

INDIA SKILLS REPORT 20 18

FUTURE SKILLS
FUTURE JOBS



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Wheebox

Measuring World's talent and Skill Potential

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Confederation of Indian Industry



An aerial, high-angle view of a dense urban landscape, likely Hong Kong, showing numerous skyscrapers and residential buildings. In the background, a range of mountains is visible under a hazy sky. The image is overlaid with a semi-transparent white layer containing text.

REACHING OVER
5,10,000
STUDENTS ACROSS
29 STATES,
7 UNION TERRITORIES
& **120+**
EMPLOYERS.





ABOUT THE TEAM

PeopleStrong

PeopleStrong is India's leading human resource (HR) solutions and HR Technology Company, enriching experience of over 175+ corporate customers and over 500,000 users. With the vision to simplify work life, PeopleStrong delivers its technology and services in one offering, using its on-demand technology product PeopleStrong Alt, which has distilled tens of thousands of hours of 'natural research and development (R&D)' — a decade long experience of servicing the HR functions of top Indian companies. Known for its penchant to innovate, PeopleStrong has many firsts to its name, the recent one being India's first native HR App for smartphones that aims to transform the future of work and work life in the HR world. PeopleStrong is the first company in the space to be successfully assessed on SSAE16.

Wheebox

Wheebox is India's leading online talent assessment company headquartered in India and spread across 5 countries globally. Wheebox partners' corporations for finding and retaining best talent using validated, reliable and standardized test for pre-hiring and measuring learning initiatives using robust assessment tools and online video proctored secured solutions. Wheebox benchmarks over 3 million users annually across globally. Staying aligned to the vision of Wheebox to "Measure World's Talent", It partners over 5000 higher and vocational education campuses for conducting its proprietary "Wheebox Employability Skill Test" for final year graduates to benchmark competencies that matter the most for being employable in corporations. Wheebox partners many fortune 180 large corporations and hundreds of small and medium enterprises to power their hiring and competency development assessment needs globally. Wheebox also powers "India Skills Report" skill supply side study and complements thousands of colleges to identify, benchmark and spot areas of competencies and supplementing with Institution wide and candidate report for developing competencies for employment. Wheebox partners many Indian states to design and deploy State Skills Report and Ministry of Labor and Employment with its proprietary BARO Career Interest Report for suggesting careers to candidates across Model Career Centers in India.

CII – India Partner

CII is a non-government, not-for-profit, industry-led and industry-managed organization, playing a proactive role in India's development process. Founded in 1895, India's premier business association has around 8500 members, from the private as well as public sectors, including SMEs and MNCs, and an indirect membership of over 200,000 enterprises from around 240 national and regional sectoral industry bodies with 66 offices pan India. Staff strength: 1100 + Permanent staff (on CII payroll). 9 International offices (Australia, Bahrain, China, Egypt, France, Germany, Singapore, UK and USA). Regional Desk representing ASEAS, ANZ, Middle East, SAARC, North America, Africa, Latin



America, CIS/Russia, East Asia, Europe, Turkey, Israel, Egypt, Iran. 9 Centers of Excellence on Competitiveness, Excellence, Sustainability, Logistics, Quality, Agriculture, Green Business, Leadership and Water. 8500 Direct and 200000 indirect industry members. More than 300 MOU Partners in more than 100 countries.

Pearson

Founded in 1844, Pearson is the world's learning company, with 35,000 employees across 70 countries worldwide. We have expertise in educational courseware and assessment, and a range of teaching and learning services powered by technology. Our mission is to help people make progress through access to better learning. We believe that learning opens opportunities, creating fulfilling careers and better lives.

Our unique insight and world-class expertise come from our long history of working closely with teachers, learners, researchers, authors, and thought leaders. Our products and services are used by millions of teachers and learners around the world every day.

We are organized around three key stages of learning - a) K-12, b) Higher education and test preparation and c) Vocational and professional education. Established in India since 1998, Pearson has introduced its wide range of products and services in educational institutes as well as directly to the learners.

AIU

Association of Indian Universities (AIU) is one of the premier institutions of the Country working for the cause of Higher Education. Established in 1925 as Inter University Board of India and Ceylone, it was rechristened as Association of Indian Universities in 1973. As a representative body of Universities of India, it liaises with the universities and the government (central as well as state) and coordinates among the universities and other apex higher education organizations of the world. The main objective of the AIU is to protect and promote the interest of universities and facilitate their activities especially by way of sharing information and increasing cooperation in the field of culture, sports, and allied areas, and help universities in mutual recognition of degrees. Being a communion of highest academics of the country i.e. the Vice Chancellors, it inevitably assumes the role of a Think Tank and Academic Leader in the country. At present out of 831 universities in the country, 679 are the members of the Association. Apart from Indian Universities, there are 13 foreign universities as associate members of the AIU. AIU is the only national body in the country authorized for granting academic equivalence to the degrees awarded by the accredited foreign universities and institutions for the purpose of admission to higher academic courses and employment.

All India Council for Technical Education (AICTE)

The All India Council for Technical Education (AICTE) is an apex body and the national-level council for technical education in the country comes under the Ministry of Human Resource Development (MHRD), Govt. of India. AICTE was established in November 1945 first as an advisory body and later in 1987 given statutory status by an Act of Parliament.

AICTE undertake proper planning and co-ordinated development of the technical education system in India and promote qualitative improvement of such education in relation to planned quantitative growth and the regulation and proper maintenance of norms and standards in the technical education system for matters connected therewith.

AICTE is a regulatory body with a mandate to define norms and standards for ensuring high-quality technical educations in terms of infrastructure, faculty, laboratories, and library requirements, while providing state-of-the-art of technical education. AICTE approves courses in more than 10,000 Technical Institutions in India at Diploma/Under Graduate and Post Graduate Level. It is universities and academic bodies who must implement the curricula, conduct examinations, and award degrees.

AICTE approved colleges covers programs of technical education including training and research in Engineering, Technology, Architecture, Town Planning, Management, Pharmacy, Applied Arts and Crafts, Hotel Management and Catering Technology etc. at different levels and spread in almost all of the 600+ districts of the country, and with intake capacity of 3.7 million students per year.

UNDP

UNDP works in more than 170 countries and territories, helping to achieve the eradication of poverty, and the reduction of inequalities and exclusion. We help countries to develop policies, leadership skills, partnering abilities, institutional capabilities and build resilience in order to sustain development results.

UNDP has worked in India since 1951 in almost all areas of human development, from democratic governance to poverty eradication, to sustainable energy and environmental management. UNDP's programmes are aligned with national priorities and are reviewed and adjusted annually.

"Disha, a partnership between the India Development Foundation and United Nations Development Programme, supported by IKEA Foundation, seeks to improve the lives of one million underprivileged women in India by helping them learn marketable skills and connect to income opportunities. The project aims to enable women to become economically self-sufficient so that they, their families and future generations can have better opportunities in life."



FOREWORD

India sits on an opportune moment in history, with a demographic dividend of 65% of her human resource pool under the age of 35 with about 12 million individuals expected to join the workforce every year. With the demographic dividend, comes the responsibility of equipping the youth with employable training and in turn, employment. Qualified and skilled human resources are most important propellant for economic advancement of our nation.

India Skills Report, which is a conscious, one-of-a-kind effort to provide an insight into the hiring trends of the market while understanding the needs of the job seeker and organizations. The fifth edition of the report has reached out to about 5,00,000 students across 29 states and 7 union territories from the supply side and corporate players from 12 diverse industry sectors on the demand side.

The India Skill Report is also a reflection of requirement of skilled manpower for industries in future and expectation of industries from the academia. I congratulate the India Skill Report Team for the fifth successful edition of this report and for bringing the government, industry and academia, all on one platform. I convey my best wishes to the teams of Wheebox, PeopleStrong, Confederation of Indian Industry, United Nations Development Program, All India Council for Technical Education, Pearson and AIU team. I am confident that this initiative will give a clear understanding and enable bridging of the talent demand and supply in the country. I believe this report will not only give an overview about the employability factor of the youth of the country, but also address the needs & expectations of the employers. There is need of regular skill assessment using scientific tool to address the skill gaps in the labour market and facilitate better employment opportunities for the youth, thereby increasing India's industrial productivity.

The Council has taken suitable measures for inculcating soft skills among students and making provisions of internship for students to make them ready for an industry which is one of the major observations drawn from this report. The Council will take the inputs of this report in further improving the quality of Technical Education in the Country.

Prof. Anil D. Sahasrabudhe
Chairman, AICTE

ACKNOWLEDGEMENTS

We are glad to bring the fifth edition of India Skills Report, India's most referred report on the talent landscape to you. We are grateful to all the student participants, corporate participants, partners and associates who have helped us in shaping this report by providing their valuable inputs and insights.

India Skills Report 2018 takes into account the efforts made to access the data of more than 5, 00,000 students through a well-structured employability test - Wheebox Employability Skill Test as well as employment data from more than 130 corporates spread across 15 Industries who participated in India Hiring Intent Survey and provided their responses.

The India Skills Report is an outcome of a joint initiative by CII, PeopleStrong, Wheebox, UNDP, AICTE, AIU and Pearson. The report presents not only the employability factor of youth from across the country, with different educational backgrounds but also the needs & expectations of employers., In other words it covers both skill availability (supply side) as well as skill requirement (demand side) and gives users the access to meaningful insights to draw conclusion on both the aspects.

We would like to thank all participants for their participation and inputs in respective surveys. We would also like to extend our gratitude to our associates and partners for their participation and support in creating India's first and unique platform for Skill development and employability.



TESTIMONIALS



Clement Chauvet
Chief Skills & Business
Development
UNDP

“Focused on the needs and aspirations of the future workforce as well as the expectation of potential employers, this report nudges the conversation in the right direction. It stands to inform more incisive decision-making for skills development and improved employability in the country.”



Rejeshwar Tripathi
Chief People Officer
Mahindra & Mahindra Ltd.

“Digital at work is phasing out transactional jobs and introducing new ones which are more meaningful. However, ensuring talent supply for these new roles remains a challenge. Its good to see such a report which covers this important topic.”



Dr. Anand Bhalerao
Dean and Principal
College of Engineering
Bharati Vidyapeeth Deemed University
Pune (M.S.) India

“NASSCOM publishing 55 new job roles in recent future, WEST 2017 will be looked as a benchmark for assessing the skills of young Indian engineering aspirants!!! We are moving towards Industry 4.0 which altogether require more skilled manpower rather than mere Engineer, initiative like this will fuel skill development vision of Govt. of India.”



Saurabh Govil
President & Chief Human Resources Officer
Wipro Ltd.

“The jobs that even artificial intelligence can't replace will be those which will require domain knowledge, adaptability and positive attitude. It will be interesting to see how the institutions will create the talent for future jobs. Hope this report will throw some insight on this. All the best to the team.”



Ujjwal Singh
Vice President - Product &
Innovation, Emerging Markets
Pearson

“Demand Supply gap for right talent has always been a challenge in the country. With the new focus and initiatives on Skill Development, we are confident that the quality of talent/skill supply will turn around. The India Skills Report 2018 involves both sides of an information base which will help bridge the gaps. The India Skills Report 2018 will be an important benchmark to measure the progress against challenges.”



Sandeep Sinha
Co-founder and managing Partner
Lumis Partner

“Recent developments in digitizations have made it imperative for the workforce to upgrade themselves. There is a need for all ... industries and academicians to come out of their comfort zone and boldly face the emerging digital work age. Kudos to the team for the comprehensive report and sharp focus on the changing scenario.”



Dr S.C.Sharma
Registrar
Chitkara University, Punjab

“Wheebox Employability Skill Test (WEST)” measured the students' capability in aptitude, domain knowledge and behavioral traits. The test quality was very good. The MCQ questions were brainstorming questions. This test will definitely help the students to know their weaknesses and strong points. Now, the students will be able to work on their weak points so that they can excel and make themselves employable.”



Prof (Cdr) RP Singh
Director (Training and Corporate Relations)
Shri Ramswaroop Memorial Group of Professional
Colleges (SRMGPC)
Tewari Ganj, Faizabad Road, Lucknow (UP)

“India Skills Report (ISR)” has played a major role in understanding the industry academia interface requirements which has helped us to train our students for meeting the industry needs. WEST employability test allows the students to understand the gap between their present skill levels and skills required to be obtained so as to become industry ready. On this occasion of the launch of next ISR, I wish the team very best. We at SRMGPC look forward to these milestones very anxiously and would like to continue supporting these initiatives.”



Dr. Mamta Bhatia

Fulbright Scholar
Associate Professor
Acharya Narendra Dev College, University of Delhi

“The employability Skill Test by Wheebox prepares the students for getting “job ready”. The data is scientifically analysed and well presented in India Skills Report with detailed analysis of the skill pool and the geographic availability. The various aspects of skill sets discussed in the Report give useful insights to vocational colleges towards preparing the curriculum matching with the training component as per industry demand. The gender-wise data can also help in encouraging and supporting Indian women in STEM fields. Wishing success to entire team of Wheebox for their continued efforts.”



Dr. Raveendranath Nayak

Director & Professor
School of Management (SOM)
Manipal University, Manipal

“Business School needs to continuously upgrade its curriculum to meet the changing needs of industry. Job profiles are also changing rapidly. Besides the efforts of B-School, MBA students must also know their soft skills which are identified as equally important for achieving success in managerial career. Wheebox Employability Skill Test for “India Skills Report 2018” provides startling early signs to the students as well as their institutions where they stand with respect to their soft skills and academic competence, but, more crucially where to focus on to improve.”



Dr. Harsh Purohit

Dean, FMS-WISDOM
SBI School of Commerce and Banking
Banasthali Vidyapith, Rajasthan

“At Banasthali Vidyapith, the world’s largest residential university for women’s education nurturing women for leadership roles since 1935, we believe that Education, Employment and Empowerment are very closely linked. In particular, employment has a strong relationship with women’s empowerment and in course of initiatives taken by Banasthali for women’s education during the last eight decades; we believe that the Wheebox Team has taken a revolutionary step. We are delighted to partner with Wheebox in bringing out “The India Skills Report 2018”. Beyond any doubts the report would achieve its objective and the unmatched insights would bring a paradigm shift in education, and benefit the noble cause of women’s employment and pave way for women becoming financially empowered. It is wonderful to note that over the time, thousands of girl students from Banasthali have participated in the Wheebox test coordinated by the team at SBI School of Banasthali Vidyapith.”



Amit Malik

Chief People
Operations and Customer Services Officer
Aviva Life Insurance

“The need for academia and industry to partner has been talked about for years now. While some appreciable efforts have been made, the gap between what the industry needs and what young graduates from schools and colleges have to offer, has only widened. The advent of the Digital age and rapid technological disruption has ensured that the shelf life of skills is lower than it ever has been. Today an Engineering or MBA degree does not necessarily lead to a job, much less to a stable career. Skill development needs to start at the school level and education needs to be tailored to ‘future’ needs. There is need to act, and act fast, lest we lose our demographic advantage!”



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EXECUTIVE SUMMARY

Economic growth is a reflection of jobs created and skills and knowledge are evident requirements for any job. Both developed and developing countries are focusing on skilling people and India is no different. Our aim is to become the future skill capital of the world and government is not leaving a single stone unturned. Being the youngest nation with more than 62% of its population in working age group of 15-59 years, and more than 54% of its total population below 25 years of age, it seems feasible. Recent skill initiatives such as National Skill Development Mission, Amendment in The Apprentices Act are examples of government's action to move towards reality.

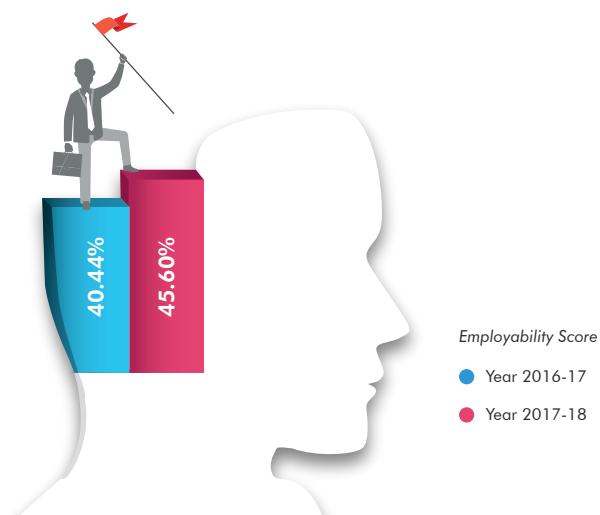
Employment landscape is changing swiftly, and new jobs are emerging with rapid disruption in the business models around the globe. Today's job market and in-demand skills are hugely different from the ones of 10 or even 5 years ago and the pace of change is only set to accelerate. New jobs require new skills which either does not exist or the population is niche. Building a skilling system to match the new requirements, a system that responds well to business needs, while opening opportunities for all people is the need of the hour. Also transforming the way employers invest in their workforce and use the skills of their employees can help meeting new skill requirements. In subsequent sections of India Skills Report 2018, we set out where we are now and what it will

take to achieve our ambition of becoming world's 'Skill Capital', ready for future.

The India Skills Report 2018 is a blend of two distinct sections – WEST – 'Wheebox Employability Skill Test' and 'India Hiring Intent' Survey. WEST focuses on skill availability and India Hiring Intent Survey covers skill demand. This report is weaved around 5 -core areas:

- Employability & Hiring trends
- Automation & it's impact on Industry
- Future Skills & Future Jobs - Getting ready for the future of work
- Apprenticeship - Getting young talent ready
- Preferences - Candidates & Employers job preferences

We approached more than 5, 10,000+ students from 29 states, 7 Union Territories (UTs), and 5,200 Institutions to get skill availability. This year employability score has taken a big leap as compared to the last year. It has reached a new level of 45.60% which has a sharp hike of 5.16% over previous year's employability score. Delhi continues to top the list of states/UT on employability score for this year as well. More than 1000+ corporates from 15 different sectors were approached for India Hiring Intent Survey to assess skills requirement for next year's hiring intent. The survey also focuses



on future skills requirement and results show that AI & Robotics are leading the next gen jobs along with others. It also takes a stock of skills availability and aspirations from candidate. The survey clearly highlights that nearly 50% of the applicants appearing for the interview

either do not meet the skills requirement or some may possess the required skills to meet the basic requirement of employers.

Key Facts from Survey Findings:

- Employability score has touched a new high of 45.60%.
- Hiring intent for Year 2018 is positive with an increase of 10-15% as compared to last year.
- 69% of India Hiring Intent Survey respondents agree to the impact of automation on jobs in future.
- 24% employers indicate that analytics is emerging as the future job area and 15% foresee Artificial intelligence as future job area
- 8.11% employers suggest that very few job seekers possess the required skill while 9.01% employers agree that nearly all job seekers possess the required skill.
- 64% employers are aware of Apprenticeship Scheme, out of which 56% have registered under NAPS.

