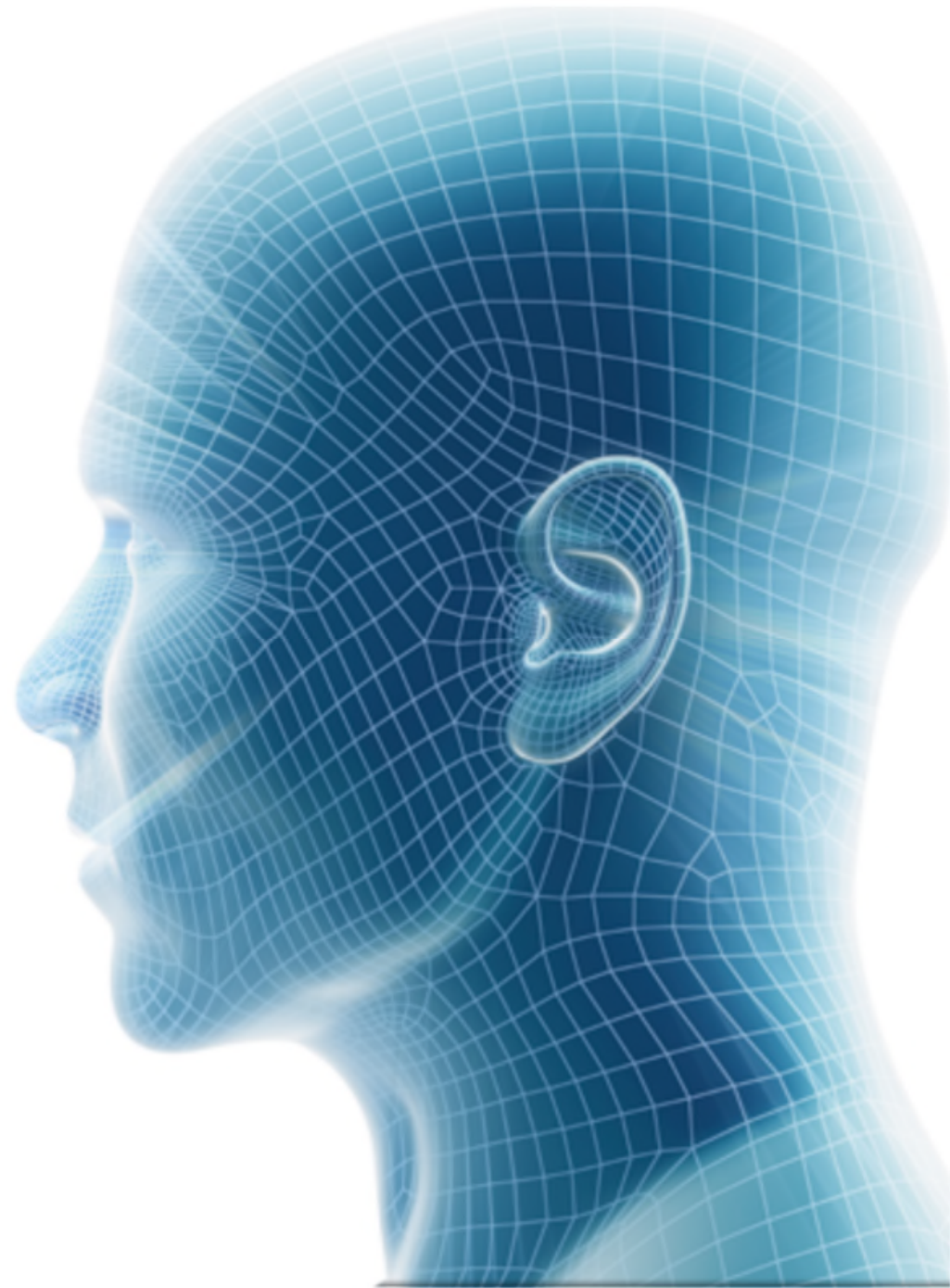


Indian IT Industry

Economic Diplomacy Division

Ministry of External Affairs

New Delhi



India: A matchless IT business partner

MARKET: Most Attractive

~1.2 billion	Growing spending power – amongst the biggest market
>75%	Population with <35 years of age
375 million	Wider online user base; 29% growth in internet users

SKILLS – Digital hub

6.2 million	Talent composition – 2x growth in 5 years
~250,000	Digitally skilled people employed in India
> 1 million	Technical output – Engineers annually

LEADING GLOBAL SOURCING NATION



67%
Global sourcing share

BUSINESS INFRASTRUCTURE- Excellence in delivery

~7-8X	Entry level wages – Lesser compared to source nations
>670	Number of Global Delivery Centers (GDCs) > 78
+16000	Diverse supplier landscape; >8000 digital-centric

INNOVATOR- Taking the lead in driving growth for customers

>4,200	Start-ups innovating for futuristic technology areas
250%	Growth in funding in B2B space over the last year
~50	Collaboration between large & small providers



Growth of India's IT Sector

2005-Present

2000-05

1995-2000

Pre-1995

In the early 1990s, US-based companies began to outsource work to low-cost and skilled talent pool in India

IT Industry started to mature. Increased investment in R&D and infrastructure. India increasingly seen as a product development destination

The number of firms in India grew in size and started offering complex services such as product management and go-to-market strategies.

Western firms set up a number of captives in India

Firms in India became global with delivery centers across the globe.

India's IT sector is at an inflection point, moving from enterprise servicing to enterprise solutions.

The country has already become the third largest IT hub



EVOLUTION OF INDIA'S IT

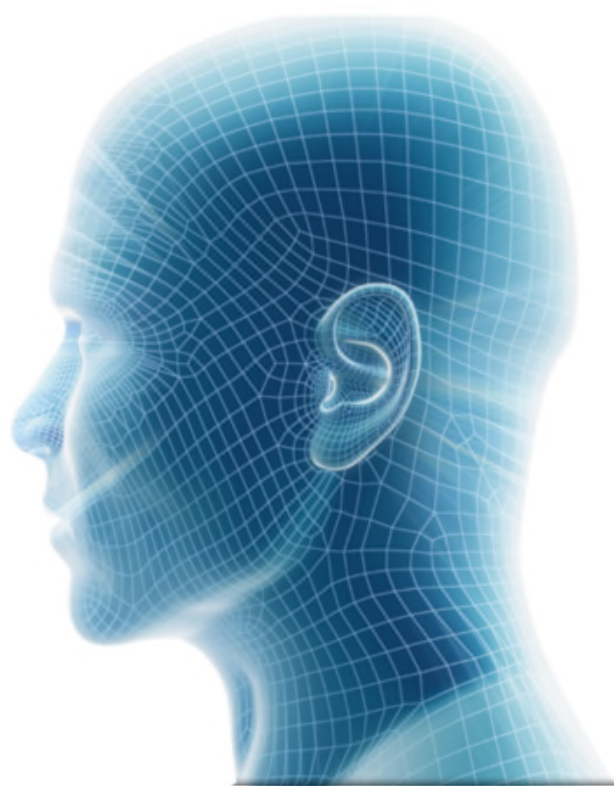
	1980-1990	1990-2000	2000-2010	2010 onward
Revenue (US\$ Bn)	1	>8	~78	1
Employees (Million)	0.06	0.34	2.3	3.7
No. of Firms	<1,000	~ 2,000	10,000 – 12,000	>16,000
GDP Share	~1%	1.8%	6.1%	9.3%
Share in Service Exports	<5%	10.5%	26%	>45%
Share in Global Sourcing	-	-	47%	67%
Value Addition	-	Low-end support & development, Time & Material pricing	End-to-end services; Strategic partner; (non-linear growth); Pay-as-you-use	Bimodal IT, Digital Bus, Automated platforms, IoT, tech, innovation
India IT associated with	Cost Arbitrage	Collaboration	Value Addition	Enabling Small Enterprises

