



ITA Symposium: 25th Anniversary of the Information Technology Agreement (16-17 September 2021)

*Session 4 :
Developments in Information and Communications Technology*

Presented by :
Saurabh Gaur
Joint Secretary , MeitY
Government of India

AGENDA

1

ICT : Context Setting

2

ICT in Indian Context

3

Government Initiatives towards Digital Experience

4

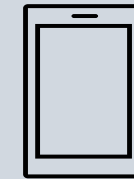
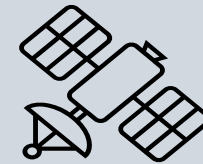
Initiatives towards Standardization

5

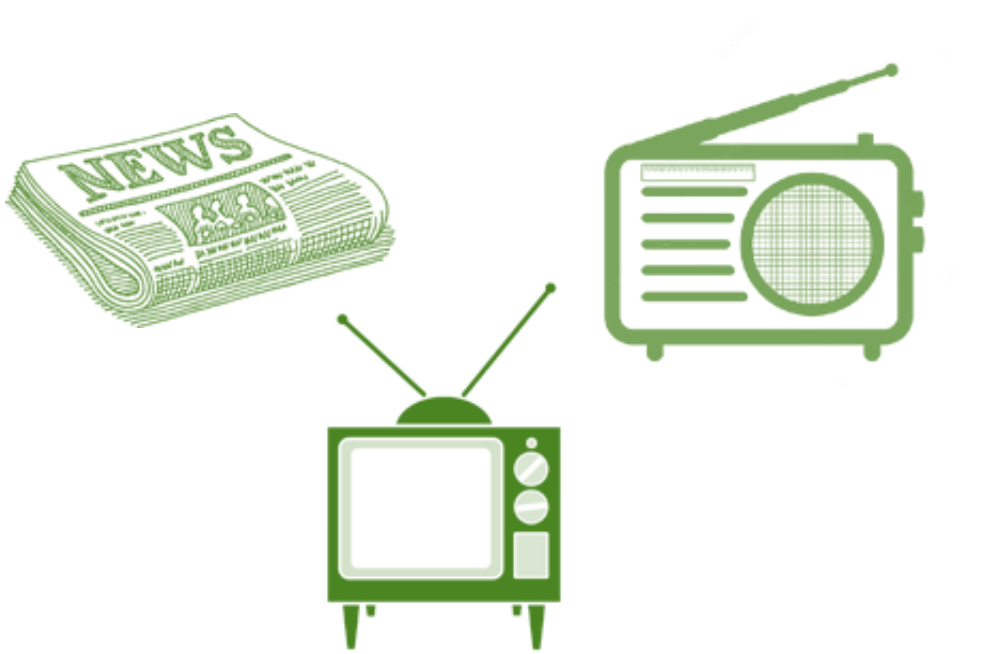
Impact of initiatives in India

6

Conclusion



ICT Transformation in the past 20 years



NEWSPAPERS, RADIOS AND TELEVISIONS



NETWORKED COMPUTERS, SATELLITE-SOURCES COMMUNICATIONS, WIRELESS TECHNOLOGY AND THE INTERNET

ICT: A Necessity

- Global internet use surpassed 50%
- 75% of total world population had active mobile broadband subscription
- Fixed broadband subscriptions grew to >15%
- >57% of households had Internet access at home



**WHERE
ARE WE?**

- Digital divide
- Gender divide
- Average of 20% of population in developing economies still does not use mobile phones
- Internet affordability as a bottleneck in Africa and Asia



