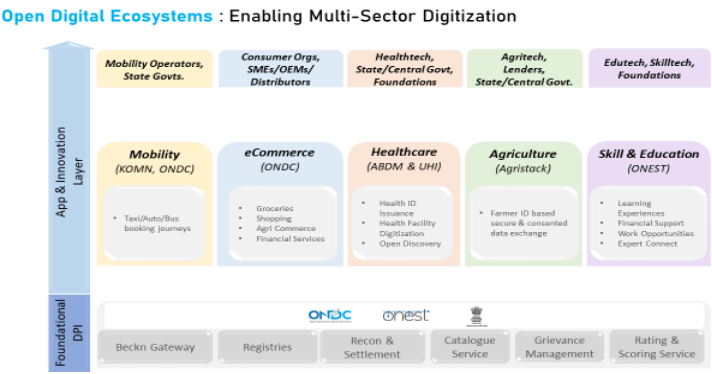


Figure 15: The Account-Aggregator Framework Seeks to Add a Consent Layer to Revolutionise Financial Services like Lending, Life Cycle Finance and Micro-credit

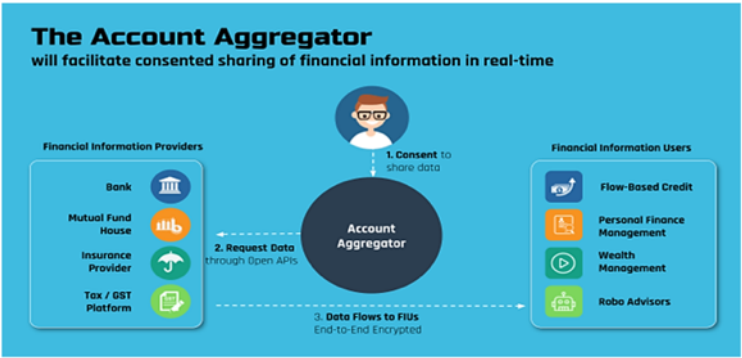


Figure 16: The Evolutionary Trajectory of India Stack from Aadhaar to ONDC via UPI/JAM

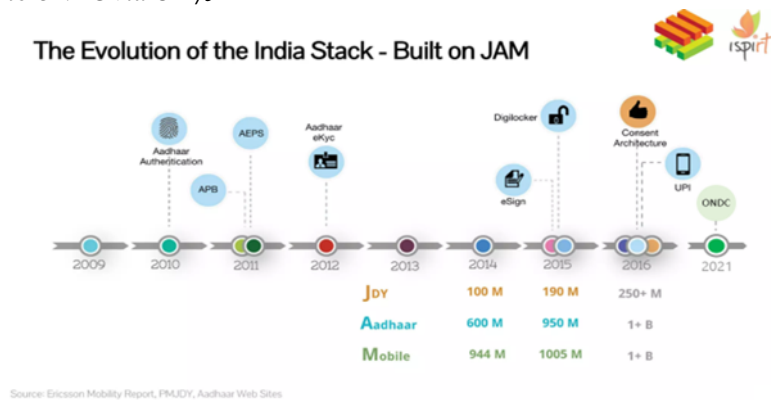
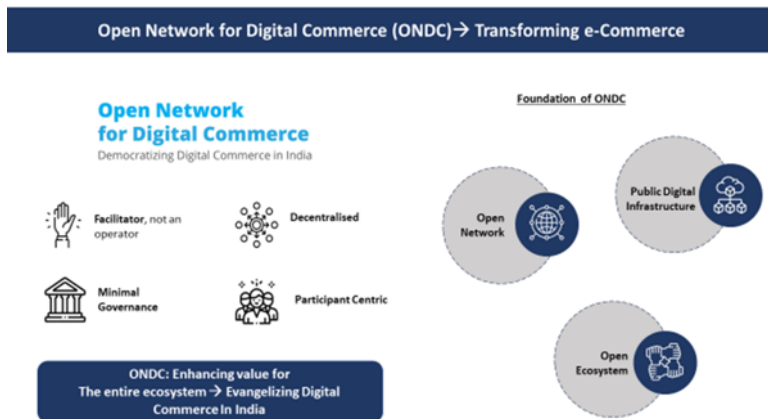


