

# INDIA SKILLS REPORT 2021

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Wheebox  
Measuring World's Talent and Skill Potential



Knowledge Partner

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By PeopleStrong

India Partner



Confederation of Indian Industry

# KEY INSIGHTS INTO THE POST-COVID LANDSCAPE OF TALENT DEMAND AND SUPPLY IN INDIA





# ABOUT THE TEAM



## Wheebox Talent Assessments

India's leading online talent assessment platform, Wheebox is a company that partners with corporations to find and retain the best talent, using reliable standardised tests for pre-hiring and learning requirements. Over 10 million users are benchmarked annually across the globe, stemming from Wheebox's vision to measure the world's talent. Wheebox partners with Fortune 500 companies, large and medium enterprises, to boost their skill development and hiring requirements. Wheebox continues to partner with numerous top educational institutions, to conduct the proprietary 'Wheebox National Employability Test (WNET)' for final year graduates and postgraduates. The test aims to benchmark competencies that matter the most for being employable in today's competitive landscape. Wheebox also spearheads the "India Skills Report" by identifying the supply of talent and skills across colleges in India. The partnership with education and academia is to identify and benchmark areas of competency required to excel in various industries. The test drives detailed candidate reports for developing skills and competencies for employment, by partnering with Confederation of Indian Industry, LinkedIn, Association of Indian Universities, United Nations Development Program, All India Council for Technical Education, and PeopleStrong. Wheebox also designs and deploys State Skills Reports in partnership with various states across the country, to hone the potential of India's talent. The Ministry of Labour and Employment is also a partner, with the BARO Career Interest Report that helps candidates make the right career choices on the "National Career Service" and across "Model Career Centers" in India. The vision to measure the world's talent has succeeded with in-depth intelligence about the evolving employability landscape of India and the world. With the ISR 2021 report, the mission is to explore the employability landscape of the post-COVID-19 economy in 2021.

## Taggd (by PeopleStrong)

Taggd is a PeopleStrong recruitment solutions brand, which is the largest Recruitment Process Outsourcing (RPO) facilitator in India. Covering 14+ sectors and having onboarded 100+ clients, Taggd manages permanent recruitment for over half a million jobs. Combining the power of human knowledge and data, Taggd brings the best talent acquisition and digital hiring solutions that have revolutionized the way businesses work and deliver. In 13 years, Taggd developed in-depth industry knowledge and recruitment expertise, establishing a talent network through digital intelligence. For businesses, Taggd offers access to a robust tech stack that complements business operations. Some esteemed clientele include Wipro, Pfizer, Honeywell, Mahindra, BirlaSoft, Tata Motors, Renault Nissan, Aditya Birla Health Insurance, Citi, IndiaMART, Swiggy, Oyo and Quikr among a growing list of national and transnational brands. Taggd has been rated among the leaders in the ROP NEAT Matrix, by Nelson Hall which is one of the leading global analyst entities. As the knowledge partner for the India Skills Report, Taggd explores insights into the employability landscape across the nation, with quantitative and qualitative insights from the academia and thought leaders of the industries. The Covid-19 pandemic was a shock to the economy, especially small-medium businesses. In this year's report, we aim to uncover the crisis and its impact on the talent demand and supply of India going forward.

## Confederation of Indian Industry (CII)

The Confederation of Indian Industry works to sustain India's development by partnering with industries, the government, and civil societies through an advisory and consultative role. CII is a non-government, non-profit industry led and managed organisation pioneering the development of India. Established in 1895, the premier business association consists of more than 9100 members from the public and private sectors, SMEs and MNCs nationwide. There are more than 300,000 other enterprise memberships covering more than 291 national and regional sectors and industries. CII works closely with the government on policy issues, mingling with thought leaders to chart progress in sustainable development. It also offers a range of specialised services and global networks to enhance efficiency, competitiveness and opportunities for the industry. CII is also a platform for networking and building strong ties to tackle key issues.

Beyond business, CII assists industries in identifying and executing corporate citizenship programmes. Civil society organizations partner with CII to carry forward integrated and inclusive development across numerous verticals and domains. This includes healthcare, education, livelihood, diversity management, skill development, women's empowerment, water and resources to state a few. During the global pandemic, India witnessed a shift in the employability landscape, setting the trend for workplace culture and competencies required to excel. With the theme of 2020-21, as the "employability landscape of the nation in the post-pandemic world," CII will focus on the key areas that are responsible for economic fortitude. These areas are - employment creation, rural-urban connectivity, energy security and access, environmental sustainability, and governance. With 68 offices worldwide, including 9 Centres of Excellence, in India, and 11 overseas offices in Australia, China, Egypt, France, Germany, Indonesia, Singapore, South Africa, UAE, UK, and the USA, and institutional partnerships with 394 counterpart organisations in 133 countries, CII serves as a reference point for Indian industry and the international business community.

## All India Council for Technical Education (AICTE)

The AICTE was established in 1945, emerging from the recommendations of CABE to coordinate, control and stimulate the provisions for education and industrial development since then. During its formative years, the mandate of AICTE covered only programmes in engineering and technology. Eventually, the growth of technical education in India pre-independence was witnessing a transformation. The number of engineering colleges and polytechnics institutes (inclusive of pharmacy and architecture institutions) in 1947 was at 44 and 43 with an intake capacity of 3200 and 3400 respectively. The phenomenal growth of technical education was responsible for the growth in the years to come. This growth was a direct result of initiatives and efforts taken to reform policies in the 80s and allowing the participation of voluntary as well as private organisations in the build up of technical institutions. Since the self-financing basis gained popularity, the total number of engineering (UG) and diploma institutes approved by the council were responsible for enabling access to technical education for millions of aspirants in the nation. The goal is to sustain technical education in India with a steady supply of the latest techniques, skills and competencies required to take sustainable development forward.

## Association of Indian Universities (AIU)

The Association of Indian Universities (AIU) is a premier institution that has been working for the pursuit of higher education. Founded in 1925, it became the Association of Indian Universities in 1973. AIU is a representative body of Universities of India, liaising with the universities and the central and state governments. AIU coordinates with universities and top higher education organizations of the world. The main objective of AIU is to promote and protect the interest of universities, while facilitating their activities, by sharing information and increasing cooperation in culture, sports and similar fields, to expand the mutual recognition of degrees and programmes. AIU assumes the role of a think tank and academic leader in the country, comprising the highest academics in the nation. Currently, out of 831 universities in India, 635 are registered members of the association. More than 10 foreign universities are also associate members of AIU.

## United Nations Development Programme (UNDP)

United Nations Development Programme (UNDP) functions in more than 170 countries and territories, in pursuit of the eradication of poverty, and the reduction of inequalities and exclusion. UNDP is responsible for developing policies, leadership skills, partnerships and institutional capabilities across the world. We help countries build resilience for sustainable development goals. UNDP has been working in India since 1951, branching into almost all areas of human development, from democratic governance and poverty eradication, to sustainable energy and environmental management. UNDP's affiliation with governments are aligned to the national priorities and reviewed and adjusted annually.



# ACKNOWLEDGMENTS



**This report is a combination of an assessment of 65,000 candidates from across India, who appeared for the Wheebox National Employability Test (WNET) and 150+ corporates across 15 industries who participated in the India Hiring Intent survey.**

## INDIA SKILLS REPORT 2021

The 8th edition of the India Skills Report (ISR) 2021 focuses on the post-COVID landscape of Talent Demand and Supply in India. In this edition, the WNET test was conducted for 65,000 candidates nationwide, assessing the talent landscape of the country. By analysing the economic impacts of the global pandemic, the pattern of hiring across 15 industries is taken into consideration. The demand for qualified workforce in industries will shape the structure of the economy in coming years. The report covers the impact of Covid19 lockdowns, consequences of the pandemic and a sustainable plan to address the demand and supply of talent in India. In an attempt to discover new opportunities for employment and bridge the skills gap of India's workforce, the ISR 2021 covers an exclusive demand and supply analysis of talent in India.

## ACKNOWLEDGEMENTS

The Eighth Edition of India Skills Report (2021), is India's most referred report on the nation's talent landscape. We recognise and express our gratitude to all parties involved in this effort and initiative to address the post covid talent demand and supply nationwide. We express our heartfelt gratitude to the businesses, government, and academia who shared their views on India's talent landscape and contributed to creating this report. The Global pandemic of COVID-19 has affected us all directly as a threat to our lives and the nation's economy. This report is a combination of an assessment of 65,000 candidates from across the nation who appeared for the WNET, and a report from the India Hiring Intent survey where 150+ corporates spread across 15 Industry sectors participated to share their hiring forecast for the year.

A very special and heartfelt thanks to the Heads of all participating educational Institutes, who helped us reach the talent pool of India. This initiative would not have been possible without their effort and participation. We would like to thank all the members of the CII National Committee on Skills Development and Livelihood and CII office bearers across states, who have lent invaluable support in partnering the WNET and the Corporate Job Survey. Their spirit has helped students and corporates across the nation participate in this initiative uninterruptedly. We are proud to have partnered with you all, on this national cause which sets the nation's direction on skills, talent, and jobs post Covid19 pandemic. We expect you will find this edition of the report fruitful as we look toward your continued support in the future.

# A GLOBAL PANDEMIC THAT SHOOK THE WORLD



While the COVID-19 pandemic shook the world, a series of lockdowns have not stopped the spirit to thrive and compete. India has witnessed a gradual spike in qualified IT personnel, embracing remote work and cloud infrastructure as the mantle to their industry sustenance. Industries like the automotive industry, construction, finance, logistics and leisure took a massive hit during steps taken to control the pandemic. Small and medium businesses were among the worst affected by the lockdowns and stringent measures to curb the spread of the virus. Healthcare found it challenging to meet the demands of a vast Indian population. Travel restrictions impacted many businesses in the country. The fast-growing IT sector is not hiring as much compared to last year. While the crisis took control of lifestyle and commerce in India, the tireless efforts of citizens and the government, prevented more harm in the country, than experienced globally. India was positioned to tackle the virus and sustain the economy, with policies and reforms that marked a new chapter for the nation. Businesses that thrive on foot traffic were in losses. Self-employed personnel found the government restrictions working against their means of survival. Social distancing and remote work began to take the nation into a new wave of employability and work culture.

Remote work began to complement industry demands in India owing to the latest technology tools in the market. The result was a change in the approach to talent acquisition and deployment. Virtual hiring, training, and conferencing became the pedestal upon which the formal sector of the economy was thriving. Simultaneously, the informal sector, being a big chunk of the local economy, witnessed unemployment and lack of resources. In fact, even large corporations in the formal sector witnessed a dip in their revenue. However, companies with enough resources to maintain their Net profit, took measures to curb their workforce and lay off a percentage of rotational employees. A report by the Centre for Monitoring Indian Economy (CMIE) stated that the unemployment rate stood at

10.99 per cent in June 2020. These statistics were evident in the imminent drop in GDP of the nation. Yet, during the lockdown, virtual hiring began to slowly fill the gaps in large corporations and small businesses alike. Various sectors were looking at the use of technology to reach the market and interact with employees. The rising deaths were a huge concern. The loss of jobs was a nightmare for millions of Indians who depend on an irregular income for survival.

As the vaccine was announced towards the beginning of 2021, the pandemic eased restrictions, and the economy is set for a steady climb. Goldman Sachs reiterated its estimated projections for India's GDP growth for the year 2021 at 10%. The ISR 2021 report has compiled crucial data that indicates that industries have sustained their workforce with remote work and technology-driven communications. As the basis to this year's study of the ISR 2021 report, the COVID-19 global pandemic has influenced a noticeable shift in the workforce of India. The report will analyse the skill gap of India's workforce and furnish the premise to excel with technology and skills required in 2021 and beyond. The report features a combination of an assessment of 65,000 candidates from across India who appeared for the WNET and 150+ corporates across 15 industry sectors who participated in the India Hiring Intent survey.



# FOREWORD

## The post-COVID landscape of Talent Demand and Supply in India

Over the last 7 editions, India Skills Report (ISR) has been most credible and considered thought leader in Talent Demand and Supply study in India. The Report has also gained significant readership across Higher Education, Central and State Governments and Thought leaders in Education

India Skills Report 2021 is the eight edition of this comprehensive report.

The theme of ISR 2021 will be Post-COVID landscape of Talent Demand and Supply in India.

This year the study aims to give insights on the skill gaps that exist in the employable population across India specifically when the Demand and Supply of talent is hugely impacted due to the pandemic. The report captures the skill levels of the supply side and needs of the demand side in the talent supply chain. With separate studies conducted to understand each side, this report tries to bring in a more realistic and holistic view of skill and talent landscape in the country.

Reaching over 65,000 students across the nation and over 150 employers across 15 Industries, ISR 2021 will together the readiness of our present talent pool for new-age jobs and the skills that employers are today seeking in prospective employees. The report will highlight the two sides and compare them to understand how the employability landscape of the nation has changed post-COVID.

This edition of the India Skills Report sheds light on the changing employability landscape of the nation, post the COVID pandemic. The primary research covers the talent demand and supply nationwide, offering students, corporations, academia and policy makers a congruent view of the impacts of the pandemic and the pertinent lockdowns on the economy.

The impacts of globalisation, demographics, policies and economic activity have been highlighted to furnish the evolving demands of India's job landscape.

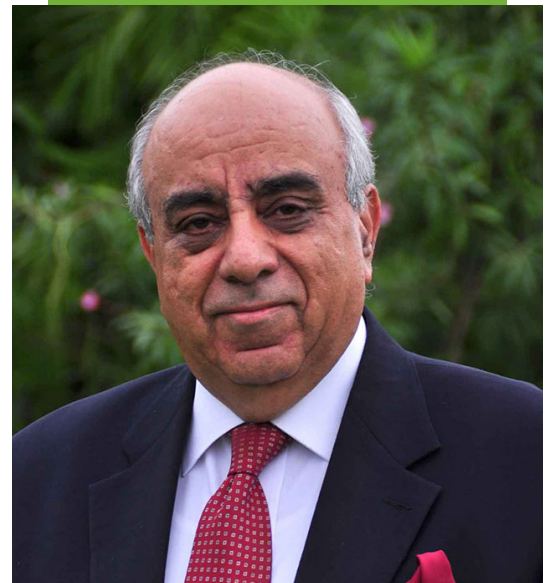
The workforce of India has been changing gradually, to meet the growing demands of modern industrialization through digitisation. The pandemic revealed the increasing reliance on technology in every sector. Organizations tapped into the concept of remote work culture and automated business processes, which have long been the basis of many successful industries.

The internet has reformed thought leadership in many ways, for industries and academia alike. Online education and remote learning has become more popular during the lockdown measures of the COVID-19 pandemic.

With increased access to technology, it is estimated that close to a billion Indians will have uninterrupted internet access by 2030. Considering that the average age of the Indian population is 26-27 years old, the vast workforce available to

cope with technological advancement is a hopeful indicator for the future.

With specific insights into the varying factors like the demographics, gender representation, variable workforce, hiring intent and youth employability, the India Skills Report aims to provide an informed outlook on the talent demand and supply in the nation post-COVID. This report is curated to give direction to the skilling ecosystem in India, where the government, students, parents, corporations, training institutes, policymakers and academia can take necessary steps.



**Arun Nanda**

**Chairman, CII National Committee on  
Skill Development & Livelihood**

# PREFACE

## Digital Excellence will be the New Normal

Amid the global pandemic, our leaders and citizens stood together to step up and face the harsh reality of COVID-19. Industries were impacted, schools were closed and the government issued stringent measures to curb the spread of the virus. Operations in the formal sector and informal sector of the economy were disrupted. Unemployment rose high and the 1.3 billion Indians were challenged by an unexpected enemy. Yet, the people stood together by following regulations and promoting the safety of each other.

A timely response from the Government held its people together during these harsh times. At the peak of unemployment and lockdown measures in India, the Hon'ble Prime Minister, Mr. Narendra Modi, attended the US India Strategic and Partnership Forum, where his statement was a reflection of the resilience of Indian people. He stated that although the Covid-19 pandemic has impacted several things, it has not impacted the aspirations and ambitions of 1.3 billion Indians. This hopeful direction, amidst a global crisis, is an inspiration for the tireless efforts towards curbing the spread of Covid-19.

India took drastic measures to put its people's health first, at any cost. The economic impacts cannot be ignored. Lockdown measures affected trade and business operations in India. The supply chain was weakened by less manpower. Travel was restricted in many regions of the world. Corporate layoffs resulted in a spike in unemployment. The informal sector of the economy was facing heavy troubles.

People began to rely on technology to navigate through this crisis. Businesses invested in software that automated many strenuous processes. Entrepreneurs started online stores in their spare time. Students were offered the option of e-learning from home. Many workplaces began hiring again. The economy was set for a steady climb. The pandemic threatened survival, but opened the doors to technology driven infrastructures. Technology proved to be the ideal tool to navigate the crisis. Online training and employee conferences became customary. Virtual platforms were the basis of collaboration in many industries. Remote work opportunities presented a way to sustain many companies amidst the lockdown measures. People began to adapt to the new normal with technology by their side. India's talent demand and supply is at the core of economic activity and sustainable growth, where technology driven innovation is the basis to development.

India Skills Report 2021 by Wheebox, in partnership with Taggd, CII, AICTE, AIU and UNDP, is a report on the talent demand and supply in post-COVID India.

By keeping in mind the changes that occurred during the pandemic, the report assesses the demand and supply of talent nationwide. In an attempt to provide key insights into the skilling infrastructure of India, ISR 2021 covers in-depth analysis of overall youth employability derived from various factors like field of study, demographics, gender participation, preferences, salary expectations and access to resources.

The Wheebox National Employability Test (WNET) survey conducted for 65,000 students, sheds light on the employability of the youth of India. Some of the key dimensions assessed

were Business Communication, Critical Thinking and Numerical Reasoning.

The report also combines a demand side story with in-depth research on the hiring intent of corporations. The India Hiring Intent Survey (IHIS) aims to unlock the in-demand jobs of today's key industry players, covering 150+ companies across 15 industries.

By analyzing the demand and supply of talent in India, this report aims to provide operational strategies for skill development. The data shows that industries are evolving, with a positive hiring intent that looks to hire more people in the coming year. A promising percentage of India's youth are highly employable.

The access to resources and technology is more than ever before. India is positioned as a future-ready player in the global market. Start-ups and small businesses are responsible for hiring a vast chunk of corporate India's workforce. Remote work opportunities presented a global outreach for the average working Indian. The student sentiment shows that a vast majority are hopeful in the existing infrastructure of Indian industries. Employers are keen on diving into the resources of a vast talent pool in India. We have derived some useful insights into the talent supply and demand, by validating this data with the trends in economic activity over the years. A careful analysis shows the position of Indian industries and the job-ready talent of this vast nation.

As companies are transforming themselves with digital technologies, the current situation is calling on the Government and Academia to follow suit. Digital transformation is now not an option but an absolute necessity. These transformations should happen on all levels, be it national, regional or local, so that we can thrive in a global competitive landscape.

The Nation needs to transition to a new digital environment. There should be an agile development approach to achieve Digital Excellence.



**Nirmal Singh**

Founder and CEO, Wheebox



## From the desk of the AICTE Chairman



**Prof. Anil D. Sahasrabudhe**

**Chairman  
AICTE**

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### **Congratulations to Wheebox for the launch of India Skills Report 2021**

This report is insightful in giving an intensive overview into the current Talent landscape of the country. The insights will offer students, corporations, academia and policymakers, a consolidated view of the impact of various forces like demographics, globalisation, political environment and Industry 4.0 on the workforce of tomorrow. This report is a combination of an assessment of 65,000 candidates from across India, who appeared for the Wheebox National Employability Test and 150+ corporates across 15 industries who participated in the India Hiring Intent survey. Despite COVID pandemic, and great slowdown, the economy has started picking up. The classes were disrupted and hence online education, online training started in a big way. In this background, although the survey was conducted on a lesser number of students than the past, it is indeed indicative and shows the light at the end of the tunnel. India has also shown great resilience, developed two indigenous vaccines, and things are back on track. This survey highlights things to come in the immediate future for being fully Industry4.0 ready. The eighth issue of the report provides insights into the job readiness of our youth and the hiring intent of companies for 2021. On one hand, the employability of 65,000 students is measured to understand their readiness for the available jobs and on the other hand, the demand preferences of over 150 employers are highlighted. The amalgamation of the two perspectives gives a complete picture and emphasizes the most prominent gaps in the education ecosystem and indicates the possible way forward. We hope the report gives valuable information and actionable insights for taking the skilling ecosystem to newer heights.