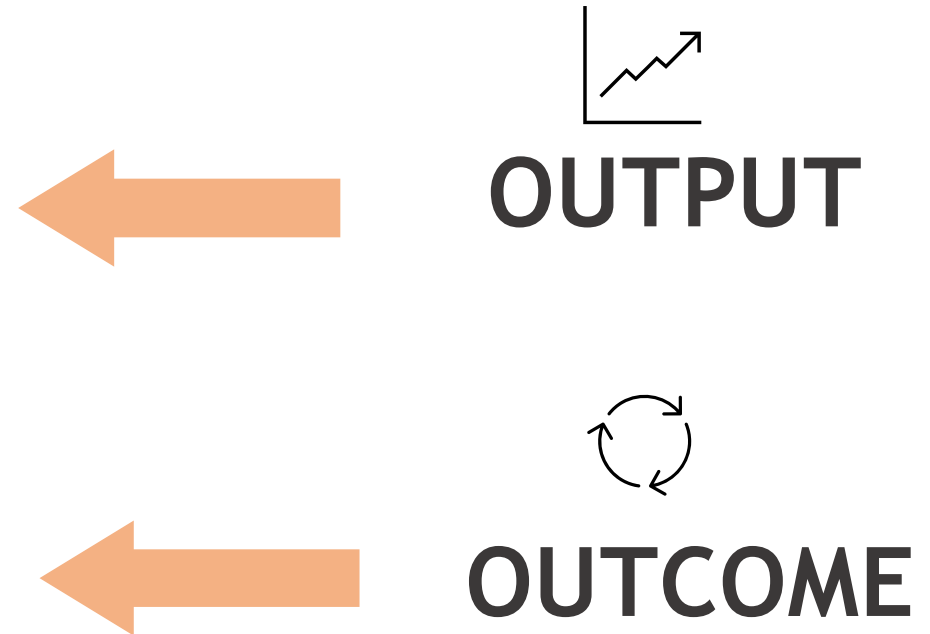
BOTTLENECKS

ICT: As a Sector

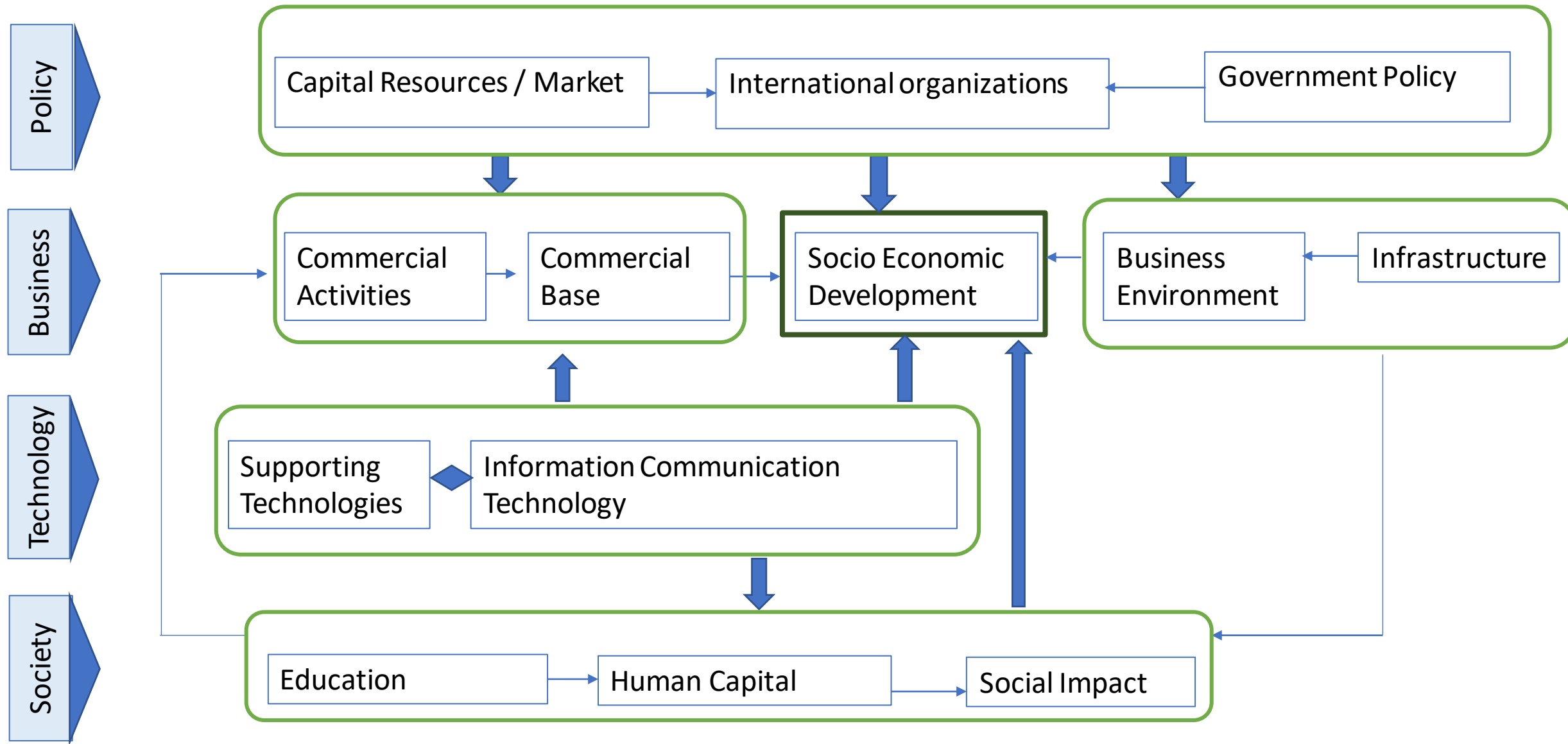
- ICT sector combines manufacturing and services industries
- The products primarily fulfil or enable the function of information processing and communication by electronic means, including transmission and display.

- Technological progress
- Output and productivity growth

- Employment or productivity growth (Capacity Building)
- Focused Market Export
- Technological change affecting other parts of the economy



ICT - An enabler for Businesses and Social Development



ICT & Sustainable Development Goals

MOST ESSENTIAL GOAL IS **SDG 9**

“Build resilient infrastructure, promote sustainable industrialization & foster innovation”

- ICT is considered by the UN as “basic infrastructure”

OBJECTIVES:

- Increase access to ICT significantly
- Provide universal and affordable access to the Internet in least-developed economies



OTHER SDGs IMPACTED BY ICT

- Poverty Reduction (Goal 1)
- Quality Education (Goal 4)
- Clean Energy (Goal 7)
- Decent Work and Economic Growth (Goal 8)
- Reduced Inequalities (Goal 10)

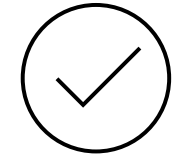
ICT: Indian Context

- The varied socio-economic conditions causing Digital Divide
- Gender inequality
- Different Terrain in different parts of the country.
- Lack of awareness