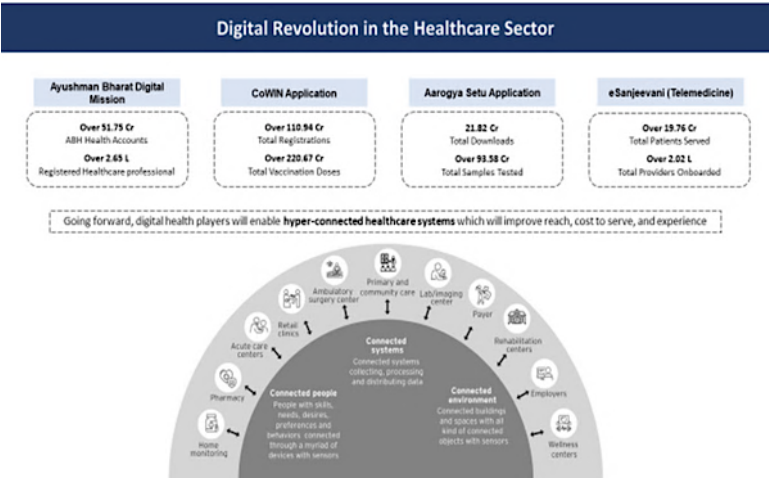
Figure 17: The Network Ecosystem Behind ONDC: An Integrated Marketplace Enabled Through Open APIs that Can Inter-operate Through Applications



A compelling instance of technological trust for public interest is the impact of the digital revolution on the health sector, including the CoWIN and Aarogya Setu applications, which seamlessly integrate and track COVID-19 vaccinations

and spread, as well as the PMJAY Mission, the cornerstone of which is the Ayushman Bharat Digital Mission (Figure 15).

Figure 18: The Hyper-Connected Systems Approach Enabled by India's Digital Health-Care Revolution



The Indian Information Technology Enabled Services (ITeS) sector holds a prominent position on the global stage and has been steadily enhancing export growth and generating job opportunities. For the fiscal year 2023–2024, the IT-BPM sector in India, excluding e-commerce, is projected to achieve a value of US\$254 billion, with exports contributing approximately US\$200 billion. Additionally, the industry has significantly contributed to employment, with an estimated 5.43 million professionals working in the sector, marking an increase of 60,000 jobs compared to the previous fiscal year. Women represent 36% of the total workforce in the industry (Ministry of Electronics and Information Technology, 2024).

As 2023 came to a close, India's Global Capability Centres (GCCs) sector skilfully navigated a tough economic climate. According to the Zinnov-NASSCOM India Report, 2023 (Ghosh et al, 2024), the semiconductor industry was particularly notable, with 30% of the newly established GCCs working in this sector.

The semiconductor GCCs in India are shifting their focus to cover the entire chip development cycle, evolving from simple service providers to key players in transformation. This change is reflected in the diverse range of job roles related to wafer design, fabrication, and system integration (Zinnov-NASSCOM India Report, 2023; see Ghosh et al, 2024). Chips produced by these centres are now essential across various industries, including automotive and telecom, impacting a wide range of products.

Trend Four: The Capabilities Approach to Engender a Skilled Workforce

India entered the stage of its demographic dividend in 2005 which is expected to last until 2055. This period has fuelled the quest for aspirational mobility and prosperity. India has already utilised 40% of this period and yet records low employment elasticity compared to China during the 1980s and especially the East Asian “tiger” economies in the 1960s. To grow at 9.25% per annum, as per the Viksit Bharat target, India needs to rapidly enhance the capabilities of its workforce and foster a new culture of anytime adult learning, to be embedded in organisations and converging through institutional praxis and sustained investment in human capital.

