TECHNOLOGY INDUSTRY IN INDIA 2017

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INTRODUCTION

India is the world's largest sourcing destination for the information technology (IT) industry, accounting for approximately 67 per cent of the market. This has led to the economic transformation of the country and altered the perception of India in the global economy. India's cost competitiveness in providing IT services, which is approximately 3-4 times cheaper than the US, continues to be its Unique Selling Proposition (USP) in the global sourcing market. However, India is also gaining prominence in terms of intellectual capital with several global IT firms setting up their innovation centers in India.
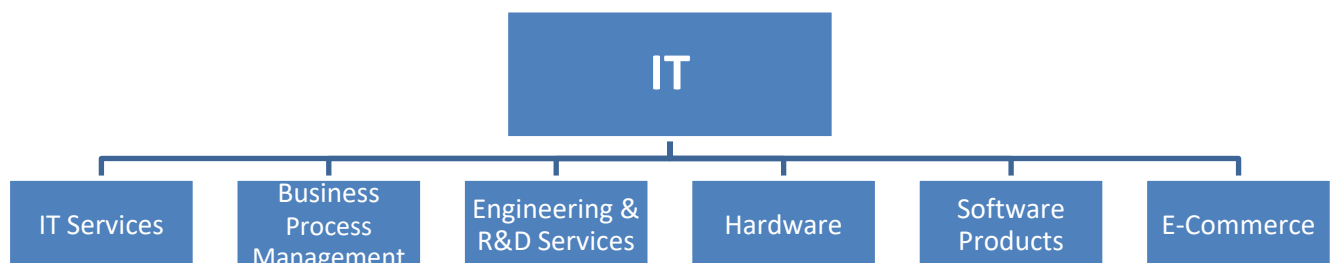
By 2018 India will be the second largest information technology market in the Asia Pacific region overriding Australia and behind only China, reports Gartner. IT spending in India is set to increase 2.9 per cent this year with enterprises focusing to spend over $40 billion designing, implementing and operating the Internet of Things.

It is predicted that amid continuous technology disruptions, political upheavals and slowdown in IT-Business Process Management global spending, the Indian IT-BPM industry is projected to grow at a rate of 8.6%. India will remain the world's fastest-growing major economy despite demonetisation, Brexit and Trump.

Due to US restrictions on visas as well as rising visa costs, most Indian IT companies have subcontracted onsite jobs to local employees in the US and have begun hiring locals. This has adversely affected margins of Indian IT companies. As the global sourcing industry continues to grow at high single digit rates, Indian IT companies continue to increase market share; the long-term industry outlook remains robust.

OVERVIEW

The IT industry has also created significant demand in the Indian education sector, especially for engineering and computer science. The Indian IT industry is divided into six major segments:

IT
- IT Services
- Business Process Management
- Engineering & R&D Services
- Hardware
- Software Products
- E-Commerce

MARKET SIZE

1. The Indian IT sector is expected to grow at a rate of 12-14 per cent for FY2016-17. The sector is expected to triple its current annual revenue to reach US$ 350 billion by FY 2025.

Growth of IT Industry
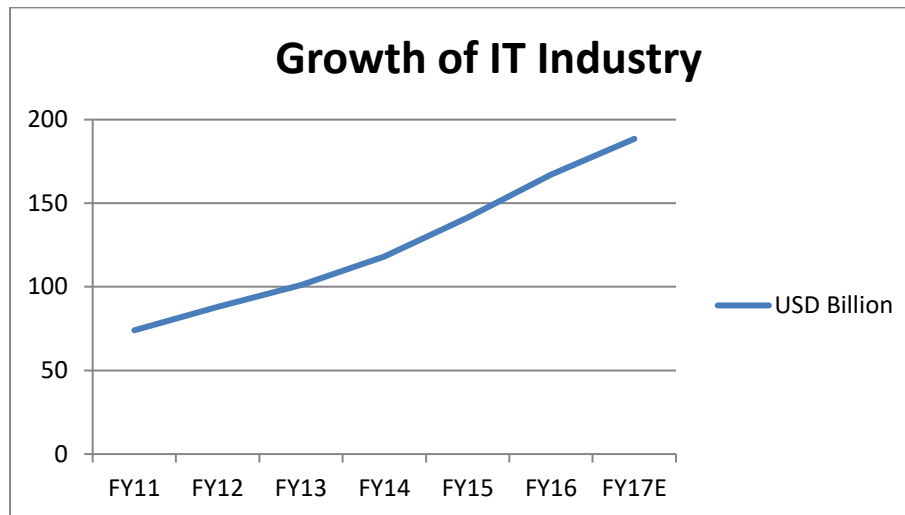
2. Employees from 12 Indian start-ups, such as Flipkart, Snapdeal, Makemytrip, Naukri, Ola, to name a few, have formed 700 start-ups on their own, thus expanding the Indian start-up ecosystem. India ranks third among global start-up ecosystems with more than 4,200 start-ups.

