DIGITAL EMPLOYMENT OUTLOOK REPORT

DIGITAL CONVULSION LEADS THE WAY







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FOREWORD







Science Fiction writer Arthur C Clarke once wrote "any sufficiently advanced technology is indistinguishable from magic". The substantial pain caused by COVID has been blunted by the magic of technology; the speed of vaccine development and speed of delivery to billions would have been unimaginable a few decades ago. This report captures another slice of magic; the ongoing transformation to India's digital landscape with its deep implications for India's economy, balance of payments, productivity, and jobs.

COVID has accelerated many trends. It brought forward digitalization investments and adoption by enterprises and consumers by a decade. It is blurring and combining the demand side between employers who service India as a market and those who use India as a production base. It has expanded the hiring demands for both third-party providers and captive global development centres. It is technology providers who had organizational pyramids become cylinders to work at Eiffel Towers. It is also accelerated the diversity of employment relationships with fixed-term employment, consultants, and gig work providing a much larger share of output than any time before.

India's technology employment is already an oasis of high productivity; 0.8% of the labour force generates 8% of GDP and our 5 million information technology workers will export more software this year than Saudi Arabia does oil. We estimate that India's technology employment will grow from 5 million to 10 million in the next few years with cascading implications for the industry (salaries, attrition, and skills) and the economy (productivity, foreign exchange earnings, and real estate).

2021 is an important turning point for India's technology industry. This report will give you a better sense of how.



EXECUTIVE SUMMARY

After a roller-coaster year, TeamLease Digital is focused on strengthening and redesigning the strategy for the current market trends. Digital Skills in India are more than optimistic in FY2022. As per the report, TeamLease Digital has witnessed 43% of their customers expecting to increase Digital Skills hiring by at least 30% or more this year.

While some customers of TeamLease Digital continue to do business as usual, the fastest-growing customers are embracing the Digital Skills effort to build more efficient, friendly, and profitable contractual and managed workforce models. TeamLease Digital is inspiring the adoption of new tech and recruiting automation for fast-growth customers.



Mr. Sunil Chemmankotil, Head, Specialized Staffing at TeamLease Digital

Considering the rise in requirements in the IT Industry, there is a huge demand for IT professionals and jobs in the sector. Yet, attrition rates continue to rise and various organizations are resorting to unscheduled pay hikes, tweaking the compensation and benefits policies, and are looking at rolling out luxury cars/bikes.

Organizations can solve the talent deficit through three main models:

Build: Hiring fresh recruits in addition to ensuring upskilling, re-skilling, and near-skilling culture and training in the organization will lead to great results.

Buy: To fix the talent problem and survive the talent war, organizations have to resort to lateral hiring as the demand-supply gap is increasing.

Borrow: Contract staffing with an organized and experienced contract staffing organization can also help in hiring, training, deploying, and managing talent based on the skillsets where there is an urgent need.

Globally, organizations have adopted a combination of these three modes with borrow proportion increasing exponentially (approx 18% in the US & 16% in Europe). However, in India organizations employ only 3-4% contract staff to the total employee base. As IT-BPM employment is poised to double in the next few years, organizations should adopt all three modes in decent proportions to stabilize the talent pool and reduce dependency on one segment of talent.



Mr. Siva Prasad Nanduri, Business Head at TeamLease Digital

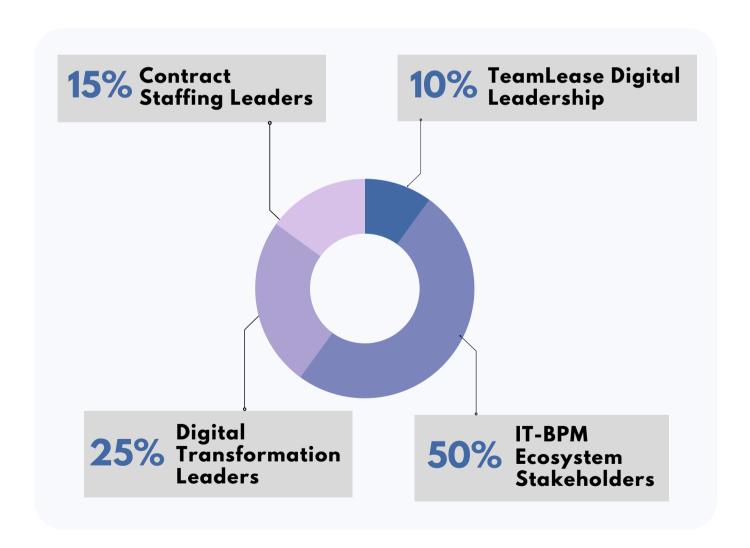
The shortage of digital skills in the current marketplace is unprecedented. The market will continue to see a rise in demand for IT and tech-based roles. IT-BPM companies understand the importance of up-skilling and re-skilling and now, organizations are partnering with EdTech companies, universities to up-skill their employees. We saw a similar boom during the Y2K boom or the dotcom boom. Also with the supercycle of digitization, the hiring trend will see double-digit growth at least for the current financial year.

