AGENDA

• India in 2025 - Shaping the Digital Revolution
• The Startup Landscape in India - Driving Innovation
• Digital India
India in 2025

Shaping the Digital Revolution
<table>
<thead>
<tr>
<th></th>
<th>Key messages</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Over the last decade, the Indian technology and services industry has transformed India and is on track to achieve its aspiration of USD 225 billion revenues by 2020</td>
</tr>
<tr>
<td>2</td>
<td>Massive structural shifts are underway in the global customer landscape and the technology industry is at the heart of this inflection</td>
</tr>
<tr>
<td>3</td>
<td>Significant headroom for growth with global enterprise spends rising to USD 4 trillion in 2025; However, nature of opportunity markedly different with 80% of incremental revenues being digital</td>
</tr>
<tr>
<td>4</td>
<td>As a result, the Indian technology and services industry has the potential to achieve USD 350 billion revenues by 2025 over the next decade; This would imply a 5% share of digital globally</td>
</tr>
<tr>
<td>5</td>
<td>Winning Partners of the Future will have to fundamentally transform their business models, solution offerings, organization and capabilities to capture this opportunity</td>
</tr>
<tr>
<td>6</td>
<td>Spurred on by the digital revolution, the Indian domestic market achieves scale; Domestic market spends to reach USD 70-90 billion in 2025, driven by Digital India and special initiatives such as smart cities</td>
</tr>
<tr>
<td>7</td>
<td>Success will require concerted effort between industry, academia, Government and NASSCOM across 5 dimensions</td>
</tr>
</tbody>
</table>
Technology and Services industry has transformed India

Growth of the Indian technology and services industry

<table>
<thead>
<tr>
<th>Year</th>
<th>Domestic Revenues</th>
<th>Export Revenues</th>
<th>Total Revenues</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>21</td>
<td>13</td>
<td>34</td>
</tr>
<tr>
<td>2009</td>
<td>47</td>
<td>22</td>
<td>69</td>
</tr>
<tr>
<td>2014</td>
<td>86</td>
<td>32</td>
<td>118</td>
</tr>
<tr>
<td>2020E</td>
<td>175</td>
<td>50</td>
<td>225</td>
</tr>
</tbody>
</table>

Source: Department of Electronics & Information Technology, Government of India; EIU World Data

Industry on track to achieve 2020 aspiration: USD 225 billion in revenues

Relative Share to GDP

<table>
<thead>
<tr>
<th>Year</th>
<th>Share to GDP</th>
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</thead>
<tbody>
<tr>
<td>2004</td>
<td>3</td>
</tr>
<tr>
<td>2009</td>
<td>7</td>
</tr>
<tr>
<td>2014</td>
<td>11%</td>
</tr>
<tr>
<td>2020E</td>
<td>8</td>
</tr>
</tbody>
</table>
The industry has been a high impact generating sector of India

- **3.1 mn**
  - Largest private sector employer of women

- **$2.4 bn**
  - Nearly half of PE/VC investment inflows into India

- **1/5**
  - Share in total services and merchandise exports

- Created technology brand for India globally

SOURCE: NASSCOM strategic review
Technology taking larger share of capex, returns becoming key factor

Growing technology intensity of business in US

Tech spend\(^1\) as per cent of US capital investment (nominal)

Percent

<table>
<thead>
<tr>
<th>Year</th>
<th>1980</th>
<th>1990</th>
<th>2000</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent</td>
<td>10</td>
<td>15</td>
<td>20</td>
<td>35</td>
</tr>
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</table>

USD 6 trillion cumulative tech capital investment globally 2005-2013

3x increase in technology intensity of capex

Return on technology is the greatest component of Return on Invested Capital

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\(^1\) Includes hi-tech services, ICT investments, software and service investments, computers and related HW

SOURCE: Bureau of Economic Analysis; McKinsey Global Institute; team analysis
Digital innovators disrupt existing models and have captured 20-25% incremental revenues in select sectors

**CE Retail example**
Incremental revenues N.A. 2012-13, USD billion

<table>
<thead>
<tr>
<th></th>
<th>3 Digital attackers</th>
<th>10 traditional players</th>
<th>All others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incremental industry revenues</td>
<td>6.1</td>
<td>2.4</td>
<td>-2.0</td>
</tr>
</tbody>
</table>

**Retail Banking example**
Incremental revenues 2012-13, USD billion

<table>
<thead>
<tr>
<th></th>
<th>6 Digital attackers</th>
<th>20 global banks</th>
<th>All others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incremental industry revenues</td>
<td>5.9</td>
<td>12.1</td>
<td>11.8</td>
</tr>
</tbody>
</table>

Digital attackers offset losses elsewhere, account for growth

20% of incremental revenues currently

SOURCE: Bloomberg; McKinsey Global Institute; McKinsey Panorama; Dealerscope; AR; SNL; quarterly reports; McKinsey Global banking pools
Global technology and business services enterprise spend likely to touch USD 4 trillion by 2025; 60% driven by digital technologies

