NASSCOM®

The IT-BPM Sector
in India 2018

amplify
digital

STRATEGIC REVIEW

NASSCOM®

NASSCOM is the industry association for the IT-BPM sector in India. A not-for-profit organisation funded by the industry, its objective is to build a growth led and sustainable technology and business services sector in the country. NASSCOM Research is the in-house research and analytics arm of NASSCOM generating insights and driving thought leadership for today's business leaders and entrepreneurs to strengthen India's position as a hub for digital technologies and innovation. NASSCOM Research, the most credible source of technology insights in India publishes an annual edition of its Strategic Review which analyses the key trends in IT-BPM industry and disseminates the latest status of the industry performance.

Foreword

India's IT-BPM industry today stands at USD 167 billion market and employs around 4 million people. It continues to be the leader in the global sourcing market with a 55% share. Despite the slowing down in growth rates, the industry has added ~USD 24 billion revenue since FY2016 and continues to be a net hirer (100,000+ additions in FY2018).

Digital technology is throwing up a new set of opportunities for the technology industry and over the past few years, the business has seen a shift: in revenue share (currently, digital share is between 18%-20% and increasing), talent (India accounts for 75% share in global digital talent), business models (partnerships, As-a-Services, etc.), revenue source (IP-led, platforms, cloud) and organisational structure (dedicated BUs, CoEs, etc.)

Change is the only constant in life and India's technology industry is at the core of this change. Digital technologies are increasingly becoming all pervasive and are not only blurring the boundaries between business units (technology, finance, marketing, etc.) but also between companies; it is now no longer tech and non-tech companies. Many companies esp. in the banking, automotive and manufacturing space are re-branding themselves as tech companies.

These advancements call for an organisation wide transformation involving people, processes and technology.

The **"Strategic Review 2018: Amplify Digital"** study, the latest edition of NASSCOM flagship report, emphasises on the Digital theme and highlights how technology companies continue to re-imagine their core businesses; it also showcases the transformation journey of demand side firms across verticals.

In this journey towards change, four key themes are central to the IT-BPM industry: Technology investments as companies focus on IP solutions around AI, RPA, IoT, analytics, etc.; companies are also setting up dedicated CoEs, innovation labs, vertical & domain specific business units to showcase their platforms and solutions; Partnerships: with peer companies and startups as a means to bridge capability gaps and white spaces and to offer end-to-end solutions to customers; M&As: aimed at quickly scaling niche digital and vertical specific capabilities, IP, expanding into new/existing geos, access to clients and gain market leadership; Digital capabilities: as digital becomes core business, firms are focusing on building the necessary talent pool to meet emerging demand; India is already the global No. 1 in terms of digital talent with a share of 75%.

This report captures the performance of the industry for FY2018 vis-à-vis FY2017 with deep-dives on five main segments – IT services, BPM, ER&D, Software products and eCommerce; highlights India's new value proposition as the digital solutions partner and the global hub for digital talent, traces how both supply side and demand side are undertaking the digital journey and highlights new opportunity areas.

These are interesting times for everyone; be it people or business. The journey will depend on how quick and adept we are adapting to changes

> *The future has many names*
>
> *For the weak it is unattainable*
>
> *For the fearful it is the unknown*
>
> *For the bold it is opportunity*
>
> *Victor Hugo*

I hope you find this report useful. Please feel free to write in your comments/feedback at research@nasscom.in.

R Chandrashekhar

President, NASSCOM

ACKNOWLEDGEMENTS

The IT-BPM Sector in India report is NASSCOM's annual flagship publication that analyses the performance of the industry, traces its continual evolution and highlights key trends that are influencing and driving this sector forward. The NASSCOM Research team relies heavily on both primary and secondary research, internal and external research reports, and reaches out to stakeholders across the board – industry, government, research firms, etc. – for their inputs that add value to the report. We would like to thank all these stakeholders for their valuable contributions, without which this report would not have been possible.