NEW JOBS AND NEW SKILLS – A FUTURISTIC PERSPECTIVE

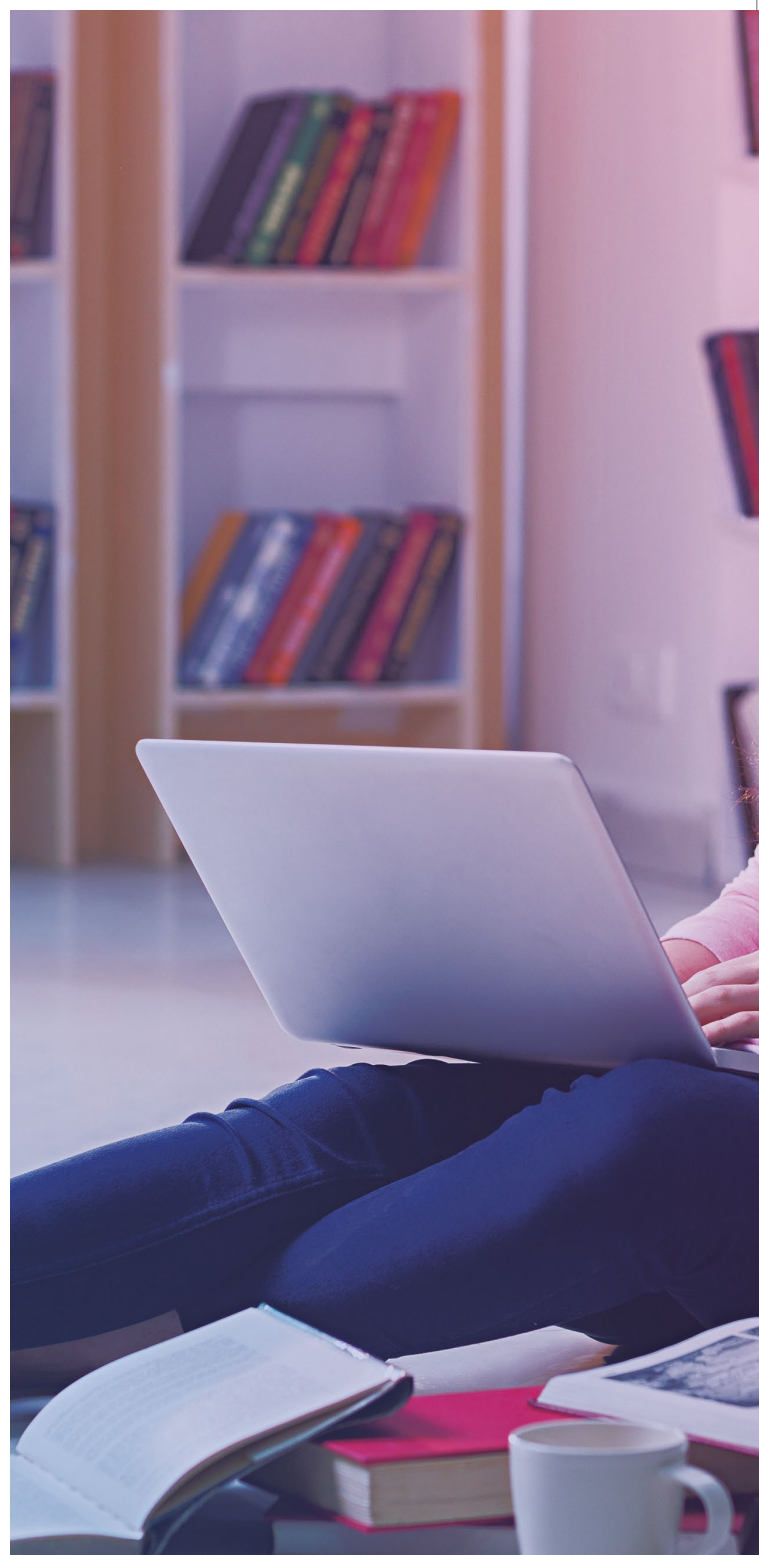
The year 2017 was a mixed bag from business perspectives as the year started with after effects of the demonetization drive. Post that the first 2 quarters were spent by businesses of all sizes getting ready for the implementation of GST in July. The year has thus seen implementation of some of the biggest economic reforms in the post-independence era. These reforms coupled with government's push for various infrastructure projects like BharatMala have created many opportunities for Indian businesses of various sizes while also giving impetus to creation of different type of jobs. In 2017, Hyderabad & Kochi metro projects have been completed while similar projects are underway in around 12 different cities.

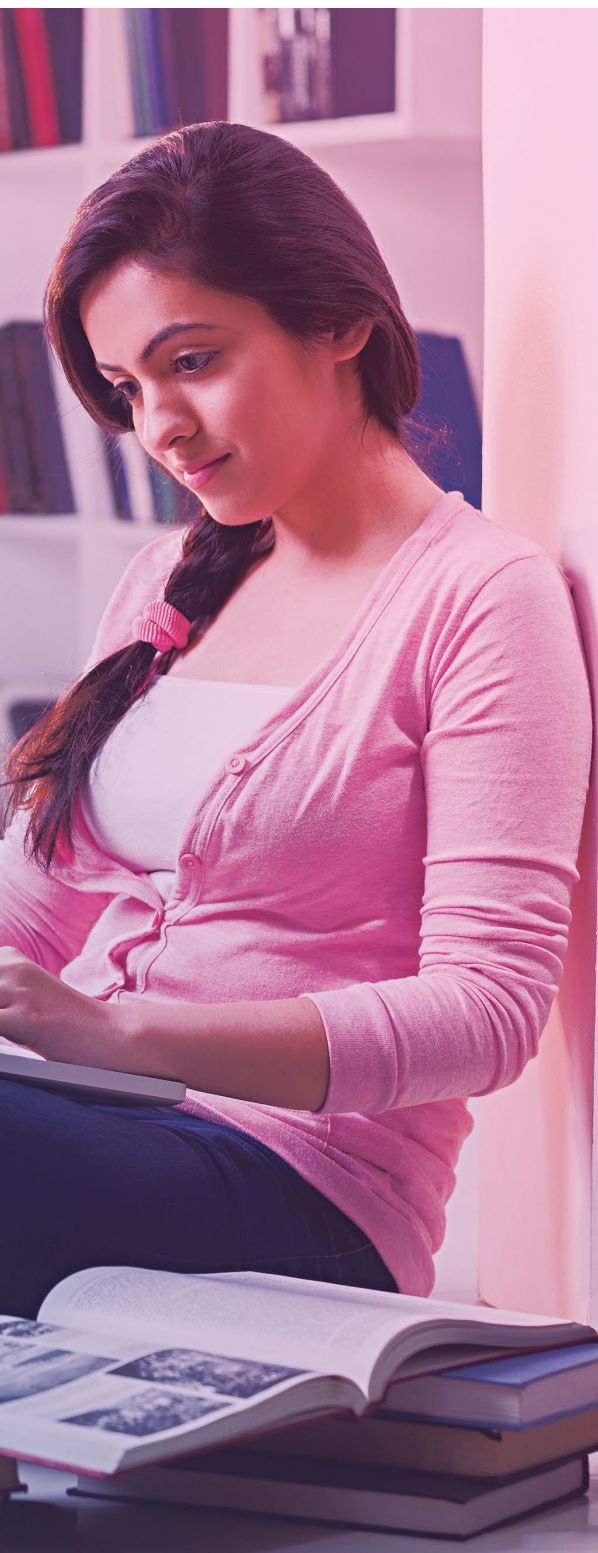
This year, we also witnessed technological advances demonstrated by India. ISRO launched a nuclear capable Agni missile in January and in February it created a record by putting into orbit a total of 104 satellites from 7 countries. In light of these events, one can look at the changing demographics of Indian labour force and the structural changes impacting the same.

It is estimated that the Indian workforce will increase to approximately 600 million in year 2022 from the current 473 million. As the workforce will increase by about 27 percent during this period the overall composition of unorganized sector and organized sector will slightly change from 92 percent and 8 percent today to 90 percent and 10 percent in 2022. The major forces impacting these shifts are that of globalization, expanding domestic Indian market and adoption of exponential technologies, like AI, Robotics, and IOT by Indian industries. Some of the macro trends those are visible in India today are:

- A clear structural shift from agriculture to non-farm sector, particularly construction, trade and transport.
- To bridge India's infrastructure gaps, the government has raised public investment in roads, railways, rural development, power, telecom, housing and "soft" areas of health care and education, creating work opportunities for an estimated 7 million workers, at wages that are 70 percent higher than average farm workers.
- Rapid advances in automation technologies are affecting India's information technology and business process outsourcing sectors. These sectors have remained net job creators, and the industry estimates that companies could hire up to 2.5 to 3 million more workers by 2025, provided they can acquire the skills needed to meet changing needs.
- The global rise of independent work and micro entrepreneurship, aided by digital technologies, is mirrored in India, where they are providing new work opportunities with better pay and links to organized value chains, including in parts of the country less covered by the formal labour markets.

It is estimated that a combination of increased government spending, additional IT hiring, the rise of independent work, and an increase in entrepreneurship created gainful employment for between 20 million and 26 million people between 2014 and 2017.





This indicates that the global forces of urbanization, need to bridge infrastructure gaps, automation and knowledge intensive work, and new digital ecosystems and independent work, are prevalent in India, and are shaping the realities of its labour market.

IMPACT OF AUTOMATION

Advances in robotics, artificial intelligence, and machine learning are ushering in a new age of automation, as machines match or outperform human performance in a range of work activities, including ones requiring cognitive abilities. It is estimated that almost 50 percent of activities that people are currently paid approximately USD 16 trillion could be automated by adapting currently demonstrated technologies. The other interesting aspect is while only 5 percent activities performed today can be automated fully almost 60 percent of current activities have at least 30 percent constituent activities that can be automated. Thus implying, more job activities will be fundamentally altered by automation than completely automated.

This essentially means people will continue to work alongside machines to produce the growth in per capita GDP to which countries around the world aspire. The anticipated shift in the activities in the labour force is of a similar order of magnitude as the long term shift away from agriculture and decrease in manufacturing share of employment.

The pace and extent of automation and its impact on individuals will vary across different activities, occupations, wages, and skill levels. Many workers will continue to work alongside machines as various activities are automated. Many physical activities and repetitive activities like collecting and analysing data have higher probability of being automated earlier than other complex activities. However as technology development and adoption increases the impact of automation on both low skilled and high skilled individuals would be similar if not equal.

Mckinsey Global Institute research suggests that India's workers have a technical automation potential – the overall share of activities that can be automated by adapting currently demonstrated technologies – of 52 percent. This is broadly in line with the global trend, and comparable to 51 percent in China and 55 percent in Japan. However the technical feasibility of automating work does not directly translate into the deployment of automation in the workplace. Apart from technical potential, other factors such as, cost of developing and deploying both the hardware and software, the labour cost vs. the benefits of automation, and regulatory and social issues. In India hence the impact of automation is likely to be sectoral and largely tied to the business case of automation. In sectors like IT and ITES we are already experiencing the impact of automation in terms of improved productivity and changing skill sets.

While most of the talk about automation has been about how it will replace humans and jobs, we believe that it is likely to be an evolution and not a revolution when it comes to automation's impact on jobs today. Machines are likely to become more like a colleague and are likely to help improve our workforce efficiency, productivity, and effectiveness. The historical evidence suggests that while technological advances create disruption and significant

short term labour displacement, in the long run it creates a multitude of new jobs and unleashes demand for existing ones, more than offsetting the number of jobs it destroys even as it raises labour productivity.

NEW AGE JOBS

With the rise of automation and its impact on every possible sector and job role known to us today, it is highly possible for this wave of automation to not only alter current jobs and professions but also give rise to completely new age jobs that did not exist a few years back.

One of the simplest examples is; with 3X rise in India's population using ecommerce between 2014 and 2017, the annual average shipments grew by 40 percent while increasing the number of workers directly employed from 20,000 to 100,000. Three fourth of these job opportunities got created in logistics and transport with 50 to 60 percent of them in Tier II and Tier III towns where job opportunities have been scarcer in the past. For these locations the type of jobs introduced by adoption of automation are completely new and different from any other type of jobs previously available in the location.

Some reports estimate that 5 percent to 20 percent of jobs available in industries such as IT/BPM, Automotive, textile, BFSI and Retail can be completely different than what we see today. Some of these new age roles are already in existence and we see these new age roles demand different skill sets from the existing labour force. Some examples of such roles are Data Scientist, 3D Printing, Digital marketing, Cyber Security specialist, Blockchain architect and similar others.

When one looks at potential jobs being created due to automation the early indicators suggest that more jobs will be created in sectors aided by automation than the sectors creating automation solutions themselves. As estimated in the world economic forum future of jobs report, in India the overall employment outlook is of strong growth in consumer and professional services industries while it suggests moderate growth in basic infrastructure, energy and mobility. In the same report, it is estimated that employment growth in information and communication technology is likely to be stable, thus indicating that more people in that industry are likely to be re-skilled while more new jobs are being created in other application sectors. Many of the future roles relevant to India are likely to be enabled by use of various technological advances such as mobile internet, cloud technology, digital payments, verifiable digital identity, internet of things, next generation genomics, and renewable energy among others.

Some jobs these technologies could enable are community health workers, community teachers and trainers, financial agents or business correspondents, community farm extension workers and para-technicians for e-services. The above mentioned empowering technologies may also create opportunities for India's millions of micro-entrepreneurs.

The formal manufacturing sector has an opportunity to move up the value chain by using technologies mentioned above, it means individuals working in the manufacturing sector will have a greater challenge to adapt to these new technologies and redefine the



way they work and compete with other low wage manufacturing locations like China, Vietnam, and Bangladesh among others. Similar shifts are likely to be witnessed in the IT and ITES industry in India and it is estimated that this sector and jobs in this sector are likely to be at the fore-front of this digital disruption.

NEW SKILLS

With new emerging job categories like data analyst and specialized sales professionals, it is becoming increasingly evident the world of work is likely to get more specialized as the mundane transactions are handled by machines. While machines continue to help workers analyse various data and help them make the right decision, the human workers will have to be specialized in their chosen field of operation to be able to make sense of the analysis and then take appropriate action. This is increasingly becoming true irrespective of whether you are a car mechanic or a CEO.

With the changing nature of work and workplaces, business activities are increasingly being delivered via a network of teams. The traditional silos of departments are being questioned and this will mean a new set of skills are required at individual contributor and manager level. The current example of the evolving role of managers in these workplaces is evident in the role of a scrum master in an agile development environment. The scrum master is a coach and a process expert who operates with no direct authority over the team or their work but is responsible to orchestrate the ensemble.

The above example indicates how increasingly the desired skill sets of most occupations are likely to comprise of skills that are not yet considered crucial to the job today. As per certain estimates Cognitive Abilities, Systems skills, Complex problem solving, Content skills, and Social skills are some of the top skills that are likely to be a growing part of the core skills requirements for many industries.

As per the World Economic Forum the future of jobs report, cognitive ability such as creativity, logical reasoning and problem sensitivity, will be required in jobs in 2020. More than 50% of jobs which require this ability do not require it today or only to a smaller extent. In about 30% of jobs demand for these skills is already high and is likely to remain so till 2020.

As skill demands are evolving rapidly at an aggregate industry level, the degree of changing skills requirements within individual job families and occupations is even more pronounced. For example, the increasing ubiquity of mobile internet combined with coming of age of internet of things promises to transform the daily routine of many frontline roles in sales, installation and maintenance and manufacturing and production job families across industries. This would mean individuals in these roles will have to display a much higher level of technology literacy than in the past. As an ancillary characteristic of increased automation of jobs, many organizations are likely to demand more responsibility related to equipment control and maintenance, higher order problem solving skills, coupled with increased understanding of work processes of the organization.

It is also likely that many purely technical occupations are expected to show new demand for creative and interpersonal skills. For example for healthcare professionals, technological innovations could mean that with automated diagnostic and personalization

of treatment, they need to be more skilled at communicating this data effectively to patients. Similarly sales and related jobs may see an increased demand for creativity as the emphasis moves to customer experience.

Today's job market and in-demand skills are vastly different than the ones of 10 or even 5 years ago and the pace of change is only set to accelerate. Governments, businesses, and individuals alike are increasingly concerned with identifying and forecasting skills that are relevant not just today but that will remain or become so in future to meet business demands for talents and enable those that possess them to seize emerging opportunities. With 65% of organizations looking to invest in reskilling of their current employees, these shifts in the nature of work will demand greater flexibility and adaptability from employees.

In a study conducted by The Economist Intelligence Unit in 2016, 46% of business managers said they expect their own job to be performed by an AI-based technology within the next five years. With such reports, it is increasingly evident that the emerging nature of work coupled with impact of automation is likely to mean that individuals and organizations will have to look at skill sets anchored in domain or industry while also focusing on other skills which aid either design of interactions or interactions with both humans and machines. As workplace collaboration increases along with rise of machines as colleagues, the importance of human skills in the age of automation is getting re-emphasized in the world of work.

RELEVANCE OF ISR

In the India Skills Report 2018, the above themes are very clearly reflected with about 47% of future jobs in India reportedly being in the areas of Analytics, Artificial Intelligence, and Robotics. With a close to 70% respondents agree to some degree of impact of automation on jobs, we are pretty certain that these global forces are at play even in the Indian market. With close to 70% of the hiring expected to be of either freshers or individuals with up to 5 years of experience, these trends are likely to shape "employability" in the coming years. Adaptability and positive attitude figure in the list of top 3 skills required by companies along with domain understanding thus emphasizing the importance of the "human" or "soft skills" in an increasingly technology driven world.

Nirmal Singh
Founder & CEO - wheebox





SURVEY METHODOLOGY & DATA ANALYSIS

India Skills Report is an amalgamation of two distinct yet cohesive activities i.e. Wheelbox Employability Skill Test – a Employability skill test and India Hiring Intent Survey – a corporate job survey. Like previous years, we carried our test & survey this year too. WEST assesses employability factor of students in the current context. For WEST, we reached out to educational institutions and students through an online skill assessment tool. Our reach expands to more than 5, 10,000 students from 5,200 institutions across the country from 29 states and 7 Union territories to assess the employable skills. All the responses were collected online through a structured survey including respondents' demographic information. Responses were tabulated and analyzed using statistical tools to represent data in this report. Normalization of data has been performed on all demographic parameters to eliminate polarization of data and inferences drawn are presented in the report at various sections.

Our objective was to assess employability of available skilled pool using a structured online assessment tool. Students were asked specific questions related to their education along with psychometric assessment. Outcome of the survey was analyzed around various parameters such as educational domain specific employability, state specific employability to get top 10 states, city specific employability to get top 10 cities, gender specific employability, expected salary ranges, interest for apprenticeship opportunities etc.

- States and UTs Covered – 29 States & 7 UTs
- Institution reached – 5,200
- Education Domain covered - 9

India Hiring Intent Survey was carried out by PeopleStrong and reached out to more than 1000+ organizations/corporates from 15 different sectors. An online survey conducted between September and November received 130+ responses. First section of India Skills Report covers WEST, which brings skill supply side or availability perspective here which is assessed using the student responses and second section of the report covers India Hiring Intent Survey, which brings demand perspective that is assessed using industry responses. Later section of the report covers matchmaking of Supply side and demand side to assess the skill gaps and way forward to bridge the gap.