RESEARCH METHODOLOGY

The report shares the insights through more than 100+ interviews across TeamLease Digital's leaders, IT contract staffing subject matter experts, and other stakeholders associated with the sector, combined with extensive research available throughout the sector.

Primary interview participant percentages:

TeamLease Digital leadership -10% ITBPM Ecosystem Stakeholders -50% Digital Transformation Leaders -25% Contract Staffing Leaders -15%



The above information containing % indicates leaders contributed to collating, validating the data and insights to publish this report



KEY TAKEAWAYS

- Teamlease Digital's recent study reveals that India's IT-BPM will grow from 4.47M to 4.85M by March 2022 at 7.5% growth and contractual headcount will grow from 126,461 to 148,211 which is about 17% growth over the last year
- Teamlease Digital has identified the top 13 Digital Skills which will rule in FY2021 and this will grow about 7.5% by end of FY2022
- With the last 2 quarter results, talent mobility from full-time employment to contractual employment is showing encouragement for the contracting industry to grow rapidly in the quarters and years to come
- IT services companies, Global Capability Centers (GCC), and Product Development companies are the top contract staffing consumers and they contribute in excess of 70% and the same trend will continue to exist in the near future too
- Attrition trends continue to worry the contract staffing industry as Teamlease Digital predicts 49% for FY2022 when compared to 40% of FY2021
- Besides very strong full-time employment growth in IT-BPM, IT contract staffing also has shown the best numbers hired in FY2022 Q1 20,500 and Q2 21,850 and will continue to grow in Q3 at 24,400 as overall contractual hiring



INDIA'S IT-BPM OVERVIEW:



9/10 FORTUNE COMPANIES HAVE GLOBAL INHOUSE CENTERS IN INDIA



LARGEST GRADUATE POPULATION
IN THE WORLD WHO ARE
EMPLOYABLE





THE LARGEST STARTUP ECOSYSTEM IN THE WORLD



NO.1 IT-BPM OUTSOURCING DESTINATION IN THE WORLD

India is emerging as the hub for "Digital Skills". Our IT-BPM industry is the largest employer in the private employer segment. In FY2021, this industry employed over 4.5 million full-time employees. Further, every job in the technology sector had a multiplier effect leading to the creation of about 3.2 indirect jobs. India is transforming into a digital Tsunami offering new-age solutions which are agnostic to the industry verticles.

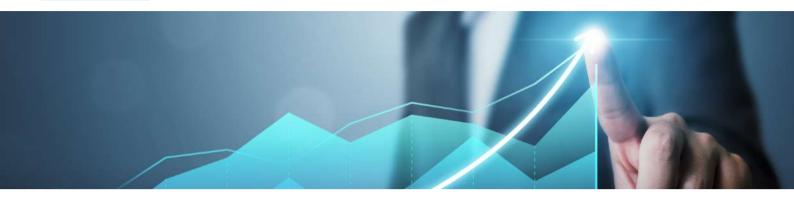
Amid the lockdown, the IT-BPM sector was one of the quickest to adapt to remote work culture. During the global pandemic, the hiring intent came with the benefits of working from home for more than 3 million IT professionals working remotely.

According to the Economic Survey of 2020-2021, India has emerged as one of the largest countries for Flexi-staffing during the pandemic thereby creating a large number of opportunities for job seekers. The IT Staffing market grew considerably during the pandemic in FY2021 as it enabled organizations to adapt to changing business dynamics. The rapid integration and adoption of technology for staffing and recruitment is more likely to make a new path.