Source: NASSCOM
 Data for 2000, 2016

STATE OF PLAY

India is fast emerging as a digital economy... Digital India, Make in India, Skilling India are creating a renewed thrust on the domestic market

Indian IT companies can offer solutions in the following segments: Social Mobile Analytics & Cloud (SMAC), ERP, CRM, mobility and user experience technologies. Business Process Management sector, which is being driven by greater automation, expanding omni-channel presence, application of analytics across entire value chain.

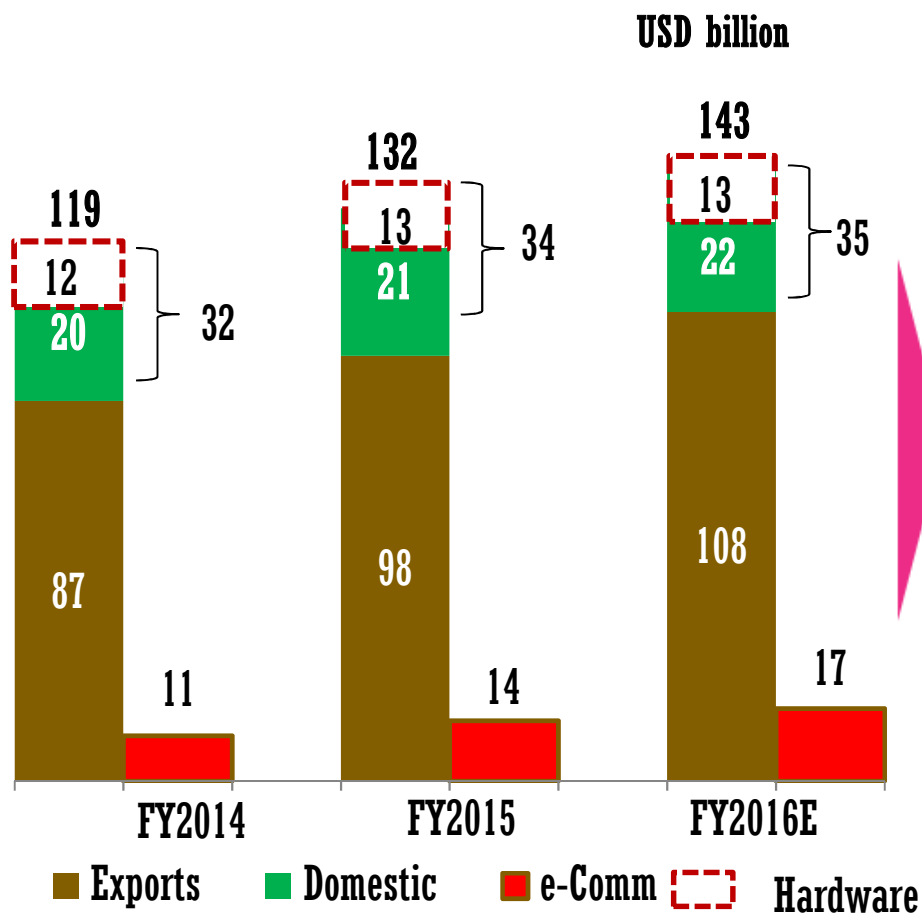


India 2016: Indian IT Industry clocked revenues of USD 146 billion... Exports segment USD 98.5 Billion... Domestic market grew by 14%- fuelled by ecommerce

- ❑ The Indian IT and ITeS industry is divided into major segments – IT services, Business Process Management (BPM), software products & engineering services, and hardware.
- ❑ **IT Services:**
 - ❑ Market Size: USD75 Bn
 - ❑ >81% of revenue comes from Exports
 - ❑ Banking, Financial Services & Insurance (BFSI) is the major vertical.
- ❑ **BPM:**
 - ❑ Market size: USD28 Bn
 - ❑ 87% of revenue comes from Exports
 - ❑ Market size - USD54 billion by 2025
- ❑ **Software Products & Engineering Services:**
 - ❑ Market size: USD27 billion
 - ❑ >84% of revenue comes from Exports
- ❑ **Hardware:**
 - ❑ Market size: USD13.3 billion
 - ❑ Domestic market accounts for a significant share.

Indian IT-BPM industry

BPM revenue break-up¹



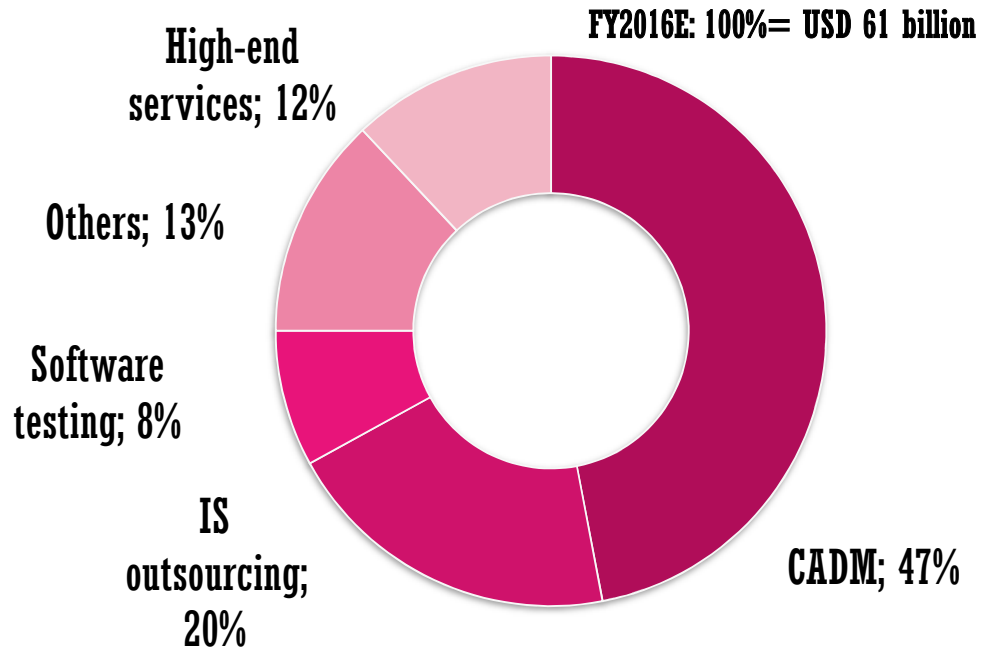
COM has begun to report eCommerce market as part of domestic ; historical numbers have been changed to reflect addition of this

nt

- ❑ Industry revenues (excluding e-Commerce) total at USD 143 Bn; growth reflects variable impact of currency.
- ❑ Exports cross USD 100 Bn; doubled over last 6 years
- ❑ IT services ~USD 75 Bn
- ❑ India has become the global hub for high value added services; ER&D and Product Development revenues ~USD 26 Bn.
- ❑ World's biggest BPM destination- Revenues of USD 28 Bn.
- ❑ ~USD 17 Bn E-Commerce industry, growing at 20% boosting domestic consumption.
- ❑ Increased consumer adoption of digital tech coupled with a technology focused Government growth agenda
 - Aadhar (Unique Identification Number) enrolment crossing 1 billion
 - Large projects like Goods & Services Tax Network (GSTN) awarded
 - Electronic transactions related to eGov doubled in 2015 – 70%