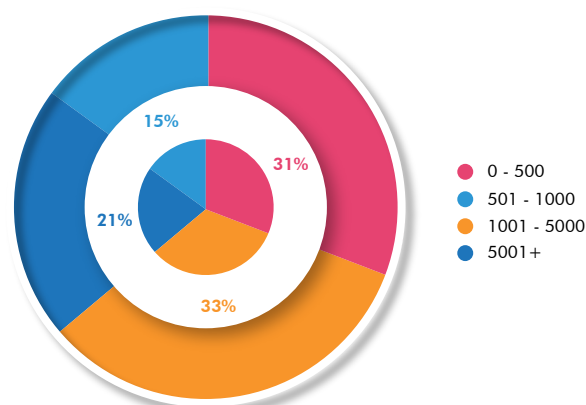
In this section we gathered responses from organizations using India Hiring Intent Survey containing 20 questions. An overall response summary is detailed below for your reference. Outcome of the survey is analyzed using statistical tool and presented in this report. Analyzed data gives you insights around hiring trends for current year as well as next year, preferred sources of hiring, experience level wise hiring requirements, educational domain specific hiring requirements, apprenticeship awareness among organizations and opportunities to students for same. Along with these factors, this year we looked at the future of skills arena as well and asked organizations about specific areas they consider important for future and impact of automation on their specific

sectors. We have also added one more important parameter to assess employer's perspective on employee's skill match to the job. In this fifth edition of India Skills Report, it was heartening to receive the support of corporates across major sectors. Follow up telephonic interviews with randomly selected sample of employers were conducted to validate the responses received from them. The encouraging response and participation by corporates is another positive indicator of their intention to play a role in solving Talent woes of the country. We hope that the insights provided in the following section, based on data provided by surveyed employers, would help in taking better decisions and creating a balanced skill-job landscape in the country.

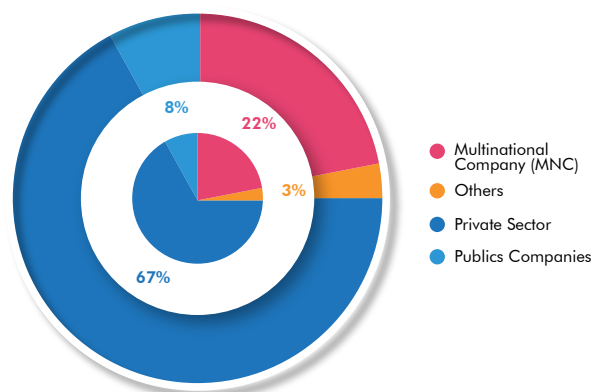
Total Survey respondents – 130 from 15 sectors

Qualified respondents – 120+ from 12 sectors

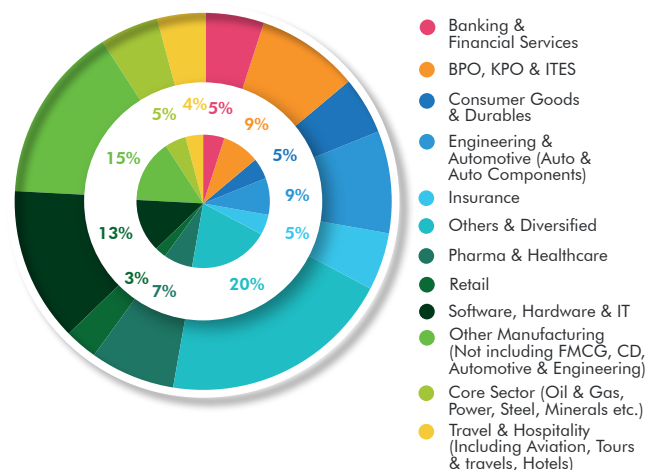
RESPONDENT BY COMPANY SIZE



RESPONDENTS BY COMPANY TYPE



RESPONDENT BY SECTOR





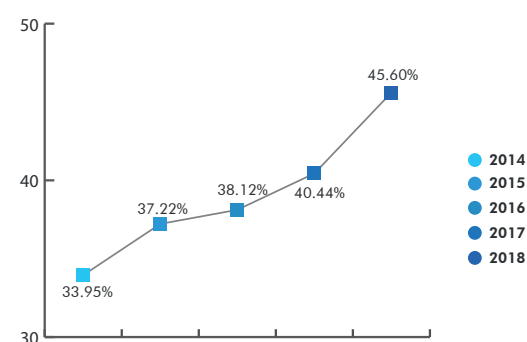
WEST ANALYSIS

The fifth edition of WEST was conducted from July 2017 to October 2017 and more than 5,00,000 students from varied educational background participated in the test. It provides us a guide to assess the talent pool available and tests their employability factor from the standpoint of their readiness to join the industry as per skill requirement. WEST was administered on an online platform and was accessible from mobile, tablet, computer as well as laptop. Usable responses of about 5,00,000 students from varied educational background across the demographic strata were drawn for analysis and reporting. We approached 5,200 educational institutions from 29 states and 7 union territories; making this India's one of the largest employability test. WEST does not have participation from IITs, IIMs, NITs and other premier institutes of country.

Skills and Employability go hand on hand. Skill gap is the real cause of high unemployable population in India and elsewhere. Skill gap is not only leading to unemployability but several other socio-economic challenges along with loss of resource in the economy. Worldwide, young people are three times more likely than their parents to be unemployed. In Greece, Spain, and South Africa, more than half of young people are unemployed, and jobless levels of 25 percent or more are common in Europe, Middle East, and Northern Africa. The International Labour Organization (ILO) estimates that 75 million young people are unemployed. Including the number of youth in this would potentially triple this number. This represents not just a gigantic pool of untapped talent; it is also a source of social unrest and individual despair.

Our test result data shows that 45.60% of students are employable or are ready to take-up jobs. Overall employability has risen from 40.44% to 45.60% over last year. In the last five years, overall employability has gone up from 34% to more than 45% resulting in providing more employable resource to the economy. This clearly shows the efforts made by various stakeholders including government led skilling initiatives; the recent UGC and AICTE led initiatives along with individual institute led initiatives to improve employability across demographics. UGC and AICTE has endorsed several Research & quality based schemes to improve the quality of education from a very basic rule of hiring a faculty to mandatory Accreditation of all Programs/Courses.

OVERALL EMPLOYABILITY



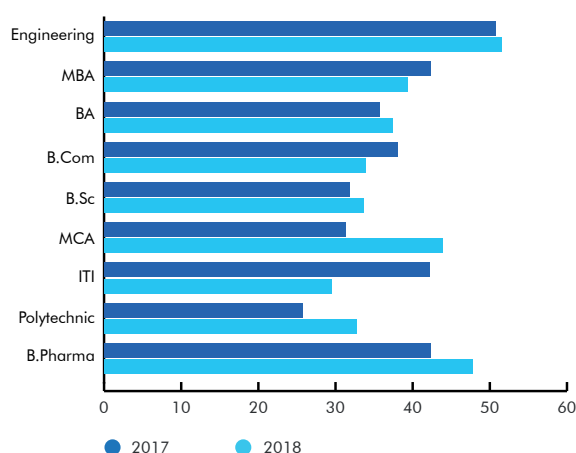
Disclaimer: Employability Score here does not include Participation from IITs IIMs NITs and other premier institutes of country

Further analyses of employability across education domains reveal that engineers are highly employable as compared to other domain students. Employability of engineers has been a concern over a last few years and initiatives taken by AICTE has started paying off as stated in the WEST where 52% of engineers were found employable. Employability of MBA students witnessed a drop of 3% over last year. MBA has become new B Tech where everyone wants to get MBA degree irrespective of their graduation degree and score in entrance tests. MBA colleges are enrolling students even if the student has not appeared for any of the MBA entrance test. Drop in quality of student intake over years due to negligence in student selection process and lack of industry internship programs or low attendance in industry internship programs are reasons of this drop among many others. A stringent approach is the need of the hour to improve overall employability situation across nation by regulatory bodies like AICTE, UGC, AIMA and others.

MCA student's employability is on rise. It has increased by 13% as compared to last year. This rise in employability is a good sign for IT companies and students as employment in IT is on rise and organizations which offer MCA based opportunities will get employable resources easily. Internship in last semester of MCA plays a vital role in employability as it enhances the subject knowledge and educational institutes seem to have started focusing on this. Core skills such as English language, numerical ability etc. also play a critical role in employment and students and institutions are paying attention towards it. This year B Pharma student's employability has increased by 6% as compared to last year. The Indian pharmaceutical market size is expected to grow US\$ 100 billion by 2025, driven by increasing consumer spending, rapid urbanization, and raising healthcare insurance among others. Keeping this surge in the pharmaceutical sector in mind, and higher employability of B pharma students, pharma companies are going to be benefited from both perspectives.

ITI and Polytechnic students' employability is a challenge among all education domain students even though both are practical training driven and employment focused courses. Low employability of ITI and Polytechnic students is due to less focus on industry alliance and core employable skills. NCVT introduced employability skills as part of the curriculum in ITI to train students and make them ready for industry but it seems ineffective considering the level of employability in the recent years.

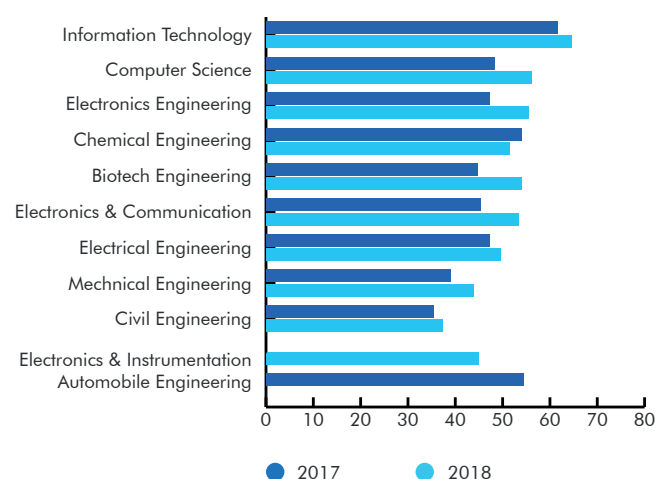
DOMAIN WISE EMPLOYABILITY



Employability of Engineering and MBA graduates have been in focus in recent years, considering both are industry specific courses and number of pass out students are also high in both the courses. Since last two years, we have also gone deeper to track engineering course wise employability and our results show that employability is on the rise this year over last year across engineering courses. Employability of engineering graduates is 52% in current year. 48% engineers remain unemployed from technical institutions across the country despite Indian Government launching various employment schemes in manufacturing sectors under "Make in India" mission. IT industry has led the economic transformation of country and altered the perception of India in global economy. India's cost competitiveness in providing IT services, which is approximately 3-4 times cheaper than the US, continues to be the mainstay of 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. The mobile wallet industry is expected to maintain its current pace of expansion and the transaction is expected to be valued at Rs 32 trillion (US\$ 480 billion) by 2022, growing at a rate of 126 per cent.

Information Technology (IT) and Computer Science courses have highest employability rate with 64.47% and 56.05% respectively and civil engineering is lowest amongst all 11 courses. Biotechnology and Electronics engineering reported 21% and 18% rise in employability over last year respectively and this is highest among all the courses. It is observed that engineering courses which are linked with industries or corporates through internship or training are scoring high on employability as compared to others. Civil engineering is one of the example where growth in the last few years has been remarkable with growth in real estate and infrastructure sectors, but absence of industry connect with students has impacted the employability of students. IT, Electronics and Communication, Computer Science are the domains where ample internship opportunities are available for students to gain industry perspective before joining industry.

ENGINEERING COURSE WISE EMPLOYABILITY

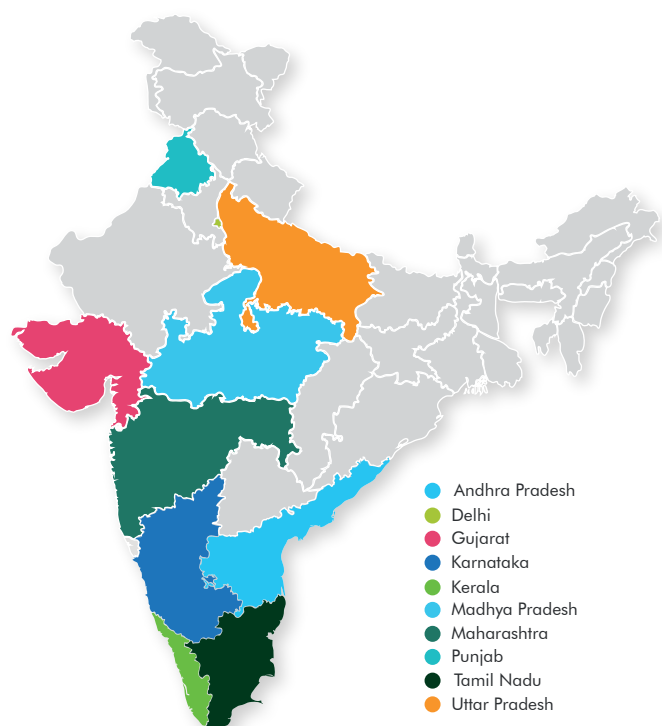


The government of India has ambitious plans to transform India into a competitive, high-growth, high productivity middle-income

country. Indian economy is now diversifying from being largely agro-based to a manufacturing and service-based economy. These ambitious plans to transform the Indian economy are highly dependent on availability of jobs and quality of workforce. This has resulted in an increased demand for skilled manpower over the past few years. More than 12 million youth between 15 and 29 years of age are expected to enter India's work force every year for the next two decades. The government's recent skill gap analysis concludes, that by 2022, approximately 109 million more skilled workers would be needed in 24 key sectors of the economy. This skill assessment clearly indicates the scarcity of skilled workforce in India who can take the jobs.

Skill initiatives taken by government alone will not suffice the requirement of skilled manpower. In order to address youth unemployment, two fundamentals need to be in place: skill development and job creation. Clearly, employers need to work with education providers so that students learn the skills they need to succeed at work, and governments also have a crucial role to play. But there is little clarity on which practices and interventions work and which can be scaled up. Most skills initiatives today serve a few hundred or perhaps a few thousand young people; we must be thinking in terms of millions to meet the future requirement.

TOP 10 STATES WITH HIGHEST EMPLOYABILITY



WEST was administered online without any restrictions to any geographic area and our respondents were spread across the country. Considering the spread of nationwide respondents, it is evident to present the employability state/UT wise. This year, list of top 10 states has a lot to say and Delhi being the new entrant in the list brings a lot of reshuffles. Kerala, Madhya Pradesh and Punjab have also got a place in this year's list. Andhra Pradesh has moved down this year and Haryana, West Bengal, Rajasthan and Telangana have skipped the list of top 10 states this year. This year's employability result presents that highest employable pool of a state is 72.71%, it has achieved a new milestone as compared to last year's highest employability of Maharashtra. Overall employability situation of all states has improved significantly from top to bottom in the list of top 10 states except one here and there. Further drill down to city level helps us find the employable pool of students at city level and helps corporates in taking better hiring decisions and focused approach for hiring.

CITIES WITH HIGH EMPLOYABILITY

S No	City
1	Bengaluru
2	Chennai
3	Indore
4	Lucknow
5	Mumbai
6	Nagpur
7	New Delhi
8	Pune
9	Tiruchirappalli

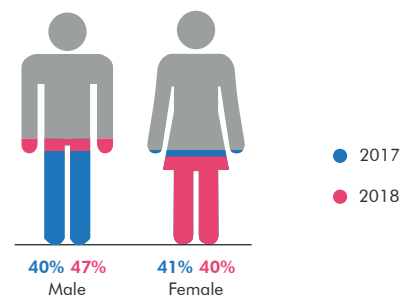
TOP CITIES WITH HIGH EMPLOYABILITY

New Delhi has maintained its status quo this year and has improved employability percentage. Delhi has highest employable pool of candidates i.e. almost 2/3rd are employable. Cities like Indore, Tiruchirappalli, Mumbai, and Chennai have less than half of student pool available for employment as per WEST. Pune has been able to maintain its place this year as well with a slight improvement in employability. Lucknow has improved a lot and has moved up this year. Form the overall employability analysis of cities listed; it is clear that employable talent pool remains in tier-II or tier-III as well even though there is zero participation from premier institutions such as IITs/IIMs or any other renowned institutes from these cities. Out of top 5 cities in the list 3 are tier-II cities.

To build future economies that are both dynamic and inclusive, we must ensure that everyone has equal opportunity. When women and girls are not integrated—as both beneficiary and shaper—the global community loses out on skills, ideas and perspectives that are critical for addressing global challenges and harnessing new opportunities. India has among the lowest female work force participation rates in the world, which has declined further in the last decade.

Our employability data reports decline in female employability this year as compared to last year. It has dropped from all time high of 41% last year to 40%. On the other hand, male employability score has grown significantly from 40% last year to 47% in the current year.

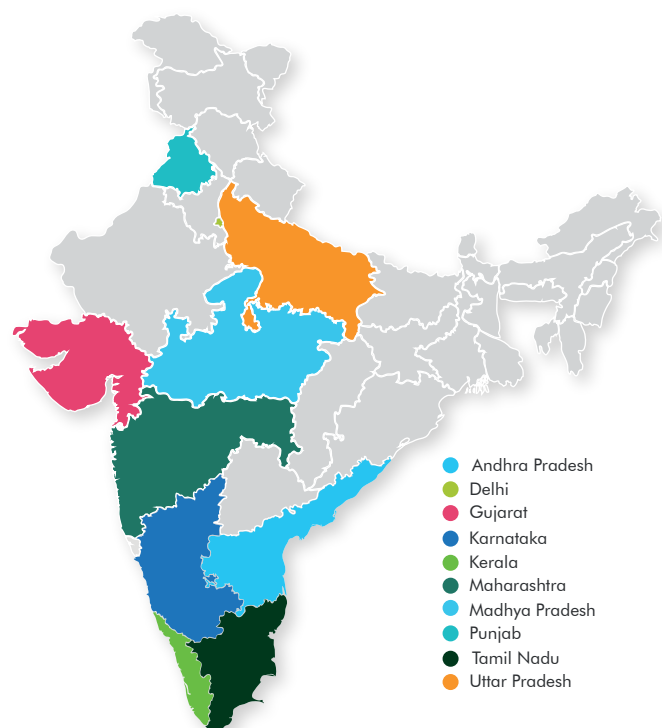
GENDER WISE EMPLOYABILITY



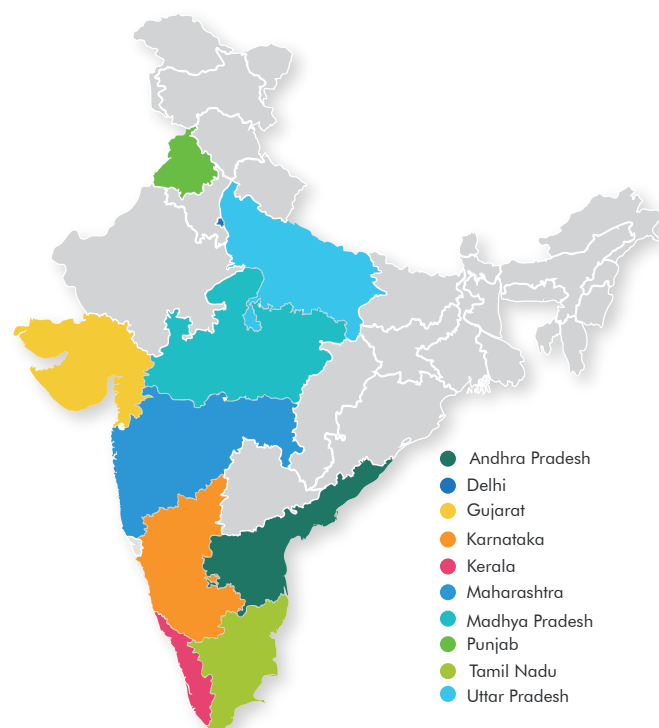
In addition to the above gender analysis, we have separated both the genders to find out the top states which have maximum male employable pool as well as top 10 states which have female employable pool.