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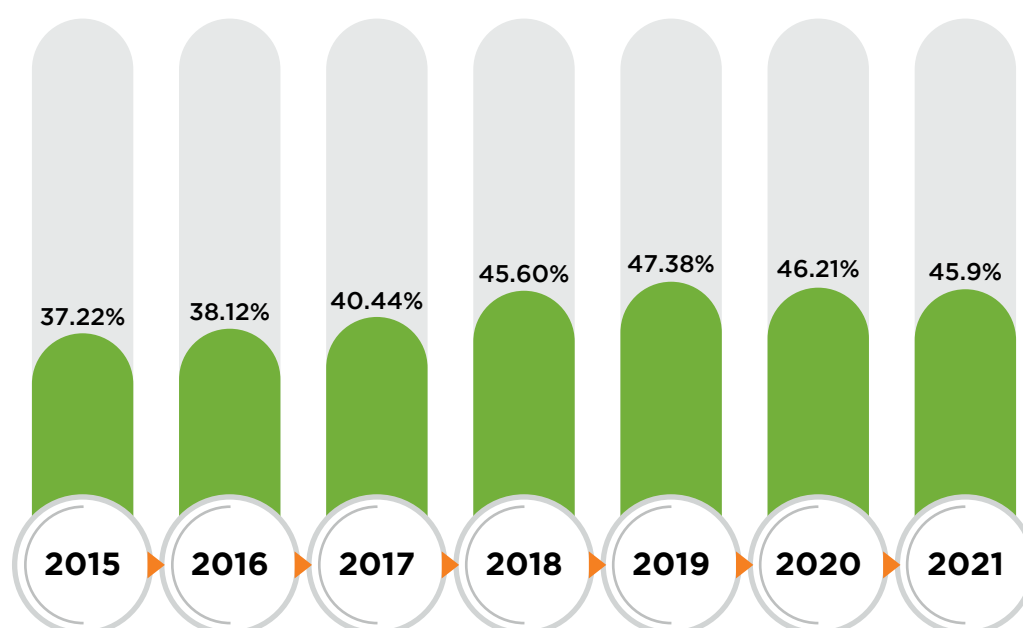




# THE JOURNEY OF INDIA SKILLS REPORT

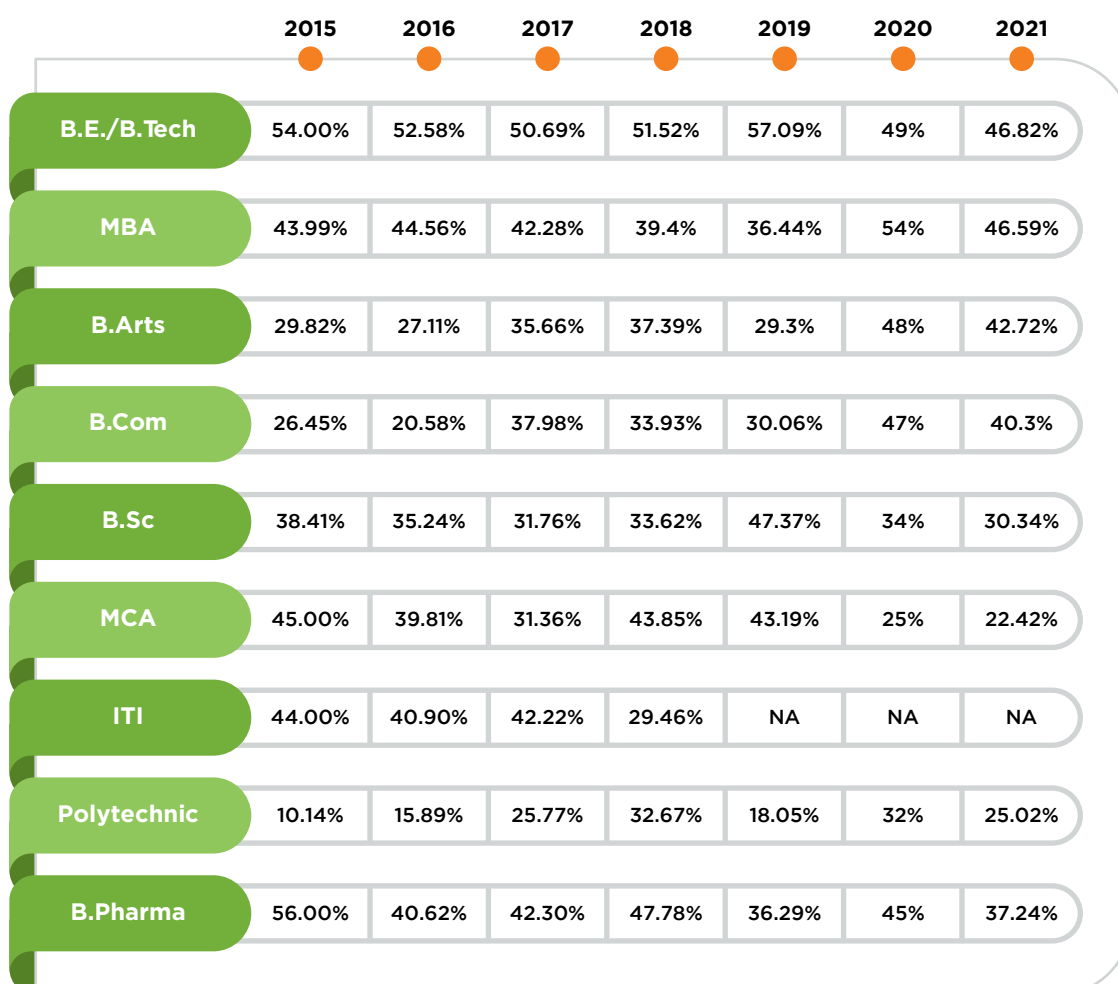
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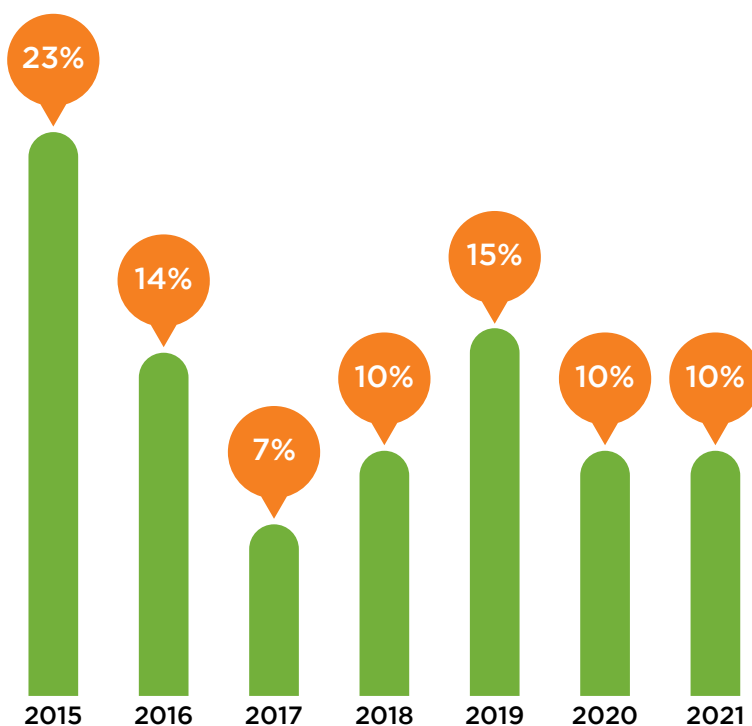
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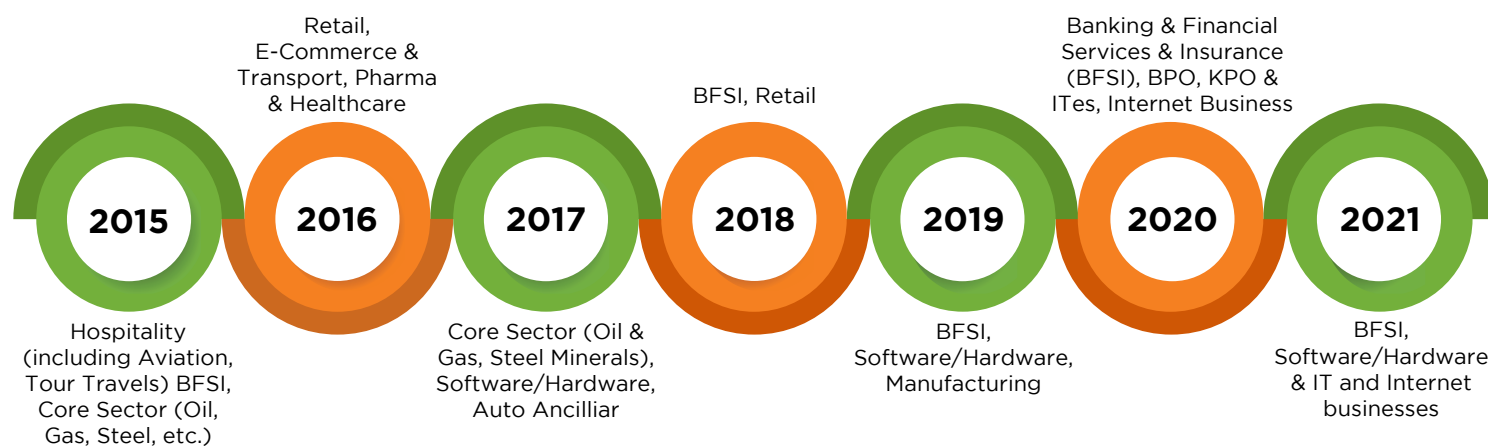
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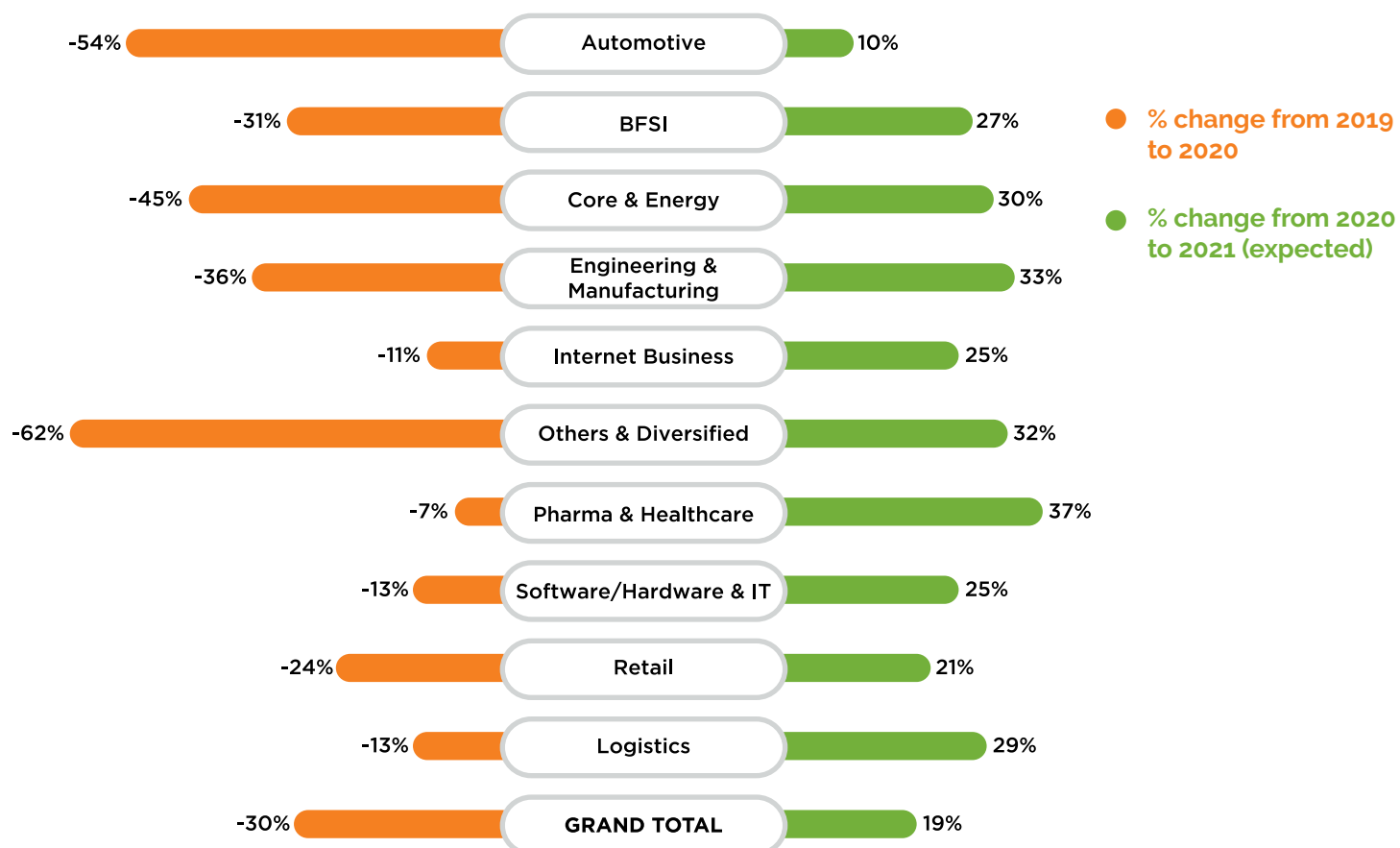


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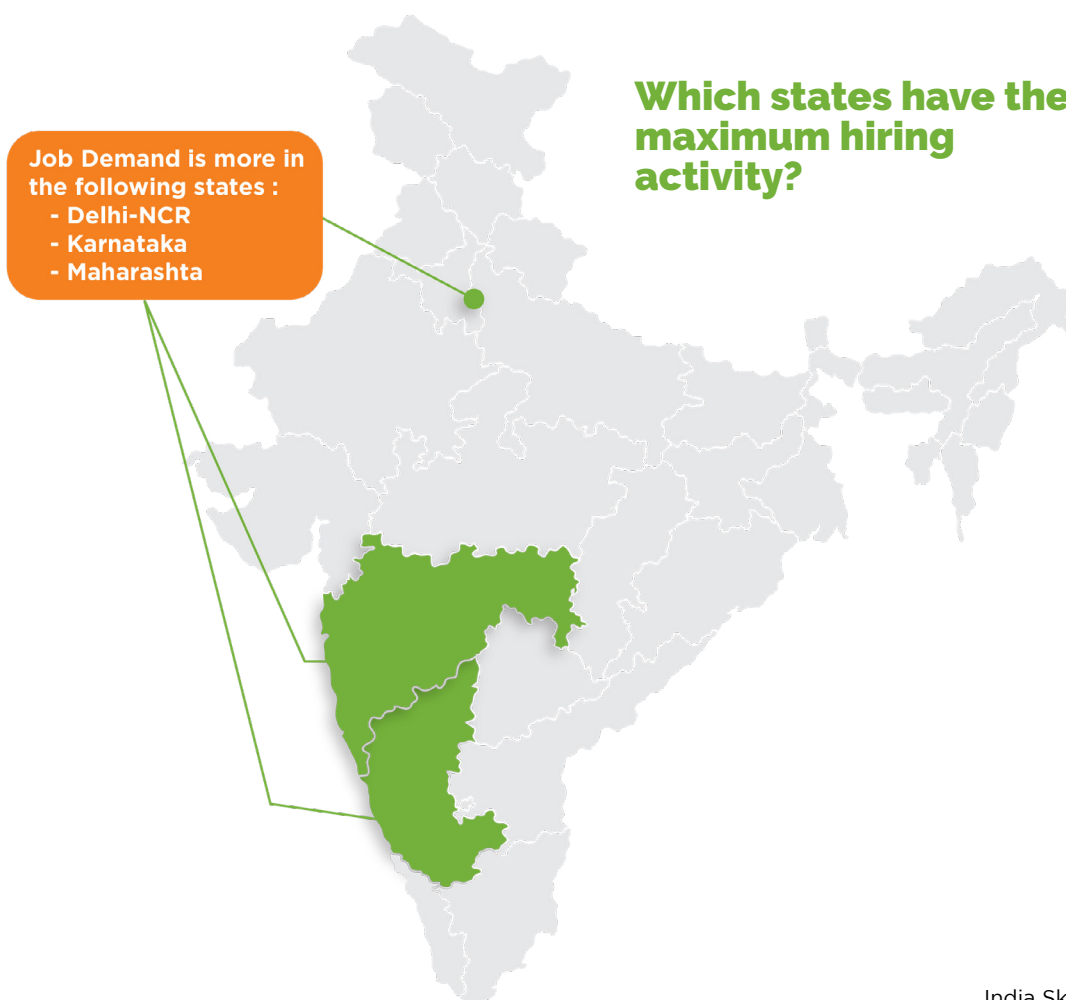
Top Sectors 2015-2021



## Which sectors have hired the most?



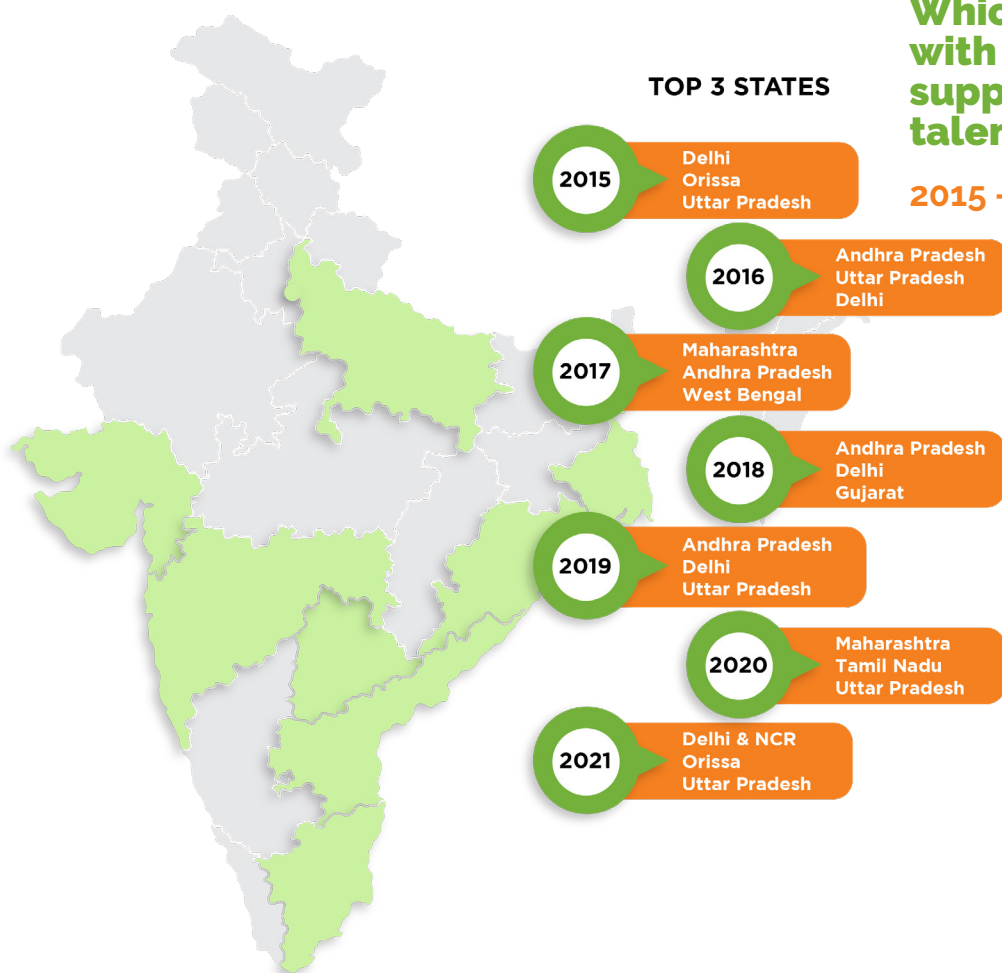
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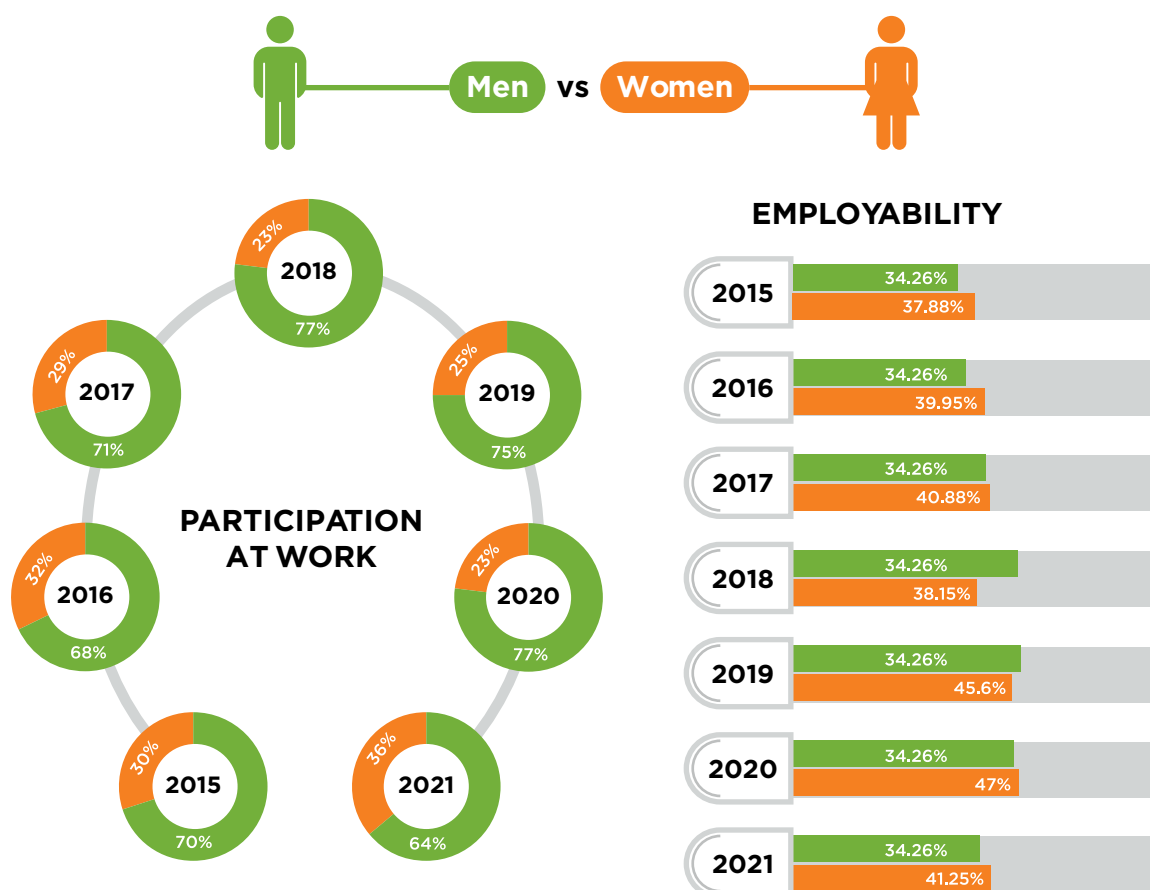
## Which are the states with the maximum supply of employable talent?