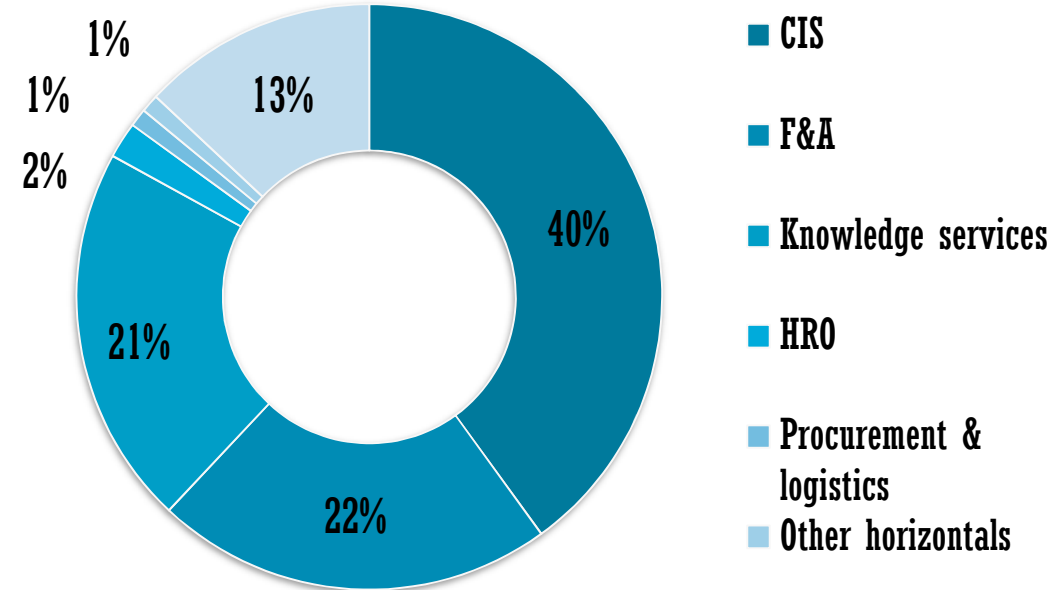
Services: At par with industry growth rate - 10.3%; M: Scale and maturity, the industry USP

IT services exports: Biggest segment of the industry



World's largest IT services base - >7,500 firms
 7% share in global IT sourcing
 IS outsourcing: Fastest growing (>12%)
 Software testing: >11.5% growth; increased focus on quality, digital transformation driving growth
 50+ MNC and GIC firms

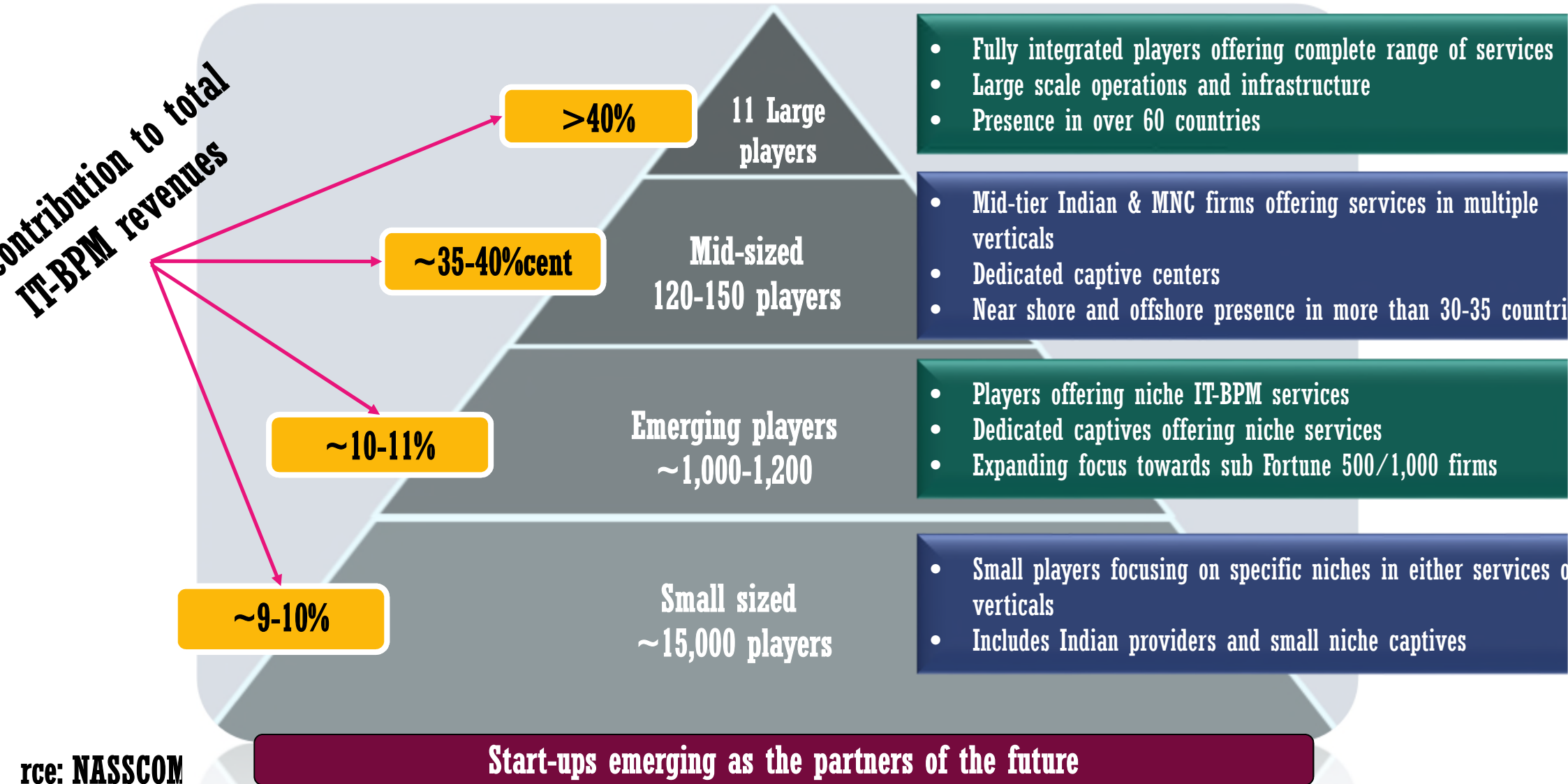
BPM exports: Knowledge services driving growth