3. Total spending on IT by banking and security firms in India is expected to grow 8.6 per cent year-on-year to US$ 7.8 billion by 2017.

4. India's internet economy is expected to touch Rs 10 trillion (US$ 146.72 billion) by 2018, accounting for 5% of the country's GDP. Increased penetration of internet (including in rural areas) and rapid emergence of e-commerce are the main drivers for continued growth of data centre co-location and hosting market in India.

5. India's business to business (B2B) e-commerce market is expected to reach US$ 700 billion by 2020 whereas the business to consumer (B2C) e-commerce market is expected to reach US$ 102 billion by 2020.

6. Cross-border online shopping by Indians is expected to increase 85 per cent in 2017, and total online spending is projected to rise 31 per cent to Rs 8.75 lakh crore (US$ 128 billion) by 2018.

7. Post the government's announcement of demonetisation of specific currency denominations, digital payment platforms such as Paytm, MobiKwik, Oxigen witnessed a sharp spike in user transactions, app downloads and merchant enquiries, thereby indicating a greater demand towards digital payments by consumers.

START UP INDIA

India will be home to 10,500 startups by 2020: Nasscom

In recent years, the Indian startup ecosystem has really taken off, driven by factors such as massive funding, consolidation activities, evolving technology and an burgeoning domestic market.

The numbers are telling—from 3,100 startups in 2014 to a projection of more than 11,500 by 2020, this is certainly not a passing trend. It's a revolution. And it's going to change the way the markets are working today in India.

India has emerged as the third largest start-up base and such ventures are poised to grow 2.2 times to reach 10,500 by 2020 despite a perception that the ecosystem in the country has slowed down in the last year, says Nasscom- Zinnov Report. The number of tech startups in India is expected to grow by 10-12% to over 4,750 by the end of 2017. With this impetus, India will become home to over 10,500 startups by 2020, employing over 2,50,000 people, reveals the report. Bengaluru, NCR, and Mumbai continue to lead as the major startup hubs in the country.

In terms of vertical growth, investors are looking at domains like health-tech, fin-tech, and edu-tech. With a total funding of approximately $4 billion, close to 650 startups were funded in 2016, signifying a healthy growth of the ecosystem.

It addition there was a 40% increase in the number of active incubators and accelerators in 2016 with impetus from government and corporates. A growth of 25% has been witnessed in 2016 with over 350 startups being founded by young students.

Emerging High Impact areas in StartUps-

E-Commerce   Health Tech

Analytics   Internet Of Things

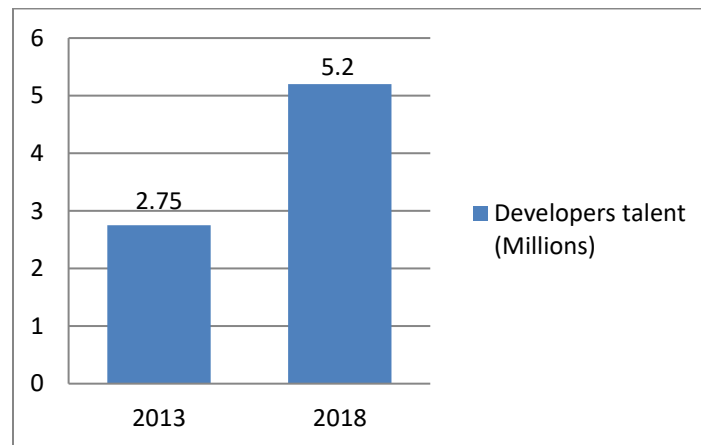Consumer Services   Edu Tech

TECH TALENT IN INDIA

Technology is one of the primary growth engines of the global economy, and governments around the world are investing in ways that attract technology talent to their cities.