We would like to thank NASSCOM member organisations, who provided relevant data and insights pertaining to their company. We would like to acknowledge the inputs and insights from all our research partners, government bodies specifically MeitY, Ministry of Commerce and Industry, Department of Industrial Policy and Promotion, STPI and other departments/ministries of Government of India and state governments who, as always, willingly provided us with relevant information.

A special acknowledgement to Everest Group who provided all the content for the section on India as a Digital Solutions Partner.
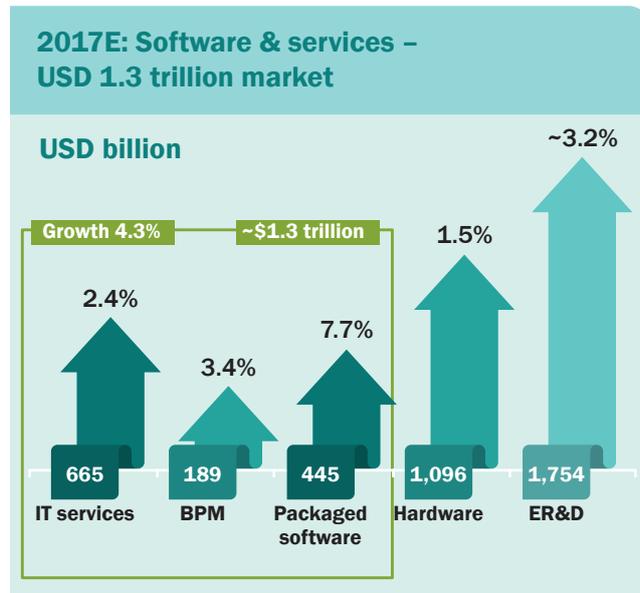
A list of all the sources and participants who helped in the making of this report is given in the appendix.

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IT-BPM Performance: Executive summary

Global IT-BPM industry

2017E: Software & services – USD 1.3 trillion market

USD billion

Source: IDC

In 2017, global IT-BPM industry stood at USD 1.3 trillion (excl. hardware) showing a growth of 4.3% over 2016:

- IT services grew a modest 2.4% driven by the continuous need for digital solutions

- BPM (3.4%) saw greater implementations of RPA

- Packaged software: Was the fastest growth segment (7.7%) - SaaS driving growth esp. FMS, HCM, analytics

- Hardware segment grew 1.5% to cross USD 1 trillion

- Global ER&D spend saw a decent 3.2% growth (as compared to previous two years which saw more or less flat growth); the push for autonomous vehicles & equipment, connectivity and smart products were key growth drivers

Global sourcing growth outperformed global IT-BPM spend growth in 2017, global sourcing grew 1.4X to reach USD 185-190 billion. India continued as the world's No.1 sourcing destination with a share of 55 per cent. 271 new global delivery centres were set up worldwide (by US headquartered firms) in 2017 - India accounted for 24% share and Europe (29%).

Indian IT-BPM industry

India's IT-BPM industry is set to grow ~8% in FY2018 – from USD 154 billion in FY2017 to USD 167 billion (excl. eCommerce), an addition of USD 12 billion.

Share in total service exports is estimated at >45% and the industry's contribution relative to India's GDP is ~7.9%. Overall, the industry is estimated to employ 3.97 million people, an addition of 105,000 people over FY2017.

The industry comprises 17,000+ firms that offer a complete range of services. In the age of digital technologies, the industry has been adept at building the necessary skills and capabilities to address new and changing customer demands. Over the past few years, firms have made substantial investments in building their portfolio of capabilities around these technologies and have set up a number of labs and CoEs to deliver digital services to customers. Consequently, the industry is now well equipped to manage the stage of Bi-modal IT. While currently the traditional services (ISO, CADM, software testing, F&A, HRO, etc.) continue to have a major share of revenue (~80%), the share of digital revenue is increasing rapidly. From about 14% in FY2016, it is now 18+% and is expected to reach 38% by 2025.