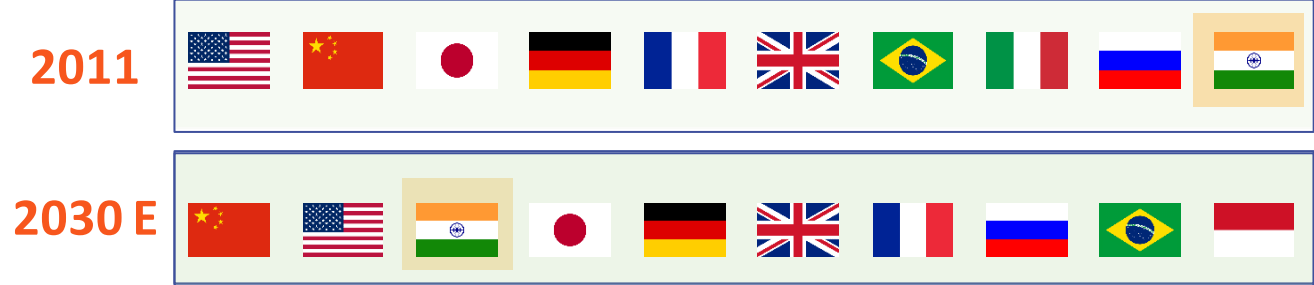
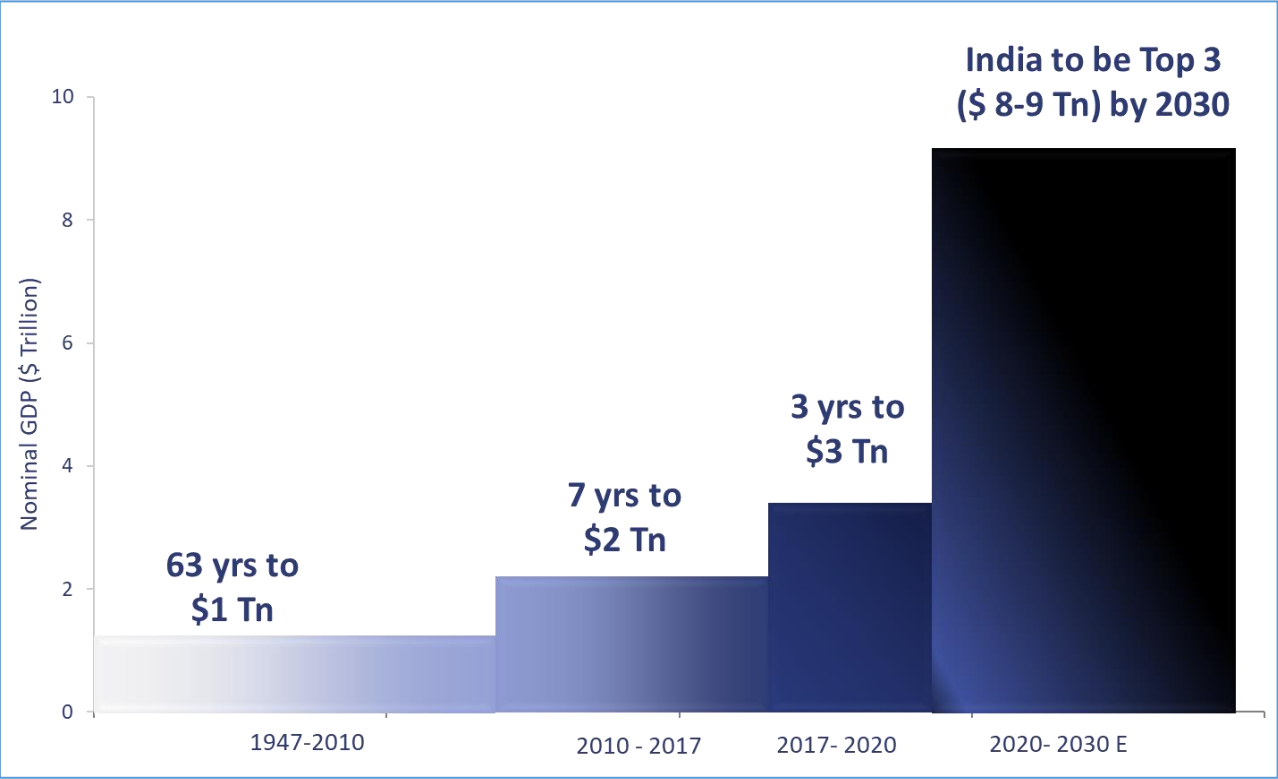
BOTTLENECKS

- Better Policies and regulations
- Govt creating more awareness on the digital initiatives
- Encourage multiple players to increase accessibility
- Strict financial capping to make ICT affordable
- Encourage more Digital Startups



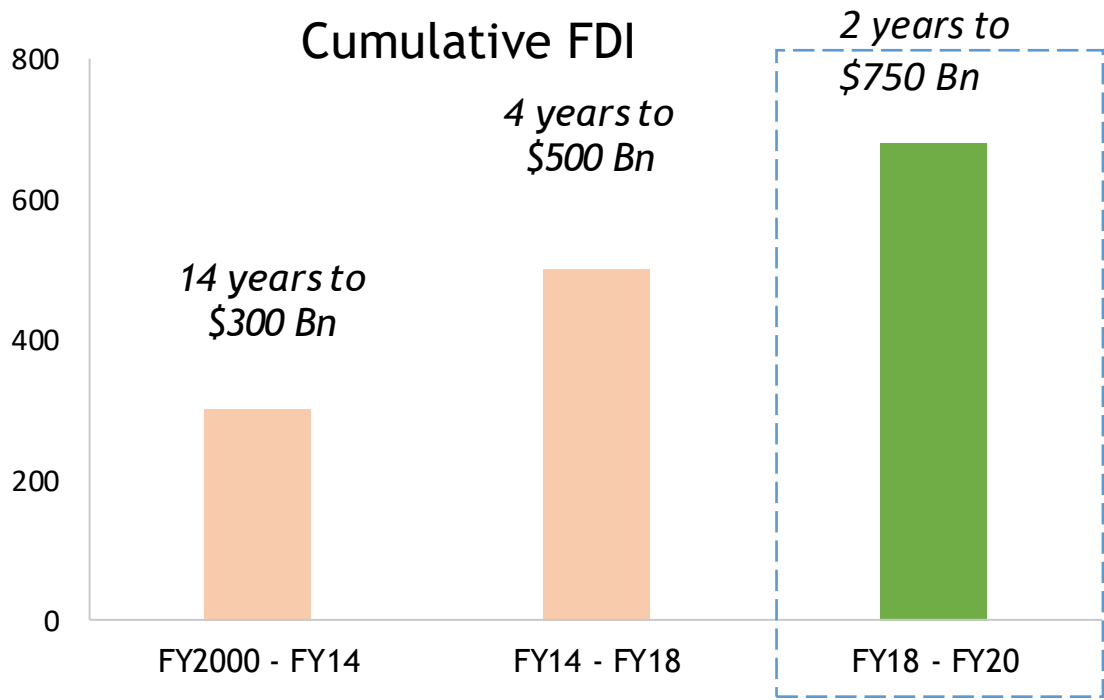
HOW TO OVERCOME?