Global technology and business services spend

USD billion

2014
Traditional spend evaporates

2020E
New service lines

2025E

Digital tech
Traditional tech

10%
90%

100%

80%
20%

35%
65%

60%
40%

3,950 – 4,100
3,440 – 3,550
1,170 – 1,400
-450 – -650
2,757

15-25% of traditional spend saved by going digital
80% of new spend around digital technologies

1 Digital technologies include social media, mobile applications, big data analytics, cloud (IaaS, SaaS, BPaaS) and cybersecurity
2 Traditional technologies include custom ADM, SI, BPO, IMS, hardware, packaged software & telecom services

SOURCE: Gartner (April 2014); IDC; Team analysis
**Key implications for the partner of the future**

1. **Explosion of new service lines**
   - 20% decline in maintenance and IMS annuity
   - 3x increase in SaaS licenses, BPaaS, Analytics and cyber security services

2. **Invest in new portfolio**
   - **Pyramid** to **Pentagon**
   - Sales and Marketing (~30% of sales)
   - R&D (~15% of sales)

3. **3-in-1 Organisation**
   - Traditional, transformative and disruptive organisation co-exists

4. **Reskilling of talent**
   - 50-60% of today’s workforce will need to be reskilled to be relevant in 2020

5. **Need for partnerships**
   - Buy, fund, incubate or collaborate with digital startups and product companies

**SOURCE:** NASSCOM-McKinsey Perspective 2025 report
80% of incremental spend to be around digital technologies, resulting in significant shift in mix

Global enterprise technology and business services spend

USD billion

<table>
<thead>
<tr>
<th>Service Line</th>
<th>2014</th>
<th>Traditional spend evaporates</th>
<th>2020E</th>
<th>BAU growth in Traditional Service lines</th>
<th>1,000-1,190</th>
<th>3,440-3,550</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digital tech.¹</td>
<td>2,757</td>
<td>-15-25%</td>
<td>2,100-2,300</td>
<td>190 – 290</td>
<td></td>
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<tr>
<td>Consulting</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>SI</td>
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<tr>
<td>BPO</td>
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<tr>
<td>ADM</td>
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<tr>
<td>Packaged Software</td>
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<tr>
<td>Infrastructure</td>
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<table>
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<tr>
<th>Opportunities</th>
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<tbody>
<tr>
<td>SaaS</td>
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<tr>
<td>Mobile/Online</td>
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<tr>
<td>Big Data/Analytics</td>
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<tr>
<td>Legacy-Digital integration</td>
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<tr>
<td>IoT</td>
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</tr>
</tbody>
</table>

¹ Digital Technologies include Social Media, Mobile Applications, Big Data/Analytics, Cloud (IaaS, SaaS, BPaaS) and Cyber Security

SOURCE: Gartner (April 2014); IDC; Team analysis
Enterprises will operate in a 3-speed world calling for a new organization model

### Traditional spends
- **Retail technology spend**: 90% in 2014, 51% in 2020
- **Examples of spend**:
  - Maintenance & upgrades of CRM, SCM etc.
  - Store back office, contact center operations

### Transformation spends
- **Retail technology spend**: 9% in 2014, 41% in 2020
- **Examples of spend**:
  - Omni channel
  - Social media marketing
  - IOT enabled SCM
  - Big data enabled loyalty programs

### Disruptive spends
- **Retail technology spend**: 1% in 2014, 8% in 2020
- **Examples of spend**:
  - Delivery through drones
  - Augmented reality devices
  - Virtual reality stories

### Principles of digital organization
1. Digital to be incubated in a separate org unit
2. Led by CXO-1 executive, focused on the markets
3. Integrated digital sales overlays and delivery within unit; sales continues to reside within BUs
4. Incubation/staging approach (stable solution delivery goes back to core delivery org.)

**SOURCE**: Gartner; IDC; Team analysis
Indian industry revenues could reach USD 225 billion by 2020, USD 350 billion by 2025

India technology and services revenue pool¹

USD billion

<table>
<thead>
<tr>
<th>Year</th>
<th>Digital tech</th>
<th>Traditional tech</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>118</td>
<td>96</td>
<td>214</td>
</tr>
<tr>
<td>2020E</td>
<td>225</td>
<td>77</td>
<td>302</td>
</tr>
<tr>
<td>2025E</td>
<td>38%</td>
<td>62%</td>
<td>350</td>
</tr>
</tbody>
</table>

Services revenues on track to touch USD 225 billion by 2020, the next USD 100 billion revenue will need 1.2-2.0 million people

1 Includes hardware, packaged software, IT services, BPO and engineering services revenues; excludes e-commerce revenues

SOURCE: NASSCOM-McKinsey Perspective 2025 report
5 key enablers to be put in place by NASSCOM and Government

1. Create innovation clusters
   - Create Innovation clusters supported by research centers, global networks

2. Enable talent of the future
   - Design, develop and rollout a massive reskilling program to train and reskill 4-5 million people

3. Encourage Entrepreneurs
   - Turbo-charge the Start-up India program

4. Build the appropriate industry branding
   - Reposition India as a global Digital and Innovation Hub

5. Enable regulatory framework
   - To support digital innovation, strengthen intellectual property rights and enable public-private partnerships
The Startup Landscape in India – Driving Innovation
The country has moved up to 3rd position and has the fastest growing base of start-ups worldwide.