Revenue[1]: ER&D and domestic market sustaining growth
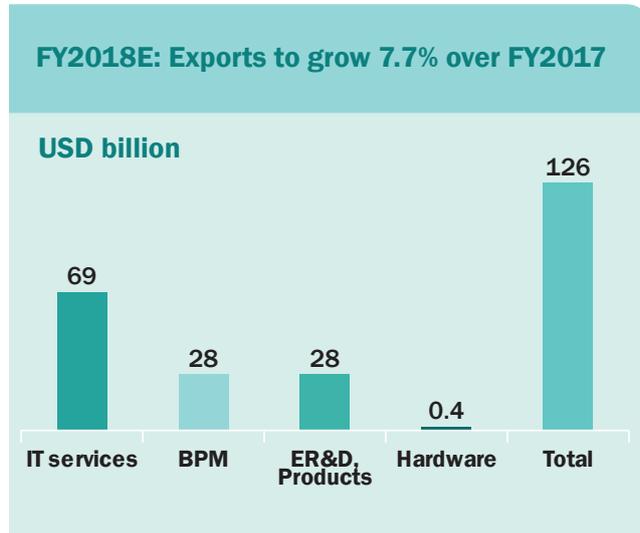
USD billion
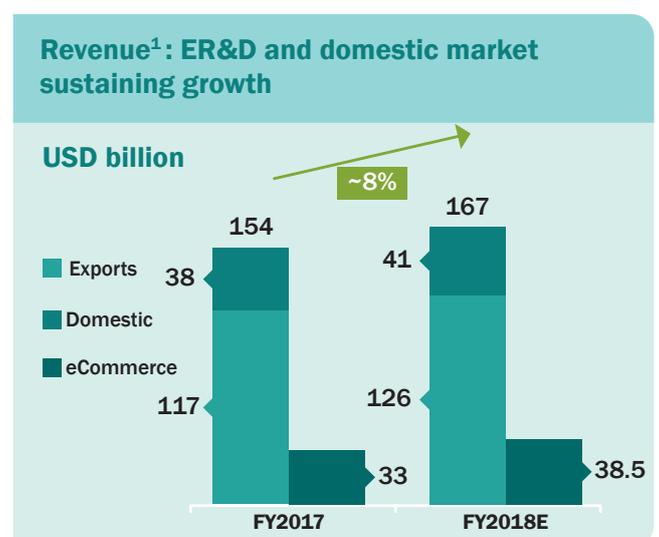
Source: NASSCOM, E: Estimate

Note: 1. Includes hardware; eCommerce data shown separately

The industry also has an ever growing set of start-ups – 5,000-5,200 – making India the world 3rd largest start-up ecosystem. Many of these are digital first companies and are working on very niche technologies like – AI, blockchain, robotics, etc.

Indian IT-BPM exports market

FY2018E: Exports to grow 7.7% over FY2017

USD billion

Category	USD billion
IT services	69
BPM	28
ER&D, Products	28
Hardware	0.4
Total	126

Source: NASSCOM

In FY2018, IT-BPM exports from India are expected to reach USD 126 billion, a 7.7% growth over FY2017 and an addition of USD 9 billion. ER&D and product development continues to be the fastest growing segment at 12.8% driven by the demand for AECS-autonomous, electrification, connectivity and shared mobility. IT services growing at ~6% driven by growth in software testing and ISO (hosted applications). BPM exports expected to grow faster vis-à-vis FY2017, at 8%; analytics, RPA, chat-bots emerging as areas of growth.