India emerging as World's Economic Powerhouse



Advantage India

#1 Fastest Growing G20 Economy	#1 Global Fintech Adopter
#2 Internet Users	#3 Start-up Ecosystem



Years

\$5 Trillion Opportunity by 2025

\$300 B Auto	\$200 B Auto Comp	\$25 B Aviation	\$100 B Biotech	\$350 B IT/BPM
\$65 B Pharma	\$304 B Chemicals	\$640 B Construction	\$130 B Defence	\$30 B Leather
\$180 B Renewables	\$285 B Roads	\$400 B Electronics	\$535 B Food Processing	\$123 B Ports
\$223 B Textiles	\$125 B Thermal Power	\$424 B Tourism	\$100 B Media	\$9 B Wellness
\$150 B Mining	\$110 B Oil & Gas	\$112 B Capital Goods	\$192 B Railways	

Transforming India through ICT



Unique Identification Authority of India
Government of India

1.25 Billion
Enrolments



776 Million
Internet Users



PRADHANMANTRI JAN DHAN YOJANA

1 Billion
Bank Accounts



Fastest Growing
Ecosystem

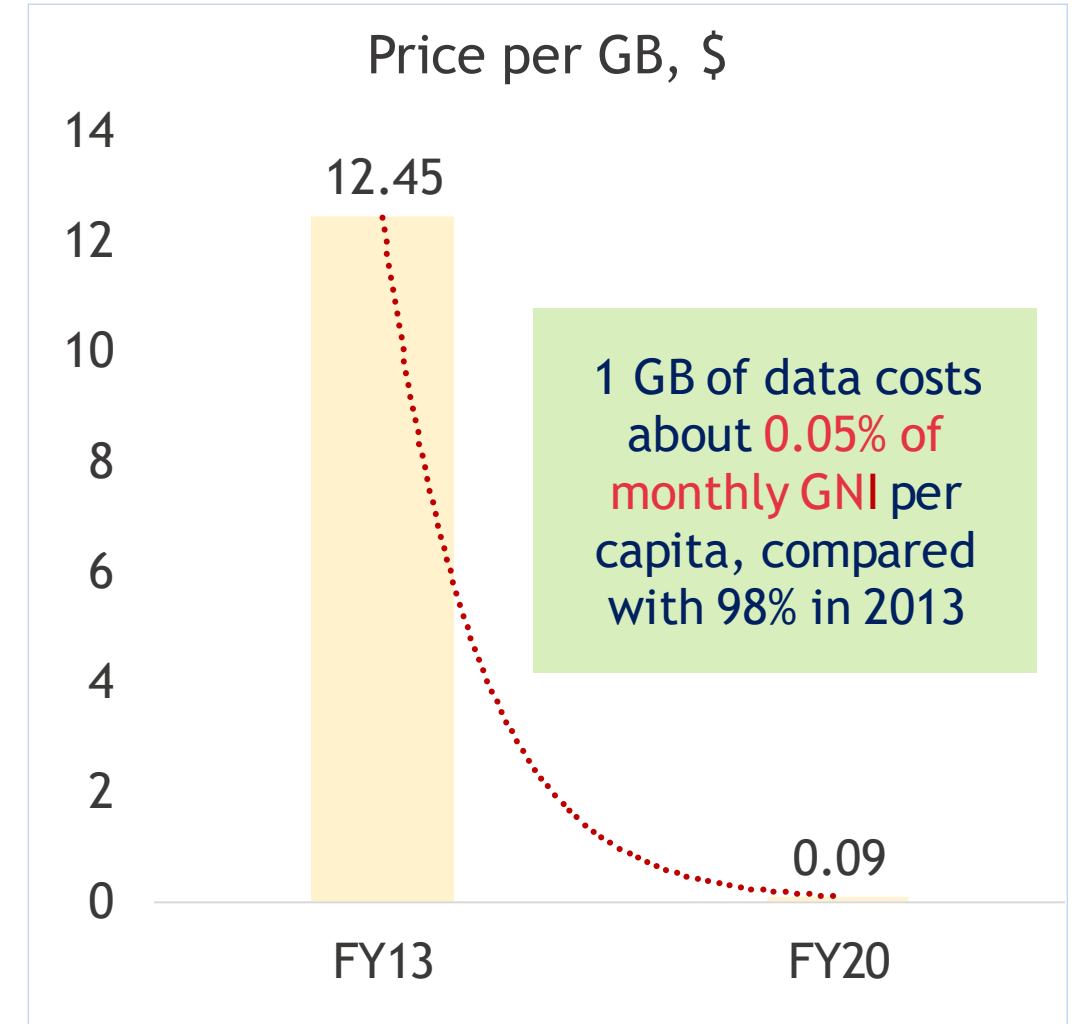
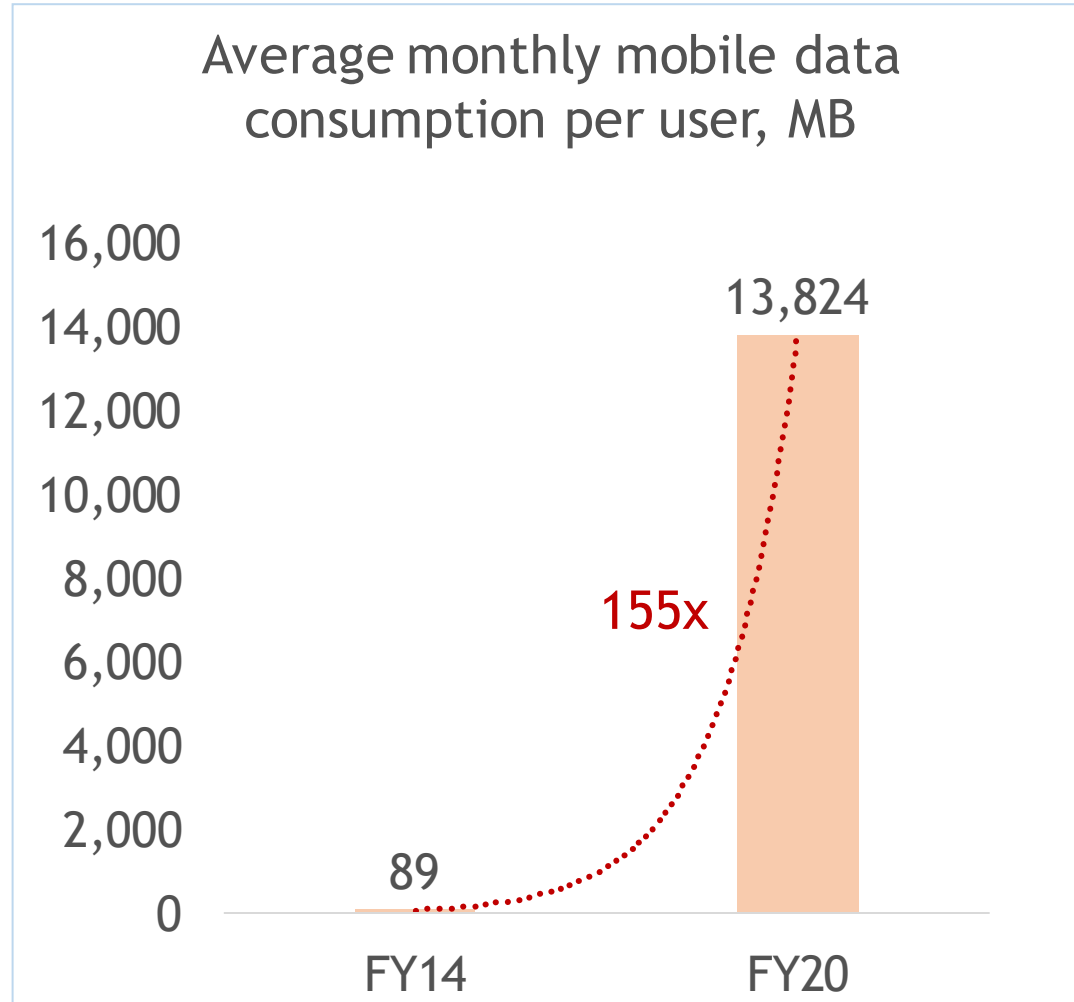