2015 -2021



## Men vs Women

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# IMPACTS OF COVID-19 PANDEMIC ON THE WORKFORCE OF INDIA



## A spell of Economic and Social Devastation

The spread of coronavirus (COVID-19) was a disaster at an unprecedented scale for the world. COVID-19 caught the world unprepared to face a pandemic of such magnitude. The pandemic confined people to their homes and robbed professionals of their jobs. Mass unemployment rose worldwide from the period from December 2019 to September 2020. The effects of the pandemic that started in 2019 is impacting the Indian employability landscape gravely. According to the Economic Survey from 2018, 93% of India's workforce operates in the informal sector of the economy. The uncertainty of income for a vast majority of the population resulted in economic conditions that rewired the social and political landscape. Given the inadequacy of job security in the informal economy, many people do not have buffer resources to tackle a pandemic of such magnitude. It is unlikely that the individuals who lost their jobs are well-equipped to face the unforeseen employability shifts due to COVID-19.

## The gruesome fate of the working population

Daily wage workers, contractual labour and self-employed workers were hit the hardest. They had to face uncertain conditions to sustain in a competitive economy. The lack of food and shelter continued through the initial months of 2020, resulting in a mass migration from cities to rural areas. The organised private sector also witnessed massive layoffs. The limited resources available in stringent economic conditions led to unstable job conditions for the private sector workforce. The Centre for Monitoring Indian Economy (CMIE) reported that India's unemployment rate might have spiked up to 23.4% during the week that ended on 5th April 2020. Until March, the unemployment rate was officially reported to increase from 7.8% to 8.7% all throughout February 2020. The result was an increase in death rates due to insufficient supplies during the spread of COVID-19 in a large, vulnerable population. The virus did not discriminate between the poor and the well-off, spreading throughout the country despite the nationwide lockdown measures.



## The Cycle of Unemployment

From May 2020, up until January 2021, a cycle of unemployment in the informal sector began. It witnessed an influx of skilled labor from various parts of the country to metropolitan areas. Graduates and undergraduates began to pursue their interests

in search of opportunities at corporates that were in need of cheap labour. The gradual shift in economic conditions created a demand for workers in various private sector industries. The extension of lockdown until New Year's Eve of 2021 further affected the local economy with mass recession. People were willing to take massive pay cuts, just to have a job that puts food on the table. Educational institutions and academia began to adopt virtual teaching methods and online classes to fill the knowledge deficit among the youth. Finance sectors quickly identified investment opportunities in an attempt to safeguard the working population with alternate revenue streams. An increasing interest in stock trading complemented the rise of mutual funds and SIP. However, corporations were among the first to have been impacted by the economic fluctuations due to COVID-19. While the top-tier corporates could sustain their workforce for the coming year, small and medium businesses closed their shutters. Self-employed workers lost contracts and employment opportunities due to the restrictions and closures of various establishments. While the cycle of unemployment negatively affected businesses, the formal sector began to utilise technology as a solution to unemployment. The increased access to large corporations gave people an edge over the job crisis, since they started hiring again. The practice of virtual hiring, online assessments, and remote screening presented a new ray of hope for aspiring professionals.



## The Digitisation Revolution

While India has a track record of facing issues due to rising unemployment in the formal and informal economies, technology presents an avenue towards a remote workplace culture. Remote work may not be ideal for every sector of the economy. Yet, it is a viable solution to harness increased connectivity and collaboration, within technology driven industries. With the rise of cloud computing and data sciences, internet services are reinventing contemporary work culture. From FMCG manufacturers to supply chain logistics, remote asset management is growing in prominence. The rise of e-commerce and internet businesses have also presented local stores, retailers, and producers with an avenue to harness digitisation of trade. The first internet revolution was the inception of the world wide web in 1989. It utilised internet connectivity for global information transactions. Since 1995, the internet has grown exponentially to surface as the most critical communication technology tool of the 21st century. With the global connectivity and communication efficiency of the internet, we are amidst the digitisation revolution in 2021. To harness the peak performance of digital connectivity, India is home to 700+ million internet users. This is nearly 50% of the total population.



## Technology to sustain India's talent

With the rise of technology, the talent demand and supply of India can be leveraged to expand existing skill sets with technology-driven education. In fact, Forbes states that the online learning market alone is estimated to grow to \$350 billion by 2025. With the connectivity of the internet and online learning, a vast Indian talent pool stands to benefit by acquiring skills necessary to the changing employability landscapes. Most private and public sector organisations have utilised the online learning scenario to implement virtual summits that enhance existing skillsets of their workforce. This trend has evolved over the past 5 years to create more jobs in internet businesses like cloud computing, customer services, business analysis, business process outsourcing, design technology, and marketing. The widespread reach of remote work environments has also become a rising trend that is redefining India's employability landscape and the world at large. The Covid19 pandemic hit the Indian economy hard, but India was prepared to make the most of the crisis. Like the famous Winston Churchill saying goes, "never waste a good crisis."



## Remote Work Culture

Remote work has not only defined the hiring process during 2021, but the work environments of corporations and businesses. The increased access to technology and the internet allows teams to collaborate remotely over their gadgets and devices.

Getting tasks done in data management, financial stock exchanges, business reporting, and every job that requires intelligence has transformed the physical reality of commerce. The rising popularity of online stores and internet businesses is a clear indication of today's entrepreneurship. Social media alone is home to more than 4 billion people, making up for 49.03% of the global population. In 2021, 54.58% of the Indian population is already registered on social media. This data is a clear pathway for a work culture which involves remote interactions and cloud sharing to fulfill job responsibilities.

## The hiring trend in IT

A Times of India report from Bangalore states that as high as 88% of India's workforce prefers to have the flexibility of working from home. Additionally, a whopping 69% believe their productivity has increased while working remotely. Despite a high percentage of the population expressing their desire to work from home, the new economic model has only just begun, and the digital revolution is introducing remote work culture. The IT & BPM sector was the quickest to adapt to remote work culture, with a workforce of 4-5 million professionals. The domestic revenue of the IT industry was estimated at US\$ 44 billion and export revenue was estimated at US\$ 147 billion in the financial year of 2020. The number of employees grew to 1.02 million professionals in just four IT majors, including TCS, Infosys, Wipro, and HCL Tech. The pattern of hiring is not limited to major IT corporations. Small and medium businesses, including various start-ups, are also following this trend. The pattern of hiring in the IT sector introduced remote work opportunities in sales, marketing, training, finance and almost every other role. The hiring intent during a global pandemic came with the benefits of work from home for more than 20,00,000 IT professionals working remotely. Small and medium businesses have also incorporated remote work for their workforce, making that number much higher on the nationwide employment scale.

## The Inevitable Economic Shift of Skills and Employability

In 2020, the remote work environments showcased India's skilled workforce in both the formal and informal sectors. With increased connectivity and remote collaboration, the pandemic's impacts on unemployment were slowly reverted with the hiring intention of companies. While most professions are reliant on the skills and proficiency of their job, the internet has offered a venue to acquire necessary skill sets. Education remains the unbroken link between employability and economic sustainability. With the widespread use of internet technologies and smart devices, aspiring professionals can get the necessary skill sets in the shortest duration, for a reasonable fee. Certification programs and online degrees from top universities are available across the world. The massive workforce of the formal sector needed to expand their existing knowledge with new tools and techniques. The informal sector witnessed a steep incline in the inclusion of technology for business. The rise of shipping services and UPI money transfer resulted in seamless business fulfillment. Investment in artificial intelligence has increased in healthcare, biotechnology, and telemedicine industries. Data science professionals became the ideal occupants of the talent demand of various businesses.

## Foreign investment in India's talent

Large corporations, with bulk investment capital, are establishing business partnerships with Indian companies during the global pandemic. In November 2020, Amazon India opened a 'Made in India' toy store, in line with the government's 'Atmanirbhar Bharat' vision. The store will empower thousands



of manufacturers and vendors to sell toys driven by the Indian culture and local folk tales. They will also sell toys that are locally crafted & manufactured. Amazon India's partnership with Hindustan Petroleum Corporation Limited in November 2020, allows for customers to book LPG cylinders and defer payment until delivery. E-commerce has begun to influence multiple industry segments, creating a data-driven business approach. This has significantly reinvented the employability landscape for a vast population of the workforce. The rise of UPI transactions has also reformed the transactional nature of business in the local economy. While Paytm founder Sharma was ranked India's youngest billionaire in 2017, his company's net worth increased to \$2.3 billion, according to Forbes in September 2020. The National Payments Corporation of India's (NPCI) BHIM UPI accounts for just 1.42% in the UPI transactions space, reporting 2.2 billion transactions in volume as of November 2020. The widespread use of UPI transactions is visible in local stores, street vendors, and car showrooms alike. The Modi government's efforts to boost employment generation have seen limited impact with an inadequately-financed MGNREGA programme, a failed Skill Development mission, and a flawed social security programme. However, the Pradhan Mantri Shram Yogi Maandhan has set the trend for local businesses to harness the requisites of skill development in India.

## Emergence of Skill Gaps during COVID-19

According to the data collected, the youth employability stood at 45.9% consisting of highly employable resources. This is significantly lower than the previous year. The emergence of a skill gap is the reason that youth employability reduced to 45.9% from last year's 46.2%. The skill gap that emerged with the COVID-19 pandemic has given rise to computer courses, language classes, and online skill assessments. Local businesses have emerged with online stores and numerous social organisations aimed at connecting businesses with technology. The nature of wireless communications is a defining factor to exemplify the nature of business transactions and operations today. For recruiters, hiring potential employees amidst a pandemic has been possible with the connectivity of the internet and applicant screening software. Technology streamlines a lot of the organisational processes that would otherwise take more personal time for professionals to fulfil. Interviewing multiple employees at once is possible with the internet and software like Zoom, Google Meet and Microsoft Teams among numerous others. This has impacted the hiring intent of organisations by prompting focus of potential employees with a certain knack for technology knowledge. Employee training was also conducted widely over conference calls in organizations. Provided that an employee qualifies for a role, their training, onboarding and work is all fulfilled remotely. Establishing the direct correlation of technology with employability in India is vital to realising the pathway forward. In fact, the employability landscape of India is evolving with technology that makes workplaces more collaborative and operations more efficient. The Covid19 pandemic revealed how central technology is to everyday lifestyle.

## Lack of labor

Meanwhile, the agriculture and construction sector has witnessed a decline in available labour to fulfil their operations. Various restrictions, policies, and reforms have created an outcry among the labour intensive sectors of the economy. Since many agricultural products are perishable goods like fruits and vegetables, the living of many citizens depend on foot traffic to stores. The logistics sector was impacted by zonal restrictions nationwide. Travel between states was under curfew and lockdown measures. Travel and tourism

laid off thousands of employees within the first few months of 2020. Businesses with seasonal profits like hotels and travel destinations were impacted by new travel regulations. Yet, the real estate investment opportunities in India have presented an avenue for multinational corporations to base their operations in India. This is an impact of the lockdown during the global pandemic, which shed light on the massive available talent force of India. The pandemic revealed more than a skill gap emerging from the increased access to technology.

## Integrated workplaces

Understanding the research behind the hiring intent of businesses in India is crucial to realising the skills that are essential for the nation's evolving economy. While the global pandemic has increased the reliance on technology for everything, remote work access has exploded as a preferable option for a significant portion of the working population worldwide. The inclusion of integrated workplaces in the formal and informal sector has revolutionized work culture. More people are relying on software and data analysis to make big decisions for their businesses. This trend is redefining workplaces and businesses, while emphasising on the critical thinking skills and value added contribution of it's workers.

The ISR 2021 explores the data driven research to spearhead the employability landscape of India post COVID-19. Dissecting the workforce data of this vast nation is essential to administering the talent supply to match the demand of today's employment opportunities. This report is a combination of an assessment of 65,000 candidates from across India who appeared for the WNET, and the India Hiring Intent survey where 150+ corporates spread across 7 industry sectors participated and shared their hiring forecast for the year.



# SUMMARY OF KEY FINDINGS



## The trend of youth employability

From the data collected during the Employability test for aspiring professionals, it was revealed that 45.9% of the youth were considered highly employable resources. This is far less than the previous years, indicating a skill gap in education. This is still an encouraging statistic considering that the average age of India is 26.8 years old. That's a vast portion of a workforce in the densely populated subcontinent of South Asia. Among the employable talent, more women were found employable than men. 41.25 women were found employable while only 38.91% of male employable resources were identified. This is an encouraging statistic for gender representation in the world. In fact, the number of women enrolled in colleges and degree programs have increased over the past. Among all aspiring professionals, B.Tech holders and MBA graduates were considered the most employable resources domain wise. Furthermore, Maharashtra, Tamil Nadu, Uttar Pradesh and Karnataka are the regions with a large majority of employable talent. While there is a huge demand witnessed for qualified Pharma & Healthcare workers, the software and IT industries are expected to hire more women in the coming year. An overall 37% positive hiring intent, indicates that more males and females will be employed by industries across diverse sectors. A noteworthy statistic shows 36% of the total workforce were women, compared to the 64% consisting of men employed in all industries. This is a significant improvement since last year, yet a lot of ground to cover for women participation in the workforce. In fact, 2015 was the last time where women participation was recorded at 30% and above. While there are more qualified women resources at 41.25% compared to men at 38.91%, the requisites for technical training is high among all aspiring professionals and students. More qualified women resources are a strong indicator of the structural changes at the roots of the Indian economy. The overall decline in employability among India's male youth is a reflection of the stringent measures that affected education and industries, during the lockdown and subsequent pandemic related restrictions. To tackle the decline in overall employability among the youth, skill-enhancing programs and employability training will play a vital role. Students from various domains are taking up online classes and training certifications to become more employable. ISR 2021 dissects the data collected on the Indian talent demand and supply, to offer congruent insights on the changing nationwide employability trends, with key focus on the drivers of employability in India. To understand the factors influencing employment and employability in India, we must analyze the changes across industries last year, due to the Covid19 global pandemic.

With the data collected for the India Skill Report 2021, we explore the talent supply and demand of India in a post-pandemic setting. The skills growing in demand are known to be technology related knowledge, assessed for a clear vision of what lies ahead. Availability of talent in each domain is analyzed on par with the cities and states that offer the most competent resources in India. This report also maps the hiring intent of 7 industries across India. A preview of regions hiring the most number of workers, will shed light on the employment opportunities and employability scale of India in coming years.

## The National Employability Test Analysis

### From Our Assessment Of The Talent available, The Wheebox National Employability Test (WNET)

**Employability of India's youth has decreased to 45.9% with the percentage of highest employable talent in the age group of 18-21 years old, at 40%.** This is significantly lower than last year's analysis of youth employability in terms of overall employable youth, but a strong reflection of the average age group of India's emerging professional landscape. This urges the need for reformative measures at the roots of education to equip younger students with skills necessary for in-demand career opportunities in various industries.

**B.Tech and MBA holders have taken over the position as the highest employable populace with an employability score of 47%.** In the previous year, that position was held by MBA holders by a mentionable marginal difference at 54%.

**MBA, B.Com, BA and B.Pharma candidates from the WNET test were considered among the next set of highly employable resources,** indicating that the coming years will witness increased hiring across all business sectors of industries and healthcare industries.

**Candidates from Maharashtra, Tamil Nadu, Uttar Pradesh and Karnataka were found with most of the employable talent** while Hyderabad, Bangalore and Pune were the cities with most employable talent. Compared to last year's data, Mumbai has come down from the top 10 cities list, with Hyderabad, followed by Pune, consisting of more employable resources to become one of the cities with the most employable talent.

**Percentage of employable women is higher than male participants,** with 41.25% employable women and 38.91% employable men. The trend of more employable women has been recorded at a steady climb in the past 3 years. This shows that India's women are the biggest resource pool for industries to leverage in the coming years.

**On an average, 64% of all professionals are men, while only 36% of the workforce are women** in India. Yet, the premise of more employable women in Rajasthan stood at 46.18% of the female test takers, followed by Telangana with 32.71% job-ready women.

**A steady increase over the previous three years shows a vast majority being 85.92% of the test takers seeking internship opportunities with organizations.** This is a clear indication of a job-ready talent pool in India lacking only in experience.

### FUN FACT:

Bangalore city retains position as the top preferred city to work in India. Having one of the highest hiring rates in the country, more aspiring professionals are making way to the Garden City of India.

### From Our Study Of The Talent Demand Side, The Hiring Intent Survey

**The hiring intent survey indicates an overall change of 43% from last year,** largely positive with about 47% of employers likely to increase hiring in the coming year. This is great news considering the gradual inclusion of remote work environments



that make hiring across state borders much easier than ever before.

**Women consist of 36% of the workforce, while men comprise 64% of all workers.** The women participation is higher than the previous 5 years, a hopeful sign for the structural economic changes in the future.

**The highest percentage of women in any sector was recorded in the Banking and Financial Services Industry (BFSI)** making up to 46% of the employable talent in this industry. While the percentage of male workers is higher, increased hiring of women in BFSI is a hopeful indicator, considering a significant majority of the employable resources in the country being women.

**Highest number of male employees were from the automotive domain** with 79%, followed by the Logistics sector with 75% and then the Core & Energy sector with 72% employable.

**Female employees in the Internet businesses were recorded at 39%,** followed by the IT sector with 38% of the workforce being women. This is a great indicator of the leaps taken by the formal sector in employing female professionals.

**The variable workforce in terms of gender across all industries was at a 23% climb,** indicating that there's a 23% chance that more women will be employed in the coming year. The available job-ready talent among young women can base the foundation to reversing gender roles and gradually upskilling the workforce in corporations.