By 2018, India will have 5.2 million developers.
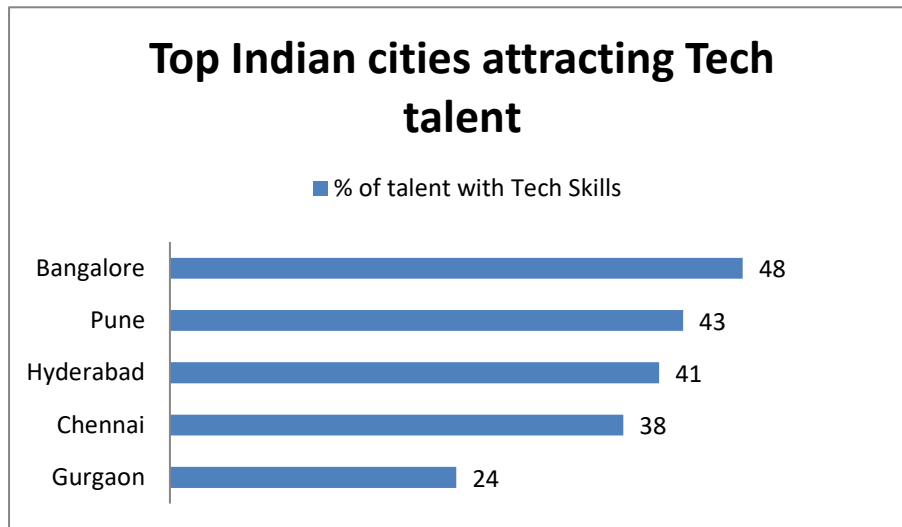

FACTORS DRIVING IT HEADCOUNT

The top 5 factors that are expected to drive the Technology headcount in India are-
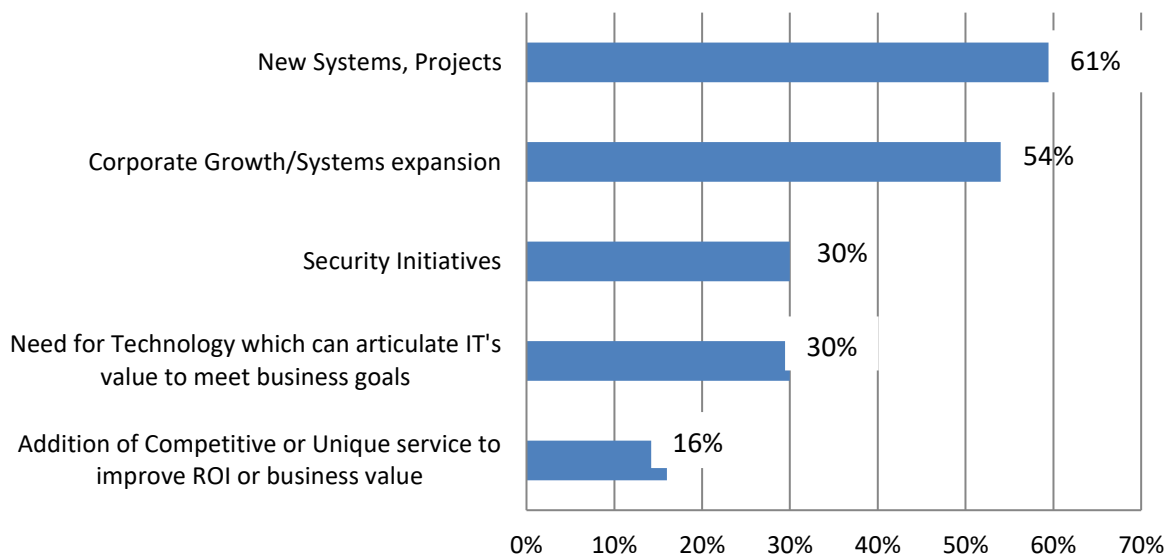
CITIES ATTRACTING TECH TALENT

Half of the top 10 global cities that attracted significant proportions of tech talent in the past year are in India. India's Silicon Valley Bangalore topped the list, followed by Pune, Hyderabad and Chennai, scooping up the top four spots in the global technology LinkedIn ranking.

The three most popular skills among the new residents with a technology background are IT infrastructure and systems management, Java development and web programming.