Technology Driven Product Start-ups by Key Countries:
- USA: 48,000–48,200
- UK: 4,500–4,600
- India: 4,200–4,400
- Israel: 4,000–4,100
- Canada: 3,000–3,100

Technology Start-ups by Year of Inception (CAGR: 16%):
- 2010: ~48
- 2011: ~525
- 2012: ~590
- 2013: ~700
- 2014: ~875
- 2015: ~1020
- 2020P: ~2,100

Quick Facts:
- Active VCs/PEs in 2015: ~145
- Active Angels in 2015*: ~290
- Incubators/Accelerators: ~110
- Start-ups perish over 2-3 years time period: 11%

Quick Growth Indicators:
- India: Active VCs/PEs in 2015: ~145
- India: Active Angels in 2015*: ~290
- India: Incubators/ Accelerators: ~110
- India: Start-ups perish over 2-3 years time period: 11%
Inspiration from successful start-ups, huge market opportunity and an enabling support system have been the key drivers

**Key Drivers**

1. **Inspiration from Success Stories**
   - Successful start-ups act as inspiration for aspiring entrepreneurs
   - Unicorns
   - Industry Leaders

2. **High Growth of Investor Ecosystem**
   - 8x Growth in # of investors since 2011
   - 7x Growth in # of investment deals by investors since 2011

3. **Large Consumer and SMB Market**
   - 10 Mn+ Tech Ready SMB’s
   - 100% Mobile penetration
   - 350+ Mn+ Internet Users
   - 115 Mn+ Smartphone Users

4. **Large pool of talent in India**
   - Available top talent in India is set to reach 60,000 annually
   - 2010: 29,500
   - 2015: 60,000

5. **Entrepreneurial Environment**
   - Government Policies
     - Promoting bank financing for start-ups through Start-up India, Stand-up India
   - Growing Platform
     - Large number of events, awards help in recognition and networking
   - Incubators/ Accelerators
     - Large base of 110+ helps in mentoring and raising funds
   - 250K Fresh Talent from Top Universities available
Driven by smartphone adoption, a huge consumer base in India is coming online

**Rapidly growing smartphone base**

- **140 Mn** Smartphone userbase in India in 2014
- **213 Mn** Mobile internet users in India currently
- **35%** Annual growth rate of smartphone users in India from 2015 to 2019
- **41%** E-commerce sales through mobile in 2014

**Consumers creating online identity**

- **300 Mn** Number of internet users in India in 2014
- **63 Mn** Consumers expected to make an online purchase in 2015
- **$100 Mn** Current size of the online grocery market in India
- **$30 Bn** Estimated Indian e-commerce industry size in 2018
Technology driven startups are trying to disrupt every aspect of a consumer's lifestyle.

**TRADITIONAL**

**Before moving to Delhi**
- Stores unnecessary items in warehouse

**Arrives at Delhi airport**
- Stands in queue to book a cab from pre-paid booth

**First few days in Delhi**
- Reaches Paharganj and searches for budget hotel
- Goes to mobile recharge shop to top-up
- Visits a property broker to get a house on rent

**START-UP AGE**

**Before moving to Delhi**
- Goes for on-demand storage for storing unnecessary items

**Arrives at Delhi airport**
- Uses mobile app to book cab to temporary accommodation

**First few days in Delhi**
- Books an affordable hotel online
- Makes a recharge using mobile app
- Searches for houses on rent online and directly contacts owner

**TRADITIONAL**

**Shifts to new house**
- Visits furniture market to buy sofa
- Face language problems with local vegetable vendor
- Being a health enthusiast, Mr. Subramaniam struggles to find a gym

**SETTLING IN NEW HOUSE**
- Son struggles to find auto rickshaw when he goes for tuition
- Unable to find shop to buy South Indian sari
- Finding a plumber to get leaking pipeline is a challenge

**START-UP AGE**

**Shifts to new house**
- Orders furniture online
- Purchases groceries using the mobile app
- Mr. Subramaniam found a nearby gym online and wears a fitness band

**SETTLING IN NEW HOUSE**
- Son uses mobile app for test preparation and book auto rickshaw
- Selects and buys a Sari from huge range available online
- Easily finds a plumber who serves their area online
Growth of Indian startups has created significant opportunities for all associated stakeholders within the ecosystem