Indian IT-BPM domestic market

Domestic IT-BPM industry is also seeing continued growth as various government initiatives encourage technology usage and Indian enterprises rapidly implement digital technologies:
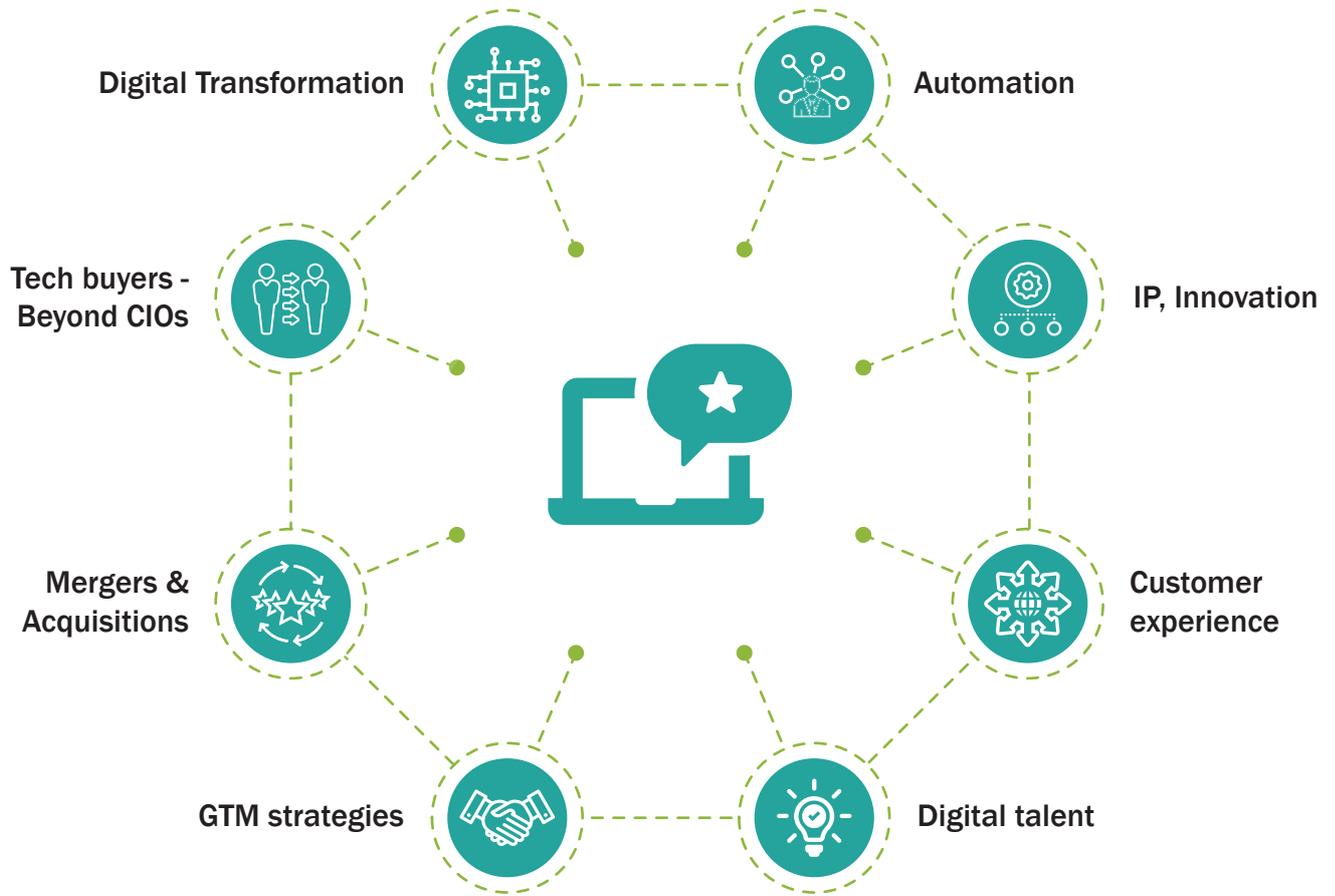
- Government: Technology adoption for its citizen and inter-departmental services

- Enterprises: M-wallets/m-banking for financial inclusion; digital marketing; online payments; analytics; automotive (EV/autonomous vehicles); etc.

- Smart projects: Smart cities, transportation, utilities, buildings, etc.