**Considering that 25% is the variable workforce in terms of permanent employees and rotational assets,** companies will continue to hire, especially in the Internet Businesses, Logistics, and Core and Energy sectors. As expected last year, e-commerce and BFSI increased hiring, and the IT sector has hired more women compared to the previous year.

**Mumbai is the city with the most employable resources with 70% of the test takers scoring above 60%.** Hyderabad is the second city with 67% scoring above 60% on the employability test.

**Ghaziabad is the city with the most employable youth between the ages of 22-25 with over 64%,** followed by Pune with 58% of employable talent. Candidates with 1-5 years of experience continue to remain in maximum demand and a growth of 13% demand for qualified resources is evident in Non-tier 1 & 2 cities across the nation.

**States of Maharashtra and Karnataka hired the most number of employees last year as well,** while companies in Telangana and Andhra Pradesh have also increased their hiring compared to other states.

**An estimated 37% positive change** is expected in the hiring intent of Pharma and Healthcare professionals in the coming year, meaning that the resources available is a good sign.

**However, the employable resource lowered to 45.9% compared to previous years** is a slight concern, considering that more industries are looking to hire in 2021. Education sectors and academia should play a vital role in equipping students with the in-demand skills of industries. Vocational training and online courses are going to play a vital role in the skilling process for the job-ready youth.

## A skill gap in the IT industry

A majority of the employable resources are qualified in their domain of education. However, the evolving economy needs a skilled talent pool with hands-on experience in various

emerging technologies. The inclusion of technology assets across industries has created a high demand for professionals with a knack for learning new skills and industry specific certifications. As various industries begin to transform with the impacts of Covid-19, the IT industry and internet businesses are taking to the centre stage. With overall funding for start-ups skyrocketing to touch \$63 billion between the period of 2014 to the midway of 2020, India witnessed the entry of 34 startups in the top club having a combined valuation of \$115.5 billion. During this period, the hiring for internet service based companies and IT firms has gone up. Interestingly, the pandemic revealed a huge skill gap in the IT sector alone. As cloud computing giants Microsoft & Amazon continued their investments in India, major businesses began to shift to the technology demands of the day. Home grown Byju's app recorded increased sales in the year 2020. End-user expenditure on public cloud services in India is expected to total \$4.1 billion by 2021. This is a massive increase by 29.4% from 2020. A simple example of cloud services is the use of Google drive and Zoho cloud to perform work tasks and share data online. The role of data science and cloud computing is gaining more momentum at the beginning of 2021 and this boom is considered an offshoot of the IT revolution in India from the early 2000s.

Cloud computing, data science and natural language processing are in high demand, owing to large skill gaps in these areas. The evolving IT industry will have to find qualified professionals to fill the roles of data scientists, analysts, AI experts and more in the next 5 years. Although only 45.9% overall are employable resources, the WNET data shows that 48.27% of the test takers from the IT domain are employable, followed by second in the highest percentage of employable talent domain wise being 39.9% of Electrical engineering graduates. With 38.34% of Computer science graduates are employable in India, they are at third in terms of employability rankings in 2021. Meanwhile, Popularity of online courses and skill enhancement courses are an added qualification for many aspiring professionals. The available talent is a strong determinant of the growth of IT and business in the coming years. The age group from 18-21 years old, is considered the most employable with 40% of the test takers in this group found well-equipped and employable. The employable resources between the age of 22-25 come second with 38.46% employable talent. The least employable talent was found in the age group of 26-19 with 37% being highly employable. These age wise statistics are an indication of the skilled workforce adapting to the latest industry demands. Yet, to fill the skill gap in the IT sector requires practical exposure to the latest technologies that gained popularity in the last 5 years. The pattern of employment over the last year shows that availability of resources in the age group of 26-29 is due to the lack of opportunities in the formal sector during 2020. In the coming years, industries and the governments should focus on making the existing talent pool more employable and aligned to the evolving industry demands.



## Online learning and self-development

The advantage of online learning is that there are no age restrictions, allowing experienced professionals a chance to change careers and pursue a fresh start. In the coming years, most of the 45.9% employable resource is expected to develop new skills through certifications that are in high demand today. The increased access enabled by smartphones and internet is also opening up an avenue for freelance opportunities in various domains. Digital marketing and e-commerce have witnessed an increment in qualified resources being employed by small and medium businesses. This trend of employment is a reflection of freelance opportunities that allow students to build a portfolio before they begin a corporate career. Also, large MNCs are tapping into the available talent in India, owing to the cheap labor in the country.

### FUN FACT:

**86.7% of WNET test takers have a computer at home.**

## Freelancing is bigger than ever before

As of September 2020, India is the second-largest freelancing market in the world. The decline in employability among the youth could be saved by freelance opportunities that can build a stronger premise for hiring. The cheaper labor has a profound impact on international clients seeking for Indian freelancers. More than 20 million Indians are estimated to be regular freelancers. The undocumented segment consists of freelancers with irregular income from occasional freelance gigs. The gig economy has been growing in India for decades. At the edge of remote work culture, unemployment rose and employability declined. Yet, the freelance opportunities were beginning to educate citizens about fresh opportunities. The best part is that freelance is more convenient and timely even for a regular day job professional. A noticeable trend is the use of freelance opportunities to build a portfolio for aspiring professionals to land their dream job. The findings state that freelance opportunities are going to become a bigger part of the corporate model of trying to get quality work done at the cheapest rates. Also, outsourcing work for small, medium or large businesses has proven to cut costs as much as 20%, as opposed to hiring a dedicated employee for one specific job role. The Freelance market of India is one reason why many industries have a significant percentage of rotational resources.





# NATIONAL EMPLOYABILITY TEST ANALYSIS - THE SUPPLY STORY



## ARE THE YOUTH JOB-READY?

The median age of India's population was listed at 26.8 years old in 2020. Among the test takers, 45.9% were found highly employable. With a population of 1.38 billion citizens, more than half the population is estimated to be below 26 years of age. This statistic is a reflection of the competition for employment in every industry. Although the formal and informal sectors offer various opportunities for graduates, the skills required are constantly evolving. Along with the rapid advancements in technology, new jobs are making way to the market. Big data & cloud computing are examples of the domains that require specialized training to fulfill job demands. It was revealed that the country needs to constantly find new ways to leverage the vast talent pool of India through skilling initiatives. The economy has witnessed a rise in numerous start-ups and social organizations over the past 5 years, where the average age of start up owners is reported at 31 years old. Yet, 85.92% of the test takers were keen on reaching out for an internship role to garner experience for a shot at pursuing their careers. The high competition is evident among the youth with the limited employment opportunities available. The Covid-19 pandemic set a lot of layoffs in motion. Yet, the slow revival of the economy was aided by the positive hiring intent of small, medium and large businesses. If the jobs available in India cannot meet the demands of a highly qualified youth from various domains, the coming years will witness a rise in alternating career paths among students of any given domain. Similarly, when the demand rises in certain sectors like IT, Pharma, Healthcare, Engineering & Energy, the available resources should be competent to match the industry expectations. The choice of an alternate career is easily available to most students due to the access to technology and this could affect the job-ready talent available for many industries.

The students who took part in the WNET were from various

domains in education across the country. The employability test (WNET) assessed skills of 65,000 candidates and their chosen domain. The Wheebox National Employability Test is a scientifically curated assessment that serves as a guide to record the available talent resources, by testing their employability from the perspective of their readiness to join the industry. The test was conducted online and accessed from mobiles, tablets, computers and laptops. We approached 65,000 students from across India. The latest WNET was the eighth consecutive year that Wheebox assessed the employability landscape nationwide, making it the largest test to record and analyze the talent demand and supply of India. The unemployment that rose during the Covid-19 pandemic is crucial to the percentage of available employable resources among youth. Compared to last year, the number of employable resources has decreased significantly, encouraging the evolution of skill sets within the vast talent pool.

**As recorded, 45.9% of the Indian youth is employable while 85.92% of test takers are seeking internships to kickstart their careers.**



# CONSISTENCY IN OVERALL EMPLOYABILITY

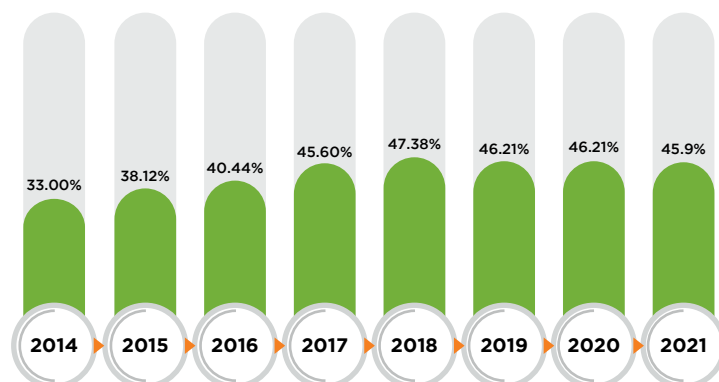


## OVER THE PAST YEAR – A DECREASE FROM 46% TO 45.9% OF STUDENTS, SHOWS THE JOB-READY YOUTH

To kickoff the Wheebox National Employability Test survey analysis for 2021, let's explore the results for overall employability of students. About 45.9% of students in this year's survey were identified as employable or job-ready. This is a significant decline by 0.1% from last year's employability score which stood at 46%. The overall trend is a positive indication of the available talent resources in various industries. This is because more technical students are employable, matching up to the demands of many industries. However, having a job-ready talent pool of 45.9% requires the opportunities to furnish this country's economy. The unemployment rate in India was estimated at 6.5% in January 2021, with 8.1% of urban India unemployed and 5.7% of rural India unemployed. This can be attributed to the less job opportunities available in the formal sector of many states in India. While a majority of India's workforce resides in the informal sector, the trained resources available are not offered the same opportunities in their localities as opposed to the rapid urbanization demands in cities. Educated students with a high employability score are not employed in the formal or informal sector due to the lack of awareness and opportunity in their areas. The WNET also assessed the geographical aptitude of India's employability landscape. Rajasthan and Madhya Pradesh were among the top states to have available skills in English as a second language. Rajasthan topped the list for states with available skills in critical thinking and computer skills. Yet, students from these states did not have a higher employability rate as opposed to states like Maharashtra, Tamil Nadu, Uttar Pradesh, Karnataka and Andhra Pradesh sealing top 5 spots for youth employability. This can be attributed to the rising efforts in skill development by the government and academic institutions. The employability rate is also a direct result of the available

opportunities in each area. However, there is still a lot of work required to equip the talent pool of India's youth with skills of the 21st century. A holistic approach to the employability landscape states that a mix of technological familiarity and in-depth subject knowledge are two factors that influence the employability of an individual. While access to technology has made India one of the largest smartphone markets in the world, the requisites for technical education is much higher than ever before. A decline in the employable youth population is not a massive hit for one of the fastest growing economies. If more youth are not trained and job-ready, the industry demand will not be met, but the competition is severe in India's saturated talent pool. Software and hardware knowledge is becoming a growing demand in industries ranging from Travel & tourism to Energy & manufacturing. The decline in employability among students is witnessed for the second year in a row, after a jump in employability witnessed between 2016-2018. Notably, the highest employable percentage was found in the age group between 18-21 at 40%, indicating the structural changes at the core of the employability landscape of India. From the years 2019-2021, the employability rating has dropped by 2 points, standing at 45.9% today.

### OVERALL EMPLOYABILITY



# MANAGEMENT GRADUATES & ENGINEERING

## GRADUATES PRESENT THE HIGHEST EMPLOYABILITY SCORES, LEANING TOWARDS TECHNICAL SKILLS.

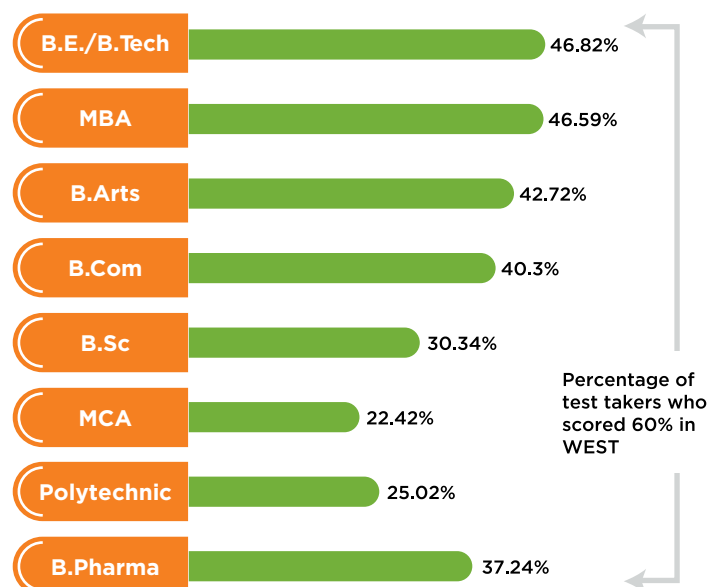
When analyzed from the perspective of most employable candidates according to chosen domains, B.Tech/B.E students were found the most employable with 46.82% employable talent in this domain. MBA students are slightly behind with 46.59% employable talent, followed by BA students with 42.72% employable talent. The Engineering graduates stood out by a slight marginal difference in the statistics, compared to the MBA graduates. Engineering graduates retain position as the most employable resources domain wise. Last year, MBA graduates were found to have the most employable resources. Compared to last year's analysis, Engineering students have also presented scores to show that they are more employable than many other domains. That being said, the highest employable resource was found in the IT domain with 48.27% of test takers scoring above 60%. The Electronics and communication engineering domain is second with 39.90% scoring above 60% on the employability test. When analyzed from the perspective of technical education required to excel in various industries, the vast majority of employable resources further consist of Computer Science graduates, Mechanical engineering and Civil engineering graduates. This indicates the technically sound populace of emerging professionals ready to tackle the demands of India's growing industrial needs. The adoption of advanced technologies such as AI, Big Data, Robotics, AR/VR and automated technologies are basing the premise for India's bright future. Provided that specialized education and certification programs can be availed by the qualified technical student base of India, industries will be hiring more employees in the coming year. Especially bio-technology, pharma, healthcare, energy, logistics and business operations. With the IT industry posing as the fastest growing counterpart of today's economy, a spike in technical hardware expertise and software engineering roles is imminent. If the quality of the technical education in India can stand the test of time, the economy can make use of this vast talent pool of technical leadership and thought leadership for the future.

The B.Pharma, Polytechnic, B.Com and BA courses also retain their position in employability where more students are job-ready this year. The strength of B.Sc, BA and B.Com students that are job ready will offer companies with a strong mantle to furnish their workforce. Provided that the economy continues to create more opportunities to diversify the talent of India's youth, the technical and non-technical education will pay off for the students. Thought leadership is required at all levels of academia and industry to ensure that the vast talent pool of India's youth is used to the optimum function of its economy. When 45.9% are job-ready resources, special focus on skilling is necessary. The successful administration of academics to catch up with the latest technology knowledge and implementation of practical learning environments will determine the skills of India's future workforce.

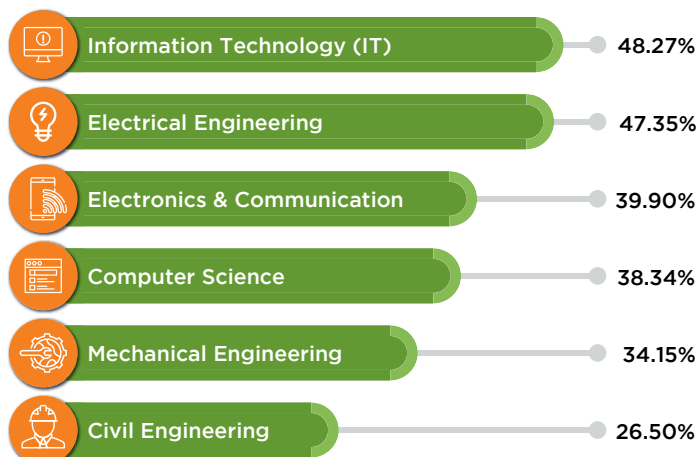


**Most Employable age group  
was found to be between 18-21  
years old, indicating a structural  
change in the employability  
landscape of the future.**

### DOMAIN WISE EMPLOYABILITY



## ENGINEERING COURSES WISE EMPLOYABILITY



## STATES WITH THE HIGHEST EMPLOYABILITY

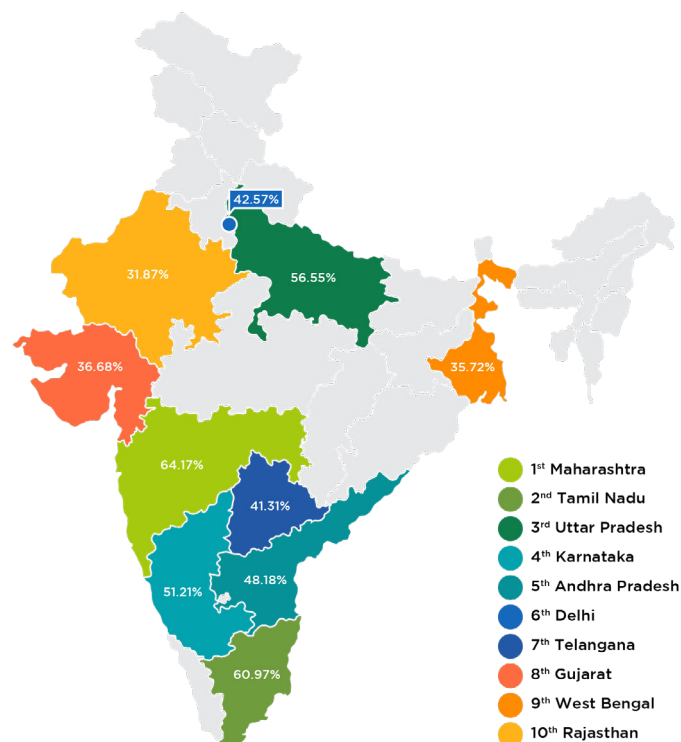
Addressing the states with highest employable talent, including UTs, the top 3 states were identified as Maharashtra, Tamil Nadu and Uttar Pradesh. The top states remain the same as last year, sealing their position as regions with the most employable talent. The employability of their human resources are a direct reflection of the job opportunities in the top 3 state economies. Karnataka comes fourth while Andhra Pradesh follows. Bangalore is among the most preferred cities to work for aspiring professionals. Rajasthan and West Bengal come in the top 10 states with employable talent, yet remain below Karnataka, Andhra Pradesh, Delhi, Telangana and Gujarat respectively. Haryana could not make it to this list again, despite the massive push from numerous skill development initiatives by National Skill Development Corporation (NSDC) and Haryana Skills Development Mission (HSDM).

## STATES LACKING OPPORTUNITY FOR ASPIRING PROFESSIONALS

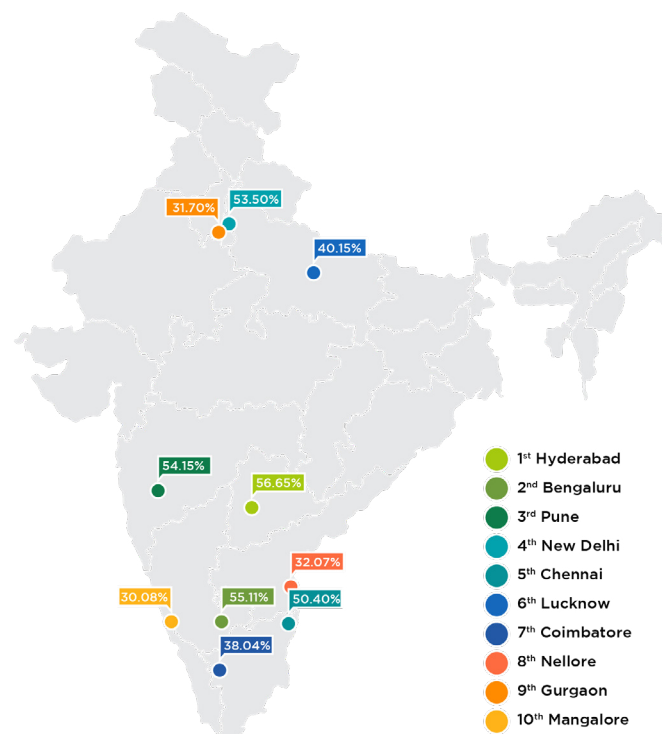
Kerala, acclaimed for its high literacy rate, did not make it to the list of top 10 states in terms of employability, despite having a huge population of employable resources. The state shows up only among the states with highest access to numericals and english language education, along with Rajasthan, Madhya Pradesh, Karnataka and West Bengal. However, Kerala has the highest employability for ages 26-29 who are lacking in job opportunities for aspiring professionals. The lack of corporate infrastructure and job opportunities in the state of Kerala and Rajasthan is evident, owing to the poor representation within the states to offer employment for its urban and suburban residents. Meanwhile, Hyderabad, Bangalore, Pune and Delhi continue to serve as the preferred destinations for employment, considering the opportunities available in these cities.