1.2 Billion
Mobile Subscribers

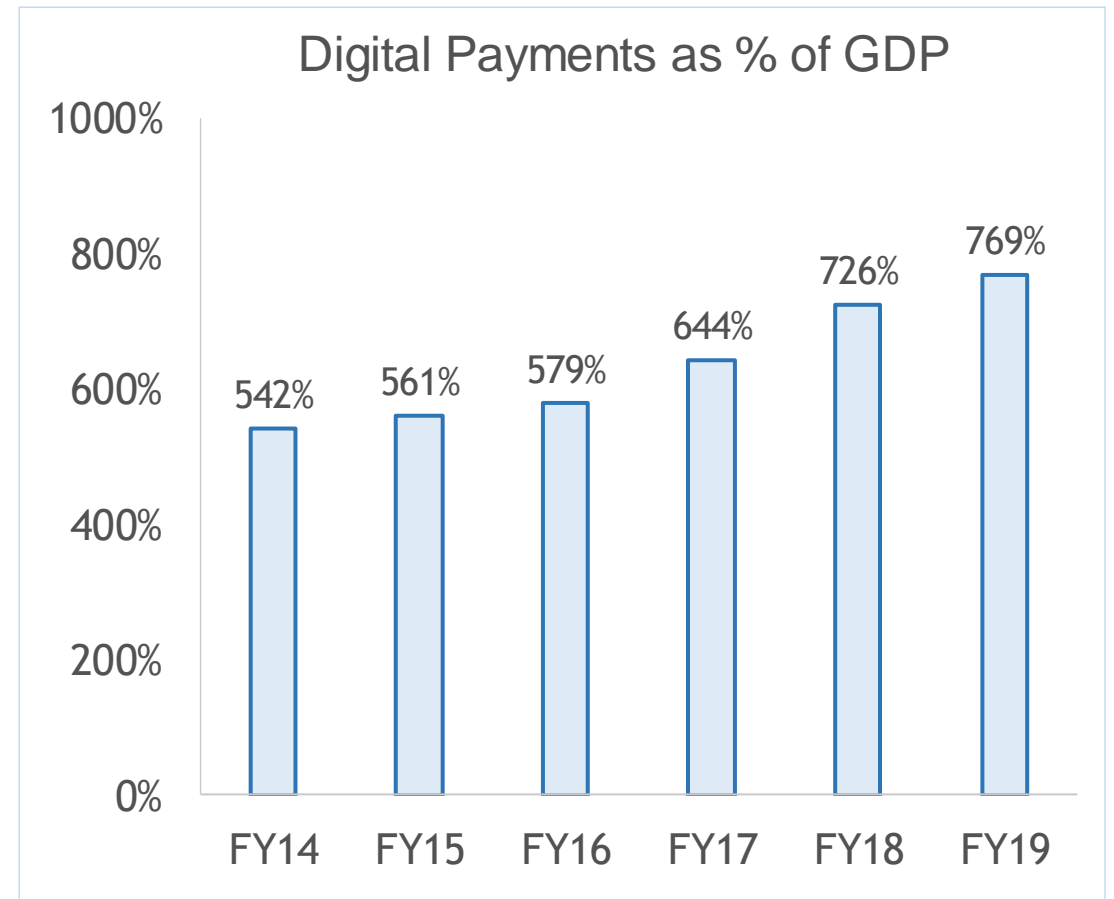
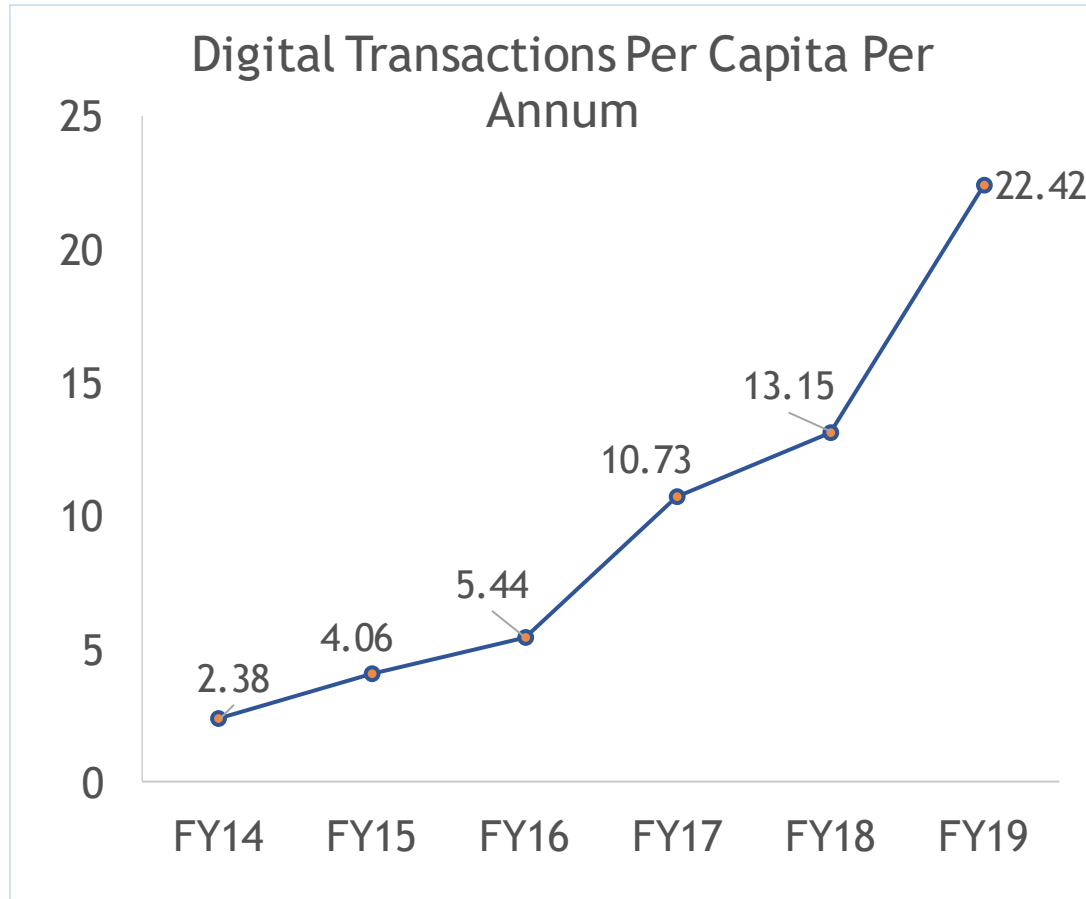