- With huge rise in the number of start-ups in India, employment opportunities are being generated
  - Between 2015 and 2020, employment in startups is expected to grow from 80-85k to 250k
- Global investors are investing in the Indian start-up ecosystems leading to increased FDI
  - 59% of the investment deals in Q2 2015 came from foreign investors; for example Snapdeal got an investment of USD 500 million, and Foxconn plans to invest USD 1 billion
- Traditional businesses are being positively impacted through increased spending by start-ups
  - E-commerce players to spend USD 600 Mn in advertising and marketing, and USD 2 billion on logistics
- Start-ups are empowering SMBs in enhancing their reach and serve customers better
  - Taxi aggregators are allowing cab drivers increase their business through easy discoverability, Hyperlocal e-commerce firms are offering new opportunities to kirana shops and grocery stores, Accommodation start-ups are improving the business of budget hotels through standardization
Ingenious startups are emerging in high impact, futuristic technology areas

<table>
<thead>
<tr>
<th>Technology Area</th>
<th>Start-Ups</th>
<th>Major Use Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internet of Things</td>
<td>10+</td>
<td>Wearable Tech, Home Automation and Fleet Management</td>
</tr>
<tr>
<td>Big Data &amp; Analytics</td>
<td>350+</td>
<td>Big Data and Social Media Analytics</td>
</tr>
<tr>
<td>Augmented Reality</td>
<td>10+</td>
<td>Marketing &amp; Advertising, Healthcare and Visualization Solutions</td>
</tr>
<tr>
<td>Cloud Computing</td>
<td>800+</td>
<td>BD&amp;A, ERM, Comm./ Collaboration and Productivity Solutions</td>
</tr>
<tr>
<td>Hardware</td>
<td>30+</td>
<td>3D Printing, Payment Solutions and Automation</td>
</tr>
<tr>
<td>EduTec</td>
<td>190+</td>
<td>Technology Platform, Educational Content, Skills Development and</td>
</tr>
<tr>
<td>AdTech</td>
<td>100+</td>
<td>Mobile Advertising, Marketing Analytics and Ad Campaign Management</td>
</tr>
<tr>
<td>HealthTech</td>
<td>30+</td>
<td>Search, ERM, Records Management</td>
</tr>
</tbody>
</table>
Digital India
What is Digital India?

- Digital India is a **Programme to prepare India for a knowledge future**.
- The focus is on being **transformative** – to realize IT + IT = IT
- The focus is on making **technology central to enabling change**.
- It is an **Umbrella Programme** – covering many departments.
  - It weaves together a large number of ideas and thoughts into a **single, comprehensive vision** so that each of them is seen as part of a larger goal.
  - Each individual element stands on its own. But is also part of the **larger picture**.
  - It is **coordinated by DeitY, implemented by the entire government**.
  - The weaving together makes the Mission **transformative in totality**

- The Programme:
  - Pulls together many **existing schemes**.
  - These schemes will be **restructured and re-focused**.
  - They will be **implemented in a synchronized manner**.
  - Many elements are only **process improvements with minimal cost**.

- The **common branding** of programmes as **Digital India** highlights their transformative impact.
Digital India Vision Areas

**Infrastructure as a Utility to Every Citizen**
- High speed internet as a core utility
- Cradle to grave digital identity - unique, lifelong, online, authenticable
- Mobile phone & Bank account enabling participation in digital & financial space
- Easy access to a Common Service Centre
- Shareable private space on a public cloud
- Safe and secure Cyber-space

**Governance & Services On Demand**
- Seamlessly integrated across departments or jurisdictions
- Services available in real time from online & mobile platform
- All citizen entitlements to be available on the cloud
- Services digitally transformed for improving Ease of Doing Business
- Making financial transactions electronic & cashless
- Leveraging GIS for decision support systems & development

**Digital Empowerment of Citizens**
- Universal Digital Literacy
- Universally accessible digital resources
- All documents/certificates to be available on cloud
- Availability of digital resources/services in Indian languages
- Collaborative digital platforms for participative governance
- Portability of all entitlements through cloud
Nine Pillars of Digital India

1. Broadband Highways
2. Universal Access to Phones
3. Public Internet Access Programme
4. E-Governance – Reforming government through Technology
5. eKranti – Electronic delivery of services
6. Information for All
7. Electronics Manufacturing – Target NET ZERO Imports
8. IT for Jobs
9. Early Harvest Programmes
Thank You

rc@nasscom.in
Appendix
In 2015, Indian start-up ecosystem has grown across dimensions over 2014, suggesting a bright future.