Top Indian cities attracting Tech talent

■ % of talent with Tech Skills

City	% of talent with Tech Skills
Bangalore	48
Pune	43
Hyderabad	41
Chennai	38
Gurgaon	24

MERGERS & ACQUISITION

1. Verizon acquired Yahoo's core internet business for $4.48 billion. The assets, which include Yahoo Finance, will be combined with AOL brands such as the Huffington Post under a new subsidiary called Oath.

2. Microsoft's buyout of LinkedIn for $26.2 billion, created a buzz in the technology industry. The companies will integrate LinkedIn's Sales Navigator tool for salespeople into Microsoft's CRM tool.

3. Wipro has acquired Appirio, a global cloud services company that creates next generation worker and customer experiences for USD 500 Million. This move will create one of the largest cloud transformation practices, a game changer in today's as-a-service and digital economy.

4. Geometric Limited announced arrangement and amalgamation between Geometric, HCL Technologies & 3D PLM Software Solutions.

TECHNOLOGY TRENDS 2017

Blink and you could miss it. The speed at which technology advances and upgrades can seem overwhelming. The major trends to be noticed in 2017 are-

IT unbounded - The boundaries surrounding IT are fading as technology becomes integral to almost every business function and relationship.

Dark analytics - Advances in computer vision and pattern recognition allow companies to unlock insights from unstructured data that until now have been lost in the dark.

Machine intelligence - Machine intelligence is helping companies make better decisions, embed complex analytics into customer and employee interactions, and—with adoption of bots and robotic process automation—automate increasingly difficult tasks.

Mixed reality - Companies are exploring more immersive and engaging ways to combine the physical world and digital systems, creating a new, mixed reality that's more natural, intuitive and intelligent.

Inevitable architecture - Open standards, cloud-first designs and loosely coupled architectures are the norm in start-ups. Now, large enterprises have similar ambitions.

Everything-as-a-service - Traditional business products are being re-imagined as services as organizations modernize core systems and the technology stack.

Digital Transformation- Digitization was the buzz word for 2016 and will continue its domination in the coming year. An increased demand for product developers and digital marketing professionals can be anticipated in 2017.

AREAS OF TECH INVESTMENT

Starting 2017, most companies are looking to invest in the following sub-sectors-