- Y-o-Y growth of nearly 9 per cent
- 38% global sourcing share
- Investments in platform-based solutions, digital marketing services, analytics and consulting fundamentally changing industry landscape

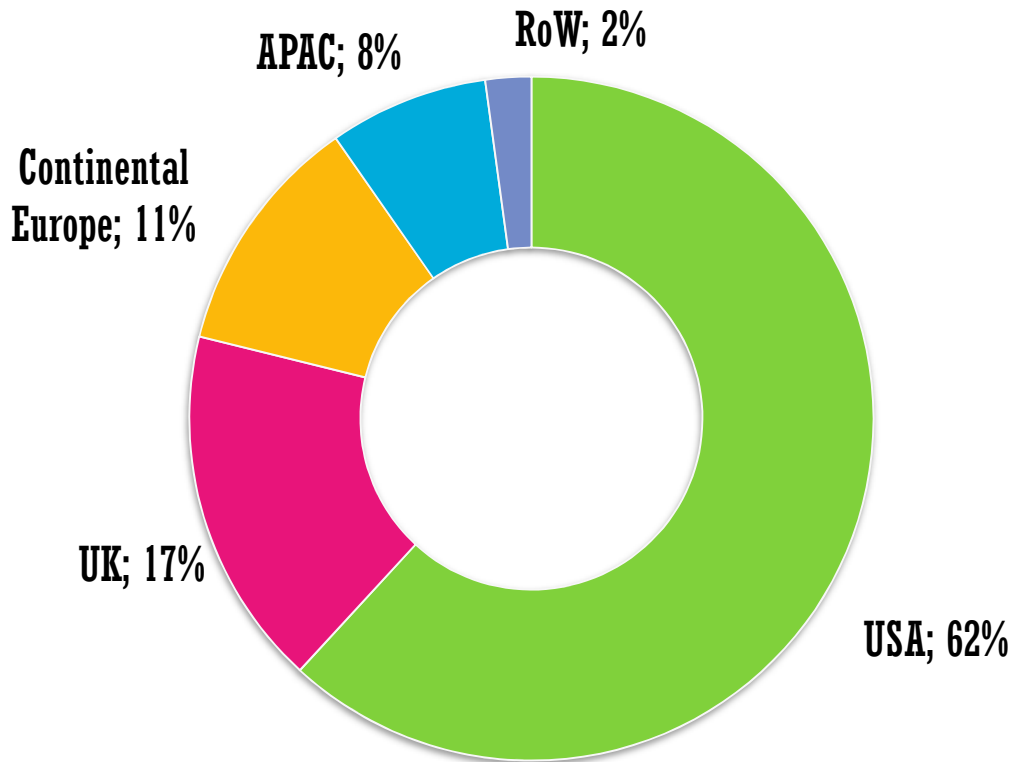
Indian IT-BPM: Mix of players

IT-BPM Industry Structure, FY 2016

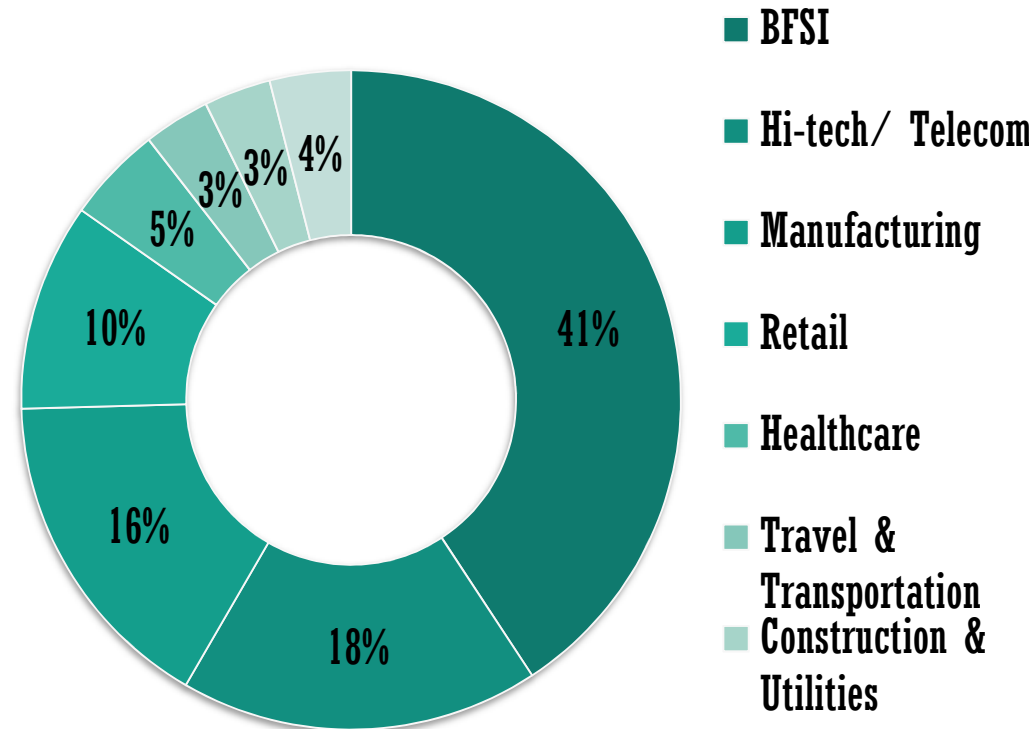


Media IT: Business Destinations & Emerging verticals

Traditional geographies growing fastest – 10.4%



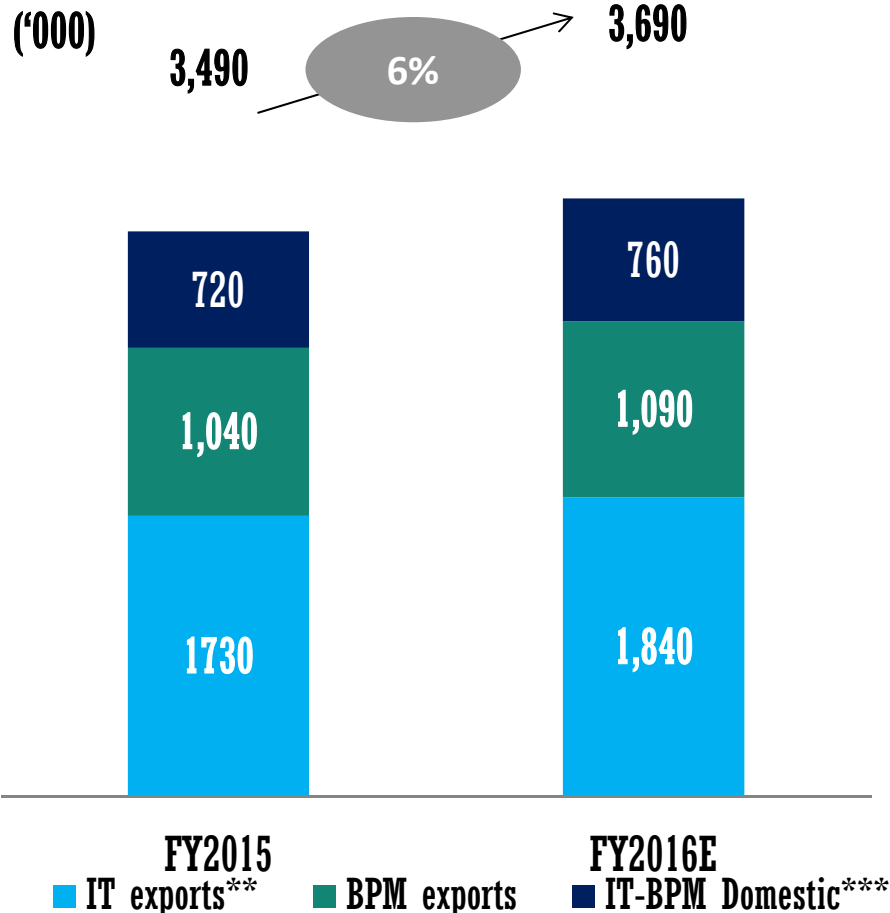
Emerging verticals growing faster



FY2016E, 100%= USD 108 billion

Industry hiring levels steady; specialized skill sets in demand

Direct employment *



- Industry employee base reaches 3.7 million, addition of 200,000 lakh in FY2016
- eCommerce industry - 40,000 employees
- 1.1 million jobs added in last 5 years
- Annual talent output: 6.2 million
 - >1 million technical graduate pool
 - ~36-38 per cent share of global employable talent pool for IT
- Indian IT industry a Global talent powerhouse – representative of millennials, showcasing diversity, and leadership in digital skills
- Talent hunt shifting from ‘Qualification’ to ‘skill based’; hiring ‘knowledge and expertise’

ommerce

India's I-commerce business valued @ US\$ 17 Bn in 2016...US\$70~90 Bn by 2020.
100 Mn online shoppers...100 Mn by end-2017.
3% of e-commerce is travel-related (tickets, hotel bookings etc.)
E-commerce tail business @ 29%
Mobile/DTH recharge seeing >1 Mn transactions per day
Electronics & Apparel are choicest purchases

India's leading e-commerce companies – Flipkart (45% share), Snapdeal (26%), Amazon (12%), PayTM (7%) and Others (10%).

Mode of Payment: Cash on Delivery (76%), Debit Cards (10%), Credit Cards (7%), Net Banking (5%), and Others (2%)

Key Support:

100% FDI via automatic route is permitted in B2B e-commerce.
FDI in B2C e-commerce is permitted in the following cases:

- Single brand entities allowed to venture into E-commerce.
- Manufacturers allowed to sell via e-commerce.

DRIVERS of E-commerce:

- Young demography: >90% of online shoppers in India belong to the 18 – 35 year age group.
- Gender usage: 65% male and 35% female
- Rising Broadband & 3G penetration
- Rising standards of living & upwardly mobile middle class with high disposable incomes and busy lifestyles.
- Urbanisation will increase to 40% from 31%
- Growing nuclear households.

Growth in Mobile Phone user base is helping the growth of the E-commerce Industry

- According to World Bank: “A 10% increase in broadband penetration would yield a 1.38% increase in GDP growth”
- India's Internet economy to reach a value of US\$200 billion by 2017.
- 2016 data:
 - 1 Billion+ active mobile phone subscriptions.
 - 402 million+ internet users.
 - 300 million+ smart phone users.

E&RD

According to Consulting Firm – Zinnov: “India accounted \$12.3 billion, or 40%, of the total of \$31 billion of globalized engineering and R&D (E&RD) in 2015”.

Indian E&RD market is expected to reach US\$ 38 Bn by 2020.

Services offered by Indian E&RD Firms include:

• Supporting clients on innovation

• Enabling access to new markets (SBMs)

• Designing products for emerging markets (frugal engineering)

• Innovating on existing designs to suit market needs

• Meeting client requirements

• Providing end-to-end product development



- There are over 400 service providers and captives offering ER&D services from India