## STATES WITH HIGHEST EMPLOYABILITY



## CITIES WITH THE HIGHEST EMPLOYABILITY



## SKILLS AVAILABILITY STATE WISE

**Top 10 States with Available Skills in English as Second Language**

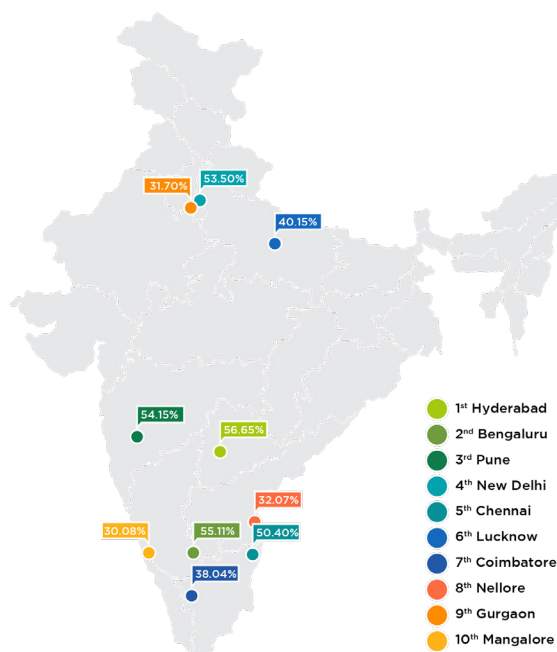
Rajasthan  
Madhya Pradesh  
Karnataka  
Kerala  
Telangana  
Assam  
Maharashtra  
Delhi  
Tamil Nadu  
West Bengal



<b>Top 10 States with Available Skills in Numerical</b>	Maharashtra Madhya Pradesh Tamil Nadu Karnataka Andhra Pradesh Uttar Pradesh Rajasthan Telangana Kerala Gujarat
<b>Top 10 States with Available Skills in Critical Thinking</b>	Rajasthan Madhya Pradesh Karnataka Telangana Maharashtra Kerala Uttar Pradesh Tamil Nadu Delhi Gujarat
<b>Top 10 States with Available Skills in Computer Skills</b>	Rajasthan West Bengal Kerala Delhi Maharashtra Uttar Pradesh Karnataka Tamil Nadu Telangana Madhya Pradesh

Further delving into the employability at the city level, Hyderabad and Bengaluru top the list with most employable talent. Last year, Mumbai was the city with the most employable talent, while this year, Hyderabad secured top position and Bangalore came third, followed by Pune. Further down the list, New Delhi, Chennai, Lucknow, Coimbatore, Nellore, Gurgaon and Mangalore are among the top 10 cities with most employable talent. Upon further analysis, Pune tops the list for Numerical skills and Udupi tops the list for Critical thinking skills. New Delhi tops the list for Computer skills nationwide. Respectively, Udupi is second on the list of top 10 cities for skills in Critical thinking, Numericals and Computer skills, while Ghaziabad was listed as the city with best access to skills in English as a second language. However, Ghaziabad is lacking in the computer skills segment of the employability test, compared to other cities.

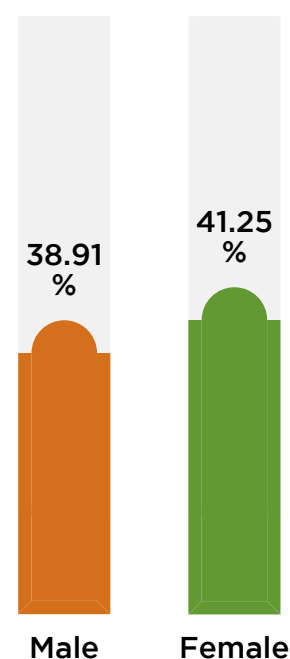
## TOP CITIES WITH HIGHEST EMPLOYABLE TALENT



## GENDER ROLES AND EMPLOYABILITY

From the data collected from employability scores among men and women, it was identified that the percentage of women scoring a higher employability score, was more than men. While 41.25% of the women nationwide were considered employable, a much lower percentage of 38.91% of male employable resources were uncovered. However, the contrasting statistic is the ratio of workers being 64% males and 36% females across all industries. Excluding management level professionals, only 23% of the main workers in India are women. Although the female employability is higher among the youth, the resource allocation does not reflect this statistic clearly. More women are taking up jobs, but only a meagre 6% of women are working in the formal sector, while 94% of employed women are in the informal sector. A report from 2011-2012 showed close to 40 million women working in home based businesses. Although 46.58% of test takers found employable nationwide were women, the 38.91% of employable men are likelier to get a job in the formal sector of India's economy. But the positive hiring intent and rotational employee statistics show that considerably more women are going to be hired by top industries in the coming year.

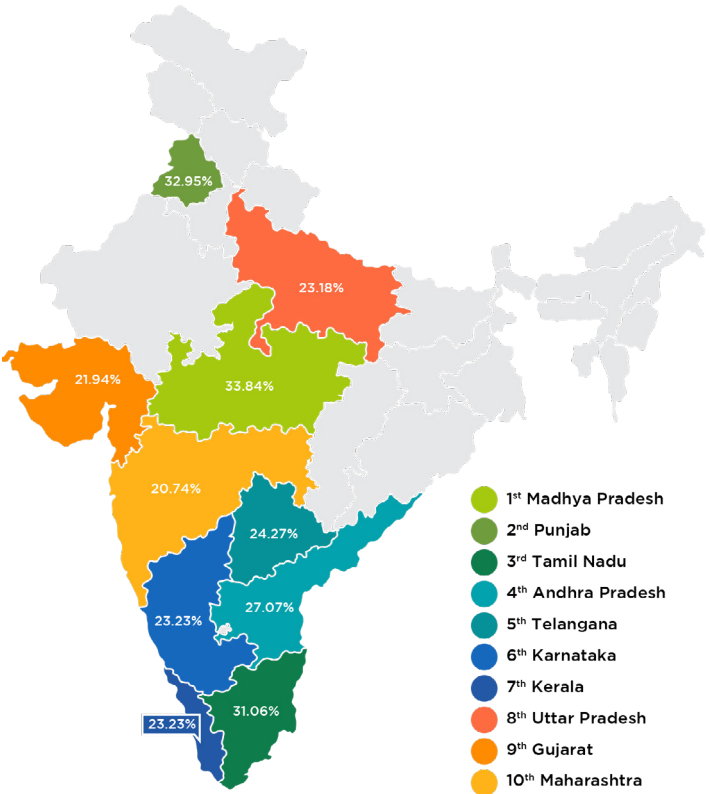
## GENDER WISE EMPLOYABILITY IN INDIA



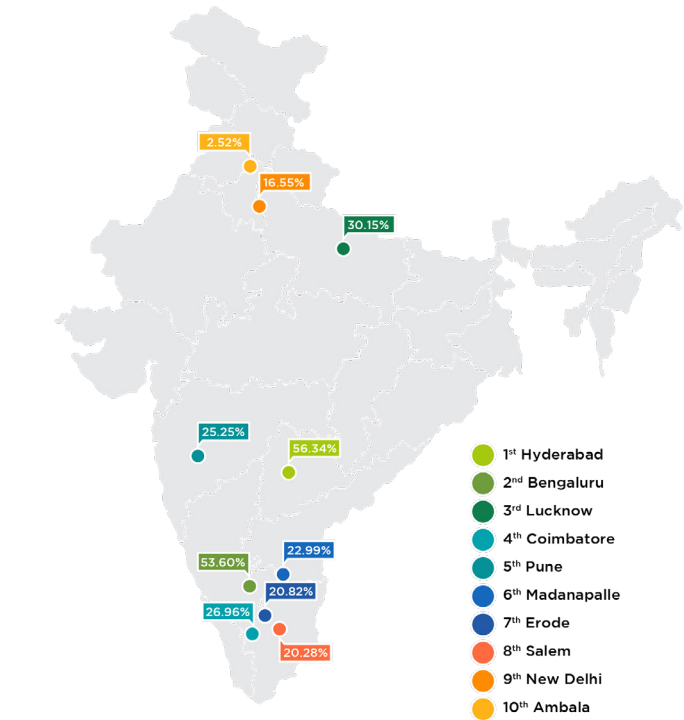
A United Nations report states that more than 2 billion women work in the informal sector worldwide, with a huge percentage coming from countries in Asia, South America and Africa. Evidence signifies that most people who enter the informal economy do not enter by choice, but due to the consequence of lack of opportunities in the formal economy, paired with the absence of another means of livelihood. Considering the population of qualified and employable human resources in India being women, the country is expected to make reforms in existing infrastructure to accommodate this vast talent pool. By doing so, India can set a trend for every emerging economy to reverse the gender roles and create sustainable opportunities for the future of globalization and world commerce.

The increase in the number of job-ready women offers an opportunity of the Indian employment landscape to address the underlying social issues and create a viable means of economic fortitude for the nation. When filling the skill gaps that have emerged during the COVID-19 pandemic, the representation of women in various sectors of the economy is crucial. The survey also traced the pattern of employability of men and women region wise. Rajasthan, Telangana and Karnataka were the top three states to have the highest percentage of employable women, while Madhya Pradesh, Punjab and Tamil Nadu were home to the most number of employable males. Considering that top tier cities are situated in regions like Karnataka, Maharashtra and Telangana, the change in hiring intent can surely benefit the gender parity required to sustain India as an example of equal opportunity and representation. That being said, both male and female employability has shown an overall decline from last year, with the male employability slightly lower and a vast percentage of students not job-ready. This is a reflection of the specialized hiring that has resulted in a shift in talent demand and supply during the Covid19 pandemic. The emergence of a skill gap also concludes the available employable resources in India. Industries based their hiring on qualified personnel with dedicated skills to match job requirements. The screening process has evolved and the talent pool is taking a new shape in the coming year.

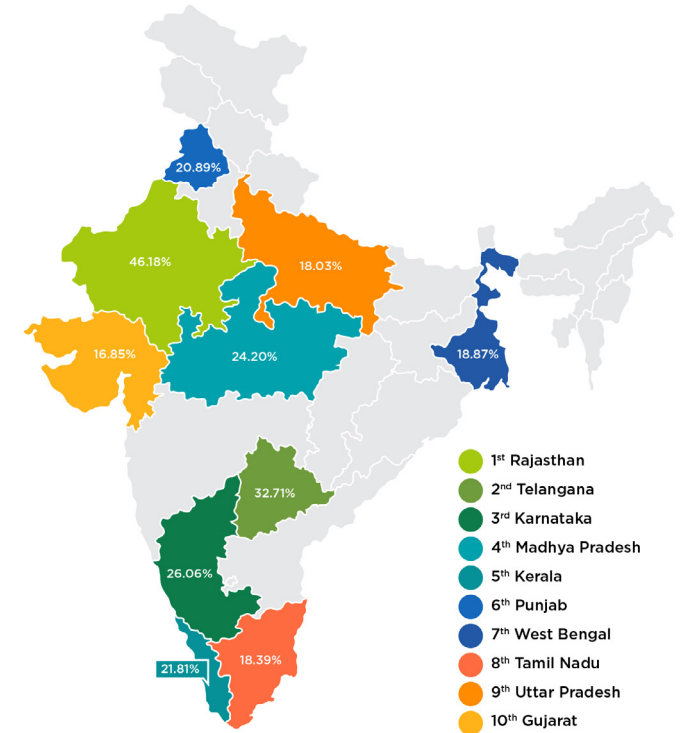
### MALE EMPLOYABILITY STATE WISE



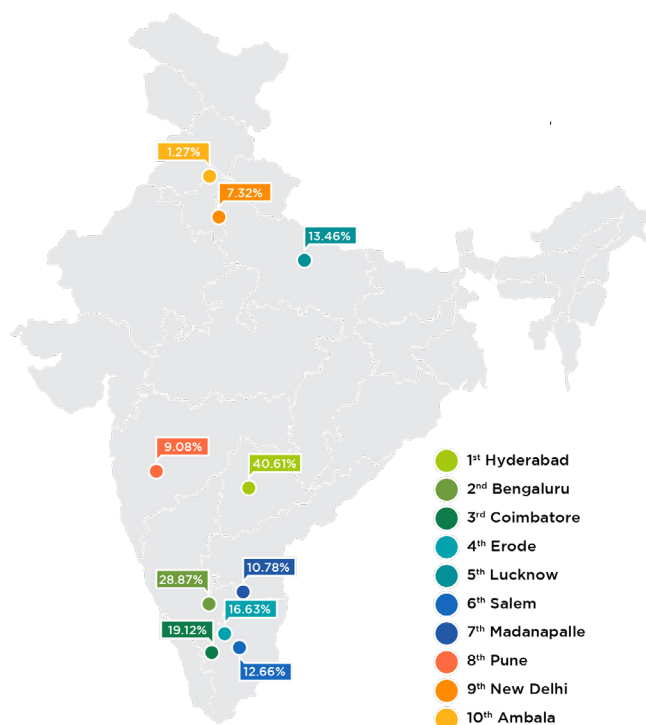
### MALE EMPLOYABILITY CITY WISE



### FEMALE EMPLOYABILITY STATE WISE



## FEMALE EMPLOYABILITY CITY WISE



## MAKING AN INFORMED CAREER DECISION

To understand the influences in choosing a career path, we asked students what facilitates or deters their career choices. We asked them if they have access to the resources required to make an informed decision about their career. We also asked them what help they expect from institutes and industries to make better career decisions. The following points were observed.

### Majority of students said they were well-informed to choose a career path.

The influences on decision making among aspiring professionals is attributed to their educational institutions, the internet and their families. 88% of test takers own a computer at their home, covering the requisites of access to information. This statistic is hopeful for the growing demands in Indian industries, leaning towards computer literacy as a strong determinant of career success. Additionally, the access to smartphones is another element that adds to the influences on their decision making for choosing a career path. With access to educational sites, news networks, online courses and organizations online, students are certainly becoming more aware of the opportunities in the economy. Both the formal and informal sectors of the economy owe a lot of their reach into the talent pool through internet communication.

### Information overload persists as a deterrent

Despite the easier access to information, an ambiguity surrounding information overload acts as a deterrent to their career progression. 40% of the students voiced their concerns about the overwhelming nature of increased access to technology and the internet. Traversing the world wide web on it's own is a skilled asset of the 21st century. When the overload of information erases a clear pathway to direct students, their

career choices are directly impacted. A study from 2019 shows that internet users spend an average of 2 hours and 22 minutes daily on social networking alone. This figure has jumped to 3 hours and 37 minutes on average daily social media usage. In fact, the role of social media in business has increased significantly over the last year, stemming from the fact that 54% of customers use social media to shop for products. Not only is this increasing the economic value of social media, but deterring a broadened acquisition of information for students and aspiring professionals.

The use of social media to target people for business expansion is on the rise. Similarly, job hunts on the internet are also increasing. Without the lack of awareness in the opportunities presented by the internet, students will not have a clear picture of the path they can take in their careers. There are reportedly 50 million user profiles on Naukri alone, where around 10,000 resumes are updated by job seekers on this website daily. Considering the vast talent pool of India, the ideal candidate is only the right website away from securing a fulfilling job.





## The era of internships

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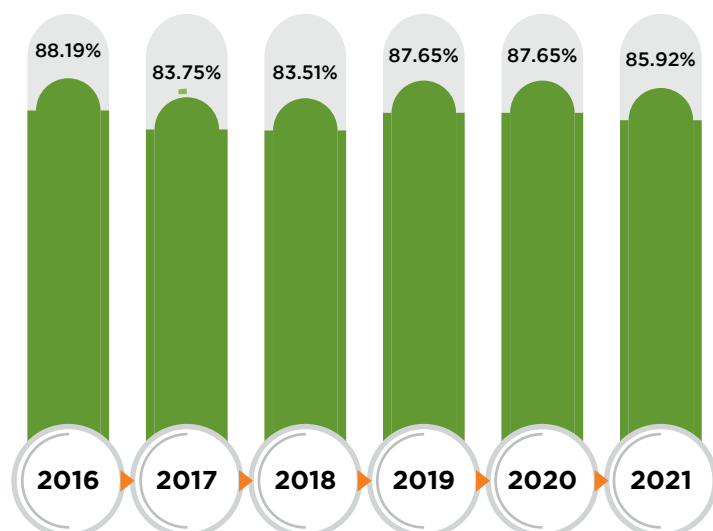
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## PREFERRED PLACES TO WORK

Stemming from the interest among students to pursue internships, they were also asked about their preferred place to work. The study revealed that certain regions in the country were more preferred than others, owing to the expanse of urbanization in India. Furthermore, their preferred salary range was also recorded as part of the WNET survey, to complement the hiring intent survey conducted to assess the demand of talent in India.

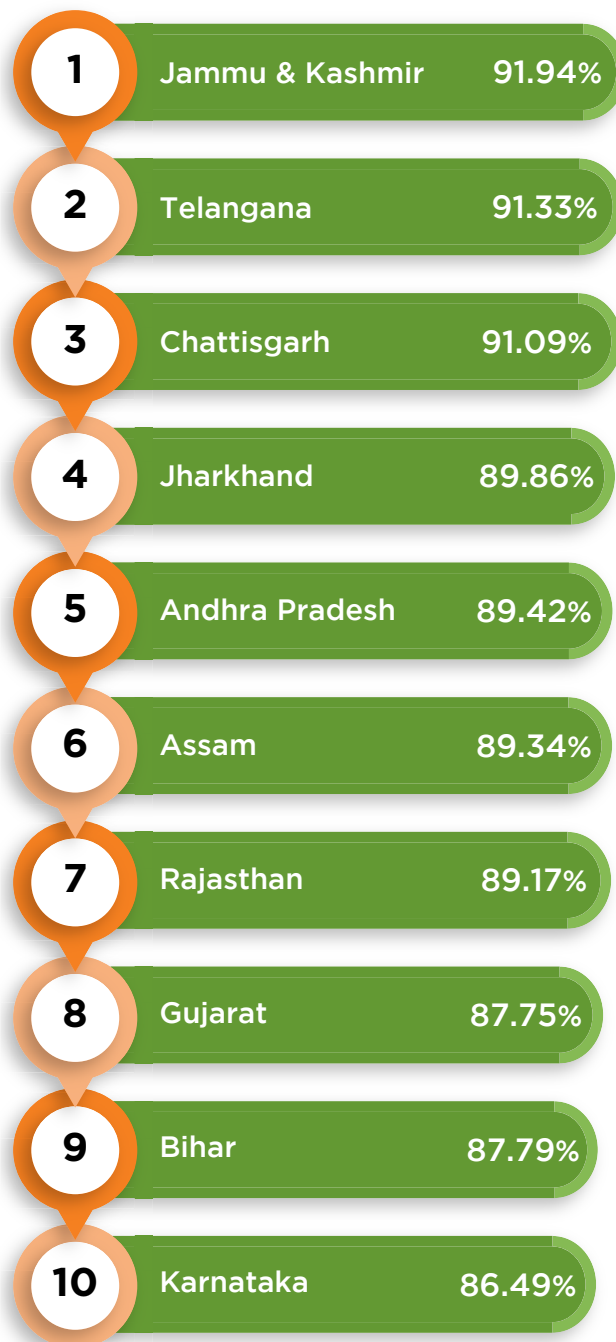
When students prefer internships to get their career started, it was only right that their preferred job locations were addressed. Numerous factors influence their preferred location, like the availability of companies, infrastructure, job market, hiring intent and awareness of the mass urbanization in various cities across India.

## PREFERENCE FOR INTERNSHIP



**Jammu & Kashmir, Telangana, followed by Chhattisgarh** were recorded as the states with highest number of candidates wanting to avail an internship. For internships, Telangana has been reporting good results from the employability perspective, indicating its determination for growth. This is further supported by its placement data, wherein the certified vs placed students' statistics is above 60% for short-term training programmes.