Major Sub-Sectors of Tech investment
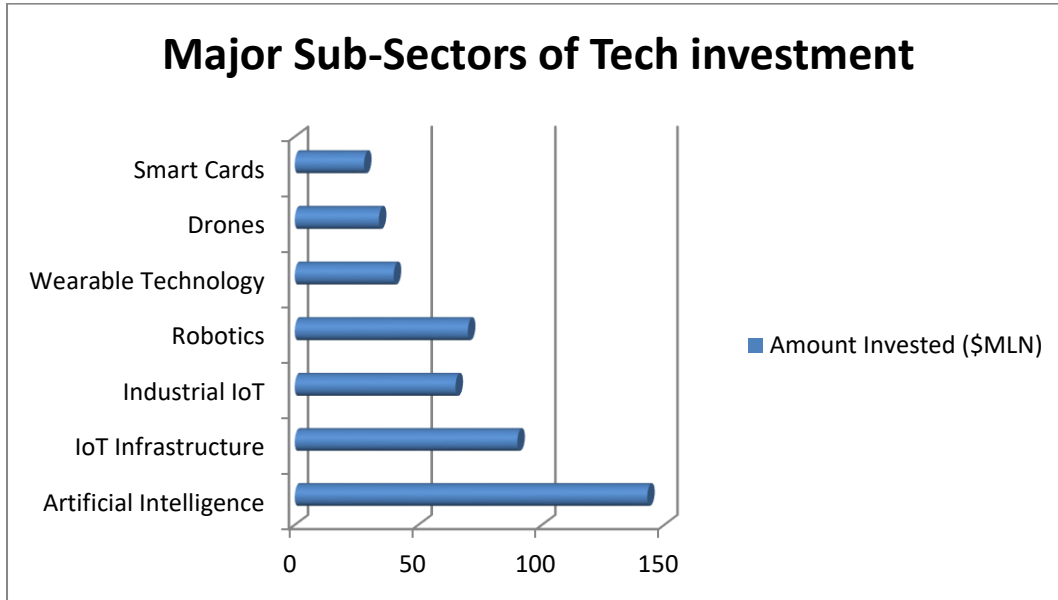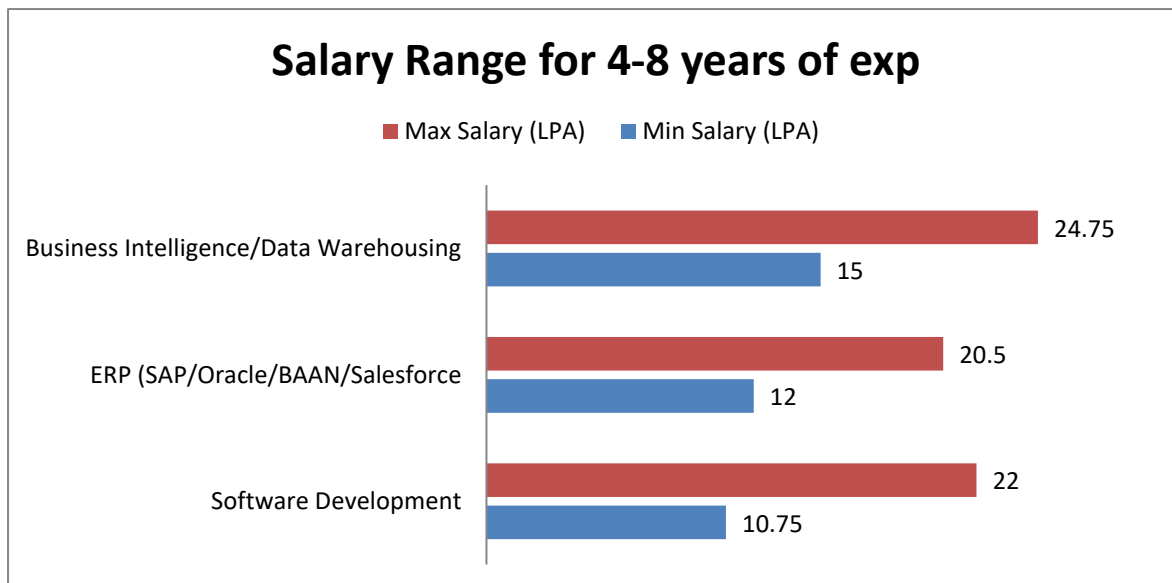

EMERGING AS A HUB

1. Around 25 handset-making companies have set up their plant in Noida and Greater Noida and Western Uttar Pradesh is emerging as a hub for electronics manufacturing, as per IT Ministry.

2. Google plans to set up its first data centre in India in the city of Mumbai by 2017, to improve its services to local customers wanting to host their applications on the internet, and to compete effectively with the likes of Amazon and Microsoft.

3. Intel is investing Rs 1,100 crore to set up an R&D centre in Bengaluru. The centre will be dedicated for chip design and verification purposes, one of the largest for the company.

4. The Electropreneur Park (EP), which was started in the South Campus of Delhi University, is an incubation centre set up with government funds of around Rs 21 crore to support incubation of up to 50 companies, said the official.
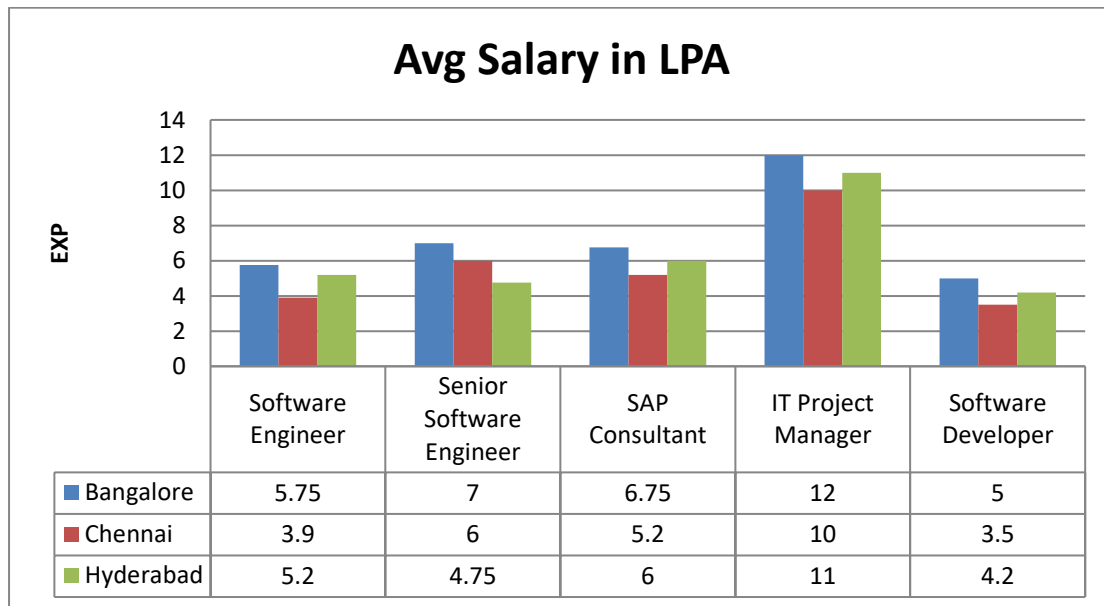
SALARY TRENDS