- Over 200,000 engineers have been employed by service providers and captives in India
- Indian service providers invest around 3.5% in R&D
- India-based ER&D centres resulted in cost savings of over \$20 billion for global organisations

DIGITAL INDIA

N:

igital infrastructure for every citizen: This includes internet availability, digital identity, mobile phones, bank accounts, safe and secure cyber space, etc

governance and services on demand: It includes real-time availability of services on mobile phones and online platforms, enabling electronic and cashless financial transactions possible, etc

igital empowerment of citizens: It encompasses universal digital literacy, availability of digital resources in Indian languages, etc

KEY OPPORTUNITIES:

- Electronics On-line education
- Manufacturing Healthcare
- Telecom sector Broadband sector

ACTION PLAN:

- Setting up of a pan-India fibre-optic network .
- Wi-Fi services in cities with a population of more than 1 million.
- Broadband access to 250,000 village clusters by 2019
- Digital lockers to each citizen, allowing them to store all their original identification documents and records
- Universal mobile phone connectivity
- Net Zero Electronic Imports by 2020
- Focus on moving toward automation in delivery of government services
- Achievement of a leadership position in IT toward betterment of health, education and banking services

Highlights of Budget 2017-18:

- Budget for pan-India Fibre-optic network increased to Rs. 10,000 crores (\$1.5 Bn)
- End 2017-18, high speed broadband connectivity on optical fiber will be available in more than 150,000 villages under Bharat Net Scheme.
- A DigiGaon (Digital Village) initiative will be launched to provide tele-medicine, education and skills to villages through digital technology.

schemes of GOI



are Technology Parks of India (STP):

I was set up in 1991 as an Autonomous Society under the Department of Electronics and Information Technology.

Services Provided: Statutory services, data communications servers, incubation facilities, training and value added services.

Special Focus: SMEs and start up units.

STP scheme - a 100% export oriented scheme, allows software companies to set up operations in convenient and inexpensive locations and plan their investment and growth driven by business needs. Over 2500 units are registered under STP Scheme.

Benefits under STP Scheme:

- Customs Duty Exemption in full on imports.
- Central Excise Duty Exemption in full on indigenous procurement.
- Central Sales Tax Reimbursement on indigenous purchase against from
- All relevant equipment / goods including second hand equipment can be imported (except prohibited items).
- Equipment can also be imported on loan basis/lease.
- 100% FDI is permitted through automatic route.
- Sales in the Domestic Tariff Area up to 50% of the FOB value of exports is permissible.
- Use of computer imported for training permissible subject to certain conditions.
- Depreciation on computers at accelerated rates up to 100% over 5 years is permissible.
- For more info. Visit STPI website - <http://www.stpi.in>

EZ Scheme

In 2005, the Ministry of Commerce & Industry, Government of India enacted the Special Economic Zone (SEZ) Act.

It provides drastic simplification of procedures and a single window clearance policy on matters relating to central and state governments.

