

“India's Digital Public Infrastructure system”



Weekly Learnings 09 / 2024

India is a digital rich country. It started with Aadhar in 2010, and the system has matured over 14 years. Digital has permeated every industry -education, health, payments, vehicles, governance etc.

The average Indian household is more digitised than the average Indian company.

Nasscom has put out a report along with Arthur D Little on India's DPI

Here are my learnings from the report.

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India's Digital Public Infrastructure

Nasscom + Arthur D Little report

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Aadhar , UPI and FasTag have contributed to 0.9 % to India's GDP in 2022.

Shiv Summary of Nasscom report

By 2030, India's digital public infrastructure (DPI) will contribute between 2.9 to 4.2 % of economic value add.

Shiv Summary of Nasscom report

India's digital infrastructure

- 800 mln smartphones
- 10 mln + active 5 G devices
- 1.95 lac villages connected through Bharat net project
- 138 data centers with 737 + MW capacity

Shiv Summary of Nasscom report

UPI payments crossed 9.3 billion in volume and Rs 14.75 lac crores in value as on June 2023

There are 865.9 mln internet subscribers

20-25 GB data consumed per person per month

India has 7.4 lac telecom mobile towers

Shiv Summary of Nasscom report

3 layers of India's DPI

Identity layer – giving every Indian a unique ID

Payments layer – allowing interoperable fast and cheap digital payments

Data layer – enabling consented secure sharing of data.

Shiv Summary of Nasscom report

The guiding principles of India's DPI are open source, interoperability and trust and consent

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Data on DPI

	2023 Nos	2023 Value
Aadhar	1388 mln	
UPI	117 billion transactions	\$ 2285 Bln
Aadhar enabled payment system		12.5 bn over 2020-22
Fastag	794 million tags issued	\$ 7.05 billion collected
GSTN	13.7 million taxpayers	\$226 bln collected

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ABDM, Ayushman Bharat digital mission

Reaches 28 % of patients

Has 293 million healthcare records

0.21 million facilities linked

0.22 million healthcare professionals enrolled.

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There are 139.4 total registered users for Digi locker

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NDEAR (National digital Education Architecture)

510 mln total addressable population
20000 eco system participants
5.24 billion learning sessions on diksha
3.2 mln exam registrations on Swayam

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NDL (National Digital Library)

It reaches over 34 registered users

This aims to revolutionize the traditional text book based teaching

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IDEA – India's digital ecosystem for Agriculture

- 50 million farmers registered for receiving crop advisory thro SMS
- \$12.5 billion given as support by agriculture infrastructure fund
- 245 000 traders enrolled for national agriculture marketplace
- 17 mln farmers registered on national agriculture marketplace

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myGov offers a platform for collaboration with citizens for policy making. It has 33 million total subscribers so far.

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Umang is a single platform for access to all government service, revolutionizing citizen services. It has 57 million registered users.

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There are many state level DPs too

Open Kochi has 1200 taxi drivers onboard and offers 35 rides per day between July 21 and December 22

Namma Yatri is Karnataka public transport system data, it has 86 000 registered drivers and 1.6 mln registered users.

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Of India's GDP of 3.4 trillion \$, DPs account for \$14.7 billion direct impact and \$17.1 bln indirect impact.

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Digitization of services makes processes efficient saving time for the involved stakeholders.

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Philippines and Morocco implemented as Aadhar like system, 8 to 10 more countries are in discussion phase.

Over 30 countries have adopted / in process of adopting the UPI system

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DPIs will lay the base for a \$1 trillion digital economy.

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By 2030, there will be 760 million Pm Jan Dhan yojana beneficiaries

By 2030, government will save \$15.3 billion direct benefit transfer.

\$ 104 bn cost savings through digitization

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Annually a citizen saves 4.2 working days using digital services.

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Key challenges to the adoption of DPIs

- Lack of interconnectedness among government ministries
- Real time data availability
- Language expansion
- Future partnerships

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Key imperatives for ecosystem development is an effective partnership between government, start-ups and corporates.