## MOST PREFERRED STATES TO APPLY FOR INTERNSHIPS



**Tamil Nadu and Maharashtra** were recorded as **top preferred states to work** for both male and female aspirants according to the survey. The increasing opportunities in Chennai and Coimbatore are a clear contributor to the awareness among aspiring professionals. Both Chennai and Coimbatore appeared in the top ten preferred cities to work. However, Bangalore was listed as the top most preferred city for work, specified by most number of female candidates. Male aspirants on the other hand, cited any city in the top 10 states as their priority for preferred areas to work.

## PREFERRED PLACES FOR WORK

### Preferred Area to work

India wide Top 10 Preferred area of work	Bangalore Any Pune Coimbatore Hyderabad Chennai Delhi/NCR Delhi Mumbai Lucknow
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### India wide Top 10 Preferred States

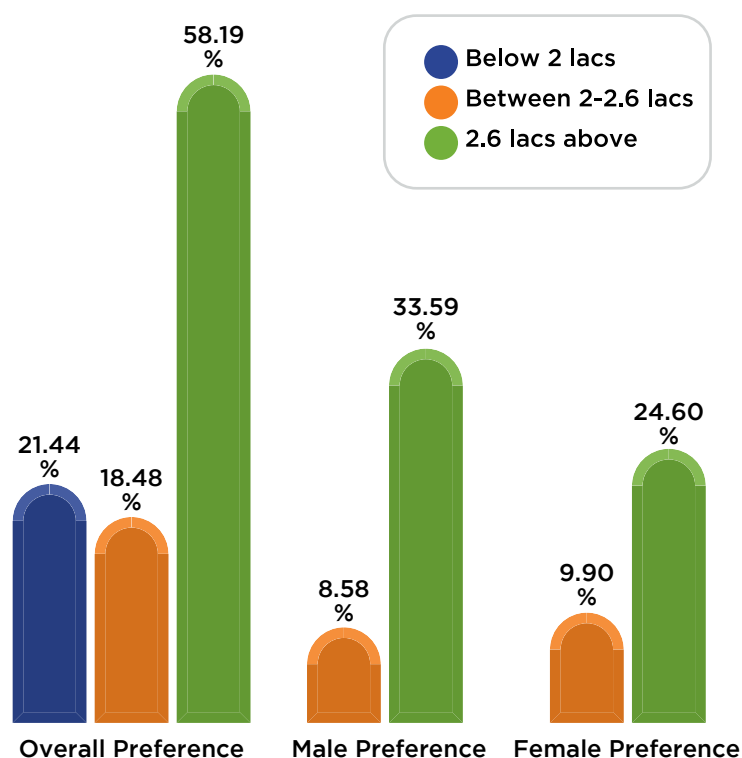
India wide Top 10 Preferred area of work	Any Bangalore Pune Chennai Delhi/NCR Coimbatore Hyderabad Delhi Mumbai Lucknow
India wide Top 10 Preferred States work by male users	Tamil Nadu Haryana Maharashtra Uttar Pradesh Karnataka Andhra Pradesh Delhi Gujarat West Bengal Punjab
India wide Top 10 Preferred area of work by female users	Bangalore Any Coimbatore Pune Hyderabad Chennai Delhi Delhi/NCR Mumbai Lucknow
India wide Top 10 Preferred states of work by female users	Tamil Nadu Maharashtra Karnataka Andhra Pradesh Uttar Pradesh Telangana Haryana Delhi Rajasthan

More than 58% of students expect a salary range above 2.6 lakhs, addressing what students expect from the industry as a preferred remunerations package. An additional 21.44% expect a salary range less than 2 lakhs per annum. A strong percentage of 18.48% expect a salary between 2-2.6 lakhs. These statistics indicate a significant increase in the number of students expecting a salary above 2.6 lakhs, compared to last year's 57% expecting remuneration above 2.6 lakhs per annum. The salary range offered for freshers and experienced professionals

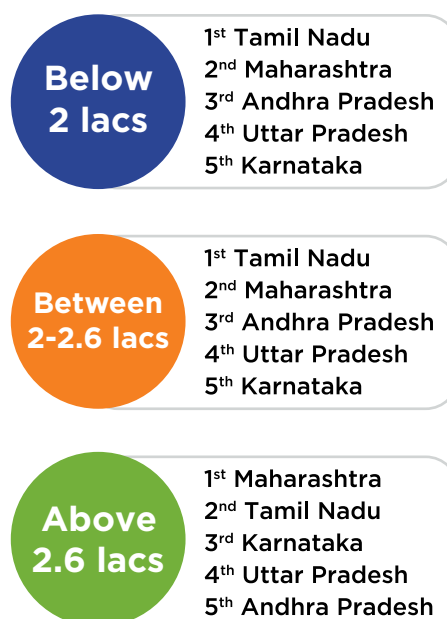
in India is far worse, compared to other developing nations like China, Singapore and South Korea. The employment landscape is predicted to improve in the coming years, in terms of remuneration, with the demand for more qualified personnel to match technical and non-technical roles in the industry. With 45.9% employable talent among the youth, the competition will influence increased pay for workers in various industries. The fact that more MNCs are investing in India during 2020, is a clear reflection of the cheap labor that is profitable for large corporations in the long run. The students therefore, are required to leverage this opportunity to upskill themselves in order to stand out as a valuable asset.

## PREFERRED SALARY RANGE

### Preferred Salary Range for skills available



### Top 5 States





Moving towards the end of the Wheebox National Employability Test survey, we have observed that overall employability has reduced from about 46% last year to 45.9% in 2021. This signifies that the education system is churning out more qualified resources than can be accommodated in the industries. Primarily, recruiters are focused on skill-specific talent from candidates. A harmful statistic is that less people in the age of 26-29 than the age group between 18-21 years of age were found more employable. In the future, the skilling ecosystem can prove to be the guiding force required for students to excel in their careers. The publicity of online courses have taken to the talent pool of India with new ideas and alternate career options. There's no better access and time to prepare for the revolution at hands. It is important to realize that as and when the world shifts towards a knowledge-oriented economy, businesses increasingly adopt new technologies and the governments strive to make their industries and talent stronger. The skill development framework should reflect the national and international demands of 2021. The supply side must focus on contemporary skills development, in tandem with the demands of industries. If the skill development is not paced on par with the number of available jobs in the country, a skill gap would emerge to cripple the entire demand and supply of talent in the nation. This is already evident in various jobs roles related to AI, ML, Cloud infrastructure, Biotechnology and Energy sectors. When India is emerging as a global leader in industry and scientific advancement, the skill gap should be addressed in every nook and corner of the country. Adding on to the vision for sustainable employment and employability, students are required to build an attitude for learning and use their knowledge to overcome challenges. Getting a degree upon completion is not the only asset that industries are looking at. In fact, the government should monitor every skill development initiative to enable operational efficiency and access to the vast talent pool of India's youth. Training institutes in the country are required to carry on the impact of targeted education through specialized certifications and training programs. The various government initiatives to upskill India's talent has dominated the media, without having the required impact on urban and rural areas. In fact, the allocated funding is much higher than the positive impact of generating skilled resources for the country's employability landscape. Awareness is fundamental, and specialized training is crucial to ensure superior quality and ease of access to skill development across cities, towns and suburbs.

## SKILLS INVESTMENT IN MOST EMPLOYABLE STATES

### Rajasthan

In September 2004, Rajasthan became one of the first states in India to establish a mission of livelihoods, addressing the challenges of unemployment and ensuring sustainable opportunities were formulated. Based on the premise of innovation and strategic planning, the vulnerable population was assured a safe way into economic sustenance. Rajasthan Mission on Skill and Livelihoods Development Corporation was created to materialize the mission for a better future for all. The Rajasthan government has also opened a first of its kind Skills University. Since July 2018, 60+ skill development institutions have been affiliated and more than 3000 students are undergoing specialized training. Furthermore, the response to Pradhan Mantri Kaushal Vikas Yojana (PMKVY) has identified Rajasthan as a key operational area. For the year 2019-20, MSDE, the government approved Rs. 33,11,71,776 for the scheme. Owing to its successful first year implementation, the Union Cabinet approved the Scheme for another four years (2016 - 2020) to impart skill to 10 million youth of the country. As the year 2020 came to a close, a total of 6,43,544 have been trained in Rajasthan within the four year tenure. The statistics are not extremely hopeful, but an indication of



the government's efforts in utilizing the talented workforce of Rajasthan.

Rajasthan came as the top state with available resources in critical thinking skills among students. As per the WNET survey, Rajasthan came first in the list of business communication competencies among all states. The state also topped critical thinking skills availability. Although the statistics of deployment of funds vs outcome has not been very encouraging, the local bodies and industrial advancements seem to be paving the way forward. Rajasthan is also listed as the top state with percentage of test takers well-versed in their computer skills. Although the global pandemic did not favor the employment of Rajasthan's talented workforce, the coming years are to witness a surge in the employable candidates from this state. A notable statistic states that Rajasthan has the highest number of employable females with 46.18% being highly employable.

### Karnataka

Karnataka has a robust economy that is flourishing with the urbanization through national and international investments. At current prices, Gross State Domestic Product (GSDP) of Karnataka is estimated at about Rs. 18.06 trillion which is US\$ 258.37 billion expected in 2020-2021. The state is expected to grow at a steady 8.2% in the coming year, with the chances of surpassing that figure. The state is the IT hub of India and home to the fourth largest technology cluster in the world. With 55% of the population in the working age group of 20 to 59 years, Karnataka has an opportunity of achieving faster economic growth through favourable demographic dividend, by promoting skill development of the working population in general and youth in particular. The government of Karnataka has dedicated resources to specialized skills development required to propel its economy. In the 2020 year budget allocation, under the Chief Minister's Kaushalya Karnataka Yojane (CMKKY), the government allocated Rs. 100 crores for CMKKY to impart industrial training to 80,000 new candidates, while Rs.40 crore has been set aside for upgrading the skills of 25,000 women workers belonging to scheduled castes and scheduled tribe communities. Further, the Karnataka Government strives to effectively implement schemes rolled out by the Government of India. One such flagship program being the Pradhan Mantri Kaushal Vikas Yojana, PMKVY has sanctioned an amount of Rs. 43,99,20,000 for the period of 2016-2020. The statistics of funds deployed vs the outcome achieved has not been the best performance. In fact, 3,14,577 were trained and oriented during this period, where the expectations were much higher for one of the fastest growing state economies. The placement under special projects recorded the highest number of placements, with 70% of trainees getting a job in the subsequent year, a figure estimated at under 9,000 people.

Assessing the economic dividend of funds allocated and skilling equipped, the government didn't have the biggest role. According to the WNET survey, Karnataka came 7th out of 10 of the top states for computer skills. Considering the economy is an IT hub in India, these numbers are way below par. However, for English as a second language and Numericals, Karnataka is in the top 10 states with qualified candidates. Meanwhile Bangalore was listed as the city most preferred for work among the test takers.

### Tamil Nadu

The Government of Tamil Nadu has created the Tamil Nadu Skill Development Corporation (TNSDC), a nodal agency to establish the skills development initiatives in the state. Under this, 227,106 youth have been trained in the last 5 years until 2019. Owing to the global pandemic, the attendance in various skill programs had dropped during 2020. However, the Tamil Nadu government has spearheaded numerous other initiatives to upskill the workforce and meet demands of rapidly growing

Chennai and Coimbatore cities. The Government of India started ICT Academy of Tamil Nadu (ICTACT) in 2009 under the PPP model to bridge the industry-academia skill gap. It undertakes various initiatives such as faculty development, skill development, youth empowerment, entrepreneurship development, research and journal development, industry-institute interaction and digital empowerment. This has been a huge boost for the local economy, considering that Tamil Nadu was listed as the most preferred state to work for both male and female candidates of the WNET survey.

In addition to the state government efforts, the Government of India has sanctioned an amount of Rs. 68,86,21,441 for 14 sectors each, for 2019-20 towards the implementation of activities associated with PMKVY (2016-20). Out of 1,56,168 candidates trained under PMKVY 2016-2020 scheme, 55% of the short term trainees got employment from 450+ training centers. The skilling campaigns by Tamil Nadu has uplifted its position as one of the most employable states in India.

According to the WNET survey, Tamil Nadu has a high number of employable resources in the country. Besides being the preferred place to work for both males and females, places in Tamil Nadu like Salem and Coimbatore show a significantly higher employable population of women than the Chennai metro. Additionally, the least number of candidates seeking an internship were from Tamil Nadu, also a place from where the highest percentage expected a remuneration between 2-2.5 lakhs per annum. Tamil Nadu also appeared for the most number of candidates expecting at least 0-2.6 lakhs and above per annum. The conclusive idea is that increased access to technology and increasing number of opportunities in cities like Chennai, Salem and Coimbatore are rapidly shaping a favorable employability landscape for Tamil Nadu.



### Andhra Pradesh

Andhra Pradesh has been developing its social, industrial and physical infrastructure over the past 5 years. Becoming the first state to reserve 75% of jobs in industrial units and factories for



the local youth has set a benchmark to follow. By contributing 9.73 lakh crore, that is US\$140 billion in 2020, the economy is estimated to grow at 12.73% at current prices. Ranked as number 1 in India for ease of doing business rankings, Andhra Pradesh also spearheaded numerous skill development programs during 2020. The Andhra Pradesh State Skill Development Corporation (APSSDC) was founded in 2014 with a vision to upskill the workforce and increase employability. The skill development in Andhra Pradesh is also focused on promoting entrepreneurship and industrial growth within the state. Since its bifurcation into Telangana and Andhra in 2014, Andhra Pradesh has significantly reformed the skilling landscape to urge local businesses and promote employability through employment opportunities. In line with the PMKVY (2016-2020) skilling mission, an amount of Rs. 35,52,79,392 for 2018-19 and 2019-20, was approved by the MSDE. It is estimated that 60% of trained candidates were placed from short term training programs, while 40% of the special projects gained jobs.

Andhra Pradesh is one of the most favorable destinations for candidates to work, as per the WNET survey. Andhra Pradesh also houses the 5th largest percentage of highly employable talent. This is not only an indication of the massive strides taken to develop the state's infrastructure, but the inclusion of numerous startups, businesses and local industries coming into play. For salary remuneration expected, candidates from Andhra Pradesh expressed their interest in taking up a job anywhere from 0-2 lakhs and from 2-2.6 lakhs and above per annum.

### Uttar Pradesh

Gross State Domestic Product (GSDP) of the state of Uttar Pradesh is expected to grow at around 6.78% between 2016-17 and 2020-21 reaching Rs. 17.91 trillion that is US\$ 254.12 billion. Uttar Pradesh has contributed with over 8% to India's GDP during the global pandemic. It has large base of skilled laborers and has emerged as a key hub for IT and ITes industries including software, business process outsourcing (BPO) and electronics. The UPSDM programme was implemented by the government in 2013, to provide training for the youth in electrical, healthcare, construction and wellness industries. To further strengthen the skills ecosystem, the UP government opened two new Skill Centres of Excellence in UP, tackling the requirements for plumbing and other services. India Institute of Skills in Kanpur, collaborated with the Institute of Technical Education, Singapore offering a venue for technical education in the state.

As per the skills development requisites of UP, an amount of Rs.52.26 crores was sanctioned by the Government of India for year 2017-18 towards implementation of components of PMKVY (2016-20). The MSDE further approved an amount of Rs.208.04 crores for the period of 2016-20, to be sanctioned equally over a 4 years period. This has resulted in successfully placing 10,65,458 trainees into respective job roles. Yet, the ratio to funds allocated is not very encouraging, considering UP was sanctioned the largest amount for skill development by the GOI. Only a meagre 24% candidates trained under short term training and 42% of candidates trained under special projects got employment from 660+ training centers.

The skill development in line with the PMKVY government initiative gathered a better response from UP, among top states ranking for employment due to the funds allocated. Also, 90% of the test takers of the WNET survey reported owning a computer at home, recording one the highest figures, after Karnataka, Delhi, Telangana and Haryana, all above 90% in terms of access to a computer. This is a direct impact of the state's investment in IT infrastructure over the past 5 years. As the pandemic took its toll, the connectivity enabled by the internet has clearly impacted the skilling process of the state, owing to the access to technology.

### West Bengal

West Bengal has contributed 12.58% to India's GDP consistently over the past 3 years. The year of COVID-19 wasn't far behind. The state recorded an estimated GDP of 12.54 lakh crore that is, US\$180 billion in the year 2020.

An abode of cultural significance, the West Bengal state established Paschim Banga Society for Skill Development (PBSSD) with focus on a coordinated manner to provide vocational training and education for skill development towards sustainable employment for its people. The Utkarsh Bangla Scheme launched by West Bengal CM, is a flagship programme of the state, which aims to train 6 lakh people every year. Considering the drastic changes in the employability landscape of India during 2020, the scheme has allocated Rs. 1,106 crores to technical education, training and skill development during the year 2020. The success of in-house skill development initiatives in West Bengal has awarded the state with the skill award – "Gold" as SKOCH AWARD on 25th February 2019. Furthermore, the Government of India, MSDE approved an amount of Rs.38,04,64,812 for 2016-2020 towards implementation of the PMKVY plan until 2020. About 50% got placements through the PMKVY for short term training, while a meagre 13% acquired a job after the special projects training. A total of 2,96,092 trainees achieved job offers through the skill development programs in West Bengal. Considering the employability index, West Bengal is among the top 10 states with access to english as a second language and comes second in the list for computer skills. West Bengal also appeared among top 10 states for employable females that stood at 18.87%.

### Delhi

As of 2020, recent estimates of the economy of the urban area of Delhi have ranged from \$369 billion (PPP metro GDP) and it has \$210 billion as (GDP Nominal) ranking as either the most or second-most productive metro area of India. Delhi is one of the fastest growing union territories of the country. The Delhi government, under its Department of Social Welfare, has formed the Delhi Skill Development Programme (DSDP) to provide employment related skills to aspiring candidates. The skills are imparted in smart centers by certified training partners approved by the NSDC (National Skill Development Council). According to NSDC, 80% of the trained candidates will be offered employment through networking by the training partners. The Government of India approved an amount of Rs.54,66,00,600 each for the years towards implementation of PMKVY (2016-2020). The skill development goals cover training, specializations and projects to employ its workforce and make aspiring professionals more employable.

Among the most employable assets, Delhi does not feature in the list of highly employable female workforce, while not appearing on the list of top 10 states with employable male candidates either. Delhi is listed among the top 10 cities with high employability among the candidates who took the WNET survey. Delhi also ranked #1 on the top 10 list of users who own a computer at home. Considering the most valuable communication technology being the internet, this is a hopeful indicator for one of the most vibrant economic hubs of India. As a result, Delhi also features in the top 10 cities with a high computer literacy ranking, english language and critical thinking skills, securing the top 10 spot in the WNET survey for respective categories.

## Gujarat

Gujarat is one of the leading industrialised states in all of India. At current prices, Gujarat's Gross State Domestic Product (GSDP) is estimated at a steady Rs.18.85 trillion, that is US\$ 269.70 billion during the period of 2020-21. This state's GSDP is expected to grow at 12.87% during the period from 2015-16 and 2020-21. As part of the skill development mission, the state initiated the Gujarat Skills Development Mission (GSDM) that continues to perform with social organizations and the government with the aim to make the workforce more employable. As part of the mission, Gujarat government also spearheads various initiatives to furnish employment opportunities in the state. For the year 2019-2020, funds worth 1573.12 crores were released in alignment with the PMKVY. Under the DDU-GKY scheme, 4.39 lakh candidates were trained during the 2018-19 and 2019-20, of which 84,156 people belong to Scheduled Tribes. Under the PMKVY 2016-20, a reported number of 49.67 lakh candidates were trained during the 2018-19 and 2019-20, of which 2.13 lakh candidates are from Scheduled Tribes. The success rate of placements is not very encouraging considering the funds allocated over the period of 5 years. This has resulted in placing 2,39,202 candidates with jobs through the program, while the average of 1573 crores were allocated each year.

On the other hand, the WNET survey identified Gujarat among the top 10 states with the most employable resources in the country. This statistic is in tandem with the development in infrastructure, social, economic and physical growth of the state. The state of Gujarat also made it to the list of best Numerical skills, Business communication and Critical thinking skills recorded during the survey. Gujarat also has a male employable workforce of 21.94% while the female employability statistics for Gujarat are not featured in the top 10 states.