The scheme is ideal for bigger Industries and has a significant impact on future Exports and employment

The SEZ policy aims at creating competitive, convenient and integrated Zones offering World class infrastructure, utilities and services for globally oriented businesses.

The SEZ Act 2005 envisages key role for the State Governments in Export Promotion and creation of related infrastructure

Salient features of SEZ scheme are as under:

- Duty free import/domestic procurement of goods for development, operation and maintenance of SEZ units
- 100% Income Tax exemption on export income for SEZ units under Section 10AA of the Income Tax Act for first 5 years, 50% for next 5 years thereafter and 50% of the ploughed back export profit for next 5 years.
- Exemption from Central Sales Tax.
- Exemption from Service Tax.
- Single window clearance for Central and State level approvals.
- Exemption from State sales tax and other levies as extended by the respective State Governments.
- This scheme has a significant impact on future exports and employment. About 202 IT-ITES specific SEZs have been notified by the DOC.
- For more info. Visit - <http://www.sezindia.nic.in/>

INFOSYS CAMPUS,



Indian IT Trends:

Indian tech players are helping create smart enterprises through confluence of Digital technologies- Cloud, Mobility, IOT, Social, Big Data

Industry players adopting multiple business models (partnerships/collaboration/ M&A) to address the digital opportunity

Indian service providers going bimodal- growth in both traditional and digital markets

Rapidly growing start-up ecosystem redefining innovation

India's consumer economy, Government' initiatives for digitization of India - driving activity in the domestic market

India: A digitally mature economy

India - 2020

Mobile subscribers (Jan 2017)

1,102.94 million

World's fastest growing telecom network

Mobile broadband subscribers (Oct 2016)

1078.42 million

3rd country globally to have >5 internet firms value at >\$ 1 Bn

Active internet user base (2016)

462 million

2nd largest user base overtaking the US

Active internet users (June 2016)

371 million

To grow to 500 million by Dec 2017

Active broadband (>512 kbps download) subscribers (Oct 2016)

218.42 million

To grow to 500 million by 2020

Mobile data consumption

82Pb (2015)

Avg data usage/month: 29% growth in 3G data

Source: Deloitte, IAMAI, IBEF, Nokia, TRAI, Zinnov, Secondary sources



2.3 Mn Petabytes digital data



600 Mn Internet Users



520 Mn Smartphone Users



90% Tech Influenced SMEs



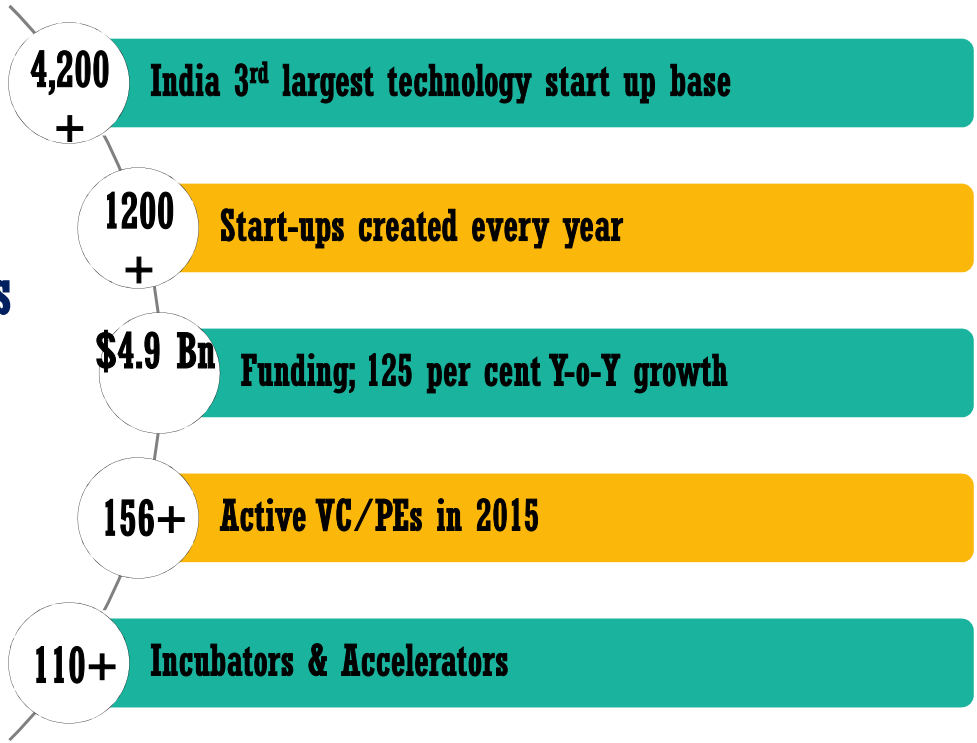
\$ 19+ Bn Digital investments By Govt.



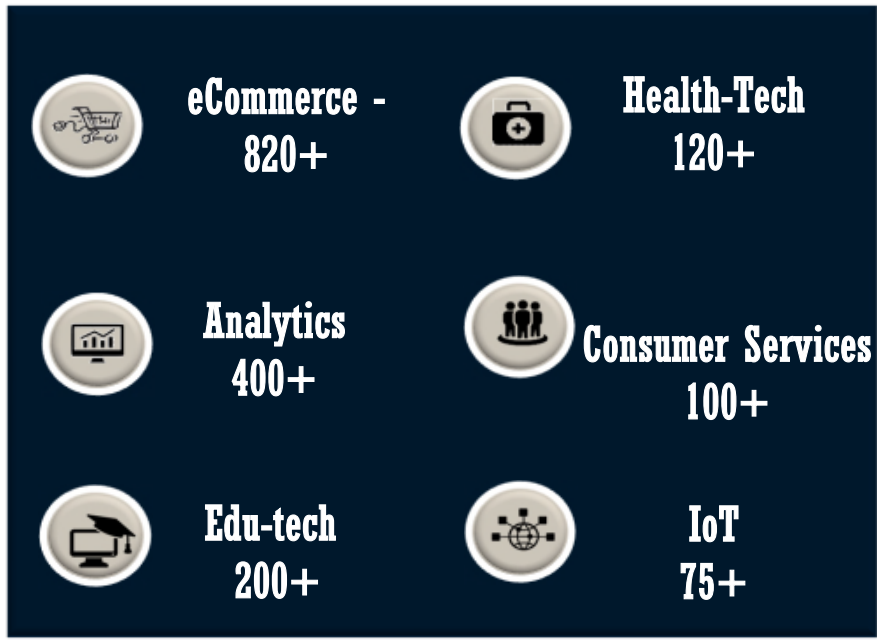
100 Smart Cities

Startups: India's next wave of tech growth

Startups in India



Emerging in high impact areas



Industry pursuing multifaceted startup collaboration strategy

OSYS: \$500M for investing in technology start-ups

WIPRO: \$100M initial corpus for venture fund

IS: 31 academic alliances and 21 R&D partners

IBM Innovation Centers: 100 Big Data & IoT startups tie-ups

NDTREE: '5/50 initiative' to promote in-house disruptive ideas

HCL: 'Value-portal' and '**MAD Jam**' to foster employee-led ideas

START-UP INDIA

Government is building a strong eco-system for nurturing innovation and Startups in the country and empowering startups to grow through innovation and design.