- Total Start-ups to grow multifold:
  - 4,200 - 4,400
  - 11,500 - 12,000 (2020)

- Average Valuation of Indian Start-ups: $2.7 Mn

- Employed in Start-ups: 80-85K

- Investments in Start-ups in 2015: ~$4.2 Bn

- 3rd Largest start-up location globally

- Share of Women Founders:
  - ~90%+ Male
  - ~10% Female

- Start-ups are born each day: ~4

- # of Incubators/Accelerators: 110+

- # of M&A Deals 2015: 65+

- # of Incubators/Accelerators: 110+

Bangalore ranked 15 among Global Startup Ecosystem.

More than 65% of the start-ups are located in **NCR, Mumbai and Bangalore**.

- Worth of funding weekly: $80 Mn

- Average Valuation of Indian Start-ups: ~$4.2 Bn

- Worth of funding weekly: $80 Mn

- # of M&A Deals 2015: 65+
E-Commerce witnessed maximum investment; Hyperlocal E-Commerce, Consumer services, Analytics and E-Commerce Enablers are the emerging investor favorites

Focus Areas of Start-ups

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>B2C 79%</td>
<td>79%</td>
</tr>
<tr>
<td>B2B 21%</td>
<td>26%</td>
</tr>
</tbody>
</table>

Share of B2C Focused Angel Deals based on investments

- **2014**: E-Commerce 49%, Aggregators 41%, Hyperlocal E-commerce 2%, Consumer Services 7%
- **2015**: E-Commerce 61%, Aggregators 14%, Hyperlocal E-commerce 8%, Consumer Services 7%

Share of B2B Focused Deals based on investments

- **2014**: E-Commerce Enablers 29%, Software 27%, Analytics 17%
- **2015**: E-Commerce Enablers 42%, Software 27%

*Average Deal Size (Overall)/(B2B)/(B2C)* is based on publicly available deal values (In the public domain deal value is not available for every deal), excluding deals >=$100 Mn; (E): Estimated, (P): Projected

**Total Investment Commitment** is estimated based on ‘Avg Deal Size (excluding deals >=$100 Mn)’ and ‘Total # of Deals’. For the year 2015, ‘Investment Commitment’ is projected for the whole year based on the run rate so far

Source: Zinnov Product/Digital Start-up Database
Startups are leveraging technology to solve problems that have been plaguing the country for decades

1. **Power**
   - **GDP loss due to electricity shortage:** $68 Bn
   - IoT based solution to make diesel generators more efficient
   - Solar/wind energy forecasting and scheduling; Online renewable energy marketplace

2. **Infrastructure**
   - **Traffic congestion costs per year:** $10 Bn
   - Intelligent traffic monitoring system with real time alerts
   - Big data and analytics to tackle issues such as infrastructure, healthcare and education

3. **Healthcare**
   - **1 doctor per 1700 persons**
   - Web-based and mobile platform for patients to connect with doctors
   - Service to allow patients to select the best healthcare facilities which are available

4. **Financial Inclusion**
   - **120 Mn** Rural households without bank accounts
   - Partnership with banks and tablet banking platform to facilitate banking services
   - Simpler financing for people through access to credit scores and other related information

5. **Agricultural Productivity**
   - **48%** Of agricultural yield of Asian countries
   - Web/mobile based ICT for farmers to improve their efficiency and increase produce
   - SMAC based supply chain family of software for rapid growth of agri-businesses

6. **Skilling and Employment**
   - **500 Mn** Government’s skilling target till 2022
   - Recruitment platform for grey-collared industry to connect candidates to job opportunities
   - English learning mobile app for speakers of regional Indian languages

7. **Education**
   - **23%** Gross Enrolment Ratio in higher education
   - Affordable technology to personalize learning & increase access to high quality education
   - Online education marketplace with offerings across segments
An evolving ecosystem of VCs/PEs/Angels/Incubators/Support Networks is precipitating the growth of Indian Start-ups.
Over 80+ business incubators & accelerators have already provided seed stage support to over 450+ start-ups.

**Incubator/ Accelerator Ecosystem in India**

- **5+ MNC Accelerators**
  - Incubated 60+ Start-ups
  - Microsoft, Citrix, Target, PayPal, Pitney Bowes

- **25+ Private Incubators**
  - Incubated 160+ Start-ups
  - NASSCOM, Kyron, Indian Angel Network, villgro

- **50+ Public Incubators**
  - Incubated 230+ Start-ups
  - SINE, cije, IITBc Innovation Center

**Top Focus Areas in 2014**

- Consumer Internet
- Big Data & Analytics
- Productivity
- Unified Communication
- GIS Location
Brain drain to brain gain- people settled abroad are returning to India to start new businesses