MALE EMPLOYABILITY STATE WISE



FEMALE EMPLOYABILITY STATE WISE



SKILL AVAILABILITY STATE WISE

LEARNING AGILITY	ADAPTABILITY	INTERPERSONAL SKILLS	EMOTIONAL INTELLIGENCE	CONFLICT RESOLUTION	SELF DETERMINATION
Karnataka	Gujarat	Delhi	Kerala	Tamil Nadu	Kerala
Delhi	Maharashtra	Karnataka	Gujarat	Andhra Pradesh	Karnataka
Punjab	Kerala	Maharashtra	Karnataka	Karnataka	Maharashtra
Maharashtra	Karnataka	Madhya Pradesh	Andhra Pradesh	Gujarat	Madhya Pradesh
Uttar Pradesh	Delhi	Kerala	Madhya Pradesh	Madhya Pradesh	Delhi
Kerala	Madhya Pradesh	Uttar Pradesh	Maharashtra	Maharashtra	Uttar Pradesh
Madhya Pradesh	Uttar Pradesh	Gujarat	Tamil Nadu	Punjab	Gujarat
Andhra Pradesh	Punjab	Punjab	Uttar Pradesh	Uttar Pradesh	Punjab
Gujarat	Andhra Pradesh	Andhra Pradesh	Delhi	Kerala	Tamil Nadu
Tamil Nadu	Tamil Nadu	Tamil Nadu	Punjab	Delhi	Andhra Pradesh

All the states remain same across the skills parameters with just change in their position in the list for a skill. Further same set of states also appear in the list of top states on overall employability. Mix of skill availability as well as employability score can help employers make their hiring decision using both the parameters to target focused pool of candidates without much efforts.

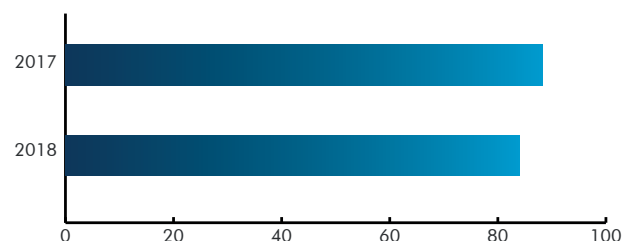
CANDIDATE PREFERENCES

Preference for Internship

Internship is an opportunity for both employer and candidate to assess each other before getting into an actual employee-employer agreement. Being an employer, corporates have an opportunity to test the skills, train the intern and assess before making him/her a full-time employment offer. On the other hand, candidates also have an opportunity to get sense of corporate environment, work culture, assessment of skills and gaps without worrying about the full-time employment. This is a win-win situation for both parties, but here the road block is that the number of internship opportunity seekers are high and opportunities are handful hence majority of students are left out from this learning opportunity. This could be one of the reasons of lower employability at graduate and post graduate level.

Our survey results show that about 84% of students are ready to take up internship opportunity. In contrary to this, only 37% organizations offer opportunities to students to hone their skills before they come on board as permanent employees. Organizations need to come forward and offer internship opportunities to students to prepare them for industry and reduce unemployment figures.

STUDENT INTERESTED IN INTERNSHIP



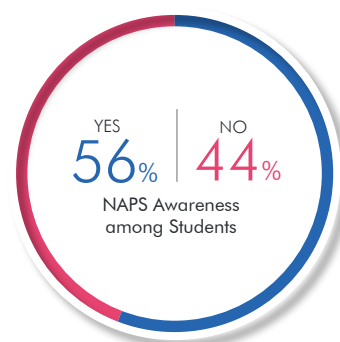
Further analysis of internship preference by education reveals that highest number of students who prefer or opt for internship are from B Tech/BE and least are from Polytechnic. Based on education wise internship preference, data inferences can be drawn that students who prefer and undergo internship opportunities are high on employability. Internship is not the only factor that determines employability, but it is a critical factor. Considering internship an important aspect in employability, AICTE has also mandated three internships during under graduate studies. This has come into effect from 2017/2018 academic year.

PREFERENCE FOR INTERNSHIP EDUCATION WISE

Education	% of students
BTech/B E	87.63%
MCA	87.62%
MSc	84.33%
BCA	82.42%
MBA	81.11%
BPharma	80.66%
BCom	80.65%
BSc	80.46%
Polytechnic	74.07%

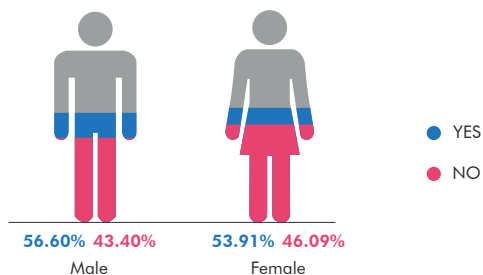
Apprenticeship Awareness among Students and Their Expectations Form Apprenticeship Program

The other side of National Apprenticeship Promotion Scheme (NAPS) are the students who are at the centre of the scheme and real beneficiaries. We surveyed them to assess their awareness level and expectations form apprenticeship program. Our findings reveal that only 56% students are aware of NAPS. Current level of awareness needs to be improved to translate the benefit of this scheme to real beneficiaries to make it a success. Academicians has a bigger role to play here in making students aware of all such opportunities opened by government.

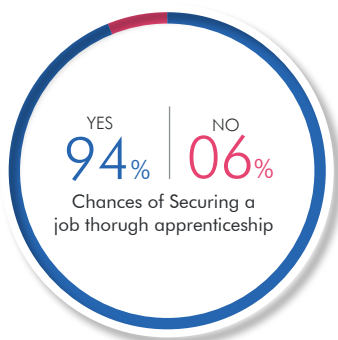


Further study inputs suggest that awareness to male students is slightly higher than female students.

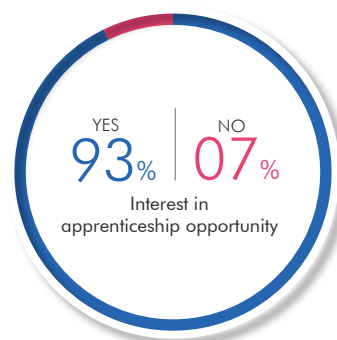
NAPS AWARENESS AMONG STUDENTS



Apprenticeship can become an enabler for job seekers to get employment in industry. Organizations prefer freshers or fresh pass outs who have under gone an internship or apprenticeship considering their hands-on experience and better skills as compared to a student who have not gone for internship. Students also believe that apprenticeship can help them get their dream job and our survey responses indicate the same. Almost 95% students agree to the fact that apprenticeship increases their chance of getting a job.

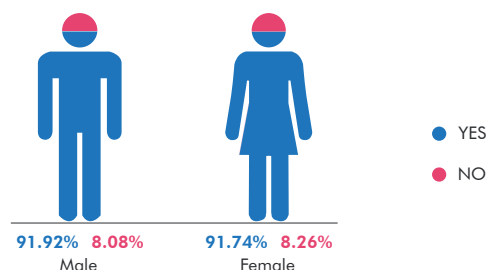


When asked about student's interest in apprenticeship if provided, more than 90% students are ready to grab the opportunity. Only 7% students are not interested in apprenticeship opportunity. The above facts on apprenticeship indicates that student community is proactively looking for apprenticeship opportunity provided industry offer them.



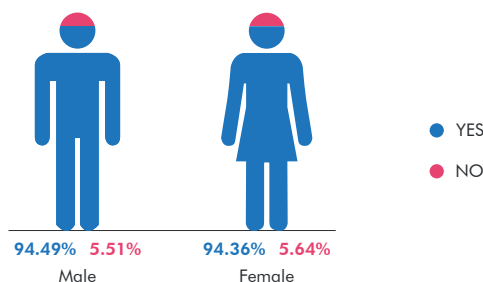
Further data break-up on gender parameter reveals that interest level of both male & female is almost equal. About 92% students from both the categories are interested in apprenticeship opportunities.

GENDER WISE INTEREST IN APPRENTICESHIP OPPORTUNITY



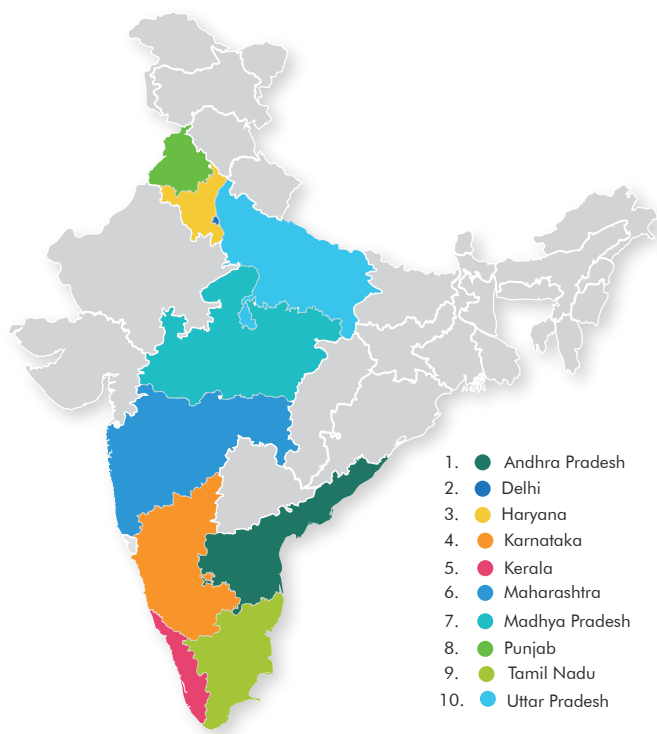
Further data on male & female survey respondent reveals that their opinion on apprenticeship helping them getting a job remains almost same. About 95% male and female students agree to the fact that apprenticeship increases their chance of securing a job.

GENDER WISE CHANCES OF SECURING A JOB THORUGH APPRENTICESHIP



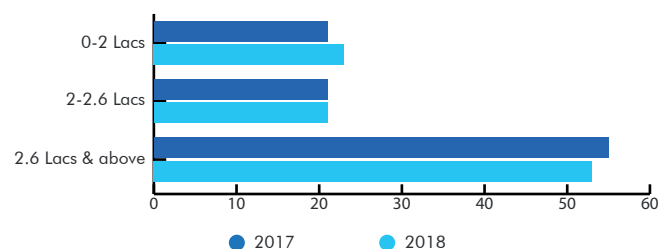
India Skills Report gives an insight of preferred states for work location. Maharashtra is the first preference among top 10 states and Haryana is the least preferred state. On the other hand, Maharashtra is also the most preferred hiring destination. This match helps employer and student meet at one place to meet their respective goals. Tamil Nadu and Uttar Pradesh falls in first 5 slots in both preferred work location as well hiring destination list. Punjab, Madhya Pradesh and Delhi are the new entrants this year in the list of preferred states.

PREFERRED STATES FOR WORK



Change in preferred salary range is not significant in year 2017 as compared to year 2016. More than half of the total students prefer highest range of salary i.e. 2.6 lacs and above. Preferred salary range data can be helpful for employers in making their offer decision.

PREFERRED SALARY RANGES



TOP 5 STATES WITH PREFERRED SALARY RANGES

Top 5 states with preferred salary range 0 to 2 Lakh	Top 5 states with preferred salary range 2 to 2.6 Lakh	Top 5 states with preferred salary range 2.6 Lakh and above
Tamil Nadu	Tamil Nadu	Maharashtra
Maharashtra	Maharashtra	Uttar Pradesh
Andhra Pradesh	Andhra Pradesh	Tamil Nadu
Punjab	Uttar Pradesh	Andhra Pradesh
Uttar Pradesh	Punjab	Madhya Pradesh

Mapping of salary ranges to states gives us insights about preferred salary ranges state wise. We have mapped 5 states across salary ranges. Students in Maharashtra prefer highest salary range, and this is evident that Maharashtra offers maximum number of opportunities as revealed in the Hiring Intent section. Uttar Pradesh, Tamil Nadu and Andhra Pradesh follow the league here and it is similar in Hiring Intent section also.





WORKFORCE GENDER DIVERSITY: IS IT THE RIGHT TIME TO BREAK GENDER GLASS CEILING?

This question is to everyone who is reading this report and most certainly to leaders of organizations. Immediate answer is not expected from you, but this thought should remain with you till the time you find an answer to this. We thought not to start diversity section with a question but after analyzing recent diversity trends, it pushed us to pose a question to each reader and leaders of the organization. Finding answer to this question is not as difficult as the question itself and our aim here is not to find an answer but to ask this question again and again till gender diversity ratio reaches parallel i.e. 1:1.

A little below half of the world's population, about 49.6% is composed of women. Yet their contribution to economic activity and growth remains below its full potential. Studies show that gender diversity at work is important and organizations with higher gender diversity are performing better as compared to others. Globally, countries are progressing towards improving gender diversity, but India is lagging. The Global gender gap report from World Economic Forum (WEF) suggests that India has slipped to 108th place i.e. 21 places down as compared to last year due to less women participation in economy and low wages.

Workplace gender diversity and equality have become an agenda for organizations across the globe. Organizations have taken this as top priority points; some have shown improvements on the same. Some organizations are still grappling with this agenda and some are confused between gender diversity and gender equality and their order of priority.

Is Gender Diversity Really A Matter Of Concern For Organizations?

This question is especially relevant for India where women's participation in the workforce is declining at an alarming rate. Over the last decade, India's female workforce participation rate, (which stood at 29% in 2016), fell by 6 percent. By 2017, only one in four Indian women were working or looking for work. This is hard to digest but that's the reality of Indian corporates. Government is making efforts to push this agenda and has taken several actions such as mandatory appointment of one-woman board member, increase in maternity leave from 12 weeks to 26 weeks, special funding scheme for women entrepreneur etc. along with several others.

Despite government's attempt to improve gender diversity; the numbers are falling because they do not adequately engage the private sector in correcting this trend. After all, organizations significantly shape the challenges and opportunities that female workers face in their day-to-day jobs and in interactions with their male colleagues.

Today's concern is gender diversity as organizations are finding it difficult to improve it even if they improve gender equality. Gender diversity and equality go hand in hand and if focused on equality, it can help improve diversity. Gender gap does not start at employment level, but even before that i.e. at education level. Gender diversity concern becomes bigger when we look at women on the data on women education. While universal enrolment has been achieved at the elementary level (class I-VIII), it consistently falls with successive levels of education. Gross enrolment ratio (GER) is the student enrolment as a proportion of the corresponding eligible age group in a given year. GER in class I-V reduced from 114% in 2008-09 to 100% in 2014-15. The above-100% enrolment rate in 2008-09 indicates that students enrolled in class I-V included those younger than six or older than 10 years. In 2014-15, enrolment in class I-V was about 100%, which signals a more age-appropriate class composition.

Promoting gender equality and women empowerment is a key to achieving sustainable and equitable development as well as Gender diversity. Gender equality is a matter of fundamental human rights. In addition, gender equality and women empowerment are crucial drivers of development. Evidence vigorously suggests that gender equality and women empowerment are vital for improving socio-political conditions and fostering economic development. Corporates need to focus on both gender equality and gender diversity for achieving gender diversity target. Price Waterhouse Coopers (PWC), one of world's leading professional services organization took a decision to work on gender diversity and last year's data shows its remarkable success. Some of the results are:

- Globally, female partner admissions have increased from 23% in 2013 to 27% this year.
- Female representation in the partnership has gradually increased from 17% in 2013 to 19% this year.
- This year, 50% of campus hires and 45% of experienced level hires globally were female.

This is certainly a better position to be in for organization if not ideal at least.

Gender Wise Diversity Trends

Indian government and corporates are trying hard to get women such as increase in maternity leave, flexi work hours for women, working women hostels, making crèche facility mandatory for employers employing 50 employees. Despite these initiatives, our study shows that working women population has significantly decreased over the last year. A lot of sectors such as Retail, Banking and Financial services etc. have shown improvement in their sector specific diversity ratio while others have pulled the overall ratio down.

Gender	2016	2017	2018
Male	68%	71%	77%
Female	32%	29%	23%

Disclaimer: Female Ratio is coming down due to increased participation of PSUs

Our study reveals that women the number of women workers in Indian workforce is dipping continuously over the last three-years as depicted by the gender diversity ratio. **Women workforce numbers have come down from 32% in 2016 to 23% in 2018. Employability of female students has also dropped this year as compared to last year. In 2017, female employability was 41% as compared to current year's 40%.** This year PSU participation was comparatively high and due to less female workforce in PSU, gender diversity ratio was pulled down. If we exclude PSU gender diversity numbers from overall ration it bounces back close to last year's number. Still if we consider 27% gender diversity ratio for this year and keep aside all factors that may have impacted; this drop of 5% in the last two years is a big challenge for Indian corporates. This raises concern on all the efforts and initiatives taken by Government and corporates to bring more women on board as these don't seem to make any difference in women worker's life or helping new women employees to join the corporates. All these factors put together, increases the burden on corporates to improve gender diversity and employers need to think out of the box to turnaround the current diversity situation.

Studies have shown that nearly 50 percent of Indian women drop out of the corporate employment pipeline between junior and mid-levels, compared to 29 percent across Asia. Women employment at senior management role is harrowing as India ranks second lowest in terms of women employees at senior management levels.

The agony of male-female difference does not stop here, gender equality is also one angle which means female workforce is not treated equal to their male counterparts. A recent internal memo by an employee of an internet giant is the latest addition in this row and has fueled the overall situation on gender equality. Corporates claim that they are continuously improving the situation, but internal whistleblowers are giving them tough challenge and pushing the organizations back to think again on the initiatives taken. India fell 21 places on the World Economic Forum's Global Gender Gap index to 108 – far below the global average and much behind its neighbours China and Bangladesh. India lost out mainly because of lower participation of women in the economy and low wages. In 2016, India's rank was 87. In 2006, when the World Economic Forum started measuring gender gaps across the world, India's rank was 10 notches higher than what it is in 2017.

Although current NDA led government is pushing women agenda at every front, ranging from education, healthcare, skilling and employment but the same is not reflected in Public sector organizations' diversity numbers. One reason for skewed diversity could be that hiring is controlled and restricted by equal opportunity policy along with reservation restrictions. Overall industry gender diversity average is dragged down due to low ratio of women in public organizations. If we exclude public sector organizations, ratio of average women participation leaps to 27% from 23%. On contrary to this, public-sector diversity remains stagnant throughout years due to minimal hiring activities and thus has a little impact on the overall change in diversity ratio year on year.