17+ Indirect
Taxes Subsumed

155x Growth in Data Consumption; >99% Decline in Mobile Data Price

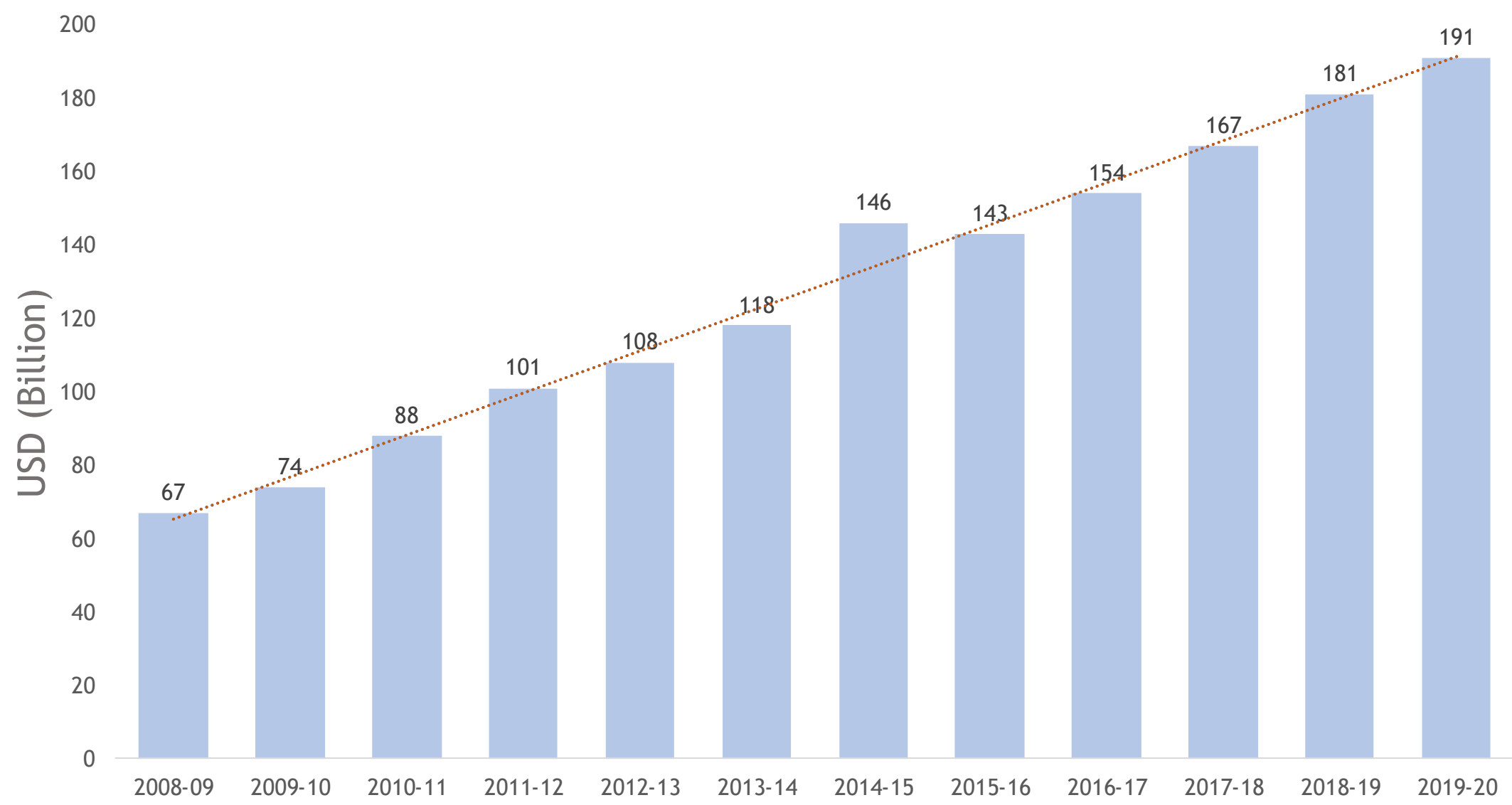


Digital Transactions increased ~10x in 5 years



Source: Reserve Bank of India

IT Sector in India has grown 3X in 12 Years



Initiatives by Indian Government in ICT

Digital India Program



Information for All



Electronics
Manufacturing



Public internet
access



Early Harvest



Universal
Mobile Access



IT for Jobs



Broadband
Highway

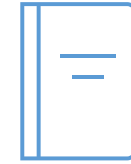


E-Governance



e-Kranti

National Policy on Electronics 2019 (NPE 2019)