The country's competitiveness in the flexible workforce is growing at over 12-14% YoY by providing contractual/contract to hire resources.



IT-BPM TALENT MARKET GROWTH AND RESPECTIVE CONTRACTUAL HEADCOUNT GROWTH:



India's IT-BPM will grow from 4.47M to 4.85M in this financial year which is about 7.5% growth when compared to the previous year.

Trending Skills	IT-BPM Talent Pool (FTE)	IT Talent Pool	BPM Talent Pool	Contract Staffing Without Support Resources
FY2019	39,70,000	26,00,000	13,70,000	1,01,796
FY2020	41,40,000	26,90,000	14,50,000	1,11,975
FY2021	44,75,000	29,40,000	15,35,000	1,26,461
FY2022 Est.	48,50,000	32,50,000	16,00,000	1,48,211*

Companies like the fact that hiring takes a few weeks and that they can optimize headcount fill requirements for short-term contracts. Moreover, there are cost advantages especially for junior or transactional positions, and the costs when releasing the resources are minimal. Job seekers don't seem to mind as it is an easy way to enter established companies, a chance to become a permanent employee and get a better salary, relative to the market median, in a short span. Experts from our TeamLease Digital survey point out that a contract job is an opportunity to correct a below-the-market salary in 24 months.

To arrive at the estimated number for FY2022, we have referred to two years of data published by the Indian Staffing Federation (ISF), NASSCOM, and boutique talent consulting companies' data repositories. Further, TeamLease Digital triangulated the data points with the demand and supply side of contract staffing leaders.

^{*}For the ease of highlighting contract staffing numbers, we have omitted the support staff headcounts like HR, Recruitment, Operations, and Finance. If we include these numbers, the contract staffing numbers will go up by at least 30% more.

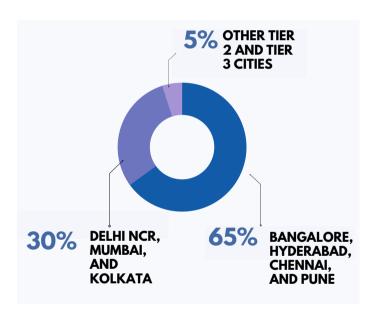


HIRING OUTLOOK AND TRENDING DIGITAL SKILLS

As FY2022 is bullish, Top 4 cities from India will contribute in excess of 65% of the overall hiring volume.

Quadrilateral advantage:

From FY2021, out of 4.47M, over 65% lies in Bangalore, Hyderabad, Chennai, and Pune. NCR, Mumbai, Kolkata account for 30% and the remaining 5% belong to Tier II & III emerging IT destinations.



Mr. Siva Prasad Nanduri, Business Head at TeamLease Digital

Tier I and Tier II cities in India are emerging as future tech talent hubs. The hiring is not restricted to just metros but has picked up even in Tier II cities like Bhubaneshwar, Indore, Coimbatore, and Lucknow."

The top 300 IT-BPM companies in India contribute to about 70% of the overall headcount of India. In FY2022, it is estimated from these top players that for every 100 successful hires, there are demands in excess of 30% towards Digital Skills and this trend will continue to grow for the years to come. These compelling reasons enabled TeamLease Digital to define a Digital Skills cloud to track the market."

Mr. Naren Sandilya Bhagi, Associate Vice President - TeamLease Digital.

66 The pandemic has completely re-defined how businesses function, especially how companies are facing the challenges of cyber threats. As companies are going digital and quickly adapting to Cloudbased models, there has been a steady rise in the number of cyber-attacks in the world. Configuration of the Cloud and protecting data requires special skills and professionals. This lead to the rise in the demand for cyber security skills by 18-20% in about last six months. The most indemand skills are centered around Threat Intelligence, Cloud Security, Risk Management, Data Security, Network Security, Computer Forensics, and much more. The demand is only set to grow for these skills and bring in more contractual job opportunities in India. "



TOP TRENDING DIGITAL SKILLS

Based on-demand drivers and hiring scenarios in the recent 2 quarters, TeamLease Digital has identified 13 skills that will lead the way in the Indian IT-BPM industry in FY2022. In general, Digitally Skilled professionals are paid one notch above when compared to the developers who are working with traditional IT skills. In FY 2022, at least 8 out of 10 mid and large IT companies will be searching for these Digital Skills to hire from Bangalore, Pune, and Delhi/NCR locations.