DIVERSITY AT PLACES: PUBLIC VS. PRIVATE

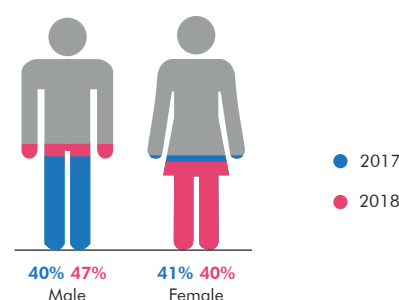
Company Type	Male	Female
Public Companies	92%	08%
Private Companies	76%	24%
Multinational Companies	76%	24%
Others	68%	32%

GENDER EMPLOYABILITY: EMPLOYABLE MALE TO FEMALE

To build future economies that are both dynamic and inclusive, we must ensure that everyone has equal opportunity. When women and girls are not integrated—as both beneficiary and shaper—the global community loses out on skills, ideas and perspectives that are critical for addressing global challenges and harnessing new opportunities. India has among the lowest female work force participation rate in the world, declining further in the last decade. 48% of the Indian population is female but their participation in workforce is merely 28.5%. Low participation of female is due to various social stigmas along with higher drop-out rate in education. 92.9% females enroll for primary education and 62.2% of them remain till secondary education; it further drops to 26.7% as in tertiary education (The Global Gender Gap Report 2017 by World Economic Forum).

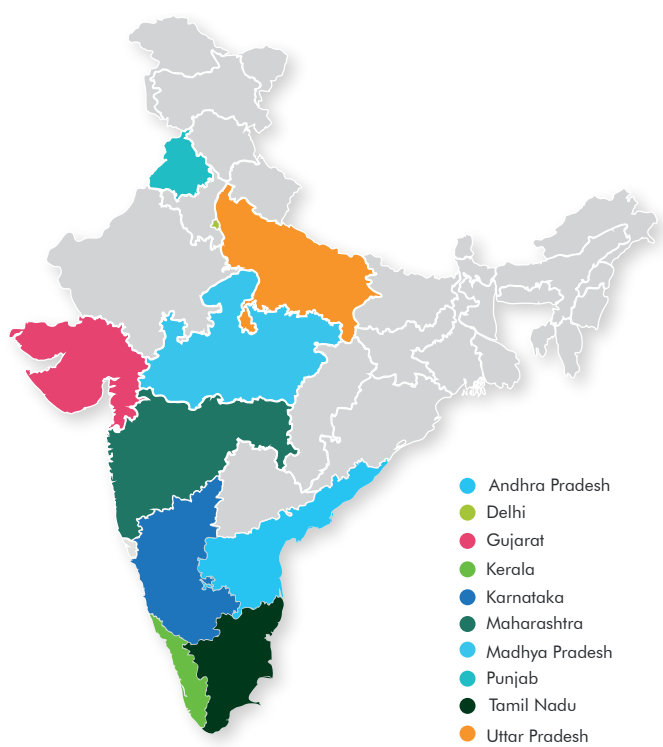
Our survey report shows a decline in female employability this year as compared to last year. It has dropped from all time high of 41% in 2017 to 40% in 2018. On the other hand, male employability score has increased significantly from 40% in 2017 to 47% in 2018. In addition to the above gender analysis, we have separated both genders to find out the states which have maximum male employable pool as well as states which have maximum female employable pool. States for both male & female are same for this

GENDER WISE EMPLOYABILITY

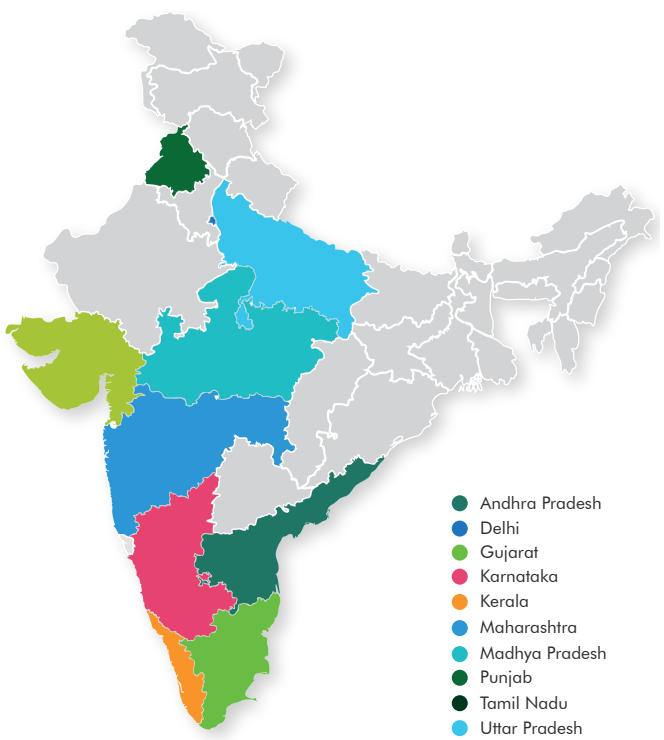


year. Karnataka leads the list of states for female employability with 29% employable females. Although the employability of male and female varies much at the top of the list of states but comes closer as we go down in the list. Delhi takes the lead in male employability with 52.70% employable male students. Here the notable difference is between Delhi and Uttar Pradesh state in male employability where it drops significantly.

MALE EMPLOYABILITY STATE WISE



FEMALE EMPLOYABILITY STATE WISE



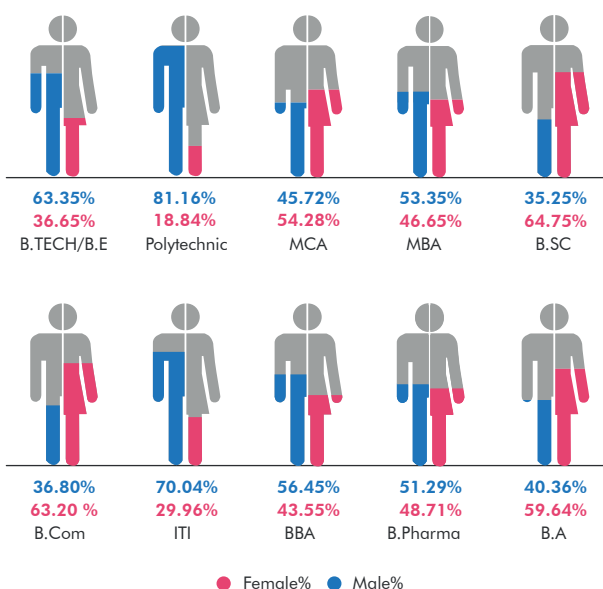
A credible gender inclusive hiring strategy peaks if employability across geography is not taken into consideration while crafting it. It is evident to know the how employability varies across cities for each gender. It in turn saves a lot of time, resource and helps in making an informed decision for hiring the desired category of talent. According to the WEST survey analysis, the top 10 cities to hire female employees for a gender diverse team are detailed below.



FEMALE EMPLOYABILITY CITY WISE

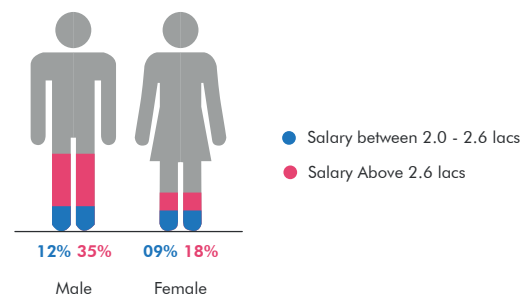
City
Bengaluru
Bhopal
Ghaziabad
Nagpur
New Delhi
Noida
Pune
Thane
Vijayawada

EDUCATION DOMAIN WISE EMPLOYABILITY



Highest employability is recorded at about 65% in B.Sc course for female students. Female employability in post-graduation courses (MBA & MC) is higher as compared to graduation courses but this does not reflect in the hiring intent of organizations. Pharma domain has almost equal employability for both the genders (49:51, Female to Male) but when this is translated into employment the gap widens (21:79). Female employability is lowest in polytechnic domain. ITI and Engineering is below 40% and the same is reflected in employment diversity ratio of engineering sector including automobile.

PREFERRED SALARY RANGES MALE VS FEMALE



Getting to Parity

Despite high economic growth and positive employment outlook, India's progress towards gender diversity and parity has been disappointing. In the past decade, while Indian GDP has grown by around 6%, there has been a sharp decline in female workforce participation from 34% to 23%.

For India to maintain its position as a growth leader on global landscape, more intensive efforts at public and private level are needed to bring women to parity with men. Education or skilling alone will not suffice till concrete actions are not taken for women employment. Workplace & work life factors play a critical role to persuade women to join corporates.

Companies tout everything from diversity targets to enhanced maternity leave to flexi work culture on the name of gender diversity. Experts suggest that top down approach is necessary to inculcate the gender diversity thought in the DNA of organization. And yet evidences suggest that the top-down approach is necessary – but not sufficient to build a path to a truly gender-diverse workplace.

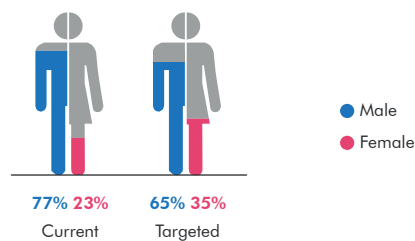
Evidence reveals that women are not treated equally at their workplace. Even at the most highly rated companies, women often report that experiences can vary greatly depending upon the department/ function or sometimes on individual manager to manager. In other words, women facing gender discrimination at work may not be driven by corporate mandates or as per CEO's proclamations, but in day-to-day interactions through the chain of command.

In 2018, we moved a step ahead on gender diversity and tried gauging targeted diversity situation and received promising numbers from our survey respondents. We asked survey respondents on the diversity ratio that they target to attain in next year and 34% of them responded to this question with their diversity targets. Considering the current situation of employable women and current diversity ratio, the targeted diversity numbers seems quite promising. Responses of 34% organizations reflect that they are conscious about gender diversity irrespective of their industry domain and current challenges. Gender diversity ratio for current year is 77:23 (Male to Female) and organizations are targeting to achieve 65:35 (Male to Female) next year. Considering the current situation of the gender gap, the targeted diversity is a real challenge for organizations but certainly not



impossible. Organizations need to think at the grass root level to bring it back on track as it was two years before and leadership commitment is crucial to attain this milestone.

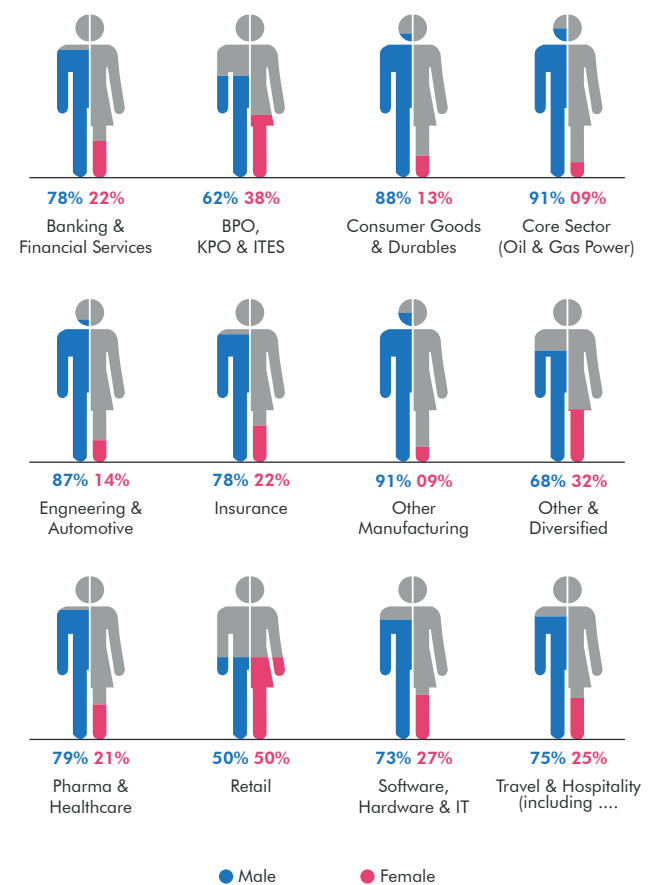
GENDER DIVERSITY: CURRENT VS TARGETED



Industry Wise Gender Disparity

India Hiring Intent Survey data helps us understand gender gaps at individual industry level. Through India Hiring Intent Survey, we have covered 15 industry domains to understand industry trends on various parameters including diversity data. Survey data reveals that Retail, BPO and ITCS are leading the ratio as compared to Manufacturing and Core sectors which are against the tide. Retail industry has highest female workforce with 50% female participation across all 15 verticals. Retail, Travel and Hospitality, BPO and ITES and other diversified sectors have gender diversity ratio above industry average of 23% i.e. only 6 of these are above the industry average of total 15 industries. Manufacturing sector along with core sector need to push women employability as currently it is only at 9%. Banking and Financial Services, Consumer Goods and Durables, Engineering and Automotive, Insurance, Pharma and Healthcare are below the overall gender diversity average.

GENDER DIVERSITY INDUSTRY WISE

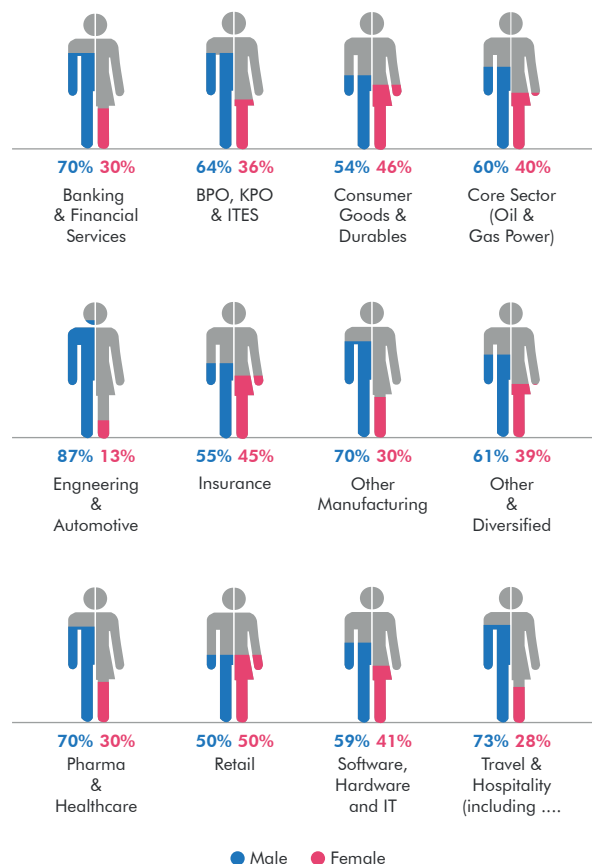


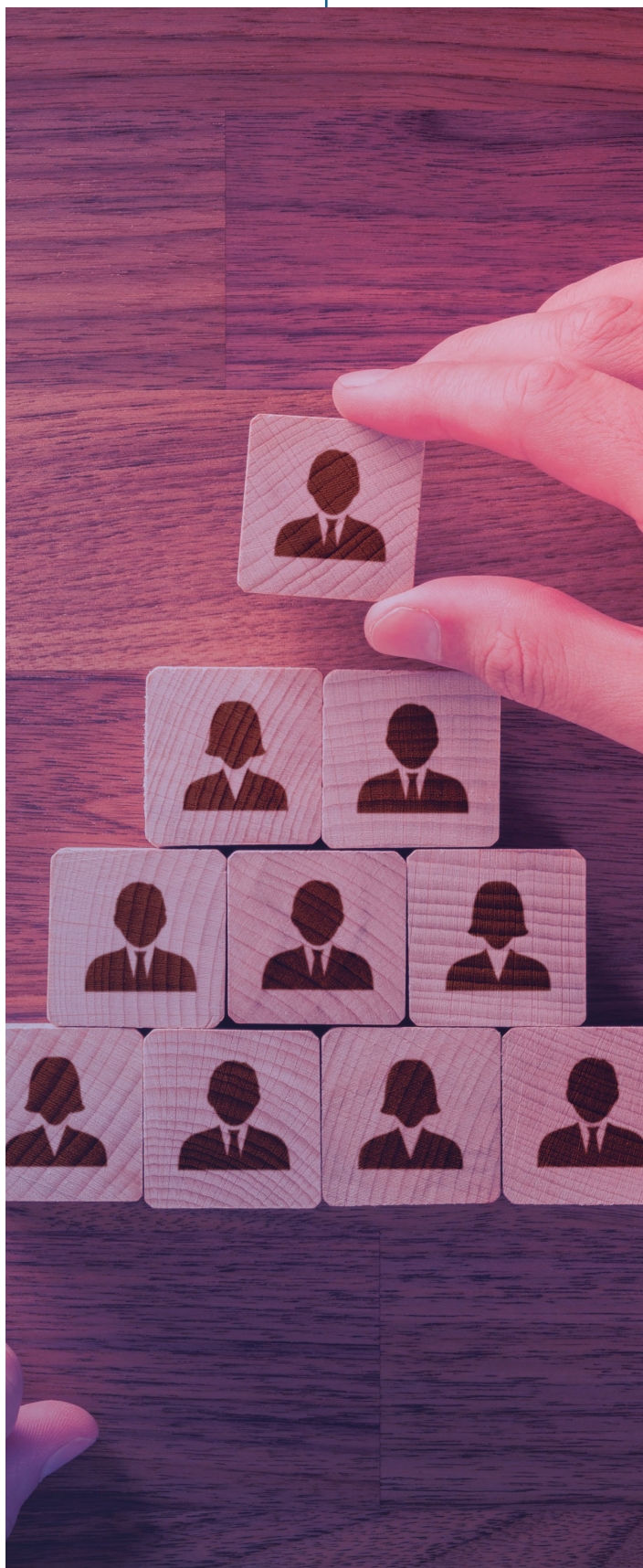
India Hiring Intent Survey respondents have also taken gender diversity target for next year. 34% respondents across industries responded to our survey question positively which indicates that organizations are cognizant about gender diversity. In the projected diversity numbers Retail and Technology are leading the race with an ideal 50:50 diversity ratio. Engineering and Automotive sector is still finding it difficult to sail through beyond 87:13 ratio which is almost equal to the current year. Average diversity ratio comes to 64:36 and out of 15 industry segments, 8 are above the average. Travel and hospitality, along with Banking and Financial services have shown little improvement in the targeted diversity ratio in comparison to year 2018.

Workplace gender equality can only be achieved when employees are able to access and enjoy the same rewards and opportunities, equal pay for work, all occupations and industries and roles are accessible, regardless of gender. Unfortunately, for most of us gender diversity is brought into attention only when it makes headlines on International Women's Day on March 8 every year.

Travel and Hospitality along with Banking and Financial sector can do better on gender diversity, considering their work environment is conducive. If these sectors realign their hiring targets as well as overall gender diversity strategy and work on narrowing pay gaps, improve work-life balance and other equality factors they can achieve their gender diversity targets. Sectors where it is improbable to have a set target to hire women due to non-conducive working environment, the gender diversity quotient of current workforce in the organization as well as in their hiring intent is downright discouraging. However, with the Indian Government mandating policies, the paradigm is slowly shifting. Organization led initiatives are also fueling gender diversity agenda in corporates.