- Consumers: India is a growing internet market (2016 market size – USD 100-130 billion) and app (2016-USD 21 billion) economy. India is the world's 2nd largest in terms of number app downloads (11+ billion in 2017, a 215% growth over 2016. Internet subscribers stood at ~465 million in 2017

- eCommerce: At USD 38.5 billion, is seen to grow nearly 17% y-o-y. After a slow start in 2017, eCommerce bounced back due to an increase in online transactions to counter the note ban, supported further by the government's push for a cashless economy. Total funding grew >180%; M&A landscape was strong and witnessed some big-ticket deals; 2017 also witnessed the comeback of grocery retail and food-tech

FY2018E: USD 41 billion; added USD 3.3 billion over FY2017

USD billion

■ FY2017   ■ FY2018E

Category	FY2017	FY2018E
IT services	15	17
Software products	5	5
BPM	4	4
Hardware	14	15
eCommerce	33	39

Source: NASSCOM

E: Estimate

FY2018 key themes

As Charles Darwin famously said, "It is not the strongest of the species that survives, nor the most intelligent, but the one most responsive to change." India's IT-BPM industry is a practical testament of this theory. It has been leading the charge in adapting to change and disrupting itself so as to enable disruption for customers. FY2018 saw some key themes gain more traction:

- Digital – transformation, both in terms of business and talent. Industry focused on expanding portfolio of digital capabilities and talent pool

- Automation: Visible trends across industries and value chain, automation is enabling standardisations, reduced dependence on people, improved efficiencies; alternately, it is also giving rise to demand for new skillsets

- IP-led business: Platformisation enabling growth in IP-led business; firms like IBM and HCL entering into IP partnerships as a new stream of revenue

- Tech buyers: IT budgets and buy decisions becoming more verticalised; shifting from the purview of the CIO and into specific lines of businesses – CMO, CFO, CDO, etc.

- GTM strategies: These are evolving keeping customer centricity and experience at the heart of business; firms using a combination to M&As (capability expansion), ecosystem partnerships (with startups, academia, peers) to co-invest, co-develop and co-sell products and services
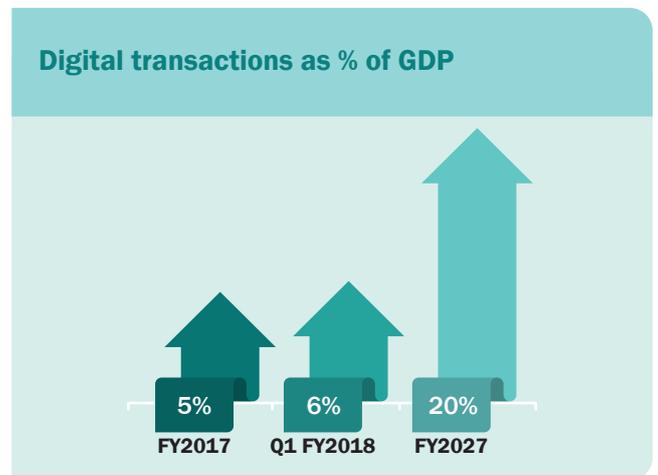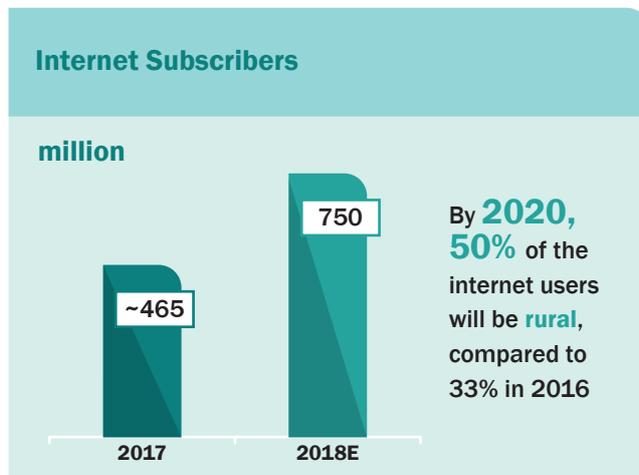
Digital India

India's Internet Economy

Market Size (USD bn)