The IT sector has been roping in a major section of the talent with the promise of good packages and global exposure. The entry level salary packages for some tech skills are-

SKILL	SALARY RANGE (ENTRY LEVEL)
.NET	6-9 LPA
IT Security	12.5-16 LPA
Java	5.5- 8.5 LPA
J2EE	8- 11.5 LPA
BI	7.5-12 LPA
Cloud Computing	12-17 LPA
Agile Scrum	13.8-15 LPA

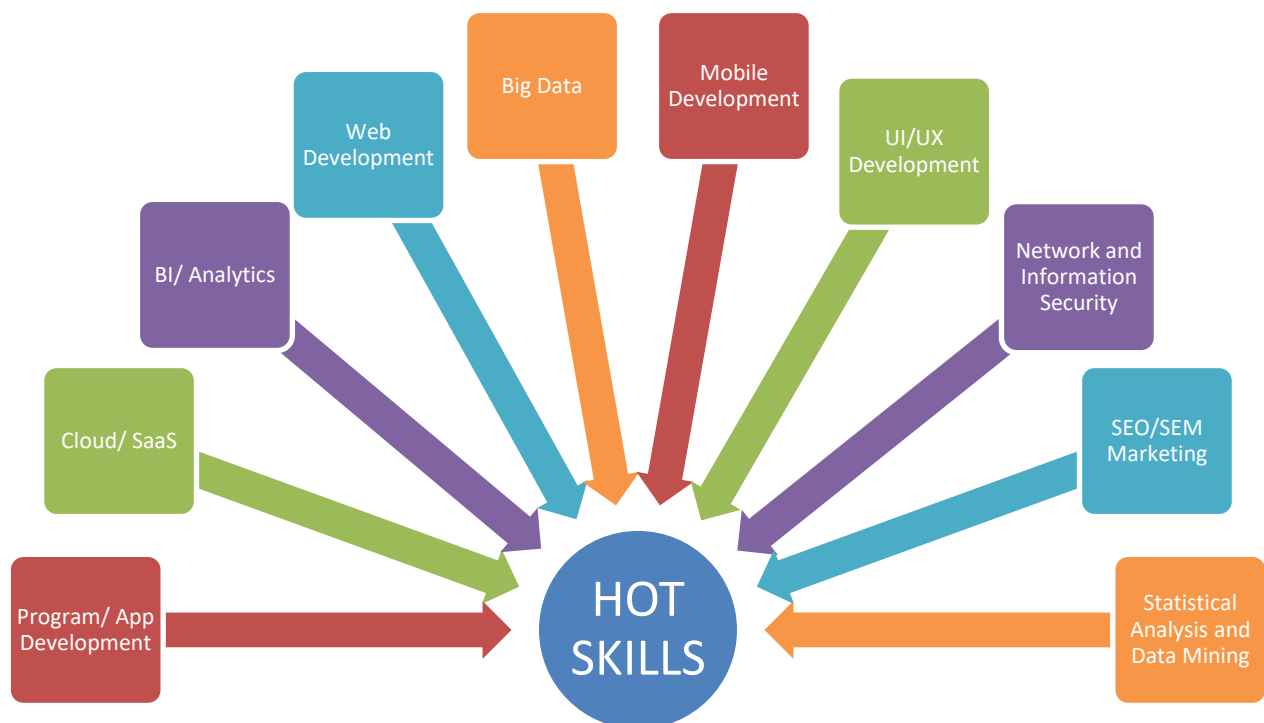The salaries offered in IT sector in India are at par with the world's best. The average salaries for 4-8 years experience talent pool is as follows:

Salary Range for 4-8 years of exp

■ Max Salary (LPA) ■ Min Salary (LPA)

Category	Min Salary (LPA)	Max Salary (LPA)
Business Intelligence/Data Warehousing	15	24.75
ERP (SAP/Oracle/BAAN/Salesforce	12	20.5
Software Development	10.75	22

AVERAGE ANNUAL SALARIES AS PER CITIES (Entry Level)

Avg Salary in LPA

	Software Engineer	Senior Software Engineer	SAP Consultant	IT Project Manager	Software Developer
Bangalore	5.75	7	6.75	12	5
Chennai	3.9	6	5.2	10	3.5
Hyderabad	5.2	4.75	6	11	4.2

TOP SKILLS TO HIRE IN 2017

Big Data
Mobile Development
Web Development
UI/UX Development
BI/ Analytics
Network and Information Security
Cloud/ SaaS
SEO/SEM Marketing
Program/ App Development
HOT SKILLS
Statistical Analysis and Data Mining

Employees are expected to see an average 10 per cent increase in salary in 2017. Salary hikes in India, although still higher than many other countries across the globe, have stabilized and we expect them to be in the 9.5-10.5 per cent range in the next couple of years.

Skills	Annual Avg Salary	Companies Hiring	Industry
Amazon Web Services	13.8	Amazon development centre, IBM, JP Morgan, Wipro, Accenture	E-Commerce, Internet, BFSI
Azure	13.1	Microsoft India R&D, Dell, Honeywell, Capgemini, EY	Product, Consulting
Machine Learning	13.7	Amazon Development Centre, GE India, Microsoft India R&D	E-Commerce, BFSI, Service
DevOps	13.7	Tech Mahindra, Oracle, Barclays, Expedia	Product, BFSI
Business Analyst	12.4	KPMG, EY, SAP, Sapient, HP	Consulting, BFSI
JIRA	11.7	JP Morgan, Citi, Harman, Visa	BFSI, Telecommunication
Salesforce	11.8	LinkedIn, Atos, Capgemini, Accenture	Internet, Consulting, Product
Spark	14.6	Oracle, Tech Mahindra, Dell, JP Morgan	Product, BFSI
Tableau	13	Vodafone, Morgan Stanley, EY, Deloitte	Consulting, BFSI

CAREER TRENDS 2017

1. Era of Technology- The technological revolution and automation of jobs has become an essential component of every business. If you are a techie, this is a golden era, as every business is well aware of the fact that to remain competitive in the market, they need to invest and empower their tech teams.

2. Evolution of Startup Jobs- There will no longer be massive hiring in e-commerce startups. However, there will be openings in the technology-led startups in education, finance and media with a boom in Artificial Intelligence and IOT.

3. Troubled Campus Placements- The IT/ITES sectors are likely to add less jobs just like in 2016 due to the automation of the process across the industries.

4. Automation Is IN- Technology implementation has become a lot cheaper for businesses to push for automated processes, which also cuts costs and time. Job seekers will need to reskill themselves to deliver.

5. Crunchers and Developers: This pool is able to digest large data and is keen to work with numbers, spreadsheets and databases. Developers and techies are the ones who will enjoy this year of growth with more and more requirements of app development.

CONCLUSION

Moving beyond a back-end tool for the enterprise, artificial intelligence (AI) is taking on more sophisticated roles within technology interfaces. From autonomous driving vehicles that use computer vision, to live translations made possible by machine learning, AI is making every interface both simple and smart–and setting a high bar for how future experiences will work. AI is poised to act as the face of a company's digital brand and a key differentiator – and become a core competency demanding of C-level investment and strategy.

India is the topmost offshoring destination for IT companies across the world. Having proven its capabilities in delivering both on-shore and off-shore services to global clients, emerging technologies now offer an entire new gamut of opportunities for top IT firms in India. In the recent times the research focus has changed towards technologies like Mobile computing, Cloud computing and Software as a Service.

The industry employs about 10 million Indians and continues to contribute significantly to the economic transformation of the country.

SOURCES

Primary Sources- Internal database, Interviews, Case studies, Questionnaires.
Secondary Sources- Reports of Nasscom, IBEF, Computer World, Newspaper articles,