PROJECTED GENDER DIVERSITY TARGETS





INDIA HIRING INTENT

Year 2017 will be remembered as a year of reforms in the post-independent era, especially for the Talent market of India. While the Indian Economy was just coping up with the impact of demonetization during the initial months of the year, a new reform came in as The Goods and Services Tax (GST). Both the initiatives though aimed at strengthening the economy, had few short-term effects, and both the job sentiment as well as the appetite of organisations to hire more were hit. For Instance, in anticipation of the GST implementation in July 2017, enterprises cut their inventories short, causing a fall in the manufacturing activity. Many businesses struggled to adjust with digitization, which came in as an undeniable need. Overall, the employment outlook for the period just took a U-turn from being positive to cautious and employers found it logical to wait and watch. The good news is that things have started looking up and the Industrial output has strongly rebounded to a nine-month high of 4.3% in August after reduced output in June and July owing to uncertainties regarding implementation of the GST. This positivity is reflected in the hiring intent 2018.

As per India Hiring Intent, a primary research was conducted on 120+ employers across 12 industries and the outcome revealed that 49% employers are positive on hiring. Banking, Financial Services, BPO, KPO, ITES, Insurance and Retail sectors, project a strong rebound in hiring numbers with a growth of 10-15% as compared to the year 2017, and leading the overall hiring sentiment to a positive end. Consumer Goods and Durables, Core Sector (Oil & Gas, Power, Steel, and Minerals etc.), Software, Hardware and IT sector will witness a moderate growth in hiring numbers i.e. about 0-5% growth as compared to 2017.

The detailed survey in which talent leaders of different organisations participate, covers various interesting facets, like the kind of roles/skills organisations are looking for, where do they plan to hire, what are the channels they use to reach candidates this, provides a comprehensive view of the talent demand side. This year for the first time we also tried to capture the employers' view on future of work and the kind of skills they foresee getting hired in coming years. All these aspects of talent landscape are detailed in the following sections of this report and are available for your inferences.

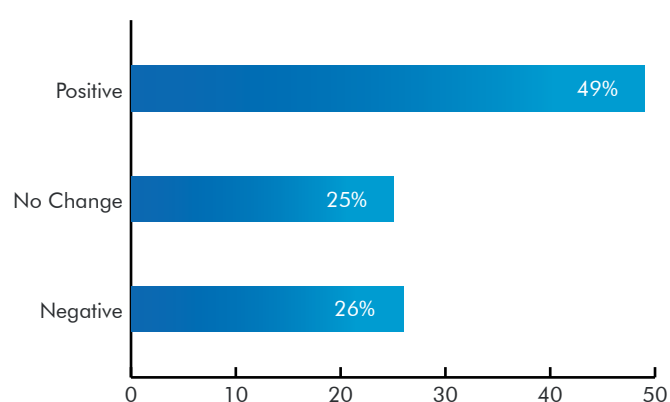
INDIA GETS BACK ON HIRING BANDWAGON

Surpassing the initial hiccups of economic growth, the Indian economy seems to be on the road to recovery. As per United Nations' report "World Economic Situation Prospects (WESP 2018)" India is expected to grow at 7.2 per cent in 2018 and 7.4 per cent in 2019. This growth rate still falls short of government's expectations of 8 per cent but it is a positive news after months of sluggish environment. Government's push to almost every sector and impact of initiatives like Make in India, Housing for all, Digital India, Stand Up India along with many others have helped the economy respond faster to interruptions. Self-employment was the biggest concern of India with finance as a major road block. Initiatives like Mudra and Start-up India have created an environment of Self-employment among skilled workforce where

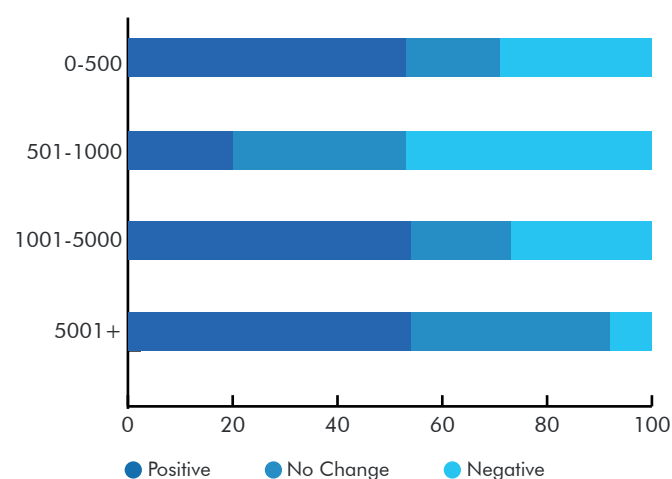
they can seek funding under the Mudra scheme. As a result, 1.17 crores direct and 0.52 crores indirect jobs have been created in first two years (a SKOCH Group report reveals). According to survey responses, about 50% of respondents have shown positive hiring intent. Considering the sensitivity of hiring and impact of macro and micro economic factors this is very encouraging and strengthens the belief that businesses are on the road to recovery.

While half of the surveyed employers expressed a positive hiring intent, as they expected to hire more people as compared to the year 2017, 25% respondents were neutral (i.e. that will hire same numbers this year) and rest 26% showed a negative hiring intent (which means a decrease in annual hiring numbers compared to the year 2017).

HIRING INTENT: OVERALL



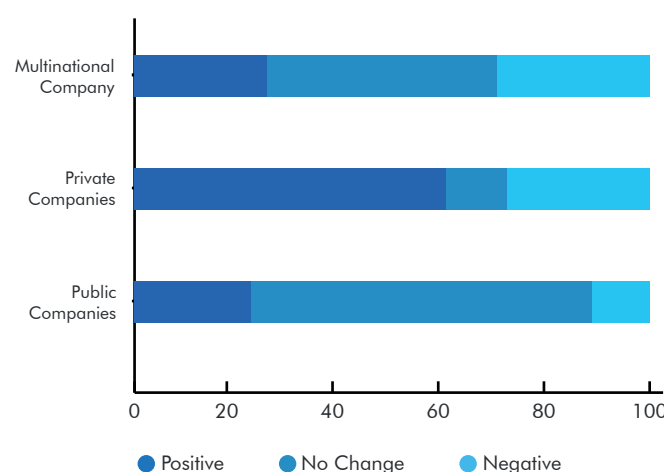
HIRING INTENT: BY COMPANY SIZE



Hiring intent shared by companies segregated on their size, is a clear indicator of confidence of organizations in economy and economic factors. Small (<500 employee base), Large (1000-5000 employee base) and conglomerates (5001+ employee base) show

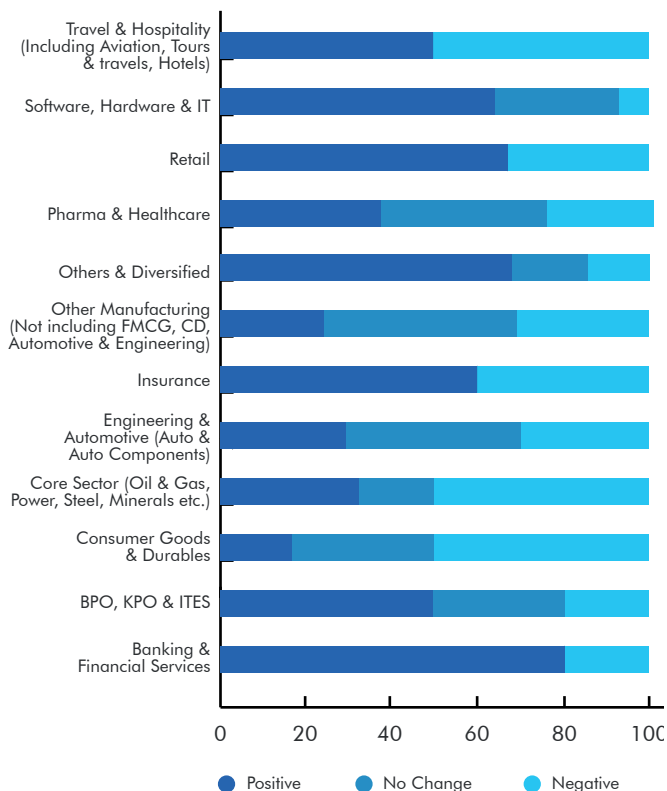
positive hiring intent. Most of the companies in these segments are planning to hire more manpower next year as compared to this year. This increase in hiring is well supported by availability of talent as overall employability is also going up and thus, employers will be able to find the right fit for their organization. Medium size organizations (500-1000 employee base) are less confident on hiring, although most of the organizations are neutral about their hiring plans. There could be many reasons for this but as per industry experts, mid-size organizations are under pressure after GST and demonetization and will need time to adapt to changes. Another interesting insight we have come across is that small organizations are looking to hire more experienced candidates while large and conglomerate category organizations are looking to hire junior to middle level positions. Organizations are looking to hire junior to middle level positions.

HIRING INTENT: BY COMPANY TYPE



Hiring intent presented by company type varies significantly across categories. Private companies comprising of 67% of the survey population are positive for hiring. This indicates that more than 50% respondents are positive about hiring people as compared to 2017. The sectors which are most positive about hiring are private company groups, Software, Hardware and IT, Banking and Financial services, Engineering and Auto sectors. Multinational companies (MNCs) are in wait and watch mode as they are neither completely positive nor negative about hiring. About 70% of them are either positive or neutral on future hiring. Further assessment of the data reveals that similar trends are generally shown by MNCs whenever the economy is in recovery mode, but their quick decision-making ability turns the situation around completely.

HIRING INTENT: BY SECTOR

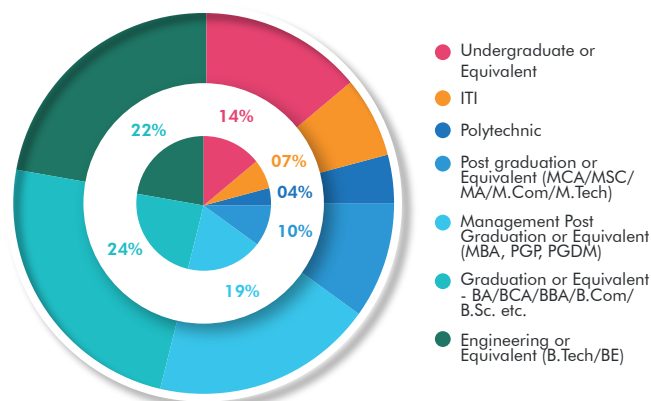


Out of the total 12 sectors, 7 are such, where about 50% of respondents have positive intent on hiring. These include: Banking and Financial services, BPO, Insurance, others and diversified, Retail, Travel and Hospitality and IT.

Positive hiring trend is depicted by majority of companies dealing in Software, Hardware and IT sector and also by Banking and Financial services companies including NBFCs.

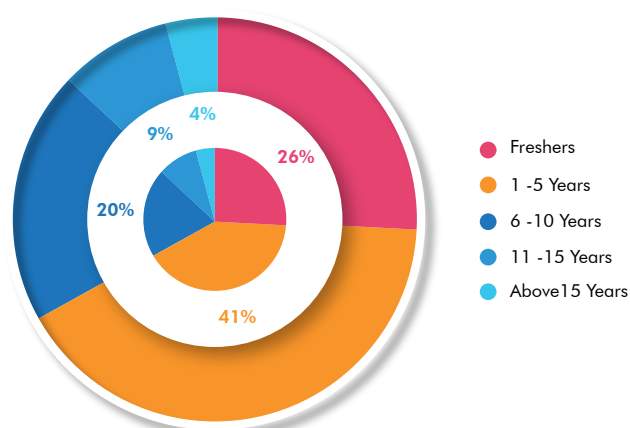
Overall hiring trend suggests that Graduation courses and engineering graduation or equivalent courses are high in demand as both put together constitutes 45% of total hiring requirements. Further data drill down suggests that Insurance, Manufacturing, Pharma and Healthcare sectors have high demand of graduates and engineers are demanded by IT, Core sectors, Engineering and Auto sectors. Management post graduate contributes to 19% of total requirements and Consumer Goods; Manufacturing & Others and Diversified sector has high demand of MBA pass outs. MBA is followed by undergraduate or equivalent which makes 14% of total requirement. BPOs and manufacturing sectors have high demand of this talent pool. ITI and Polytechnic are preferred by Manufacturing, Engineering and Automotive (Auto and auto components) as compared to others. Software, Hardware & IT, Others and Diversified are in favour of post graduate pool of students and MCA is preferred by IT sector.

HIRING INTENT BY EDUCATION DOMAIN



Every organization prefers experienced and trained pool of candidates over fresh pass out or inexperienced due to various reasons such as training efforts (time & cost), productivity and opportunity cost etc. Our survey response reflects this preference as well where candidates with 1 to 5 years' experience are given more preference over freshers. Freshers are preferred in BPO, KPO, ITES, Manufacturing and Automotive where numbers of floor level roles are very high. Software, Hardware & IT prefers middle level employees. Public sector organizations prefer freshers as compared to MNCs and Private sector organizations. 1to5 years' experience band employees are in demand for MNCs as compared to others. Demand of middle to senior level is least in Public sector organizations as they prefer internal talent over lateral hiring for these levels. As we move up in the experience hierarchy the requirement reduces and same is reflected here in our responses. Similar trend was observed last year as well.

HIRING INTENT BY WORK EXPERIENCE



GETTING READY FOR THE FUTURE OF WORK!

Today digital technologies such as 3D printing, sensors, cognitive technologies, robotics, AI and the "Internet of Things (IOT)" are

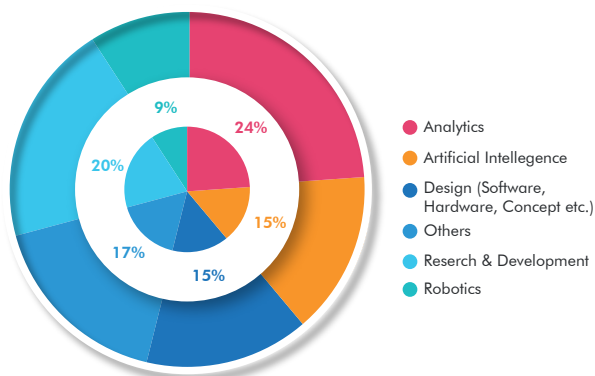
changing the way companies design, develop, and deliver almost every product and service. In parallel, digital disruption and social networking have changed the way organizations hire, manage, and support employees. The pace of change is accelerating. Competition for the right talent is fierce. And 'work' no longer means the same as it did a decade ago; many of the roles, skills and job titles that existed earlier have perished and most of the jobs of tomorrow are unknown to us today. As we reach this dynamic world of work, businesses need to focus on the capabilities and skills they will need, now and over the next five to ten years. As driverless cars, virtual reality, smart homes etc. which were just concepts a decade ago, have become today's reality.

When we approached survey respondents, and asked them what key skill sets do they plan to hire in future; below are the key areas that came up:

- Data Analytics
- Research & Development
- Artificial intelligence
- Concept design (Hardware & Software)
- Robotics
- Others (Cognitive technologies, VR, Augmented Intelligence)

Data analytics and R&D roles are already in existence, but their scope will increase in the next five years. Techno-advancements and AI, Concept design and Robotics will emerge as new areas and extensive jobs will be created. Cognitive technologies, VR and Augmented Intelligence etc. are taking leeway in our day-to-day life and will continue to grow in near future. Organizations need to sense these future trends and act swiftly to remain in competition.

FUTURE JOB AREAS



AUTOMATION & ITS IMPACT ON JOBS

In recent years, there have been debates over automation and digitization resulting into a jobless future. These arguments have been supported by industry reports, researches and past job data. Today robots flip burgers and work warehouses. Artificial intelligence handles insurance claims and basic bookkeeping, manages

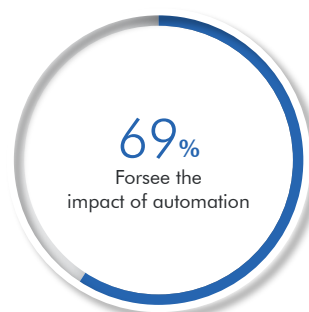
investment portfolios, does legal research, and performs basic HR tasks. Human labour doesn't stand a chance against them. After the "automation apocalypse," only those with spectacular abilities and the owners of the robots are expected to thrive.

We are going through a fundamental revolution in the way we work. Automation, AI and robots are replacing human tasks and jobs, changing the skill set that organisations are looking for in their people. These momentous changes raise huge organisational, talent and HR challenges, at a time when business leaders are already grappling with unprecedented risks, disruption, political and societal turmoil. A 2016 report by The World Economic Forum (WEF) titled, 'The Future of Jobs' estimates that 5 million jobs will be lost to automation by 2020 and that the number will keep growing in the following years. Jobs that once seemed like "safe bets"—office workers and administrative personnel, manufacturing, and even law—will be hit hardest, estimates the report. In order to address youth unemployment, two fundamentals need to be in place: skill development and job creation. Our report focuses on both fundamentals, with special attention to the impact of automation on jobs as well as new skills that are emerging and shaping the future of workplace.

Automation technologies including artificial intelligence and robotics will generate significant benefits for users, businesses, and economies, lifting productivity and economic growth. The extent to which these technologies displace workers will depend on the pace of their development and adoption, economic growth, and growth in demand for work. Even as it causes decline in some occupations, automation will change many more. 60% of occupations have at least 30% of constituent work activities that could be automated. It will also create new occupations that do not exist today, much as technologies of the past have done.

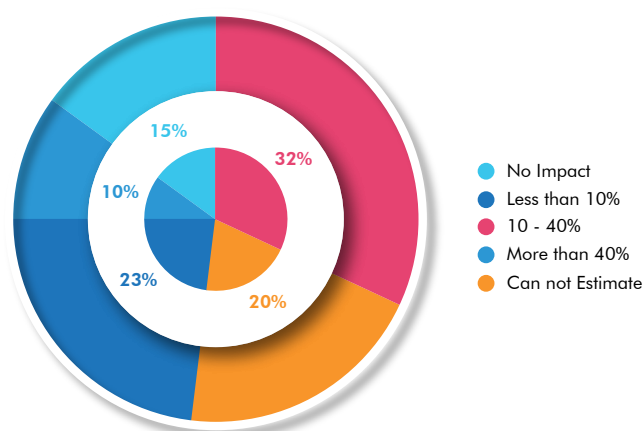
From the responses of India Hiring Intent Survey that we have received, acceptance of the impact of automation is clear amongst employers across industries. From organisations which deliver services across varied domains like Banking and Financial Services, Insurance, FMCG, and Manufacturing amongst others, it is the common thread that has weaved its story in to the Indian Industry.

Considering the impact of automation on jobs, we asked survey respondents to help us understand their industry trends and impact of automation on their respective industries. 69% of the respondents agreed that automation is affecting their industries while remaining 31% declined any impact.



We went ahead and asked one more question to the respondents who agreed on the 'impact' to understand the level of appulse, automation has on their industry. 32% respondents claim that automation is affecting 10 to 40% of existing jobs. Engineering, Automobiles, Manufacturing, Consumer durables and Core sectors have highest responses of this impact category. 23% respondents have yet not decided on the impact level and say that the impact cannot be estimated. This category of respondents needs to assess the situation and act proactively before it turns unfavourable. Surprisingly, 15% out of 69% who primarily agreed on the impact of automation on their industry say that automation will not have any impact on the jobs in their organization.