2016: 100-130

2020: 215-265

Share in GDP

5%

7.5%
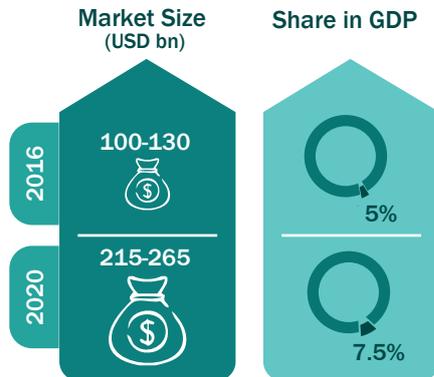
India is on track to be a Trillion Dollar Digital Economy backed by government's collaborative approach to encourage private sector participation. Increasing access to internet in both urban as well as rural areas, ambitions e-governance projects, continued focus on skill development and growing digital transactions are some of the indicators of rapid growth of the India's digital economy.

Through Digital infrastructure the government aims to provide a sustainable digital environment creating opportunities for start-ups and SMEs with focus on providing internet and various technological applications.

Internet Subscribers

million

2017: ~465

2018E: 750

By **2020, 50%** of the internet users will be **rural**, compared to 33% in 2016

Digital transactions as % of GDP

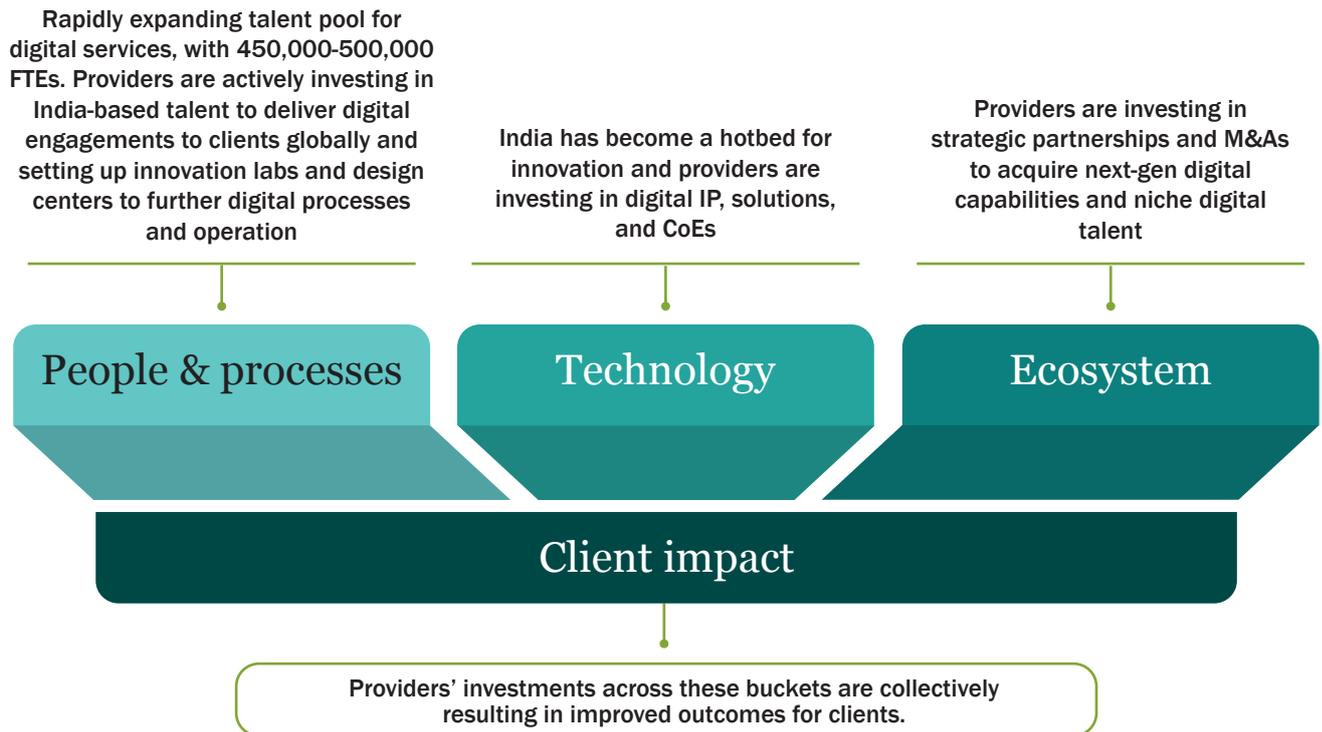FY2017: 5%

Q1 FY2018: 6%

FY2027: 20%

Another important digital initiative by the government is Goods & Services Tax Network (GSTN), which has been established with the objective to provide common and shared IT infrastructure and services to all the stakeholders for implementation of the Goods & Services Tax (GST)

The Government of India has launched various digital skilling initiatives that are aimed at empowering citizens with the knowhow of using IT and mobile devices. The government aims to empower at least one person per household with digital literacy skills by 2020.