Features of the Scheme:

Simple Compliance Regime based on Self-certification

Legal support & fast-tracking patent examination at reduced costs.

Relaxed norms of public procurement for start-ups

Faster Exit.

Fund support through a corpus of US\$ 1.5Bn.

Credit guarantee support ~ US\$ 75Mn per year for 4 years (ending in 2020)

Tax exemption for 3 years.

Start-Up Fests & Annual Incubator Challenge



#startupindia

- India ranks 3rd globally in terms of the number of start-ups
- 19,000 technology-enabled start-ups. Dominated by Internet and financial services start-ups.
- World's youngest start-up nation ~ 72% founders less than 35 years in age.
- Bengaluru ranks 15th globally in Start-up Ecosystem Ranking for 2015.
- Number of start-ups with Series A round funding in 2014 was 46 while it increased to 114 in 2015.
- Total Start Up investment: \$4.7 billion in 2014 to \$ 7.2 billion in 2015.

Venture Capitalists (VC) operating in India:

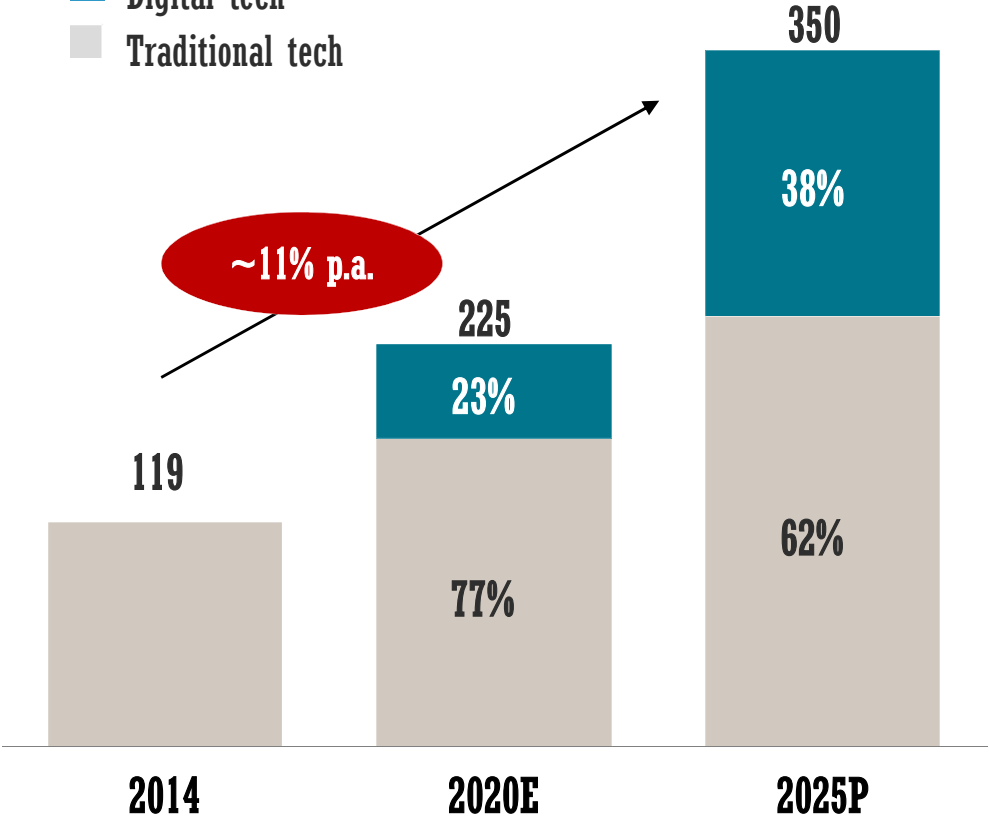
- Early VCs: Seedfund, Accel, Kae Capital, and Venture East.
- Late VCs: Helion, Sequoia, Matrix.

Revenues to reach US\$ 350 billion by 2025

India technology & services revenue pool

USD billion

- Digital tech
- Traditional tech



Digital revenues to spearhead growth

- Global enterprise tech spend will rise to USD 4 trillion by 2025, 80 per cent of incremental tech spending will be digital
- Indian technology services revenues projected to reach USD 350 billion by 2025, CAGR of 11 per cent
- Successful Indian companies will have to fundamentally transform their business models, solution offerings, organization and capabilities to establish leadership
- Revenue growth not the only indicator of India's tech leadership; factors such as investment, valuations etc., may need to be considered

IoT, Big Data & AI

The Internet of Things (IoT) market in India is expected to reach \$15 Bn by 2020...roughly 5% of the global market.

Over 120 companies offer IoT solutions, 70% of these IoT startups have emerged in the last five years itself.

A cumulative amount of \$60 Mn has been invested in the last two years alone.

Healthcare and manufacturing are the leading verticals demanding IoT solutions. Next-gen commerce along with transport and logistics are gaining adoption with connected vehicles and systems.

Key segments: Smart lifestyle, connected homes & buildings and connected homes.

India's first centre for excellence in Internet of Things (IoT) has been set up in Bengaluru in July 2016.

- ❑ Big data analytics market in India has been valued currently at \$1.2 Bn...Market is growing at 26% CAGR...expected to reach \$16 Bn by 2025.