PERCEIVED IMPACT OF AUTOMATION



GETTING YOUNG TALENT READY!

National Apprenticeship Promotion Scheme or Apprenticeship Act is less talked about point even after the amendments to both the Apprentices Act, 1961 and the Apprenticeship Rules, 1992. Except the central government and some state governments, no other institution or organization seem to be paying attention to it. Organizations are in dilemma regarding implementation of Apprenticeship Act, as it is not clearly communicated to implementers. Haryana and Rajasthan government have taken lead in implementing the act in their respective states. Haryana has mandated its departments to hire 15,000 apprentices i.e. 10% of total workforce including contractual or outsourced manpower. Currently, only 2.3 lakh trade apprentices are undergoing apprenticeship training in 30 to 165 establishments throughout the country. Out of these, 36,000 apprentices are in central public sector undertakings or central government and 1.94 lakh apprentices are in state public sector undertaking or state government departments and private sector. Indian government would increase the engagement of apprentices to 50 lakh cumulatively by 2020.

Unfortunately, engagement of private sector organizations in this area is very low. Firstly, there has been a problem of awareness about new regulations that are in effect. Secondly, the benefits of apprenticeship and its impact on the economy are largely unknown. Government should take corrective measures to eliminate any interpretation challenges and increase awareness among private sector players.

India has only 36,535 (as on Dec, 2017) enterprises registered for taking apprentices compared to Germany which had more than 431,121 (till 2014) enterprises for apprentices and about 522,094 students enrolled for apprenticeship in the same year as compared to only 2,30,000 in India. Apprenticeship module of Germany is globally known but is difficult to adopt considering the difference in overall educational approach from any country. We got an opportunity to drive apprenticeship as an effective means of promoting industry-academia collaboration and should be encashed like Germany if we aim to become the 'skill capital' of the world.

Awareness For Apprenticeship Scheme Among Corporates



The responses from India Hiring Intent Survey shown that only 64% organizations are aware of the apprenticeship scheme. This is an alarming situation for government as it's a more than 2 year old initiative and just a little over one half of the organizations are aware of this. At this juncture, where industry experts are pushing collaboration approach among government, academicians and industries to work together on skill gaps and employability challenges, all the three parties seem to be working in silos with no one taking the cognizance of developments.

Registrations Under National Apprenticeship Promotion Scheme



Out of 64% organizations which are aware of the Apprenticeship Scheme, only 56% have registered and the same is reflected in overall enterprise registration numbers on apprenticeship portal as well. Only 36,535 organizations have registered themselves under the scheme offering apprenticeship opportunities to 50,856 apprentices. Considering the pace of overall registrations and



opportunities offered, the employability gap and skilling mission will take more than expected time.

Today, India has an opportunity to act and reform the overall educational and skilling arena considering the positive socio-economic outlook, favorable nod of political and other external factors. More than 12 million youth between 15 and 29 years of age are expected to enter India's labor force every year for the next two decades. The government's recent skill gap analysis concludes that by 2022, and about 109 million more skilled workers will be required in 24 key sectors of the economy. To make the most of the demographic dividend, it is critical to improve the employability of youth at this stage. It is evident that if reforms are not planned today, tomorrow's skill gap will be higher than expected. This has been proved in past as well where intended results of the skilling schemes have not been achieved due to poor implementation and absence of time bound interventions. Key Hiring Preferences.

Hiring through different Sourcing Channels

However, the sources do not have any impact on hiring activities of any sector or industry, but when it comes to individual organizations, their preference change on the sources they utilize for hiring. This piece of information is helpful for jobseekers to channelize their energy and efforts while scouting for opportunities.

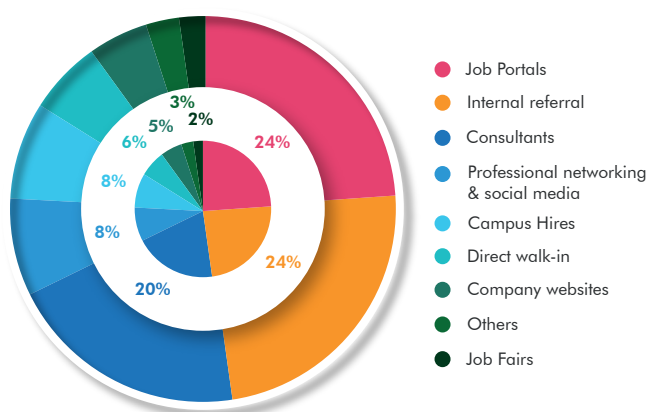
We asked each participant to choose hiring sources and their contribution to overall hiring in their organization, and then analysed the trends. Here internal referrals and Job portals are the first preference of organizations and contributes to 24% each of the overall hiring followed by consultants at 20%. All these 3 sources put together make about 70% of total hiring. Rest 30% is contributed by remaining 6 sources.

Organizations preference to internal referral is derived from various factors that impacts the performance of referred employee

and retention of the employee. Current employees are great source of knowledge for recruitment as they understand workplace better. Their confidence in organization helps new joinee in decision making and the retention is higher. Employee referral program is therefore an effective method of recruitment. Organizations are going ahead and designing lucrative policies for referrals that allow employees to refer suitable candidates.

Current trends show that job fares are least preferred for hiring in this techno-enabled world and connected world.

PREFERRED SOURCING CHANNELS



3 Most preferred Sourcing Channels

Sourcing Channel	% Contribution
Job Portals	24%
Internal referral	24%
Consultants	20%

3 Less preferred Sourcing Channels

Sourcing Channel	% Contribution
Company websites	5%
Others	3%
Job Fairs	2%

Top 3 Skill Preferences That Employers Suggest Candidate Should Possess

The saying "Hire for Attitude and Train for Skills" goes well here. A valuable employee is one with the right attitude for organization. By attitude we are referring to a person's thought, manner, and general disposition towards another person, idea, activity, object and work. Organizations prefer three things: domain knowledge, adaptability and positive attitude over any other skills.

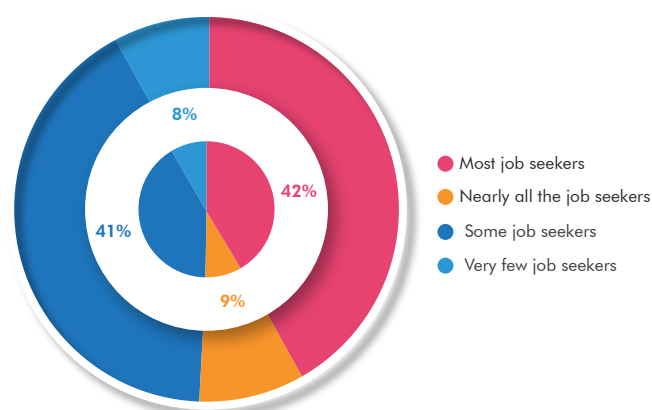
TOP 3 PREFERRED SKILLS

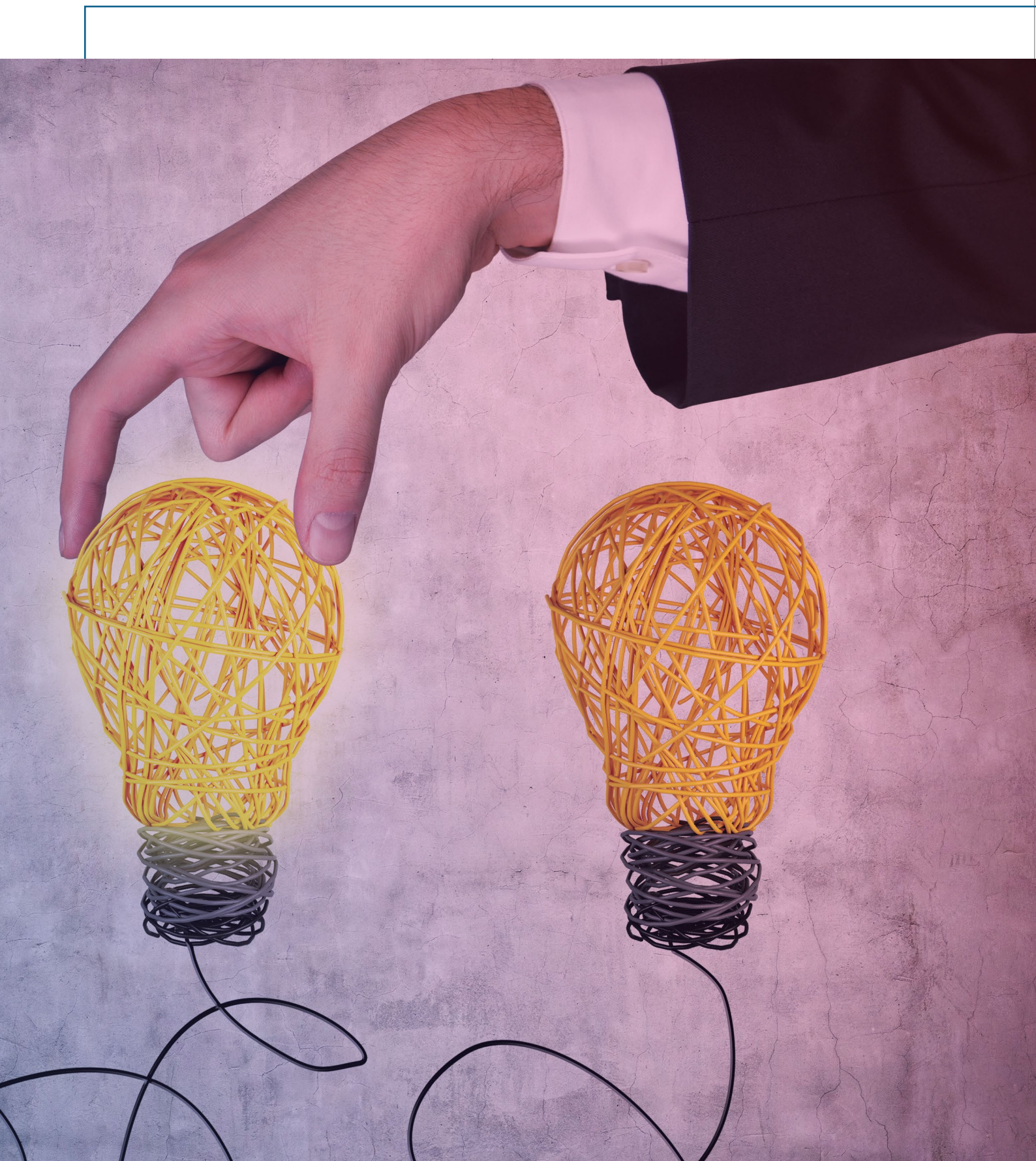
Ranks	Preferences
1	Domain Understanding
2	Adaptability
3	Positive Attitude

Employer's Perception For Required Skills That Job Seeker Possess

Do you really remember the last interview inputs that you gave to candidate and his/her skill match to your requirements? In this year's survey we asked respondents to share their experience of past and cases of candidate's skill match or mismatch. Survey outcome reveals that 41% of respondents feel that only "Some job seekers" meet the required skills whereas 42% claim that most job seekers possess the required skill and fit match to their requirements. 8% and 9% respondents respectively claim that very few job seekers and nearly all job seekers meet the required criterion. An interesting point to note here is that employability score of student pool is also aligned and almost equal to the perception of employers i.e. 42%.

EMPLOYER PERCEPTION FOR REQUIRED SKILLS





MATCHMAKING: SKILL EQUATION

Job is the equilibrium point for employer and potential employee to start their journey and this match is dependent on two aspects of work dynamics i.e. skill requirement and availability. Once these two aspects match, other associated factors such as skills and knowledge, potential, experience etc. come in picture and decide the match of employer and employee. Matchmaking section of this report matches various data inputs from India Skills Report and Wheebox Employability Skill Test or in other words it is a match of demand and supply side for employers and students to find their equilibrium point.

Skill equation is derived from two factors, employment seekers and employable candidates. Set of Skills is the only differentiator between employment seeker and employable and the difference is termed as the skill gap. This skill gap indirectly leads to unemployment and skilling is the only solution to overcome this unemployment challenge. Rapid technological transformations are affecting our jobs and workplaces as the pace of skilling is not in line with the transformation of jobs and workplaces. This situation becomes more critical when availability of required skills remains low. Such shortages are set to grow considering the current state of education and focus on skilling, and their impact is already biting organizations. This is particularly acute in some sectors and at higher levels where they are acting as an obstacle to growth. Within companies, there is widespread recognition of how important it is to invest in development and progression. Doing so helps in addressing specific skills gaps, supports business productivity as well as performance of the economy. Organization led skilling initiatives are very niche and organization domain specific hence does not have significant impact on the overall skill gap challenge.

Our intent here is to provide students a platform to assess the current state of skill requirement from employer side as opportunities and on the other hand help an employer assess skill availability through employability data on four parameters detailed below:

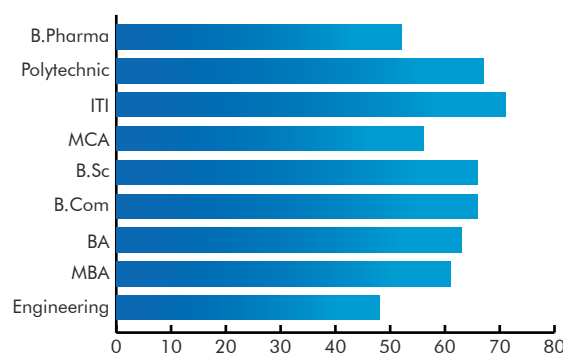
- **Education wise employability vs Education wise opportunities** – India Hiring Intent Survey and WEST captures education domain wise data in their respective reference of employability and employment opportunities.
- **Gender wise employability vs Gender wise opportunities** – Here match of employability and opportunity data is provided on the basis of gender. This data set can help employers target diversity related measures to improve gender diversity ratio.
- **Geography wise employability vs Geography wise opportunities** – Geography wise match is at state and city level employability and opportunities. States and city level comparisons between employability and opportunities provide deeper insights about

employment and employability. Students and employer both are benefited as now they can focus on city level opportunities.

- Internship preferred vs Internship opportunities – Matchmaking on internship data talks about the gap between opportunities available and internship demand across educational domains.

Skill equation across education domain: Unemployable pool of students/job seekers across education domains

SKILL EQUATION ACROSS EDUCATION DOMAIN

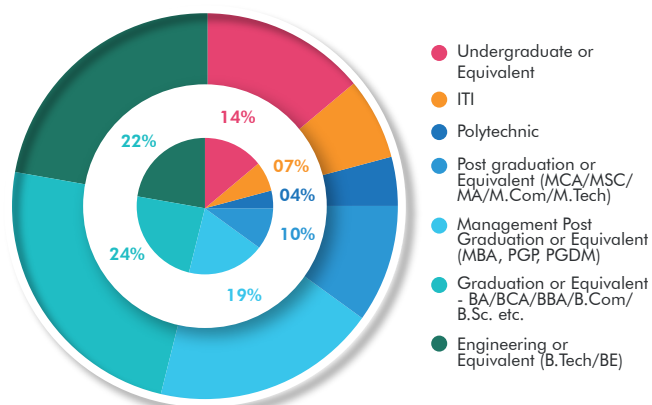


- 1.5 million engineers pass out every year but only 52% are employable, highest employable population across domains.
- ITI has highest skill gap followed by Polytechnic, even though both are skill oriented courses and this skill gap reveals the level of education in both the course.
- Annually about 3,60,000 MBA students pass out from 4000 B-schools in India and 61% are unemployable due to skill gaps and lesser work experience.

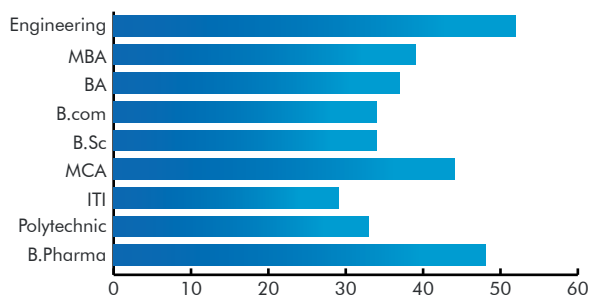
EDUCATION WISE EMPLOYABILITY VS EDUCATION WISE OPPORTUNITIES

Students and employers come together to the median point of job through employability and employment. Through WEST and India Hiring Intent Survey insights we have mapped both expectations in a chart format below to depict the gap. Gap between employability and employment is referred as unemployment. Unemployment is caused due to insufficient job opportunities for employable workforce and skill gap. Engineers have highest opportunities in the market as per India Hiring Intent Survey responses and also have the highest employability score as well. Core graduate students from BA, BSc, B Com have the next highest job opportunities, but employability is a concern and due to low employability, these graduates either remain unemployed or go for professional courses to gain job related skills. Similar trends are also visible for ITI students as well.

DOMAIN WISE EMPLOYMENT OPPORTINITIES PERCENTAGE



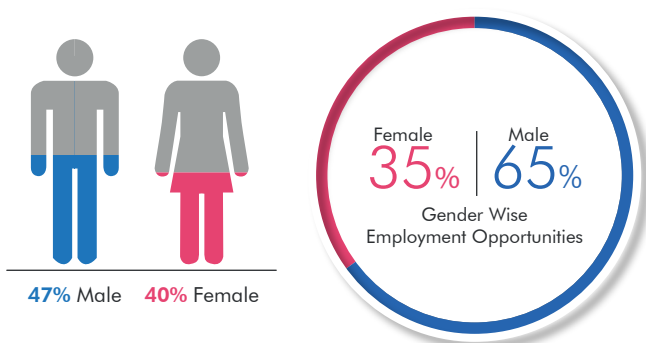
EDUCATION WISE EMPLOYABILITY PERCENTAGE



GENDER WISE EMPLOYABILITY VS GENDER WISE OPPORTUNITIES

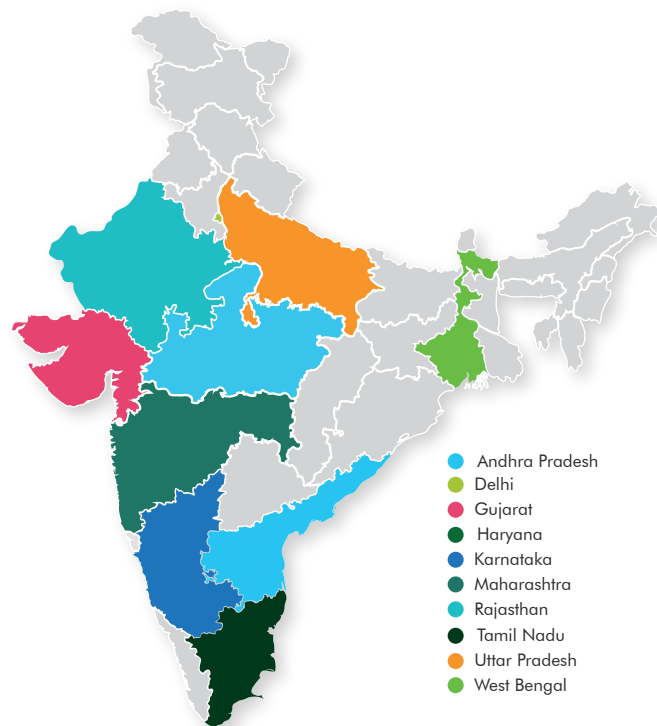
Organizations are working hard to improve the gender diversity ratio from current 77:23 to 65:35 by next year. Employability data supports the gender diversity drive if female prospective are targeted well. Increase in male employability and improvement in gender diversity increases competition for male prospective, which gives an option to organizations to hire best out of available talent.