The government has a strong focus on transforming the country into a cash-less economy. Various government incentives such as referral bonus scheme to promote the use of BHIM, zero service tax on railway tickets booked online and launch of Aadhaar-based mobile app are aimed at encouraging digital payments in the country.

Under Digital Citizens, the mission of the government is to ensure a government-wide transformation by delivering key government services electronically to citizens. There are 44 Mission Mode Projects, most of these pertain to delivery of government services via electronic mode.

India's value proposition: India as a Digital Solutions Partner

Rapidly expanding talent pool for digital services, with 450,000-500,000 FTEs. Providers are actively investing in India-based talent to deliver digital engagements to clients globally and setting up innovation labs and design centers to further digital processes and operation

India has become a hotbed for innovation and providers are investing in digital IP, solutions, and CoEs

Providers are investing in strategic partnerships and M&As to acquire next-gen digital capabilities and niche digital talent

People & processes	Technology	Ecosystem

Client impact

Providers' investments across these buckets are collectively resulting in improved outcomes for clients.

India's value proposition for the global technology industry is steadily shifting towards offering end-to-end digital technologies. India is setting itself up as the Digital capabilities hub for the world:

- 8,100+ firms offering digital solutions
- Boasts of a digitally skilled talent pool of 450,000-500,000
- Accounts for ~75% of global digital talent
- Indian IT-BPM firms: 18-20% share of digital in total revenue