India’s working-age population will increase by at least 12 million per year until 2030—roughly adding a Belgium every year. India’s Labour Force Participation Rate (LFPR) is around 0.5—reasonably high for men at about 0.8 but shockingly low at 0.20 (and declining) for women. The reasons why it is so low are still a puzzle, with explanations ranging from the need to perform unpaid housework to a lack of appropriate jobs, safety issues, discrimination, inadequate training for women, and overall patriarchy (Chhibber and Soz, 2021, p. 121). Adding to this, there is a dualistic structure to India’s labour market due to its uneven rural–urban structural transformation, lack of skills-

based education, and pace of demographic transition. India would need to create at least 8.5 to 9 million jobs every year until 2030. This implies 6 million jobs to meet the employment needs of everyone entering the workforce and looking for a job; 1.5 to 2 million more jobs if the LFPR of women rises to 0.5, making the average LFPR 0.65; and another 1 million to gradually absorb the sink of underemployed people eking out a precarious living on the streets. At present, according to the World Bank's report on jobs in South Asia, India creates 0.75 million jobs for every 1% growth (Chhibber and Soz, 2021, p. 122). It is in this context that "inclusive growth" has become the mantra of sustainable and equitable development of the Indian economy and the aspirations of its people. A Viksit Bharat urgently needs to match the upskilling of its labour force with job creation, requiring a multifaceted approach that encompasses education, vocational training, and policy reforms, striving to create Gross Value Added (GVA) services to generate greater employment elasticity to GDP.

India's higher education system is currently underperforming in equipping graduates with the necessary skills for the modern job market. Many graduates find themselves unemployable due to outdated curricula and inadequate teaching methods.

Described below are some of the proposed strategies for effective upskilling:

1. **Revamping Higher Education:** The National Education Policy (2020) has been developed to address this by introducing credit-based and choice-based curricula, with multiple exit and entry points that integrate cultivation of critical thinking skills, with vocational training as well as applied skill-based courses. We urgently need to expand liberal education across the higher education landscape while improving specificity of employable skill-sets through vocational and application-oriented technical education. The private sector needs to play an active role in increasing excellence in the former, while improving targeted matching, industry

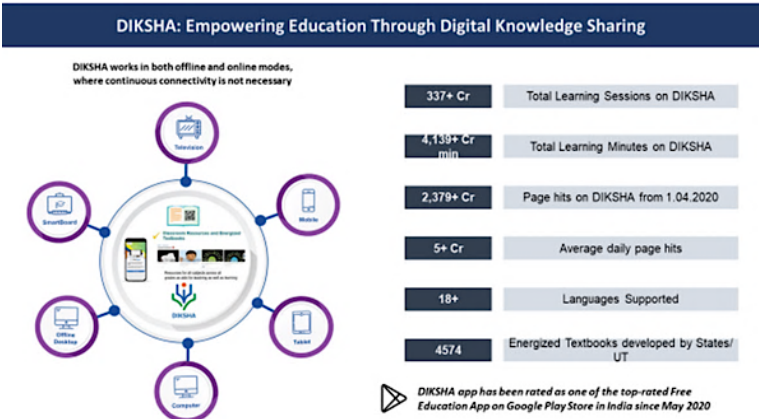
linkages, apprenticeship opportunities and capacity building of ITIs and Polytechnics to address and expand the skills component, which will have a multiplier effect on Indian manufacturing.

2. Rationalising Public Funding of Higher Education Institutions (HEIs): Public funding should be supplemented with reasonable fees from those who can afford to pay and by endowments from philanthropic donors and alumni to create a sustainable model that can support top-notch research and employable outcomes. Business internships and higher order applied skills like data science, machine learning, and AI need to be concurrently developed to incentivise firms to hire from a wider cross-section of campuses and institutes. More coordinated efforts to address the skills gap need to be found within higher education, with a commitment to incubating startup solutions that may drive self-sustaining positive externalities.
3. Vocational Training and Lifelong Learning: Beyond formal education, vocational training programmes are essential for upskilling the workforce. Here, we need a mindset change and should encourage autonomy for higher education institutions (HEIs) to modify their curricula and foster partnerships with vocational training institutions. Delhi Skill and Entrepreneurship University (DSEU) is one such initiative that can be replicated as a hub which needs to be connected to many spokes, especially smaller colleges that offer traditional courses. It should be mentioned that about half of our college students are enrolled in three traditional courses: Bachelor of Arts, Science, or Commerce, typically in small colleges (AISHE 2020; Ministry of Education, 2020). Addressing professional shortages in areas like veterinary science, which are connected to sectors where India can afford to pursue supply-side solutions like dairy and livestock, is the need of the hour.