NPE 2019 has been Notified on 25-02-2019



Promoting domestic manufacturing and export in the entire value chain of ESDM to achieve a turnover of USD 400 billion by 2025

Marquee initiatives to boost the economy through ICT

Production Linked Incentive Scheme for Large Scale Electronics Manufacturing and IT Hardware

Scheme Features

- Bringing Global value chain
- Large Investments
- Ecosystem of electronics manufacturing
- Export promotion
- Domestic Champions
- Employment Generation
- Domestic Value Addition

Large Scale Electronics Manufacturing



Production
USD 141 Bn



Investment
USD 1.43 Bn



**Mobile
Domestic Value Addition**
15% - 20% → 35% - 40%



Additional Employment
2,00,000
Direct Jobs

IT Hardware



Production
USD 21.3 Bn



Investment
USD 0.33 Bn



Domestic Value Addition
10% -15% → 25% - 30%

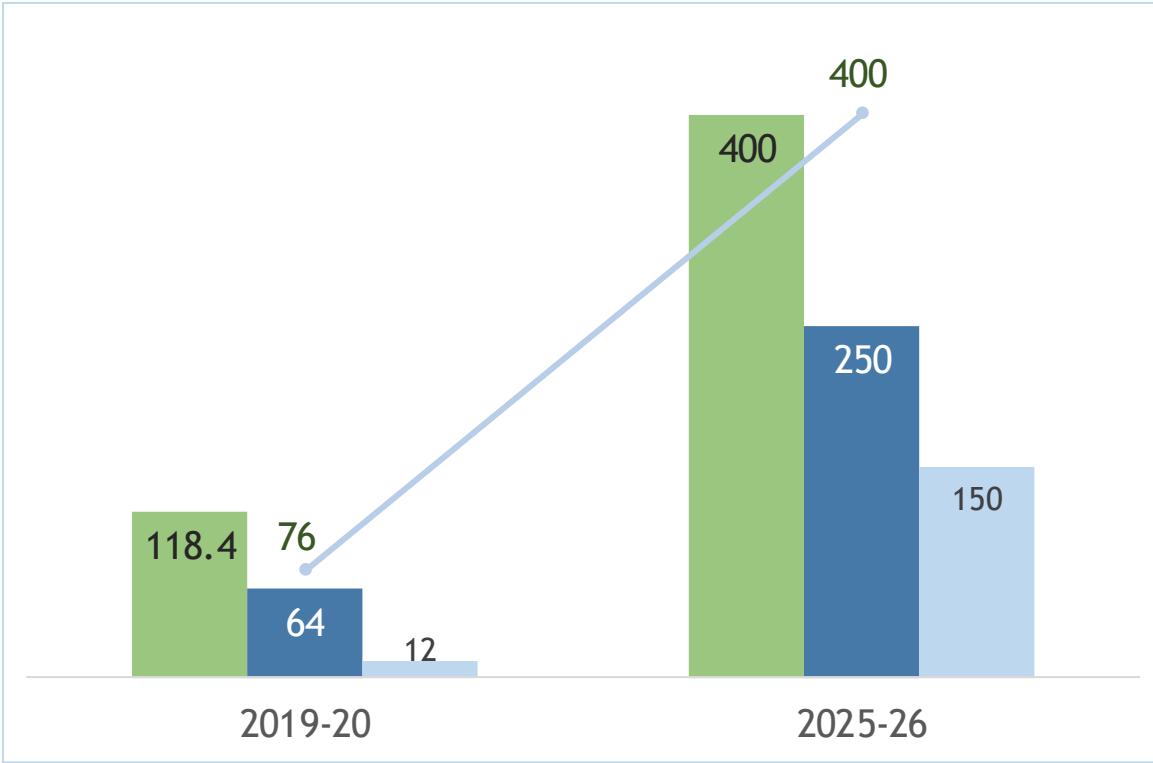


Additional Employment
36,000 direct jobs

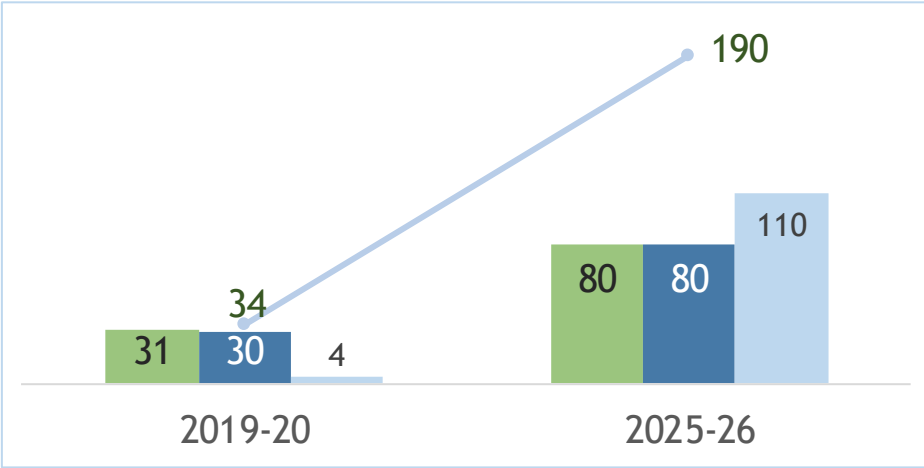
Roadmap to 2025



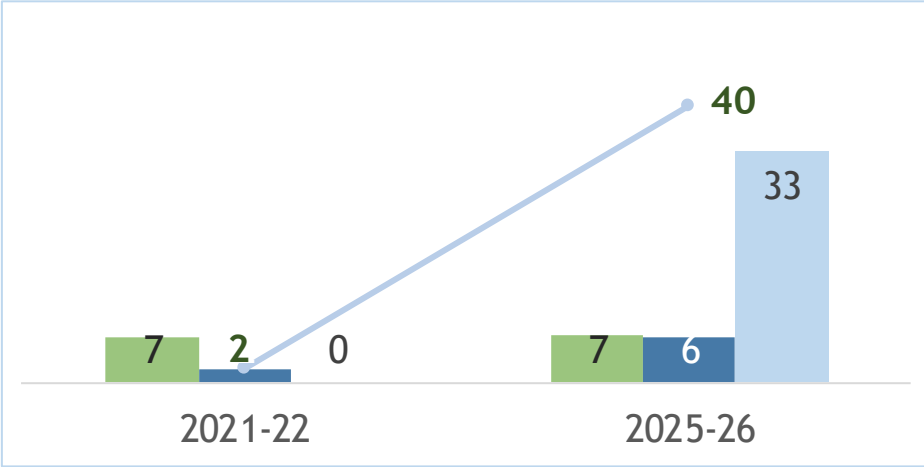
All Electronics



Mobile Phones



PC, Tablets



Indian Startup Ecosystem

50,000+

Startups in India

\$95 B

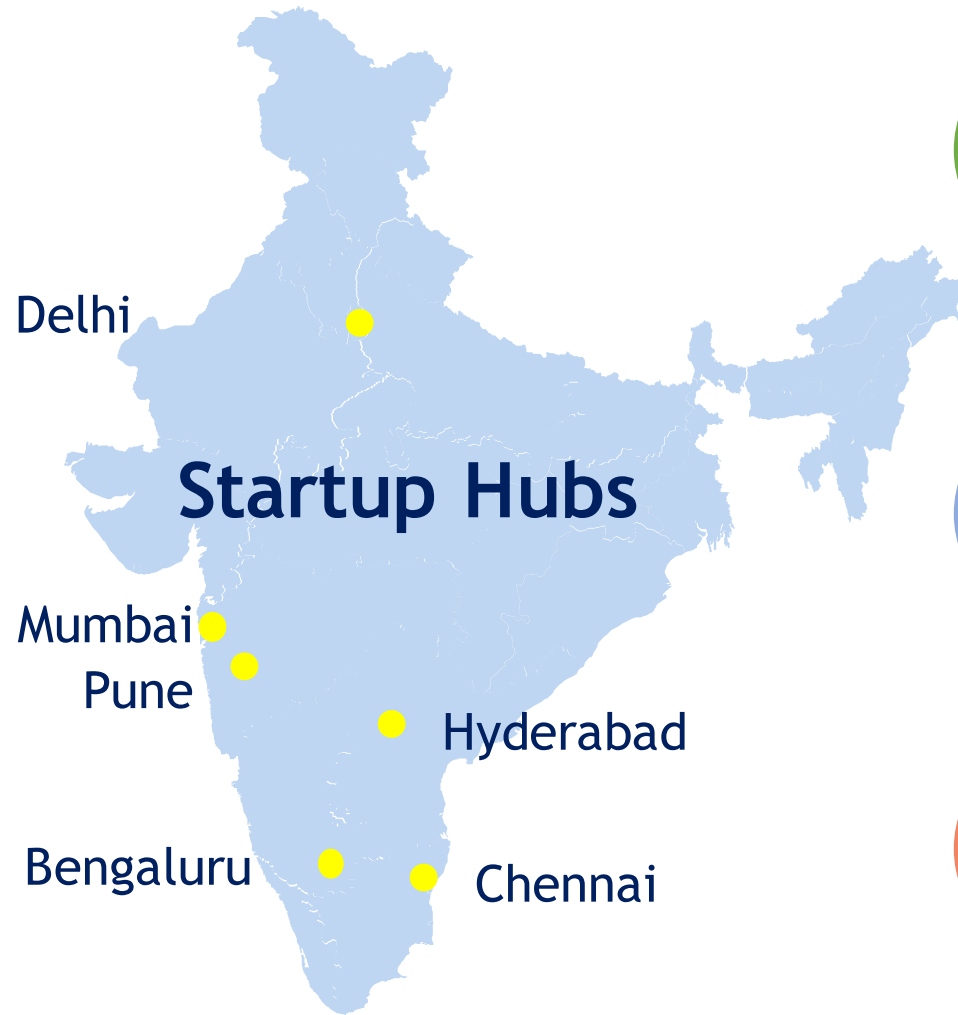
Valuation

330+

Incubators/
Accelerator*

\$29 B

Funding since
Jan'16



28 Yrs.
Avg. age of
founders



#61
Unicorns
*25 added
since Jan'
21*



40%
Incubator
Annual Growth



55%
Startups in
Metros

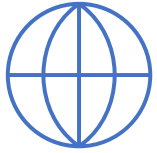


9%
Women
Entrepreneurs

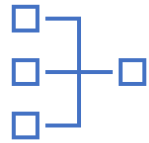


700+
Startups
arising from
unicorns

Conclusion



ICT development has penetrated many areas of business, government and society, to the extent that they appear to be all pervasive.



Present unprecedented opportunities for social and economic development, entrepreneurship, market development, and governance reform.



ICT for development is not just about computers, cell phones, and the internet, but about help, support, and train people in linking them and communities for communication, learning, support for innovation, and impetus for inclusive growth

The background is a deep blue with a fine grid of dots. Overlaid on this are several concentric circular lines and arcs, some solid and some dashed, creating a sense of depth and movement. In the center, a wireframe figure of a person stands with arms slightly out, facing a bright blue light source at the center of the circles. To the left of the figure, there are two sets of double arrows pointing left, one in white and one in a lighter blue. To the right, there are two sets of double arrows pointing right, also in white and a lighter blue. The overall aesthetic is high-tech and digital.

Thank You