## Maharashtra

The Gross State Domestic Product (GSDP) of the state of Maharashtra for 2020-21, at current prices is estimated to be around Rs 32,24,013 crore. This is a steady 12% increase from the revised estimate recorded during 2019-20. In the year 2015, the government formed the Department of Skill Development and Entrepreneurship to facilitate the vocational training and livelihood promotion activities within the state. As a top destination for work in the formal and informal sector of the economy, Maharashtra stands out as a highly employable talent supply. The Pramod Mahajan Kaushalya and Uddyojakt are examples of other initiatives taken by the state to promote sustainable employment and employability. The Vikas Abhiyaan (PMKUVA) is a flagship program of the state that offers free skill training to youth through Industrial Training Institutes (ITIs) and on boarded private vocational training organizations. In terms of the number of students trained in vocational courses (150000+), Maharashtra is the leading state. Sources verify that over 50% of the beneficiaries of PMKUVA are women. An amount of Rs. 85,77,62,615 each for the year 2016-2020 was approved by MSDE towards the implementation of PMKVY (2016-2020). However, in comparison to the massive funding, only 7,30,522 candidates have been offered jobs through the programme. Nevertheless, Maharashtra remains the top state to work, considering employment opportunities and qualified labor.

Additionally, Maharashtra did not make it to the top 10 states with a high percentage of available female employable resources. Considering that a massive population of women are benefiting from various government skilling activities, the state should record more employable women towards the year 2021 and beyond. With an overall high employability score, cities like Mumbai and Pune are making way for fresh employment opportunities. The WNET test uncovered that Maharashtra still has one the most employable workforce in total, men and women combined, as opposed to any other state. This analysis

was based on the number of users who scored more than 60% from each state. Maharashtra also recorded the highest number of candidates expecting remunerations above 2.6 lakhs per annum.

## Telangana

Telangana is reported as the fastest growing state in India registering 14.9% growth in Gross State Domestic Product (GSDP) during 2019. Today, Telangana's nominal gross state domestic product for year 2020-21 is recorded at 11.05 lakh crore US\$150 billion. Paired with a steady growth curve, these figures are estimated to increase. The state is gradually becoming a centre of various global companies with the development of Hi-tech city in Hyderabad. In its budget of 2019, the government introduced an unemployment allowance of Rs 3,016 per month to the eligible, totaling Rs 1,810 crore for FY ending 2020. This reformative step was commended by the international and national media for promoting sustainable welfare. The Government has formed Telangana Jagruthi Skill and Knowledge (Tj Skill) under National Skill Development Corporation of India (NSDC) and organization TASK (Telangana Academy for Skill and Knowledge) to skill and upskill the state's youth. Telangana has also emerged as one of the top 10 employable states, standing at 7th with 41% employability rating, followed by Gujarat, West Bengal and Rajasthan. The WNET concluded that Hyderabad city stands out as the city with the highest employability rating among all top cities recorded. In fact, according to economic times, Hyderabad, known as the City of Pearls, is ranked as the best city to live and work in India.

As part of the PMKVY scheme, the MSDE approved funds of Rs. 27,53,44,124 for 2019-20, as part of the 2016-2020 skills development activities. Compared to the funds allocated, only 2,28,745 were recorded to have been placed in job roles in the state. However, the investments in IT and industry have grown over the years, with IKEA furniture establishing its first endeavor in India, in the state of Telangana. Additionally, Google, Microsoft, Amazon, Accenture and numerous other top MNCs have established the city of Hyderabad and state of Telangana as their base for operations. With the increased opportunities, Hyderabad is in the middle of rapid urbanization. It was affected by the COVID-19 pandemic when the rapidly growing economy lacked the generation of a skilled talent pool to meet the demands. The impact was short-lived as Telangana is estimated to grow faster than any other state in the coming year. Telangana also featured as the state with the highest number of interns wishing to enroll in a company to gain experience. Telangana is also in the top 10 states in terms of numerical skills and business communication access to the youth. Featuring a strong talent pool, Telangana is the state to have a percentage of 32.71% female employable resources in the country. This is hopeful for the rapid urbanization and structural economic reform of Telangana as a state.





**ACADEMIA  
SPEAKS**

**Dr. Amarendra Pani**

Head Research Division  
Association of Indian Universities

“India Skills Report gives rich insights into the current trends in the skills development ecosystem of India highlighting the depth of the demand-supply imbalances persistent in our country. It presents a comprehensive picture of the existent talent reservoir available through our educational institutions and tracks the employability patterns that are shaping demand for talent via reaching out to employers across industry verticals. It provides vital inputs to support and strengthen efforts undertaken by various stakeholders of Country, including Government to build up the pool of employable resources of the economy.”

**Anil Sachdev**

Founder and CEO,  
School of Inspired Leadership  
(SOIL) India

“Our Higher Education System needs to be reimagined. We need to develop students who develop their capacity to learn through introspection, reflection and source the child like curiosity within themselves to acquire the skills needed for the new world. Even as we learn how to deploy artificial intelligence, robotics and machine learning and embrace the power of big data and digital, we have to develop empathy, and mindfulness so that our students think holistically and work to make our world better. We need to free our higher education system of all controls and make this sector attractive for investments by the world's best universities. India will never become a developed country unless we completely reform higher education.”

**Dr. L. Mahesh Kumar**

Registrar  
St. Peter's Institute of Higher  
Education and Research

“India Skills Report is a wonderful initiative by Wheebox in association with CII. It has been carrying out comprehensive analysis and reports over the past seven years in the field of Higher Education. The report highlights the standard of the employment skills which is very useful for the younger generation. The analysis of the Wheebox National Employability test gives the reader an understanding of the employability levels of students undergoing varying courses, state-wise openings and opportunities regarding Internships, skill level training. All in all, a wonderful report that I look forward to every year along with so many graduates.”

**Dr. Aditya Sharma**

Registrar  
Teerthanker Mahaveer University

“Congratulations to Wheebox on their new edition of the India Skills Report. By showing the hiring intent of companies, it will help students in making better choices while selecting their field of study.”

**Dr. Parmod Kumar**

Professor and Vice-Chairman  
Academic  
ISEC Bangalore

“Recent developments in digitization have made it mandatory for the workforce to upgrade themselves. There is a need for all, Government, Enterprises and Academia, to adopt the emerging digital work age. The India Skills Report is a comprehensive report with a sharp focus on the changing scenario.”





**INDUSTRY LEADERS  
SPEAK**

1

**Prashant Bhatnagar**

Director, Global Head of Experienced  
& Campus Recruitment  
Credit Suisse

“In the context of our industry, there is a slight dip in the Indian job market, but that dip is significantly lower compared to some of the other geographies. There are two factors contributing to this trend. Firstly, the fact that suddenly everybody across the world was working virtually, the inhibitions related to working remotely disappeared on their own within just a few months. Secondly, businesses that were not open to the possibility of having roles in locations like India, soon realized the potential. In addition to the opportunities to expand revenue, location such as India also keeps a check on the costs. Although India is in the evolution journey, it still provides labour arbitrage and intellectual arbitrage. Covid-19 has also impacted the hiring landscape in terms of roles, qualifications and skills in demand. There is certainly a shift towards more flexi hiring in terms of job profile. Profiles or skills that are required today to get over the hump maybe slightly different a year from now. So, it is important to strike the right balance between what and who to hire today versus who will companies need a year from now. The second change is that companies are selectively looking at the possibility of fixed-term contracts, which wasn't necessarily very widely used. Thirdly, the method of how talent is assessed is also changing. The behavioural personality assessments that were largely limited to senior leadership are now applicable at the mid-level and junior level too. Companies are now looking for people who can work independently and are self-starters, given the fact one has to drive work and organize oneself remotely.”

3

**Suresh Tripathi**

Retd. Vice President (Human  
Resource Management)  
Tata Steel

“Every geography, every location has something different and hence you can't take centralized decisions. So, we had to depend on distributed leadership driven by data. This worked out and played out very well. I think crisis also creates a situation where collaboration increases. We at Tata, witnessed a huge amount of collaboration and experimented with multiple things. We experimented with structures, with working people, with policies, with our plants, and much more. A lot of the experiments turned out successful and we started seeing benefits in time. The pandemic did impact production temporarily; during this time, Tata Steel changed focus and created opportunities to collaborate and give back to communities. It has also given us the opportunity to explore digital technologies available today for running a manufacturing facility. We had never thought that steel plants can run from home, but they could be run from home. All digital facilities were available, the crisis made it possible to explore and adopt digital avenues. In terms of jobs, blue-collared discrete technical jobs will continue to be in demand. But digital transformation is imperative, which will open the door for the need for new tech skills. Access to talent has increased which will push for modularization in manufacturing.”

2

**Kanwal Kaul**

Director – Human Resources, Talent  
Acquisition / Chair D&I Council-2019  
NatWest Group

“Foundation of skills required in the future will be technology which will then cut through the functions. For example, in retail banking, regulatory operation skills such as modeling, valuation, equity fund search, consumer wholesale, Treasury, banking, operation analytics, RP, data Sciences, cloud product engineering are going to be in demand in the retail space. There are a few trends to sort of keep in mind, which of course will have an impact on the skills that we hire in the skills of future. One is of course the digital transformation of the businesses. Financial institutions around the world are modernizing legacy systems to create customer centric offering. Second trend is around the regulatory framework which is increasing with increasing complexity and coverage. The third trend is around the impact of fintechs, mobile banking and the big tech on customer expectations. These trends are going to impact the skill requirement in the industry.”

4

**Ketan Krishna**

Head of Human Resources  
Rentomojo

“We saw a huge spike in temporary workforce. When the pandemic hit, the delivery team had to go to 2x level as 52% of our customer base was moving back from the cities to their hometowns. Unlike most businesses, we at Rentomojo had to take our product back. A large set of our customers closed their rental subscriptions and moved. We hired people who would enable this movement of product back to the warehouse. We immediately got contractors onboard that gave us the flexibility or working as per various context of lockdown with respective to the various state govt. We had to be very nimble. For a business such as Rentomojo, we definitely anticipate a 20 - 30 percent increase in hiring in the bottom of the pyramid roles, delivery roles, or customer service roles for the next year. One very important shift that we anticipate is the prevalence of gig workers for central roles which are location agnostic. Now there is acceptance of work from home, hometown and anywhere. If we get talent in a tier-2 or tier 3 city, we are absolutely fine with it as long as the work is delivered. Although our initial estimation for this change was around 2025, but COVID-19 has accelerated this shift.”



5

**Monica Mudgal**

Senior Vice-President – Human Resources at HealthKart  
HealthKart

“Organization support to be with the employees during these critical times has been the key to revival. We managed volatility with extreme focus on employees and putting them at the core. At HealthKart, we set up helpline to support employees, be it setting up a door-to-door delivery service for employees who lived alone or pick-up and drop service when work resumed.”

8

**Raghu Chandrashekhar**

Senior Vice President & Head  
Human Resources  
Siemens Healthineers

“At Siemens Healthineers, we apply the 4C Model - Content, Compensation, Career & Context, to tide over the new era of work, post-pandemic. Content is key in all forms of communication. Trust your people and they, in turn, will give their best. Career is in individual's control, and it's only you who can own up your growth & development. Context is essential to bring pride and passion to the industry we work in. MedTech or Healthcare industry has been at the forefront of the global Covid-19 pandemic. Serving humanity is what keeps our teams self-driven, excited, and motivated to keep pushing boundaries.”

6

**Rajiv Naithani**

Chief People Officer  
Infograin India

“On the business side, to ensure business continuity, the first step was to enable remote working of employees. We helped all employees with laptop access and backend infrastructure support was set up within just two days. On the people side, we moved quickly and redefined the employee engagement parameters. Learning transitioned from being heavily dependent on classroom learning to bite sized interventions of not more than 2 hours, end-to-end virtual onboarding processes were adopted, and so on. Careers became global, and opportunities became boundaryless. Since work closely with the travel and hospitality companies, the talent working on such project were impacted immediately. However, we were able to deploy their services for other clients and thus talent became boundary less. We were able to prepare ourselves much before lockdown was declared as we moved very swiftly. Rajiv Naithani

9

**Anil Gaur**

Group Chief People Officer  
Uniparts Group

“The industry no doubt has undergone a change, but such disruptions keep coming in some form or the other once every decade if we look at past trends. Auto is one of the major contributors to the Indian economy. It also generates a huge amount of employment. Business challenges in the industry are not only induced by COVID-19, but the sector is also undergoing a correction phase, which is an essential part of the business cycle. One of the key things that we should keep in mind that businesses will continue, is not to have a knee-jerk reaction. Patience and a high amount of tolerance and understanding of the changing business environment will help overcome all challenges. We are sure that the auto industry will pick up in the next couple of years. It is important that we tactfully adopt and adapt to changing needs. For example, today mainstream mobility is transitioning to e-mobility, tomorrow it may be something else. Hiring needs will change in the coming time, depending on what the environment requires. Currently, we are expecting a high demand for talent who digitally aligned and will enable businesses to work with technologies efficiently.”

7

**Mr. Ajay**

Sr. Vice President & Head - HR  
SRF Limited

“Hardcore manufacturing jobs will continue to be in demand, while maintenance jobs may squeeze due to better management of machines. Advancement in machinery and technical evolution will impact the count of jobs. However, talent scarcity in manufacturing is expected as new skills will be required to perform on the shop floors. Business Analytics will be the core in terms of skills required for future jobs. Ability of handle ambiguity, multi-tasking, adaptability to change and collaboration are going to be the must have skills for future hiring.”

10

**Alok Vatsa**

Director Human Resources

Adient

“The pandemic brought along with it a lot of new nuances for conducting business, be it flexibility of time and location or changing business requirements. The automotive industry was going through low volumes even before the COVID-19 crisis. After the pandemic, we had to adapt to the dynamically changing situation. Agility and resilience have been more in focus. People must be self-reliant and take care of multiple activities, and business processes must be flexible to accommodate. As the business scenarios improved, we saw a lot of pent-up demand coming through, there is an uptrend in demand for talent as well. There is also need for more temporary and flexible workforce. In the white-collar jobs particularly in the engineering and corporate functions there is now a realization that flexibility of time and location is a feasible option. Once the organization is flexible, it brings in a lot of complexities to ensure employee connect with the organization, individual's alignment with business objectives, and alignment of team's direction. This has brought in a requirement for up-skilling of employees. People are expected to hone their communication and social skills, be more proactive, take self-initiatives and enhance their ability to work across functions.”

12

**Kameshwari Rao**

Chief People Officer

Publicis Sapient

“As companies seek to digitally transform themselves today, they are looking at the tech industry to not just modernize their systems but help them find new ways to deliver value to their consumers. This requires a consumer focussed orientation and designing systems that put the consumers in the centre. Software engineers need to also develop a consultative and problem solving mindset, so that they can work in networked teams with a level of independence and empowerment to take decisions. More and more we see networked teams that bring together capabilities such as strategy, product, experience, engineering and data, and tech talent need to shift mindset to thrive and deliver value in such teams.”

13

**Devvesh P Srivastava**

Head – HR &amp; Corporate Services

Apotex

“One of the big shift which we have noticed across Organisations in last 6 to 8 months is that People Leaders are now moving from Task-orientation to Result-orientation. The concept of self-directed teams are expected to drive business growth and have a direct influence on the growth as compared to the past. The leadership dynamics too will change as Leaders need to shift their focus from Activity to Outcome-based measurement for success and they have no option but to enable and empower frontline leaders.”

11

**Megha Gupta**

Human Resources Director

Fiserv

“Technology advancements are expected to accelerate across businesses. 63% of the current job that people are currently doing will be replaced by technology which necessarily means that the way we perform our jobs can be replaced. So, we can expect a shift in role from being more execution oriented to be more strategically driven. Thus, today's talent force needs to be reskilled to adopt more cognitive skills like problem solving, strategic thinking, etc. Mobility of talent within the organization is important to manage this change and be future ready.”

14

**Pradipta Banerjee**

Vice President – Global Human Resources Centers of Expertise

CGI Information Systems &amp; Management Consultants

“During the pandemic, to manage our talent globally, we anchored on one of our core values: intrapreneurship - which is entrepreneurship from within. In line with our decentralised model, every country put together a strategy that works best for them. As we are aware, the pandemic has had a different impact in different parts of the world and hence this strategy based on local leadership and experience helped us through the crisis. Given privacy and security concerns, many of our clients were initially sceptical about remote & virtual working. Once we got over the initial challenge our productivity improved and discretionary efforts from our members increased - demonstrating our value of ownership.”

15

**Biswaroop Mukherjee**

Head HR – Commercial Vehicles  
Business Unit  
Tata Motors

“The commercial vehicles industry has gone through a lot of headwinds. Even before the pandemic hit us, the industry was experiencing downtime. The commercial vehicle is a cyclical business in which the business goes through continuous crests and troughs. The pandemic has prolonged the revival of the industry. Having said that, we expect the industry to revive and go beyond the pre-pandemic growth level in the coming 12 to 18 months. We are seeing a huge amount of traction in our small commercial vehicle as the demand for last-mile delivery has significantly increased due to the pandemic. With lockdown, social distancing norms, and remote working, people need things delivered to their doorstep, this behavior change has given a push to the small commercial vehicle segment, which is registering a huge uptick. We expect the heavy, medium, and intermediate commercial vehicles to post a 10% growth above the pre-covid levels in the coming 12 to 18 months. From a talent perspective, we expect demand for niche roles in Digital and Analytics such as solution generation is expected to come up as a role shortly. In certain cases, business development and marketing roles will also see a demand in the sector. The passenger vehicle segment too will echo some of these trends. However, we expect the segment to register growth as the demand for privately owned vehicle has gone up with the shared mobility segment is under stress due to social distancing norms.”

16

**Sahil Sharma**

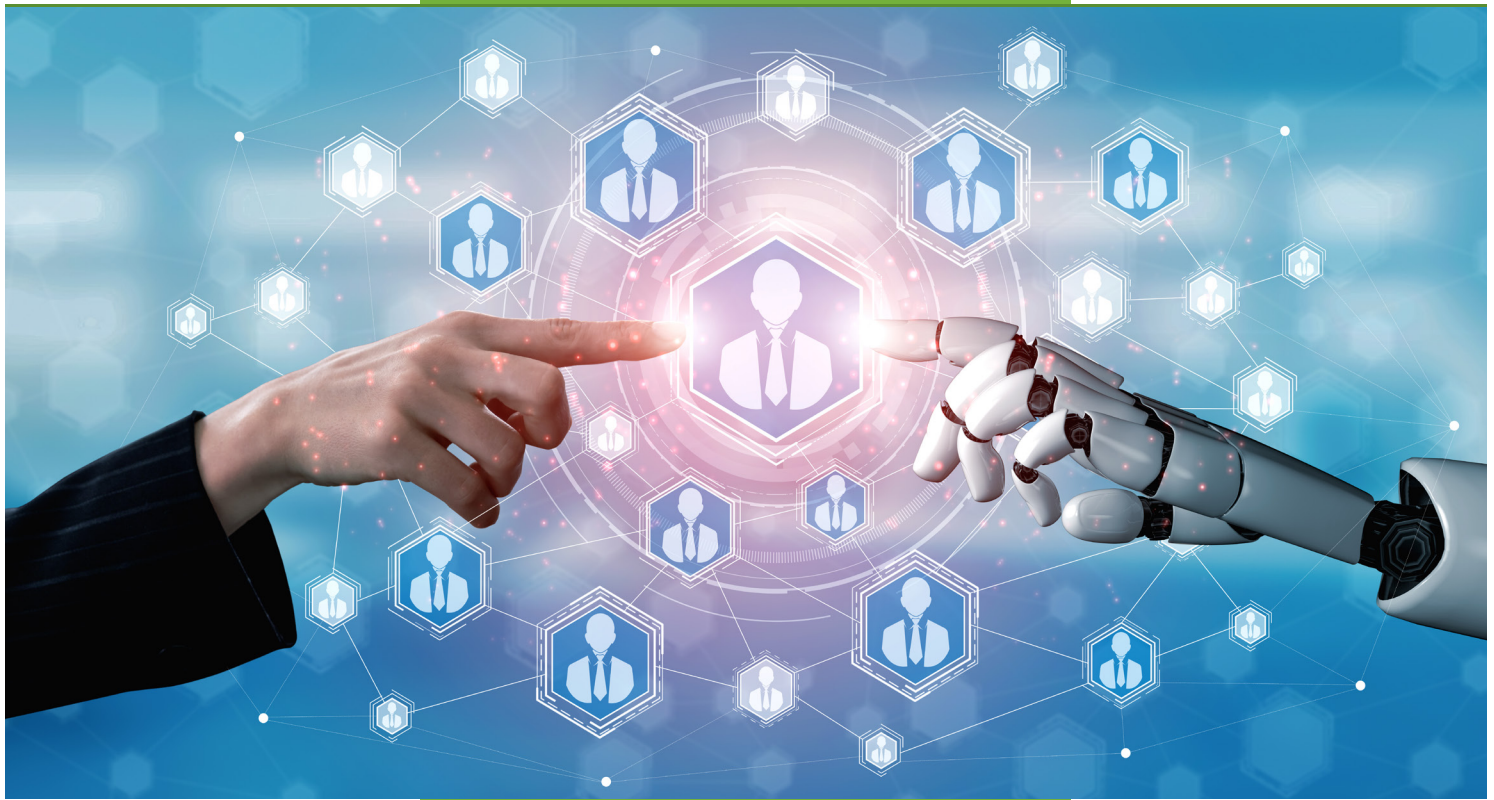
Co-Founder & CEO  
GigIndia

“The skills in demand and the emerging roles will comprise sales, customer experience experts and digital marketing specialists. The technical skillset is steadily emerging as complementary to every other skillset. Skills such as marketing, sales, accounting or even art which were non-technical earlier, are now greatly impacted by technological disruption. We will see technology & automation as the basic skill sets in the future of work. Also, the Union Budget 2021-22 will exert a profound impact on the employment landscape. Extending social security benefits to gig and platform workers will give the gig economy an immense fillip. With gig workers to be covered under ESIC, minimum wages will apply to this cohort. The announcement of a new portal for collecting the data of gig employees and other workers will help in providing them with health and insurance benefits. Gender neutrality and diversity has also received a shot in the arm since women will be allowed to work in the above segments, including night shifts, but with requisite safeguards. Together with the new labour laws announced last year, these reforms will streamline and transform skilling and the gig economy, attracting more talent in the days ahead.”