Trending Skills	Approximate Headcount in India FY2021	Skill Assumptions	FY2022 Growth Indicator
E-Commerce	100000~120000	Tech & product development in E-commerce talent pool in India. These numbers are FTE numbers in E-commerce players and not included vendor numbers	5~10%
Data Engineering	40000~50000	Talent pool who work on Data Modeling, ETL, Database Engineering, Analytics, Data Warehouse, Data Lakes, Visualization, etc.	4~6%
Data Analytics	120000~150000	This includes data cleaning, analyzing to draw insights using BI & advanced analytics tools Data science — Python, R programming, ML, Apache Spark, Apache Flink, Apache Kafka, SAS	6~10%
Data Visualization	32,000~35,0000	Tableau, PoweBI, Qlikview	4~6%
RPA	27,000~30,000	Automation Anywhere, UiPath, Blue prism	6~8%
Full Stack Development	25000~35000	Front end + Backend DB + API/SOA + Cloud + Microservices & DevOps	8~10%
Data Science	40000~50000	Includes Statistical Modeling, Machine Learning, Data Mining, Unstructured Data Analytics, and Natural Language Processing	4~6%
Cyber Security		Cyber security area includes forensics, SIEM, vulnerability assessment, Threa intelligence, InfoSec, Endpoint, Network Security, Encryption Tools, Web Vulnerability, Network Defence Wireless, Packet Sniffer, Antivirus Software, Firewall, PKI Services, Managed Detection Services, Penetration Testing	
Cloud & DevOps	130000~150000	This includes Cloud implementation (40%) & support pool (60%) - AWS, Aure, GCP, Docker, puppet, checf, Jenkins, Splunk	6~8%
Mobility (Mobile App Development)	120000~150000	iOS, Android, and Mobile Application Development, Testing & Support pool	6~8%
Artificial Intelligence	30000~40000	All Artificial Intelligence, Deep Learning, and Cognitive areas considered	5~7%
Machine Learning	35000~45000	ML tools include Tensorflow, Scikit, Pytorch, Knime, etc	6~8%
UI/UX	32,000~40,000	Angular, React, User research/experience, Wireframing, Prototyping, Adobe XD, Figma	5~7%

^{*}About 20% of the above skills will be overlapping numbers in one or more skill categories.

Includes Statistical Modeling, Machine learning, Data Mining, Unstructured Data Analytics, and Natural Language Processing.

To arrive at these top skills & roles, TeamLease Digital tracked the last 3 months hiring patterns of top IT services organizations, global in-house centers, software product captives, and consulting organizations. Also considered the next one quarter's hiring forecast of top skills/roles and validated with industry experts, TA leaders, and recruitment heads in top organizations. Programming community sites such as StackOverflow, GitHub, HackerRank and AnswerHub trends accounted to bring top skills.



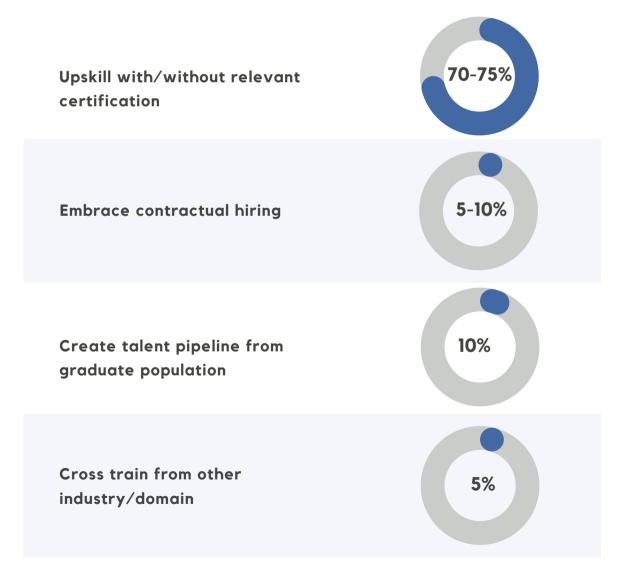
DEMAND & SUPPLY OUTLOOK OF DIGITAL SKILLS:

Trending Skills	Demand	Supply	FY 2022 Hiring Outlook
E-commerce	0	0	0
Data Engineering	0	0	
Data Analytics	0	0	0
Data Visualization	0	0	0
RPA	0	0	0
Full Stack Development	0	0	0
Data Science	0	0	0
Cyber Security	0	0	0
Cloud & DevOps	0	0	0
Mobility (Mobile App Development)	0	0	0
Artificial Intelligence	0	0	0
Machine Learning	0	0	0
UI/UX	0	0	O



What do top companies do to increase the Supply?