### Key Drivers

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Examples</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>Maturing start-up ecosystem in India</td>
<td>Ashwini Asokan, MAD Street Den</td>
</tr>
<tr>
<td>2</td>
<td>Massive market opportunity with high # of potential customers</td>
<td>Suchi Mukerjee, LimeRoad</td>
</tr>
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<td>3</td>
<td>White spaces in India which can be addressed by start-ups offerings</td>
<td>Sameer Maheshwari, Healthkart</td>
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<td>4</td>
<td>Ease of funding availability</td>
<td>Saurabh Arora, Lybrate</td>
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<td>5</td>
<td>Low running cost for start-ups</td>
<td>Sandeep Aggarwal, Shopclues &amp; Droom</td>
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<td>Poornima Vardhan, 335TH</td>
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- Ashwini Asokan, Masters from Carnegie Mellon University, USA; Worked at Intel, USA, and founded MAD Street Den in 2014
- Suchi Mukerjee, Masters from Carnegie Mellon University, USA, Worked at Intel, USA and founded LimeRoad in 2012
- Sameer Maheshwari, MBA from Harvard Business School, USA; Worked at UBS and founded Healthkart in 2011
- Saurabh Arora, MBA from Columbia Business School, USA; Worked at Facebook, USA and founded Lybrate in 2013
- Sandeep Aggarwal, MBA from Columbia Business School, USA; Worked at Facebook, USA and founded Shopclues and Droom in 2011
- Poornima Vardhan, MBA from The Wharton School, USA; Worked at UBS, USA, and founded 335TH in 2014
Indian CXOs are coming forward to join start-ups or starting their own ventures

**Key Drivers**

1. High pay-packages coupled with stock options
   - Technology Leaders joining Start-ups
     - Rajat Bansal
       - CTO
       - Worked at Amazon, Adobe & Microsoft
     - Amitabh Mishra
       - SVP, Head of Technology
       - Worked at VeriSign
   - Business Leaders joining Start-ups
     - Ramendra Mandal
       - VP, Sales
       - Worked at Oracle
     - Sumant NaikKhanvte
       - Director, Product Management
       - Worked at Juniper Networks
   - Industry Veterans starting own ventures
     - K Radhakrishnan
       - Co Founder, GrocerMax
       - Worked at Future Group, Reliance Retail
     - Ashish Goel
       - Founder, Urban Ladder
       - Worked at Mckinsey, Amar Chitra Katha Media

2. Higher roles and responsibilities
   - Technology Leaders joining Start-ups
   - Business Leaders joining Start-ups
   - Industry Veterans starting own ventures

3. Better future career growth
   - Technology Leaders joining Start-ups
   - Business Leaders joining Start-ups
   - Industry Veterans starting own ventures
Collaboration between large enterprises and startups: A win-win

1. Corporate Accelerator Program – Invest in innovation

   **Program Overview:** Funding and mentorship to young and aspiring Start-ups through a separate venture fund

   **Features of this program include:**
   - Mentorship
   - Start-up connects and collaboration
   - Creation of global springboards for Indian Start-ups

2. Intrapreneurship Program – Nurture ideas internally

   - **Program Overview:** An entrepreneurship in-residence program, where large companies often hire or partner with young minds to innovate something new.

   - **Features of this program include:**
     - Hire a team of entrepreneurs internally to set up a business
     - Encourage employees to start their own businesses

3. Enterprise Partnership – Build strategic fits

   **Program Overview:** Partnership with a product/IP based company possessing niche skills and complementing the partner’s product portfolio. Revenue arrangement: Share in the total project revenues or joint profit share

   **Features of this program include:**
   - Product collaboration
   - Joint go-to-market strategy
   - Innovation

4. Corporate Funds Program – Support the young

   **Program Overview:** Corpus/ fund set aside for partnering with or acquiring innovative start-ups

   **Features of this program include:**
   - Mentoring
   - Collaborating and investing
   - Joint go-to-market and additional valuation in the longer-run
Government Policies and Initiatives for start-ups

1. **Start-up Stand-up India**
   - To promote bank financing for start-ups and offer incentives to boost entrepreneurship

2. **Launched India Aspiration Fund (IAF)**
   - To boost start-up ecosystem, launched IAF with initial corpus of INR 2,000 Cr to finance and promote MSME sector

3. **Create MUDRA Bank for Small Business Loans**
   - Initial corpus of INR 20,000 Cr & credit guarantee corpus of INR 3,000 Cr to provide loan facilities to small businesses

4. **SETU\(^1\) Program**
   - Established techno-financial/incubation programme to support start-ups and set aside INR 1,000 Cr in 2015 Union Budget

5. **Technology Innovation and Development of Entrepreneurs**
   - Scheme implemented by DIT\(^2\), aims to assist institutions to strengthen their Technology Incubation centres

6. **Atal Innovation Mission**
   - Established a platform to promote culture of innovation and R&D and earmarked INR 150 Cr in 2015 Union Budget

7. **Improving Ease of Starting a Business**
   - To create Ebiz portal for reducing approvals required to start a business
   - To complete tax registration in 2 days

8. **Plans Incentives to IoT Start-ups**
   - Easy import facilities & duty benefits
   - Minimize excise & central sales tax
   - Subsidised rates on purchasing land

9. **State Government Start-up Policies**
   - Andhra Pradesh Innovation & Start-up Policy 2014
   - Kerala Technology Start-up Policy 2014

Note: \(^1\)Self employment and Talent Utilization; \(^2\)Micro Units Development Refinance Agency; \(^3\)Department of Electronics & Information Technology; \(^4\)Micro, small and medium enterprises; \(^5\)Central excise and service tax
What is Digital India?