Firms are developing an entire portfolio of digital capabilities through various initiatives:
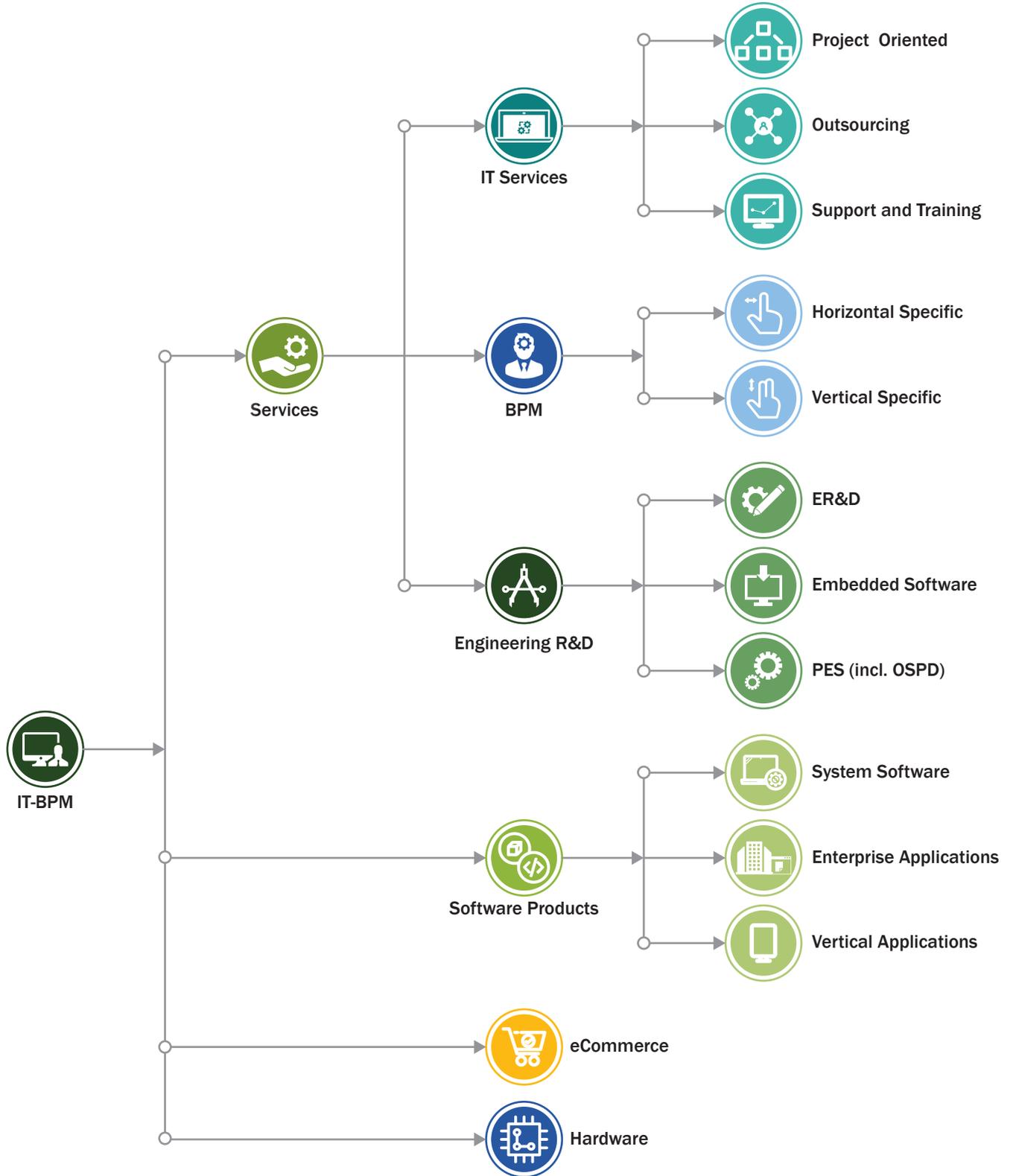
Internal: Re-skilling/up-skilling employees at speed and scale, organisational re-structuring (vertical-specific and digital BUs), setting up CoEs/Labs dedicated to niche technologies, business model shifts (as-a-service, platformisation, risk-reward pricing, etc.)

External: M&As to scale access to talent, markets, customers; partnerships with startups (niche capabilities), academia (talent development and R&D), peer companies (white spaces, etc.)

Apart from this, India continues to be the leader in terms of: cost arbitrage (5X-6X cheaper than the US), has global presence (80+ countries), a fast growing domestic market (USD 41 billion) and a potential consumer market (1.3 billion population).

All these factors combined are enabling India to maintain it's position as the world's No. 1 preferred location for offshoring with a share of 55% in global souring.

IT-BPM Industry Segmentation

```
IT-BPM
  ├── Services
  │     ├── IT Services
  │     │     ├── Project Oriented
  │     │     ├── Outsourcing
  │     │     └── Support and Training
  │     ├── BPM
  │     │     ├── Horizontal Specific
  │     │     └── Vertical Specific
  │     └── Engineering R&D
  │           ├── ER&D
  │           ├── Embedded Software
  │           └── PES (incl. OSPD)
  ├── Software Products
  │     ├── System Software
  │     ├── Enterprise Applications
  │     └── Vertical Applications
  ├── eCommerce
  └── Hardware
```

Note: The continual evolution India's IT-BPM landscape and an in-depth analysis of its segments has necessitated a more relevant segmentation and re-classification of the industry:

ER&D: Now includes product engineering services (PES) of both third-party firms (earlier termed as OSPD) and MNC GICs

eCommerce has been analysed separately and isn't included in total IT-BPM market