Gender Wise Employability

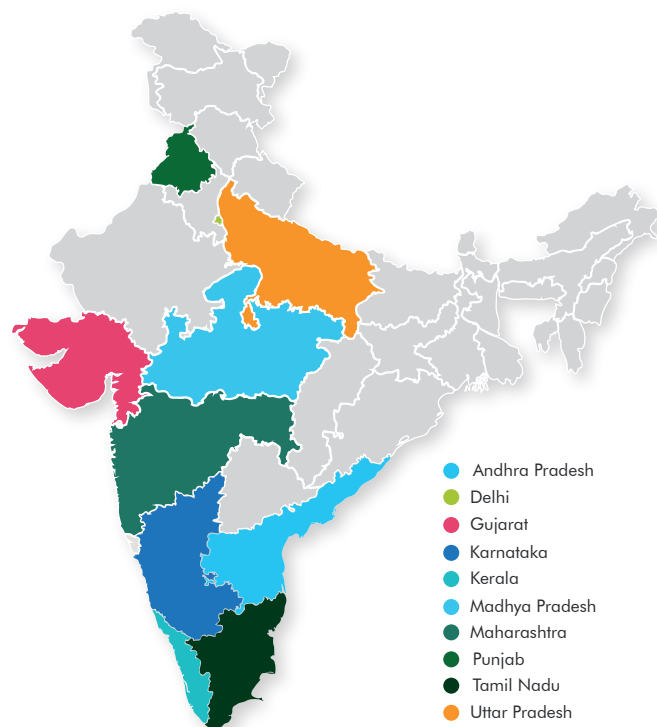


GEOGRAPHY WISE EMPLOYABILITY VS GEOGRAPHY WISE OPPORTUNITIES

Top 10 States With Highest Employment



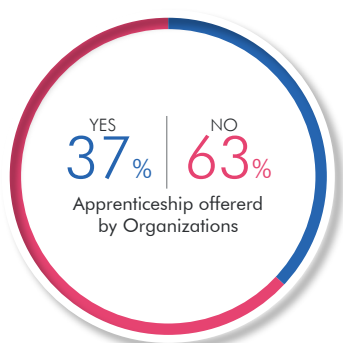
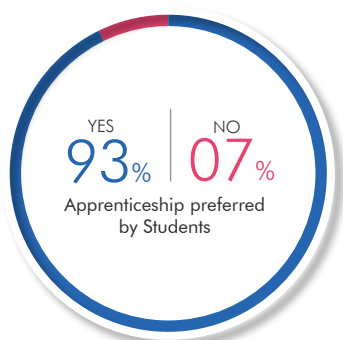
Top 10 States With Highest Employment



This equation of top 10 states with highest employment and employability will help job seekers and employers in meeting their respective expectations of getting the right job and getting the right candidate respectively. Out of the top 10 states 7 are common in both the categories and these are Maharashtra, Delhi, Uttar Pradesh, Karnataka, Tamil Nadu, Andhra Pradesh and Gujarat. This match helps both the stakeholders of skill equation to opt for more region-specific choices in terms of job and candidate to offer more suited opportunities.

APPRENTICESHIP PREFERRED VS APPRENTICESHIP OPPORTUNITIES

Match of apprenticeship opportunities preferred by students and offered by organizations is given below. Apprenticeship match reveals that only 37% of organizations offer apprenticeship opportunities and 93% students wish to avail opportunities available in the market. Here the gap in terms of opportunities available and required is considerably due to inadequate support from industry. Key takeaway is that the organizations need to offer more apprenticeship opportunities in order to meet expectations of students. This move will help both students and organizations in long run to get more employable students.



Take Aways From India Skills Report 2018

- Employability has grown to highest ever level of 45.6% in last five years which is a positive sign for students, academicians and industry.
- Hiring outlook for year 2018 is positive with expected growth of 10-15% in hiring activities.





APPENDIX

WHEEBOX EMPLOYABILITY SKILL TEST

Demographic Data

DOMAIN WISE RESPONDENT DATA	MALE %	FEMALE %
B.Tech/B.E	63.35	36.65
Polytechnic	81.16	18.84
MCA	45.72	54.28
MBA	53.35	46.65
B.Sc	35.25	64.75
B.Com	36.8	63.2
ITI	70.04	29.96
BBA	56.45	43.55
B.Pharma	51.29	48.71
B.A	40.36	59.64



India Wide Top 10 Preferred Area Of Work

India wide Top 10 Preferred area of work
Any
Bangalore
Pune
Chennai
Mumbai
Delhi
Delhi\NCR
Hyderabad
Coimbatore
Chandigarh

India Wide Top 10 Preferred Area Of Work By Male User

India wide Top 10 Preferred area of work by male users
Any
Bangalore
Pune
Delhi\NCR
Chennai
Mumbai
Delhi
Hyderabad
Chandigarh
Coimbatore

India Wide Top 10 Preferred Area Of Work By Female User

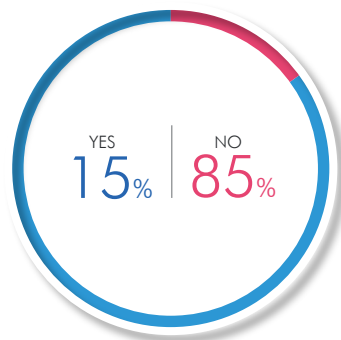
India wide Top 10 Preferred area of work by female users
Bangalore
Any
Mumbai
Pune
Chennai
Hyderabad
Coimbatore
Delhi\NCR
Delhi
Chandigarh

Top 5 states where employees prefer salary of 0-2 lakh	Top 5 states where employees prefer salary of 2-2.6 lakh	Top 5 states where employees prefer salary of more than 2.6 Lakh
Tamil Nadu	Tamil Nadu	Maharashtra
Maharashtra	Maharashtra	Uttar Pradesh
Andhra Pradesh	Andhra Pradesh	Tamil Nadu
Punjab	Uttar Pradesh	Andhra Pradesh
Uttar Pradesh	Punjab	Madhya Pradesh

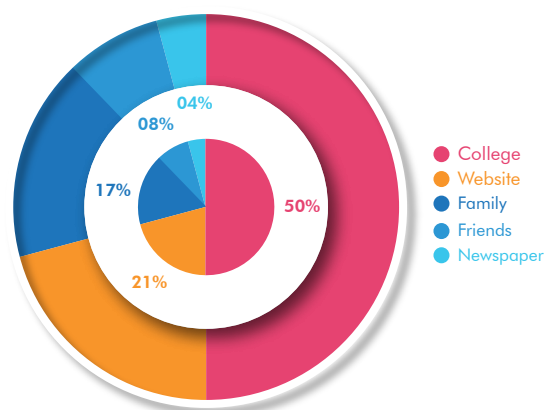
Age wise employability

India wide Percentage of Employable resource between 18-21 age	46%
India wide Percentage of Employable resource between 22-25 age	46%
India wide Percentage of Employable resource between 26-29 age	26%

Are You Fully Equipped To Take Career Decisions?

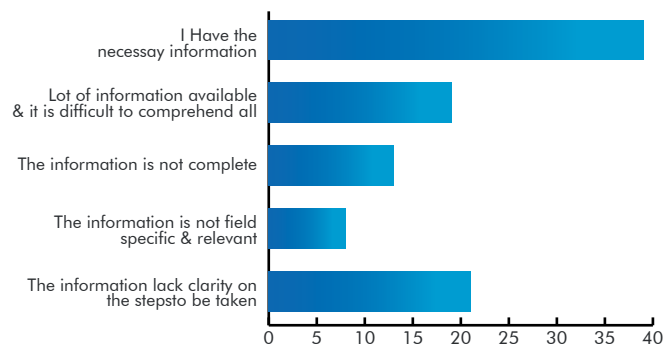


What Are The Sources Of The Information Regarding Your Career?

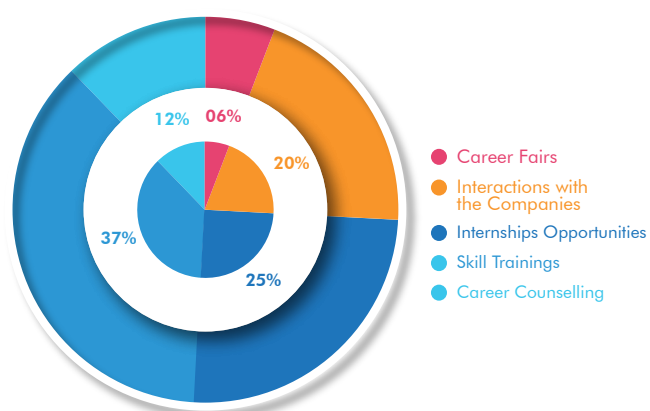


What Are The Gaps In The Information?

INFORMATION GAP



What Support Do You Require As To Make Informed Choices About Your Career?



India Hiring Intent Survey

STATES WITH HIRING ACTIVITY DATA

EMPLOYER'S PREFERENCE	% RESPONDENTS
Domain Expertise, (Domain Understanding)	38%
Positive Attitude	21%
Adaptability	13%
English Language	10%
Numerical & Logical ability, (IQ)	8%
Learning agility	6%
Interpersonal skill	3%
Ability to work well with others	2%

STATES	HIRING
Maharashtra	16.51%
Delhi	13.58%
Tamil Nadu	10.58%
Karnataka	10.51%
Uttar Pradesh	9.40%
Haryana	6.74%
Gujarat	3.76%
Andhra Pradesh	3.31%
West Bengal	3.12%
Rajasthan	2.81%
Bihar	2.75%
Telangana	2.24%
Madhya Pradesh	2.22%
Punjab	2.20%
Kerala	1.74%
Uttarakhand	1.58%
Orissa	1.57%
Jharkhand	1.19%
Himachal Pradesh	1.09%
Andaman Nicobar	0.89%
Assam	0.88%
Chandigarh	0.61%
Pondicherry	0.28%
Goa	0.19%
Chhattisgarh	0.14%



Don't just Think

Step up to Achieve

JK Business School is an industry anchored business school established in the year 2006 in the corporate hub- Gurugram (Haryana) and has emerged as one of the Top 50 Business Schools in India (by Assocham), recognized for its excellence in academics, research, inter-cultural solidarity and its valuable contributions to the industry, society and the mankind. JKBS is a member of JK organization; a reputed conglomerate with a 125+ years of legacy and tireless contribution to the Indian business through diverse industries and initiatives in the field of education by setting up prominent educational institutions including Universities across various locations in India, imparting quality education to more than 31,000 students.

JKBS was set up amidst the advent and influx of information technology and new emerging models of business. To grow and sustain business, the organizations need to constantly evolve, innovate, and modify systems for scanning environment effectively, devise action plan to attract & retain people and to make it work. The people need to be equipped with skill sets, upgraded knowledge, attitudes & attributes, mind sets and right values. Tomorrow's leaders need to be focused, sensitive to social concerns, tolerant, non-conformist and at the same time possess the ability to take risks and deliver in diverse environments.

JK Business School (JKBS) is working towards equipping the future business leaders and rendering them capable of responding to challenges in the emerging markets. Industry-Institute-Interface is an important ingredient in the training process. The programmes

offered at the institute are- AICTE recognized, Post-Graduate Diploma in Management and MDU, Rohtak affiliated Under Graduate Programmes- BBA & B.Com (H). The institute has a strong faculty base, most of them are from IIMs/IITs, carrying impressive knowledge, experience and exposure to the industry.

The job oriented course curriculum designed by the subject matter experts, professionals from the industry and academic leaders bears the flagship for JKBS success. The student-centered- learning pedagogy, value added courses, Industry Mentors, tie up with CII for strategic Corporate Social Responsibility (CSR) project and the Foreign Collaboration offers the holistic development to a young mind.

There are various other courses and activities that the students go through for getting themselves job ready. In addition to this, students are also provided with an opportunity to write case study and research papers along with the faculty. Students are encouraged and guided to pursue MOOCs courses on millionlights, swayam etc. to get an edge over competition in the corporate world. The college emphasizes on e-Learning and promotes the same by motivating students to use the digital mode of learning- 'GovindBoard' – an android based learning management app to access all the study material, results, attendance and presentations of the respective course curriculum. The Summer Internship experience offered by JKBS is one of its kinds. The unique Real-time perpetual assessment system and evaluation has served as a break-through and has been received very well by the Industry.

A strong team of corporate relations guarantees abundant opportunities for all the students for internship as well as placement. Some of the top notch companies recruiting year on year from JKBS are- CeaseFire, ICICI Securities, Axis Bank, Coca Cola, HSBC, Britannia, Naukri.com, Indiabulls etc. The diverse profiles offered by the corporate shows the market relevance of the talent being nurtured at JKBS.

The Institute has been ranked amongst Top B Schools in India, consistently over several years now. The relentless efforts of the team JKBS has won the institute several awards and accolades over years. JKBS has been ranked Top 62 in B- School Rankings 2017-18 (MINT- MBA Universe Survey), Top 41 Business Schools in India by Business World Survey (2017), Top 31 Outstanding Business Schools of Excellence (CSR-GHRDC Survey 2017), State Top B School by Education World (2017), Best Management College in India for Innovation 2017 by CEGR (2017), Excellence in Education Award by Competition Success Review (CSR) (2017), "Asia's Top Industry Anchored Business School" awarded by ASSOCHAM (2016), Best B -School in Placement by CEGR(2016), Best Management College for Infrastructure by CEGR (2015), Excellence in Education Award by Competition Success Review (2016), Leading Business School of the year at ASIA Education Leadership Summit (2016), to list a few.

The sun never sets at the JKBS campus. A 24*7*365 learning environment helps in achieving a great learning curve for the young leaders. Apart from academics the students are actively involved into several co-curricular activities, management activities, research, clubs and committees, and recreational activities to ensure a happy mind and a healthy heart.

DIRECTOR'S MESSAGE

Today we are blessed to live in the third industrial revolution where digital age is being casted on the invention of World Wide Web and seeks to connect the world on innovations in information technology. This new age is more of technological disruption than on manufacturing, changing the concepts of work place.

While the behavioural attributes like positive anger, courage, emotional intelligence, risk tolerance remain important the framework is shifting towards artificial Intelligence, Internet of things, self-driving vehicles, nanotechnology, bio technology, cloud computing. In these times the skillsets require adoption to social media skills, being tech savvy and remote functioning.

As a responsible industry anchored business school we at JK have expanded in the areas of digital marketing, supply chain logistics and business analytics to address the new age skills required for managers of tomorrow.

Skills in Digital marketing are much more relevant today as the mobile advertising turns to a billion dollar industry in India. Logistic and supply chain management has already come of age in India with already billionth delivery taking place for Indian brands. Business today require workforce with predictive analytics skillset to help them challenge the intricacies of competitive scenario. Deriving meaning out of the data is no more an input-output process but a complete life cycle. Mining, accessing, tabulating, processing and interpreting are the life cycle stages of the skill sets which are likely to be in demand in the coming years.

Dr. Sanjiv Marwah

Director, JK Business School



Dr. Sanjiv Marwah

Director
JK Business School

“Skills in a changing landscape of Information Technology with the help of World Wide Web are extremely critical but difficult issue to address. Some of the jobs which are getting created today were not present when the anticipating prospects were in the classroom. Skill disruptions are changing the prosperity of the societies today.

India moves to be the youngest country (median age) in the world with a huge challenge to address –whether it's an asset or a liability. This challenge can be addressed best by making the youth employable with requisite skills.

India skill report in association with CII, People Strong, UNDP, AICTE and Wheebox have taken the most exhaustive effort in the Indian Subcontinent to amalgamate the opportunities and challenges faced by the India to provide this catalyst.”



GATEWAY EDUCATION

Gateway is an emerging educational institute located in Sonipat, NCR Delhi. Established more than a decade ago, Gateway has grown into various facets of education and skill development. Over the last few years, we have strengthened our efforts for skilling.

Our focus areas in terms of the faculty are engineering, architecture & design, and hospitality. In all these faculties, we have put a focus on industry-oriented education. We have partnered with India Skills Report and Wheebox to measure the performance of our students and provide them the right environment to enhance their skills.

Our visiting faculty from the industry, regular practical sessions at the industry, and workshops form a continuous basis for skill development. Through tests such as WEST, we get to know what is lacking in our students and appropriately design curriculum interventions in discussions with the industry.

Skill assessment and enhancement has become an unavoidable element in creating employable graduates. Towards this step, institutes should work together with the industry and skill development initiatives such as The India Skills Report. Only then will we be able to better understand the real needs of the industry and align it with the aspirations of the students.

GIET, Sonipat offers many skill development programs for students besides their academics. To empower and enhance the employability of engineering graduates many training programs, guest lectures, technical activities, sports activities are being organized throughout a year. With a clear emphasis on skill development of students studying in our institute several forward steps are taken such as:-

- **Financial assistance to Super-40 group:** To give a technical and financial assistance to meritorious students of GIET, a dynamic group of 40 students from various departments known as GIET, Super-40 is created. On the basis of their academic performance every year, Super-40 group is being revised. In this way a thinking of competitive minds among the students developed. The GIET extends its full support to the students selected in Super -40 group and give financial assistance to

complete useful projects, training programs and preparation for competitive examination such as GATE, IES etc.

- **Focus on Industry- institute Linkage:** Gateway Institute of Engineering and Technology is continuously working on to develop a bridge the gap between Industry- institutes. A series of round table meeting with industrialists and technocrats working in industry has been started. The objective of such type of meeting is to know about the expectations of industry from the engineering graduates.
- **Arrangement of regular Aptitude & Reasoning classes:** Special lectures are being conducted to improve quantitative & reasoning aptitude lectures for final year students.
- **Arrangement of regular Guest Lectures:** Eminent Faculty from IITs, NITs and other renowned technical Institutes and also from industries are called for guest lectures.

- **Arrangement of regular Alumni Talk:** well settled alumni's of GIET in different companies are called to deliver the talk among the graduating students regularly. This increases the peer to peer learning. Students learn a great deal by explaining their ideas to others and by participating in activities in which they can learn from their peers.
- **Arrangement of regular Workshop to increase employability for final year students:** On the basis of the fact that students reaching to final year forget the basics of their knowledge. To overcome this problem GIET is continuously organizing workshop for final students. In these workshops concerned faculty always strives to provide basic knowledge about the tools, instruments used in their field.
- **Regular industry visit:** GIET always arranges industrial visit for the students in each semester so that they can get technical and practical exposure to the knowledge.



Rakesh Aggarwal
President
Gateway Education

“India has a demographic dividend. A skilled workforce is crucial in taking the country forward. I am happy to see The “India Skills Report” which wholistically analyzes the issue of skills and presents actionable items. This report is an important reference document for anyone working on skill development and education in India.”



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Impact Partner



*Empowered lives.
Resilient nations.*

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www.peoplestrong.com



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