- Digital India is a **Programme** to prepare India for a knowledge future.
- The focus is on being **transformative** – to realize IT + IT = IT
- The focus is on making **technology central to enabling change**.
- It is an **Umbrella Programme** – covering many departments.
- It weaves together a large number of ideas and thoughts into a **single, comprehensive vision** so that each of them is seen as part of a larger goal
- Each individual element stands on its own. But is also part of the **larger picture**.
- It is **coordinated by DeitY, implemented by the entire government**.
- The weaving together makes the Mission **transformative in totality**

The Programme:
- Pulls together many **existing schemes**.
- These schemes will be **restructured and re-focused**.
- They will be **implemented in a synchronized manner**.
- Many elements are only **process improvements with minimal cost**.

The **common branding** of programmes as **Digital India** highlights their transformative impact.
## Digital India Vision Areas

### Infrastructure as a Utility to Every Citizen
- **High speed internet** as a core utility
- **Cradle to grave digital identity** - unique, lifelong, online, authenticable
- **Mobile phone & Bank account** enabling participation in digital & financial space
- Easy access to a **Common Service Centre**
- Shareable **private space on a public cloud**
- Safe and secure Cyber-space

### Governance & Services On Demand
- Seamlessly integrated across departments or jurisdictions
- Services **available in real time** from online & mobile platform
- **All citizen entitlements** to be available **on the cloud**
- Services digitally transformed for improving **Ease of Doing Business**
- Making financial transactions electronic & cashless
- Leveraging GIS for decision support systems & development

### Digital Empowerment of Citizens
- Universal **Digital Literacy**
- Universally accessible digital resources
- All documents/certificates to be available on cloud
- Availability of digital resources / services in Indian languages
- Collaborative digital platforms for participative governance
- **Portability** of all entitlements through cloud
Pillar 1. Broadband Highways

Broadband for all Rural
- Coverage: 250,000 GP
- Timeline: December 2016
- CAPEX: Rs 32,000 Cr
- Nodal Dept: DoT

1yr: 50,000 GP
2yr: 100,000 GP
3yr: 100,000 GP

Broadband for all Urban
- Virtual Network Operators for service delivery.
- Mandate communication infrastructure in new urban development and buildings.

Changes in Rules to facilitate.

National Information Infrastructure
- Coverage: Nationwide
- Timeline: March 2017
- Cost: Rs 15,686 Cr
- Nodal Dept: DeitY

Integration of SWAN, NKN, NOFN. To be implemented in 2 years.
Pillar 2. Universal Access to Mobile connectivity

- **Coverage**: Remaining uncovered villages (~42,300 villages)
- **Timeline**: FY 2014-18
- **Cost**: Rs 16,000 Cr
- **Nodal Dept**: DoT

**Ongoing Programme**
Increased network penetration & coverage of gaps
Pillar 3. Public Internet Access Programme – National Rural Internet Mission

**CSCs –**
- Made viable, multi-functional end-points for service delivery
- **Coverage:** 2,50,000 villages (now 130,000)
- **Timeline:** 3 Years - March 2017
- **Cost:** Rs 4750 Cr
- **Nodal Agency:** DeitY

**Post Offices to become Multi-Service Centres**
- **Coverage:** 1,50,000 Post Offices
- **Timeline:** 2 Years
- **Nodal Agency:** D/o Posts

**Ongoing Programme**
- Reach of Govt. services to all GPs

This should be long term vision for POs
Pillar 4. e-Governance: Reforming Government through Technology

- Government **Business Process Re-engineering** using IT to improve transactions
  - Form Simplification, reduction
  - Online applications and tracking, Interface between departments
  - Use of online repositories e.g. school certificates, voter ID cards, etc.
  - Integration of services and platforms – UIDAI, Payment Gateway, Mobile Platform, EDI

- **Electronic Databases** – all databases and information to be electronic, not manual

- **Workflow automation** inside government

- **Public Grievance Redressal** - using IT to automate, respond, analyse data to identify and resolve persistent problems – largely process improvements

- **To be implemented across government - critical for transformation.**
Pillar 5. eKranti - Electronic Delivery of Services

- **Technology for Education — e-Education**
  - All Schools connected with broadband
  - Free wifi in all schools (250,000)
  - Digital Literacy program
  - MOOCs – develop pilot Massive Online Open Courses