The linkage between higher education and vocational training needs to be brought under the ambit of the Skill India Mission—in a manner that eschews over-dependence on state-run units and centres. Instead, we should create platforms that enable incentives for traditional skill and technology transfer to take place in a decentralised manner, promoting value-added inclusive growth. Master craftspersons or technicians from across the country, representing a wide variety of technical and craft specialities, can be paid and incentivised to adopt the apprenticeship model of skill transfer. Furthermore, each successful student/apprentice who passes a standard skill test could earn the master an additional monetary bonus. Firms like Tilfi have adopted such a model to ensure bespoke artisanal quality in their weaves, and dresses and these may be acknowledged as skilling champions to mobilise our human resources.

The Role of Technology in Dissemination and Lifelong Learning: Leveraging technology can significantly enhance upskilling efforts. Online learning platforms can provide flexible and scalable solutions for delivering quality education and capacity building. Lifelong learning initiatives based on learning management systems (LMS) also need to be replicated at an organisational level, allowing individuals to continuously upgrade their skills in line with technological advancements and changing skill requirements that further dictate job-market dynamics. Digital learning tools like the DIKSHA platform are exemplars in this regard. They help in monitoring progress while providing personalised learning experiences, thereby effectively scaling dissemination and improving outcomes.

Figure 19: DIKSHA App as an Exemplary Edu-Tech Platform Providing Resource Commons



As Chairman of the Capacity Building Commission, I have closely witnessed the success of the iGoT (Integrated Government Online Training) Karmayogi platform in fostering a culture of learning and forward-looking agility within the wider Civil Service Training and Capacity Building Ecosystem. Having a tech platform which is steadily evolving into an integrated learning management system for over 3.5 million civil servants has led to the gradual embedding of an adult learning culture to upskill civil service competencies according to their specific job roles. This is, in itself, a far-reaching “silent revolution” fostering a model of agentive change that can align national priorities with performance orientation, adjusted to citizen expectations in moulding an updated, competent, agile, and future-ready civil service.

Figure 20: iGoT Karmayogi Platform



Trend Five: Putting Them Together: Improving State Capacity as a Lego Problem

Recent works by Devesh Kapur (2020) and Chhibber and Soz (2021) have highlighted the structure of India's "boutique government" (2020) as "small but expensive." They provide counter-intuitive evidence that the Indian bureaucracy is, in fact, disproportionately bloated at the top, with a shortage of critical service personnel per citizen (too few judges, police officers, teachers, doctors, and so on), particularly at the local government level which is the actual citizen-interface level. India's public expenditure is quite large, but as far as it is spent on the permanent executive to improve state capacity, it is spent poorly. An immediate conclusion from this is not that India should increase government spending but that it should reorient its spending more effectively. Almost 50% of total governmental expenditure is non-developmental, with large portions going to administrative salaries, pensions, and interest payments. India also spends too much at the central and state levels and very little (3%) at the local administration level. The same amount spent at the local level would enable the hiring of many more teachers, nurses, and other critical frontline workers as local

wages are much lower than those determined at state capitals or at the centre in New Delhi. This has a direct effect on state capacity as it leads to planning and commitment fallacies in balancing service delivery across specificity and transaction volume (Israel, 1987; Chhibber and Soz, 2021).

Figure 21: Classifying Government Activities by Specificity and Transaction Volume

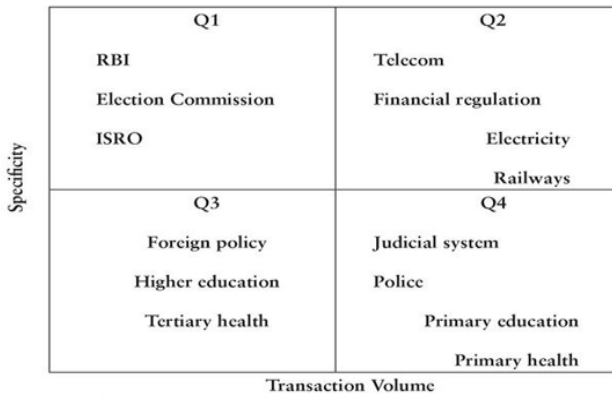
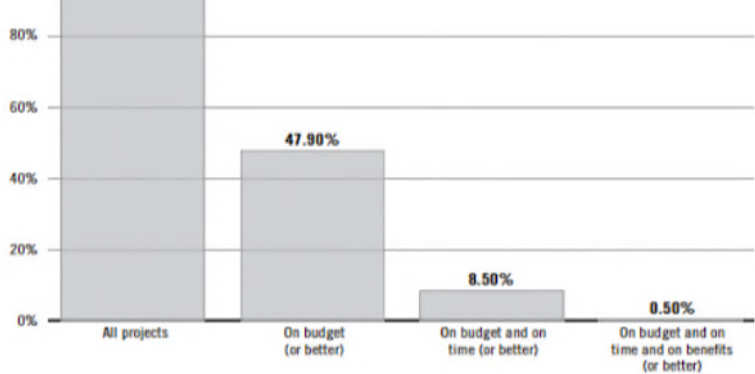