CONTRACT STAFFING AT A GLANCE

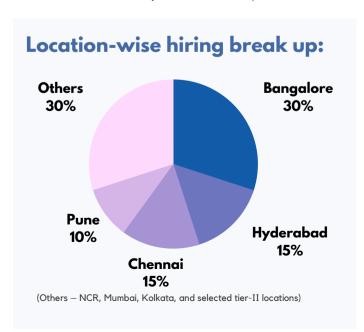
Installed IT-BPM pool: 126,461 as of March 2021 expected to grow to 148,211 by March 2022.

Bangalore is the no.1 destination which is having almost 1/3 of the contract staffing talent pool followed by Hyderabad, Chennai, and Pune. This trend is more than full-time IT-BPM employees installed population and continues to be bullish in the forthcoming quarters too.

India IT-BPM Contract Staffing Numbers Vs Digital Skills in FY2020, FY2021 and Estimated FY2022

FY	Contract Staffing Without Support Resources	Contract Staffing Net Added	TL Digital Skills (Overall Talent Vs Net Addition)	Digital Skills Growth %
FY2020	1,11,975	10,179 (9%)	8,900 (800)	19%
FY2021	1,26,461	14,486 (11.45%)	11,200 (1050)	31%
FY2022 Est	1,48,211	21,750 (14.67%)	12,900 (1600)	50%

In FY2022, contract staffing leader TeamLease Digital predicts that Digital Skills demand will grow by 50%. This is a 19% increase when compared to last year.



While reflecting on the contractual progress over the last few quarters, Mr. Sunil Chemmankotil, Head Specialized Staffing at TeamLease Digital quotes:

Enterprise customers' talent acquisition team is mandated to hire in excess of 10% through contractual mode. 8/10 employers whom we engage with commit 6-9 months as contractual duration with a possibility of increasing additional 6 months as an extension to ease their business planning."



TALENT MOBILITY TRENDS AMONG FULL TIME AND CONTRACT EMPLOYMENT

As FY2022 is marching towards the net addition of Digital Skills like never before, TeamLease Digital has surveyed the IT-BPM ecosystem stakeholders, digital transformation leaders, and contract staffing leaders and asked key questions on talent mobility happening between full time and contracting hiring trends.

FY	Contractual To Contractual	Full-time To Contractual	Gig To Contractual
FY 2020	90%	<10%	<2%
FY 2021	85~90%	<10%	<2%
FY 2022	85%	10~15%	<2%

While reflecting on the last few quarters mobility trends, **Siva Prasad Nanduri** - **Business Head at TeamLease Digital** quotes:

Our key customers are increasing contractual headcount in FY2022 and beyond. Traditionally the sources for attracting contractual headcount used to be from the other staffing companies. This year, we have seen a steady increase of up to 15% of contractual IT-BPM joiners happens from full-time employment. This trend is a big boost to witness Digital Skills presence among the contracting headcount in India."

Demand-side leaders aspire to engage with a contractual headcount in FY2022 and beyond. When asked a key question on recommending contractual mode of hiring instead of full time hires, the respective leaders' views are as follows:

Recommended Views	IT-BPM Ecosystem Stakeholders	Digital Transformation Leaders	Contract Staffing Leaders
Strongly Recommend	50%	60%	85%
Partially Recommend	20%	20%	12%
Neutral	20%	18%	3%
Does not Recommend	10%	2%	0%

^{*}Recommended views representation is derived from 100 participants through primary interviews



TOP CONTRACTUAL TALENT BUYERS BY COMPANY TYPE

According to TeamLease Digital, FY2021 witnessed the following talent buyers by company type. Using the current demand-supply scenario, TeamLease Digital predicts the hiring outlook trend and potential % of the change in 2022.