- **Technology for Health — e-Healthcare**
  - Online medical consultation
  - Online medical records
  - Online medicine supply
  - Pan-India exchange for patient information
  - Pilots – 2015; Full coverage in 3 years

- **Technology for Planning**
  - GIS based decision making
  - National GIS Mission Mode Project

- **Technology for Farmers**
  - Real time price information
  - Online ordering of inputs
  - Online cash, loan, relief payment with mobile banking

- **Technology for Security**
  - Mobile Emergency Services

- **Technology for Financial Inclusion**
  - Mobile Banking
  - Micro-ATM program
  - CSCs/ Post Offices

- **Technology for Justice**
  - e-Courts, e-Police, e-Jails, e-Prosecution

- **Technology for Security**
  - National Cyber Security Co-ordination Center

**Ongoing Programme (NeGP) — will be revamped to cover these elements**
Pillar 6. Information for All

- **Online Hosting of Information & documents**
  - Citizens have open, easy access to information
  - Open data platform

- **Government pro-actively engages through social media** and web based platforms to inform citizens
  - MyGov.in
  - **2-way communication** between citizens and government

- **Online messaging** to citizens on special occasions/programs

- **Largely utilise existing infrastructure** – limited additional resources needed
Pillar 7. Electronics Manufacturing
Target NET ZERO IMPORTS by 2020

- **Target NET ZERO Imports** is a striking demonstration of intent
- **Ambitious goal** which requires coordinated action on many fronts
  - Taxation, Incentives
  - Economies of Scale, Eliminate cost disadvantages
- **Focused areas – Big Ticket Items**
  - FABS, Fab-less design, Set top boxes, VSATs, Mobiles, Consumer & Medical Electronics, Smart Energy meters, Smart cards, micro-ATMs
  - Incubators, clusters
  - Skill development
  - Government procurement

- There are many ongoing programs which will be fine-tuned.

- **Existing Structures inadequate** to handle this goal. Need strengthening.
**Pillar 8. IT for Jobs**

**Train people in smaller towns & villages for IT sector jobs**
- **Coverage:** 1 Crore students
- **Timeline:** 5 years
- **Cost:** Rs 200 Cr for weaker sections
- **Nodal Agency:** DeitY

**IT/ITES in NE**
- **Scope:** Setting up of BPO per NE State
- **Coverage:** NE States
- **Nodal Agency:** DeitY

**Train Service Delivery Agents to run viable businesses delivering IT services**
- **Coverage:** 3,00,000
- **Timeline:** 2 Years
- **Nodal Agency:** DeitY

**Telecom service providers to train rural workforce to cater to their own needs**
- **Coverage:** 5,00,000
- **Timeline:** 5 Years
- **Nodal Agency:** DoT

**New Scheme**
- IT ready workforce
- ICT enabled growth in NE

**Ongoing**
- Skilled VLEs and Viable CSCs
- Telecom ready workforce
Pillar 9. Early Harvest Programmes (1/3)

**IT platform for messages**
- Coverage: Elected representatives, All Govt employees
- 1.36 Cr mobiles and 22 Lakh emails
- Mass Messaging Application developed

**Government Greetings to be e-Greetings**
- Basket of e-Greetings templates available
- Crowd sourcing of e-Greetings thru MyGov
- e-Greetings Portal ready by 14 August 2014

**Biometric attendance**
- Coverage: All Central Govt. Offices in Delhi
- Operational in DeitY & Initiated in Urban Development
- On-boarding started in other depts
- Procurement of devices – tender issued

Targeted Mass messaging since July 14
1st e-Greeting from PM on 15th Aug 2014
To be completed by Oct 2014
Pillar 9. Early Harvest Programmes (2/3)

Wi-fi in All Universities
- Scope: All universities on NKN
- 400 additional Universities
- Cost: Rs 790 Cr
- Approval Oct 2014
- Implementation done by Dec 2015

Secure email within government
- Phase I upgradation for 10 Lakh employees done
- Ph II for 50 Lakh employees by March 2015
- Cost: Rs 98 Cr
- Email to be primary mode of communication

Standardize government email design
- Standardised templates under preparation
- To be ready by October 2014
Pillar 9. Early Harvest Programmes (3/3)

- **Public wifi hotspots**
  - **Coverage:** Cities with pop > 1 Mill., tourist centres
  - **Nodal Agency:** DoT/ MoUD
  - **Digital Cities**
    - Completed by Dec 2015

- **School Books to be eBooks**
  - **Nodal Agency:** MHRD/ DeitY
  - **Completed by Mar 2015**

- **SMS based weather information, disaster alerts**
  - **DeitY’s Mobile Seva Platform ready**
  - **Nodal Agency:** MoES (IMD) / MHA (NDMA)
  - **In place by Dec 2014**

- **National Portal for Lost & Found children**
  - **Nodal Agency:** DeitY/ DoWCD
  - **In place by Oct 2014**