Figure 21 describes four quadrants of government activities. Q1 has specialised professional institutions that perform highly specific tasks (with less direct citizen contact), enjoying functional autonomy and delivering high quality of government services. In contrast, Q4 contains services with high interaction with citizens and low efficiency or quality (adapted from Israel, 1987).

This skewed state capacity structure requires significant overall remodelling, especially as the role of the state changes to service provisioning, effective regulation, and project oversight, with the private sector carrying out the bulk of the actual tasks to carry out production, build infrastructure, and create value—key features of New India’s growth story. Good governance requires overcoming the “iron law of megaprojects” (Flyvbjerg, 2017, pp. 1–18)—a phenomenon affecting large-scale interventions and developmental projects by virtue of them going “over budget, over time, under benefits, over and over

again”—a fate bogging down the quality of public goods and services and affecting state capacity by virtue of choke points, design frictions, and complex systems bottlenecks.

Figure 22: The Iron Law of Megaprojects Leads to a Fat-Tailed Distribution in Achieving Large Project Outcomes



Source: Flyvbjerg and Gardner (2023).

The only way out of this impasse is for India to design lean public-service systems that are not top-heavy and will not over-regulate or crowd out private investment, while augmenting the base of critical services that only the state can perform. This requires resource augmentation and flexibility in setting up goals and to lessening organisational noise through harmonisation and algorithmic forecasting, while establishing an iterative vision that tackles ecological complexity with common-course agenda building through “iterative visioning.” This is exactly what Viksit Bharat does by designing a common agenda through the three Cs—*Commitment, Collaboration, and*

Capabilities—that enable *modularity*²⁴³ (Flyvbjerg and Gardner, 2023).

This is exactly the approach we have taken at the Capacity Building Commission (CBC) to institutionalise Mission Karmayogi across the labyrinthine civil service ecosystem. We’ve started small by targeting a “big push” to digital learning resources—providing a set of common-interest courses and topical caselets (Gyaankosh) for learners to readily engage with and draw upon as a reference. The goal has been to put building blocks in place for targeted role-based learning of encadred officers belonging to groups B, C, and D of the permanent civil service at the centre. We have tinkered and experimented with MDO-wise annual capacity building plans and inter-ministerial workshops and realised how to improve individual capabilities at the margin, perfecting the art of repetition with experimentation—the core hallmark of *modularity* (Flyvbjerg and Gardner, 2023, pp. 153–154).

***Viksit Bharat* as a Multi-scalar Modular Approach to Getting Big Things Done**

Viksit Bharat@2047 is a similarly multi-directional and modular “developmental Lego model” that allows us to collectively pursue our dreams by reverse engineering creative solutions through collaborative channels, unleashing tipping points across 12 key sectors to achieve the end goal of a US\$30 trillion economy by our centenary year (see Figure 23). It endeavours to sustain a multi-directional effort to steadily actualise organisational forecasting through a nuanced and feedback-oriented consolidation of effort, using the three Cs of

²⁴³ The idea that completing many small things concurrently, heuristically referred to as building blocks (What’s Your Lego?), helps achieve the one big goal which is the target megaproject—in our case, a fully developed India by 2047.

Commitment, Collaboration, and Capabilities, so that India’s “tryst with destiny” is completed fully and unequivocally, not left to chance, luck, or prevarications of reading the crystal ball.