Company Type	Top Talent Buyers	Hiring Outlook For FY2022
Services	42%	
GCC/Software Product Companies	32%	
Pureplay BPO	11%	
Tier III & others	7.5%	
Tech Startups	5%	
Big 4	2.5%	





Tier I IT Services Companies: Established IT Services companies offering a broad level of IT offerings & solutions with more than 20,000 employees in India with > \$2 billion services revenue.

Tier II IT Services Companies: Competing with Tier I Services companies' capabilities and client portfolios. $5,000 \sim 20,000$ employee strength in India with > \$500 million- < \$2 billion services revenue.

Tier III IT Services Companies: Boutique and specialized IT services companies focusing on any industry or services portfolios. Company size of < \$500 million revenue and <5000 employee strength.

Pure Play BPO Companies: Concentrating mainstream business of Business Process Outsourcing (BPO)/ Knowledge Process Outsourcing (KPO) services to various domestic & international customers.

Global Capability Centers (**GCC**): Any shared services/product captive organization which service parent company IT/Operation need or developing their own product / R&D activities.

Software Product companies: Product / R&D setup which concentrates on developing application/enterprise software products/ tools to global customers.

Big 4 companies: The Big Four accounting firms refer to Deloitte, PricewaterhouseCoopers (PwC), KPMG, and Ernst & Young. These firms are the four largest professional services firms in the world that provide audit, transaction advisory, taxation, consulting, risk advisory, and actuarial services.

Technology Startups: A tech startup is a company whose purpose is to bring technology products or services to market. These companies deliver new technology products or services or deliver existing technology products or services in new ways.



ATTRITION TRENDS - FULL TIME VS CONTRACTUAL



India's IT-BPM Attrition is witnessing a never before attrition trend in FY2022 and it will continue to surge in the next quarters.

Pandemic-related dynamics played a game-changing role for the past year and will continue to play a vital role in defining the attrition trend for 2021. TeamLease Digital has been tracking the hiring trends in FY2022 and engaged with IT-BPM ecosystem stakeholders, digital transformation leaders, and contract staffing leaders to predict hiring and attrition trends. With the insights gathered from the top 300 employers in the Indian IT-BPM market TeamLease Digital is populating the following:

FY	FTE Attrition	Contractual Attrition
FY2020	15%	34%
FY2021	13%	40%
FY2022	24%	49%

Source: Han Digital, IT-BPM FTE (Full time Employment) numbers only from NASSCOM

In FY2022, contract staffing attrition is expected to grow up to 49% which is a 9% increase when compared to FY2021. Last year's attrition was due to the pandemic and business uncertainty. This year's attrition trend is high due to increased business, higher numbers of resignations within 90 days time. This infant attrition trend is the highest in the history of the IT-BPM industry in India. For the contracting market, we are witnessing about a 15% infant attrition trend which is the key driver for attrition towards 50%.

Attrition recorded in the Q1 (Apr, May & Jun 2021) and Q2 (Jul, Aug &, Sep 2021) was the highest among Teamlease Digital for contractual hiring. It stood at 49%. This trend will continue for the rest of the year as the war for Digital Skills intensifies in the Indian IT-BPM market.

In contrast, Full-time employment attrition will be set to cross 24% in FY 2022. With the attrition trend of the top 300 companies, the Q1 (Apr, May, & Jun 2021) and Q2 (Jul, Aug, & Sep 2021) attrition was 26%. This trend will increase at least by 2% more in Q3, as large companies' full-time attrition is expected to be crucial in managing the attrition for the rest of the year.



DIVERSITY & INCLUSION (D&I) TRENDS IN DIGITAL SKILLS



One of the key elements of D&I is gender diversity. For the past 10 years, Indian IT-BPM leaders have embraced gender diversity as one of their goals to achieve. This trend yielded up to 34% of the overall installed talent pool as gender diversity. During the initial days of the pandemic, the gender diversity initiative has taken a back seat for 2 quarters. However, from Jan 2021 onwards, the hiring trend of gender diversity and D&I has picked up in full swing.