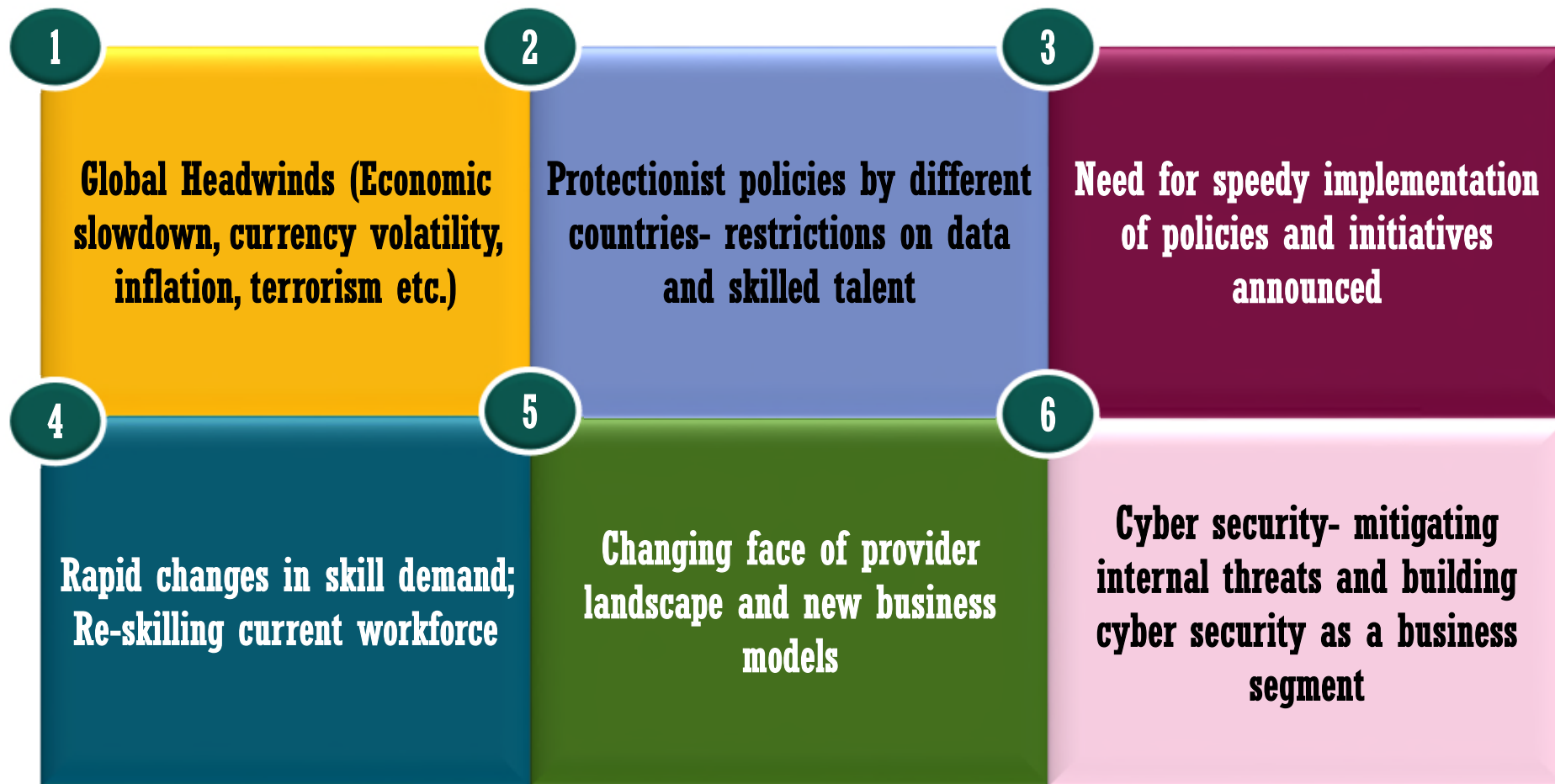
- ❑ There are about 600 companies in this space out of which 32% are startups and approx. 32% looking at a multipronged approach of skill development, thought leadership, products, and platform to realize the vision.

- ❑ The analytics industry in India employs 90,000 people currently in sectors such as BFSI, retail, telecom and healthcare and the growth is propelled by demand for cloud-based solutions and predictive analytics capabilities.

- ❑ In India, more than 200 Artificial Intelligence (AI)-focused global companies have collectively raised more than \$1.5 billion so far in the past year.

- ❑ Driven by evolving technology and a flourishing domestic market, Indian entrepreneurs are increasingly exploring new opportunities in AI and machine learning across a variety of applications and use cases.

Industry working to mitigate key issues



ELECTRONICS

Electronics System Design and Manufacturing (ESDM) industry is one of the fastest growing sectors in the country.

Changing global landscapes in electronics design and manufacturing capabilities, and cost structures have turned the attention of global companies towards India.

Key Facts of Play:
65% of the electronics is currently imported;
25-30% of the systems simply assembled;
less than 10% of the electronic systems are completely designed and manufactured in India.
Almost 100% of semiconductors are imported.
Domestic production can cater to a demand of only \$100 Bn by 2020, leaving a demand-supply gap of \$300 Bn.

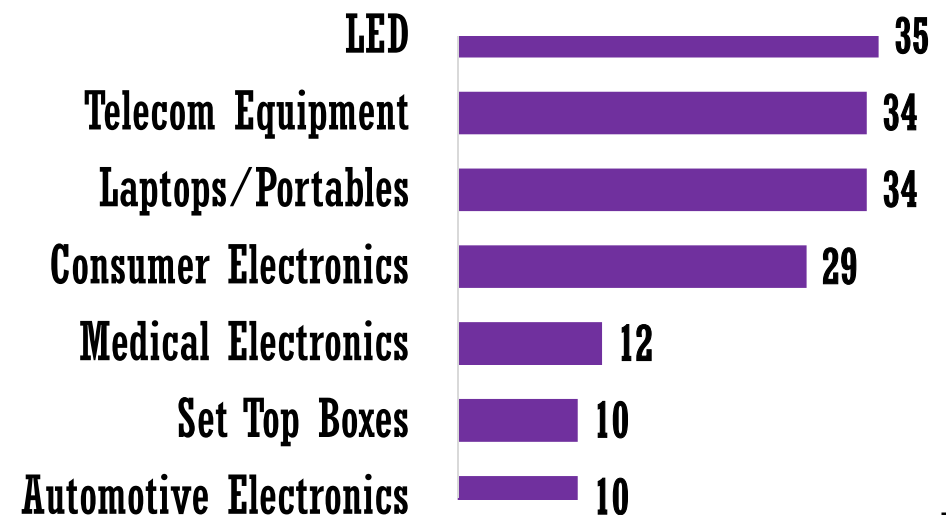
Electronics imports, are currently the 3rd highest, next to crude and gold.

Top 10 electronic products contributing about 70% by total revenue include:

- Mobile Phones
- Flat Panel TVs
- Notebooks
- Desktops
- Digital Camera
- Inverters & UPS
- Memory Cards & USB Drives
- 4W EMS
- LCD Monitors
- Servers



Segment: 2020 Mkt. Size



LECTRONICS...2

ies to promote ESDM industry include:

National Policy on Electronics

Preferential Market Access

Modified Special Incentive Package (MSIP) Scheme

Fab policy

Electronic Manufacturing Clusters (EMCs) and Information

Technology Investment Regions (ITIRs)

Export Incentives

l Policy on Electronics:

chieve a turnover of \$400Bn by 2020 by investing \$100Bn.
uild a supply chain...raise local production from 20~25% to
60%

tial Market Access:

erence for locally manufactured electronic goods in Govt.
urement...not less than 30 % of the total procurement.

Modified Special Incentive Package Scheme (MSIPS)

- Subsidy of 25% on Capex if the ESDM unit is in non-SEZ and 20% on capex if within SEZ...available for investments made within 5 years from date of approval.
- 200% deduction on R&D for electronic chip manufacturing units
- Reimbursement of central taxes and duties (like custom duties, excise duties and service tax) for 10 years in select high-tech units like Fabs, Semiconductor Logic and Memory chips, LCD fabrication...applications accepted till Dec 2018.
- **Budget 2017-18:** US\$111 million) worth incentives under MSIP scheme.

Electronic Manufacturing Clusters Scheme

- Grant assistance for setting up Greenfield & Brownfield EMCs

Export Incentives

- 0% Basic Customs Duty on products covered under the Information Technology Agreement (ITA) of WTO & Specified materials used for manufacture of electronic components and optical fibers and cables.
- Focus Product Scheme (FPS) – Duty Credit 2% of FOB and Special Focus Product Scheme (SFPS) – Duty Credit 5% of FOB

THANK YOU