Figure 23: Constituent Modular Goals of Viksit Bharat@2047

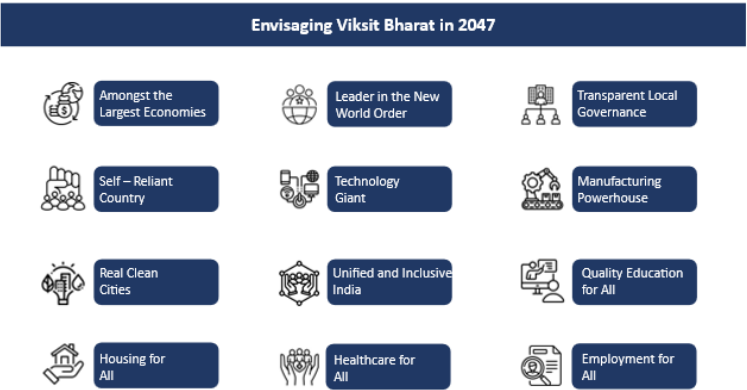
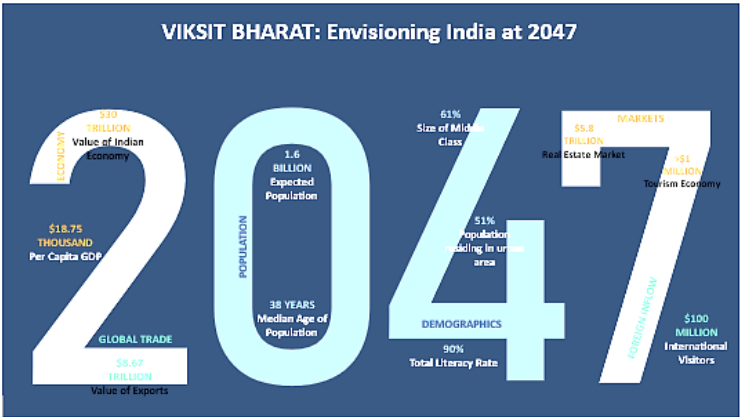


Figure 24: Realising Viksit Bharat@2047 Is a Task of Conscionable Foresight: Requiring Commitment (Sankalp), Collaboration (Sahyog), and Capabilities (Kshamata)



References

- Baru, S. (2020). India's rise from a regional to a global power. *Journal of International Analytics*, 11(2), 122–134.
- Bhagwati, J., & Panagariya, A. (2013). Why growth matters: How economic growth in India reduced poverty and the lessons for other developing countries. Public Affairs Press.
- Bijapurkar, R. (2009). We are like that only: Understanding the logic of Consumer India. Portfolio Penguin.
- Chandler, C., & Zainulbhai, A. (2013). Reimagining India: Unlocking the potential of Asia's next superpower. Simon & Schuster.
- Chhibber, A. & Soz, S. (2021). Unshackling India: Hard truths and clear choices for economic revival. HarperCollins.
- Das, G. (2002). India unbound: From independence to the Global Information Age. Penguin Books.
- Desai, S. et al. (2024). Rethinking social safety nets in a changing society. India Policy Forum.
- Elevation Capital. (2023). The macro view: The Elevation Bottomline report on fintechs 2023. <https://bottomline.elevationcapital.com/> (Accessed June 17, 2024).
- Flyvbjerg, B. (2017). Introduction: The iron law of megaproject management. In Bent Flyvbjerg (Ed.), *The Oxford handbook of megaproject management* (pp. 1–18). Oxford University Press.
- Flyvbjerg, B., & Gardner, D. (2023). How big things get done: The surprising factors behind every successful project, from home renovations to space exploration. Pan Macmillan.
- Ghosh, Achyuta et al. (2024). Zinnov-NASSCOM India GCC trends: Quarterly analysis—The rise of semiconductor GCC—Q4 2023. Zinnov-NASSCOM India. <https://zinnov.com/centers-of-excellence/zinnov-nasscom-india-gcc-trends-quarterly-analysis-semiconductors-q4-2023-report/>
- Gupta, Sangeeta et al. (2023). Zinnov-NASSCOM India tech start-up landscape report 2023. Zinnov-NASSCOM India. <https://zinnov.com/innovation/zinnov-nasscom-india-tech-start-up-landscape-report-2023/> - ~:text=Zinnov-nasscom India Tech Start-up Landscape Report 2023,-04 Jan, 2024&text=The Indian tech start-up,decade to a staggering 31,000
- Hurun Research Institute. (2024, April 9). Hurun global unicorn index 2024. Hurun India. <https://hurunindia.com/blog/hurun-global-unicorn-index-2024/> (Accessed June 15, 2024).
- International Monetary Fund. (2023). World economic outlook. IMF. <https://www.imf.org/en/Publications/WEO> (Accessed June 15, 2024).
- Israel, A. (1987). Institutional development: Incentives to performance. The Johns Hopkins University Press.
- Kapur, D. (2020). Why does the Indian state both fail and succeed? *Journal of Economic Perspectives*, 34(1), 31–54. DOI:10.1257/jep.34.1.31