Talent Funnel	% in FY2021	% in FY2022
No of graduate students	52%	55%
ITBPM diversity Full time	34%	36%
ITBPM contract workforce	22%	23%
ITBPM contract Digital workforce	14%	20%

As per our study, Industry leaders are saying the contribution of contractual gender diversity in Digital Skills is currently at 14% and is expected to grow to 17% in FY2022. As an extension, Global IT-BPM players have started doing dedicated campaigns to embrace LGBTQ which resulted in bringing considerable numbers of such IT-BPM experts into the workforce. Among the players, BFSI captive companies contributed the maximum number of LGBTQ onboards and created a benchmark to celebrate.

As per the TeamLease Digital respondents, the following trend is emerging as best practice to increase gender diversity and another inclusive workforce.

MORE FRESHERS

Inject more freshers to accelerate gender diversity as major workforce and shape them to serve digital skills in future



ROLE UPLIFTMENT

Top companies major diversity workforce opt for managerial roles and individual contributor roles equally.

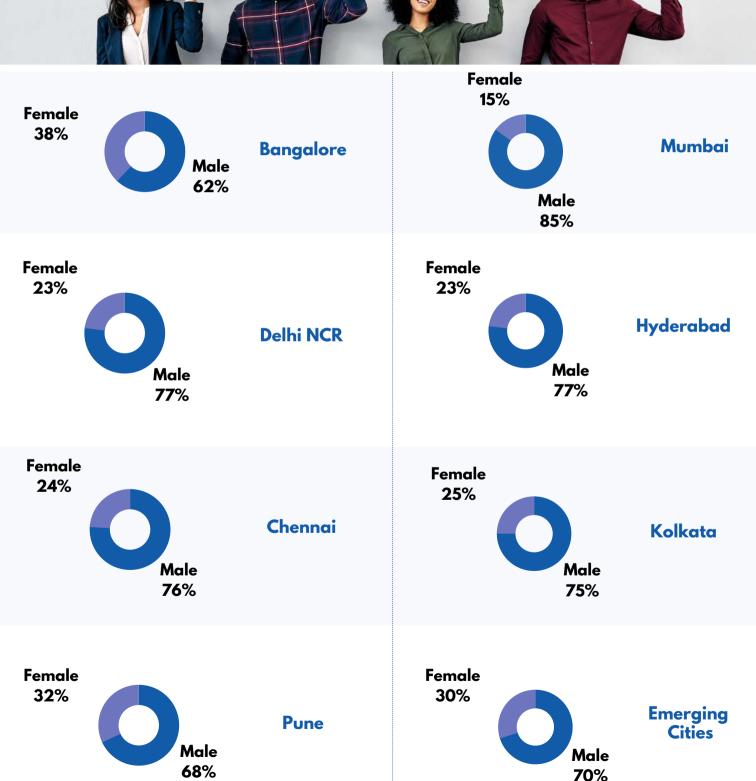
TECH SAVY

Increased trend of support functions roles to strong tech heavy roles by adopting upskilling and cross training



DIVERSITY & INCLUSION TRENDS IN DIGITAL SKILLS BY LOCATIONS







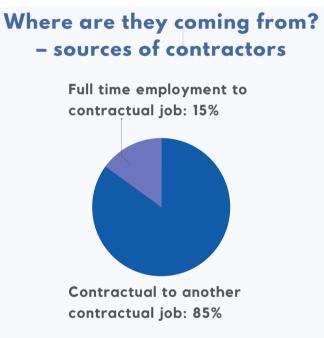
CONTRACT STAFFING 2021 - WHAT HAPPENED IN Q1 & Q2. WHAT TO EXPECT IN REST OF THE YEAR



Q1 (Apr, May, & Jun 2021) and Q2 (Jul, Aug, & Sep 2021) numbers were really encouraging when compared to last financial years' Q1 and Q2.

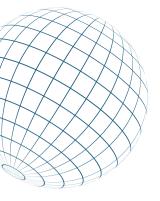
FY	Q1	Q2	Q3 Estimated
FY22	20,500	21,850	24,400





TeamLease Digital expects 90,000 ~ 1,00,000 onboards this year, of which, attrition backfill about 40%; 20% of them will be converted to the client payroll, 15% of contractor tenure ends, 5% of them get background verification failure resulting in effort loss, and the remaining 20% of them are net addition when compared to the previous year (Business growth reasons).





TEAMLEASE DIGITAL

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