- Ladusingh, L., & Narayana, M. R. (2012). Demographic dividends for India: Evidence and implications based on National Transfer Accounts. In Donghyun Park, Sang-Hyop Lee, & Andrew Mason (Eds.) *Aging, economic growth, and old-age security in Asia* (pp. 203–230). Edward Elgar Publishing. <https://doi.org/10.4337/9781781953600.00013>
- Malone, D. M. (2015). *Does the elephant dance? Contemporary Indian foreign policy*. Oxford University Press.
- Ministry of Commerce and Industry. (2024). DPIIT recognized startups. Government of India <https://www.startupindia.gov.in/content/sih/en/search.html?roles=Startup&page=0#> (Accessed July 19, 2024).
- Ministry of Education. (2020). All India survey on higher education (AISHE) 2020. MoE, Government of India. <https://aishe.gov.in/aishe/home> (Accessed June 22, 2024).
- Ministry of Electronics and Information Technology. (2024). IT/software sector. Ministry of Electronics and Information Technology, Government of India. <https://www.meity.gov.in/content/software-and-services-sector> (Accessed July 19, 2024).
- Ministry of Finance. (2022). *Economic survey 2021–2022*. Government of India.
- Ministry of Finance. (2023a). *Economic survey 2022–2023*. Government of India.
- Ministry of Finance. (2023b). *Union budget 2023*. Government of India.
- Ministry of Petroleum and Natural Gas (MoPNG). (no date). Natural gas pipelines. MoPNG, Government of India. <https://mopng.gov.in/en/pdc/investible-projects/oil-and-gas-infrastructure/natural-gas-pipelines> (Accessed June 11, 2024).
- Ministry of Ports, Shipping and Waterways (MoPSW). (2024). Annual report. MoPSW, Government of India. https://www.shipmin.gov.in/sites/default/files/Annual_Report_2023-24_English.pdf
- National Rural Development Infrastructure Agency. (2023). DPR template for PMGSY-III. Ministry of Rural Development, Government of India.
- NITI Aayog. (2018). *Strategy @ 75*. NITI Aayog, Government of India.
- O'Neill, J. (2001). Building better global economic BRICS. *Global Economics*, Paper no. 66.
- Panagariya, A. (2008). *India: The emerging giant*. Oxford University Press.
- Panagariya, A. (2020). *India unlimited: Reclaiming the lost glory*. HarperCollins.
- Panagariya, A., & More, V. (2023). Poverty and inequality before and after Covid. *Columbia Summit on Indian Economy*, School of International and Public Affairs, Columbia University, New York City, pp. 24–25.
- Sharma, R. (2013). *Breakout nations: In pursuit of the next economic miracles*. W.W. Norton & Company.
- Silver, N. (2012). *The signal and the noise: Why so many predictions fail—but some don't*. Penguin Press.
- Simon, H. (1968). *The sciences of the artificial*. MIT Press.

- Union Internationale des Transports Publics (UITP). (no date). Performance of Indian Metro Systems: Lessons for upcoming Urban Rail Projects. UITP. <https://www.uitp.org/publications/performance-of-india-metro-systems-lessons-for-urban-rail-projects/> (Accessed June 18, 2024).
- The World Bank. (2023). WORLD DEVELOPMENT INDICATORS. World Bank. <https://data.worldbank.org/indicator> (Accessed June 15, 2024).