# INDIA HIRING INTENT 2021

## THE DEMAND STORY



### **JOBS OUTLOOK 2021**

Rapid globalization, integrated technology driven marketplaces and data driven business decisions are setting a new wave of reform of the jobs available in India's formal and informal sector. The digital transformation over the past decade has impacted employment in India. Basic computer knowledge is considered a valuable asset in almost every organization and industry. Numerous initiatives by the government, social organizations and private sector firms have been directed towards skilling the Indian workforce. While most cities are inviting a lot of foreign investment, the vast majority of people are not yet equipped with the global demands of technology. Yet, the promising indicator of India as the world's second largest smartphone market is hope for more people leaning towards honing their technology oriented proficiencies. Considering that a vast majority of the students in schools and colleges are women, means that the structure of the economy is slowly changing in favor of gender parity. Companies are hiring more women employees, owing to the skilled workforce available among the youth. Initiatives like Skill India, Venture capitalism and efforts to boost the start-up infrastructure are introducing new models and frameworks of employment. Just a few years ago, social media gained massive popularity. The job role of social media analyst, marketer and content provider is gaining momentum in almost every industry. Most industries are beginning to adapt their presence in the market to the world of online interactions and publicity. The Government of India is laying out signs that it is up for re-inventing the business model for India's public sector and private sector. Large corporations are investing more in software development to automate business processes, making way for data scientists, database managers, cloud architects and various other technical roles. The increasing stake of local consumerism in ecommerce is furnishing new opportunities for logistics providers and fleet managers. Large investments from foreign entities like Ikea,

Walmart, Schneider Electric and many fashion labels are breaking into the Indian market. The import and export of raw materials and goods is taking advantage of the technology to make business processes more efficient.

In addition, the rapidly changing technology environment is reshaping entire organizational structures and operations. It has led to the rise of new business models within organizations and in tandem with the evolving market, changing the way people work and consume. The prominence of Byju's, Ola, Swiggy, Oyo, Lenskart, CRED, Myntra and numerous others are clear indicators of the technology driven business models of today's economy. A knowledge driven populace requires a tech-enabled workplace to function at the best level. As India moves towards an increasingly connected economy, the key role of the Government is evident in the employment opportunities. The hiring intent of public sector organizations and government initiatives have become more available through online portals. More awareness about local initiatives are driven through technology easily accessible to the citizens. However, while the government aims to reskill and upskill the existing populace, especially in rural areas, the scientific community has been evolving rapidly. Robotics, Artificial intelligence and machine learning are the basis of modern business operations. From telemedicine for remote diagnosis and medical procedures, to hospital staff management and medicinal drug research, AI algorithms and robotics play a vital role. Machine learning has been introduced into the latest range of car entertainment systems which can operate your phone through voice commands while driving. All this innovation is a clear set up for a future of new job roles that require a specialized technical knack and knowledge. An example of the biggest development is computer knowledge is software like AutoCAD becoming a big part of architecture and civil engineering. Similarly, travel booking software and automated response systems have enabled better customer experiences in

various industries. The power and utility sector has slowly been catching up to the digital revolution with technology oriented customer interactions and utility monitoring interfaces online. This shift in the employability landscape is not a direct result of the Covid19 pandemic, but increasingly visible amidst remote work oriented hiring. The hiring intent of corporations, public organizations and educational institutions have changed, to reflect the adoption of technology as a crucial determinant of the changing times.

The labor market primarily comprises the vast gig economy in India. With software tools and increased global connectivity of the internet, Indian writers, programmers, speakers, designers and teachers are all going online. The gig economy is a big chunk of the internet activity in 2020. Owing to the lockdowns and restrictions, many people found ways to make money online through the gig economy. While labor intensive tasks witnessed a steep decline in available resources, the internet economy is thriving. Moving forward, the access to technology in schools, colleges and organizations will determine the visibility of India's skilled workforce. If the skill gap is not met in rural areas, the urban rotational employability will not have a home-grown talent pool to refill the gaps in their organizational structure. Numerous online courses have been endorsed by top global universities and national universities, in an attempt to reach back to their alumni with the latest learning required in today's industry. Google recently introduced a programming and coding initiative for 16 year olds in India. Byju's offers an interactive way for students to grasp key concepts. Firms like Edureka and Urbanpro are utilizing educational resources to create awareness and minimize the skill deficit in India. Top colleges and universities are offering specialized training courses to equip students with job specific skill sets. The knowledge temples of India consisting of schools, colleges and vocational training institutes should tap into the vast youth workforce of India in rural and urban areas alike. To meet the demands of today's industries, education will play a pivotal role in reducing the skill gap and boosting awareness about technology driven communications. It is observed that despite a significant population of energetic youth in the country today, the industry is complaining of scarce talent. To dissect this problem and provide an answer for India's talent demand and supply changes, we conducted an online survey called the Corporate Hiring Intent Survey 2021, with more than 150+ employers, across 15+ industries to understand their challenges in hiring the candidates they require. The industry leaders also shared their views on the nature of roles and skills their organizations would seek in prospective employees. The report provides clarity on where they plan to hire and what channels they prefer to reach out to candidates. Hence, ISR 2021 presents the India Hiring Intent 2020 survey results.

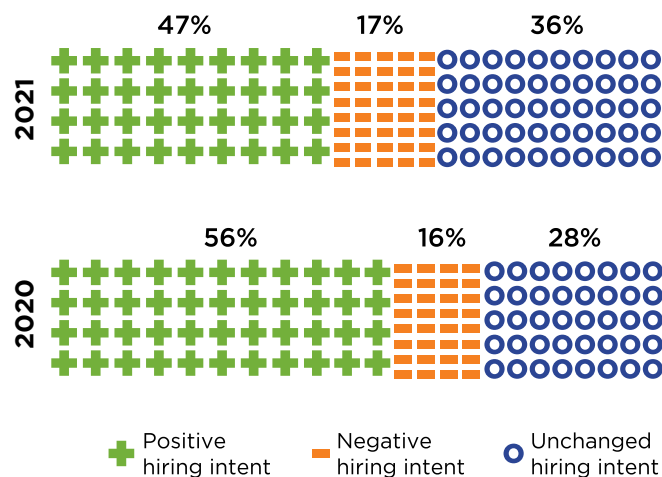
## A POSITIVE HIRING TREND DESPITE A GLOBAL PANDEMIC

47% of the Industry employers in the 2021 survey, reported a positive hiring intent while 36% are looking comfortable with their existing infrastructure. 17% of employers expressed a negative hiring intent, stating that they are not looking to hire at all. These figures are significantly lower than the 56% positive hiring intent recorded in the year 2020. Last year about 28% maintained their position with no intent to increase or decrease their hiring. Considering that the hiring intent for new employees is much lower than last year, it does not complement the vast talent pool available between the ages 22-29 years old. While more women are pursuing higher education than ever before, the employability score has also risen. The decline is attributed to the impacts of Covid19 and the slowdown in various industries across the economy. The global impact of the pandemic has taken a toll on the Indian talent demand as well. However, the demand for Pharma and Healthcare professionals has risen, owing to the challenging

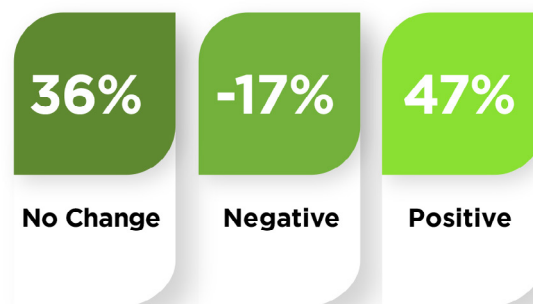
demands of their profession, revealed by the global pandemic. Owing to the devastating impacts of Covid19 on the economy, the hiring intent has dropped. The major difference is in the number of organizations that remain unchanged in their hiring intent, recorded at 36% this year. The negative hiring intent has increased by 1% from 16% in 2020 to 17% this year.

### 47% OF EMPLOYERS EXPRESSED A POSITIVE HIRING INTENT FOR 2021

**47%** of employers expressed a positive hiring intent for 2021



### Overall Hiring Intent in 2021

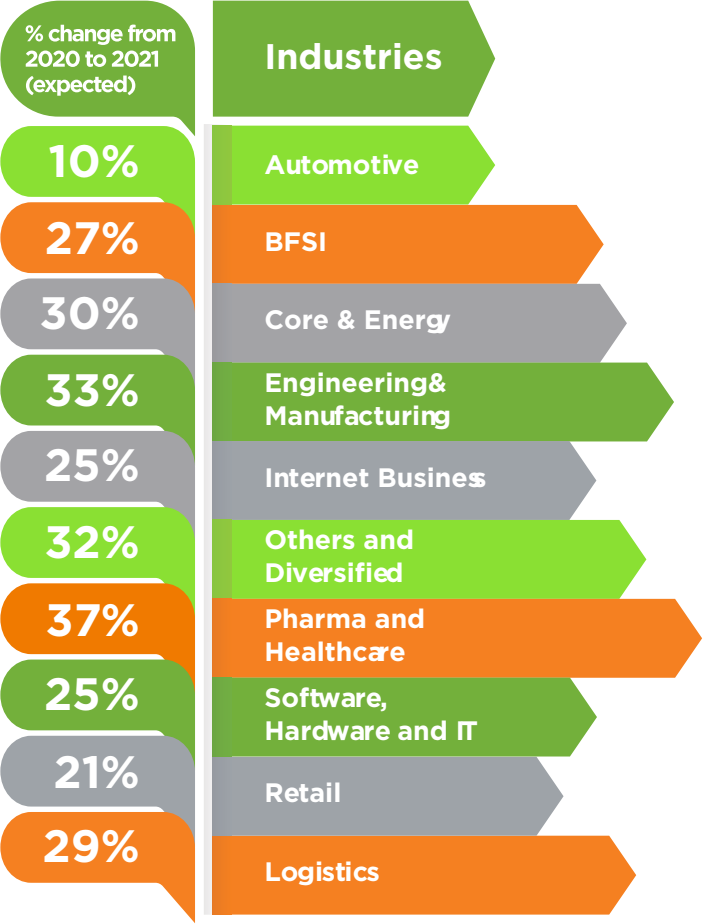


## HIRING SPREE IN PHARMA & HEALTHCARE, ENGINEERING & MANUFACTURING AND CORE & ENERGY

The industries expected to hire most are Pharma & Healthcare with an upward trend of 37%, followed by Engineering & manufacturing with an uptrend of 33% and then the Core & Energy sector with 30% increment in hiring. This is a massive shift in the hiring intent compared to last year, where internet businesses, software and hardware and the BFSI took the top spot for increased hiring. As per the 2021 analysis of hiring intent among corporations, the informal sector is expected to hire more at 32% than the BFSI standing at 27%, and IT industries at 25%. That being said, the Logistics sector expressed a 29% increase in hiring intent for the year 2021. The Swiggy and Zomato deliveries that skyrocketed during lockdown set the premise to hiring in the logistics sector. The Automotive industry expressed the least in terms of hiring more employees with only a 10% uptrend expected in 2021. Recovering from the

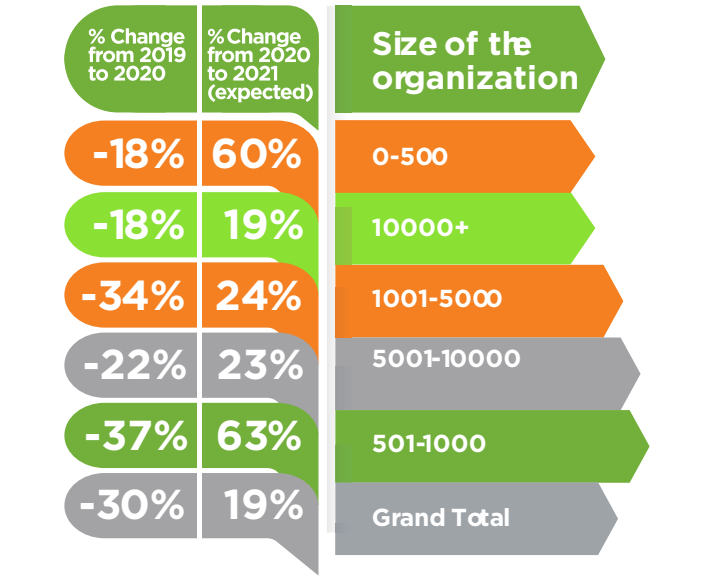
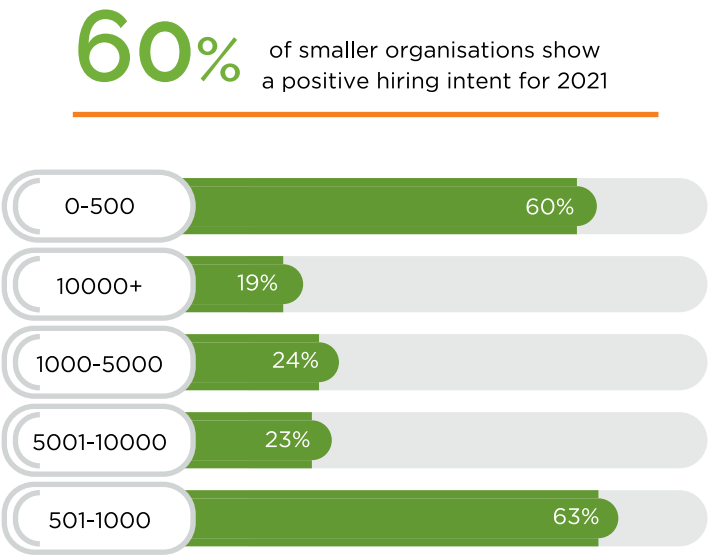


drawbacks of the global pandemic's impact on the economy, overall industries who laid off employees last year, expressed an intent to hire more professionals in the upcoming fiscal year of 2021.



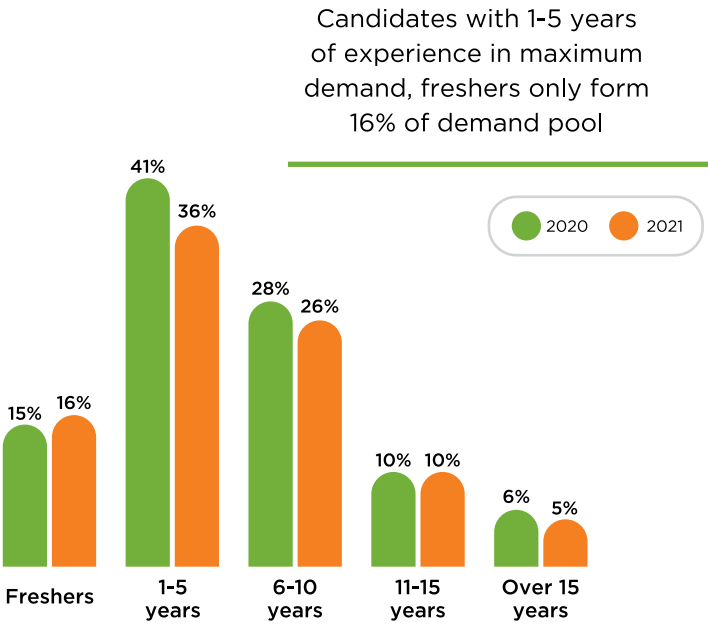
### Hiring intent by company size

With respect to organizational structure and company size, 63% of companies with a workforce of 501-1000 employees expressed a positive hiring intent, while 60% of small organizations with a strength of 0-500 employees showed a 63% positive hiring intent. At the same time, large corporations with a workforce of 10000+ showed only a 19% positive hiring intent. This is a clear indication of how small and medium businesses will set the trend for the employability landscape nationwide in 2021.



### WHO IS GETTING HIRED?

Once again, candidates with 1-5 years of work experience are in higher demand, sought after by over 40% of employers across industries. The overall hiring is expected to increase in the coming year, with freshers likelier to fill internship roles and rotational jobs. The demand of freshers in the IT industry increased owing to the demands in BPO services and KPO sectors. But this is a minor adjustment to last year's layoffs recorded in top corporations. There are no fluctuations in the senior or executive level hiring in corporations since last year. A quarter of the demand is held by candidates with 6-10 years of experience. There has been a slight movement in the demand for engineering and management professionals over the year, but not a significant statistic that can base the economic shift of talent demand and supply nationwide.



### Hiring Intent By Education Domain

The industries expected to hire most are Pharma & Healthcare with an upward trend of 37%, followed by Engineering & manufacturing with an uptrend of 33% and then the Core & Energy sector with 30% increment in hiring. The Engineering graduates are in high demand, owing to the percentage of

The industries expected to hire most are Pharma & Healthcare with an upward trend of 37%, followed by Engineering & manufacturing with an uptrend of 33% and then the Core & Energy sector with 30% increment in hiring. The Engineering graduates are in high demand, owing to the percentage of freshers being 24% of the total workforce. The retail sector is expected to hire the second largest number of freshers with just above 20% of the new hires being freshers. The software and hardware industry is close, with a range between 16-18% being freshers. Paired with the expected positive hiring intent, the Core and Energy sector comprises 10% freshers, indicating that their positive hiring intent could offer job opportunities for qualified graduates. Engineering students make up most of the talent pool in IT, Internet Businesses, the Automotive sector and other industries. Graduates are in high demand, based on the requirement of knowledge-oriented business functions in various industries.

Upon analysis of the demand outlook posted by various industries, it has been noted that engineers are preferred over a wide range of industries – automotive (auto and auto components), manufacturing, core sector, IT and telecom forming more than 50% of the demand pool. The demand for Pharma and Healthcare is also positive, with up to 20% of the workforce with an Undergraduate degree and 27% graduates, followed by a whopping 25-30% from a technical educational background. Meanwhile, 40% of all new recruits across industries are expected to be interns at an organization in the coming year. Additionally, there has been an increase to 52% of total workforce being from Non-Tier 1 cities.

## SKILLS IN DEMAND

The transition in work culture over the past year has resulted in some impressive takeaways for the type of work ethics and skills companies are looking for. Companies are still looking for a positive attitude and soft skills. Besides, that the technical expertise with communication tools is becoming an increasing demand across all industries.



## Soft Skills are vital

When asked about the skills employers look for in a potential employee, they all had one thing in common. Everybody wants to work with a person that has a positive attitude. Especially when the companies have been put through challenges during the pandemic, the need for resilience, flexibility and active communication has been the top necessity. Some of the top skills that employers were looking for in terms of soft skills are listed below.

Problem Solving  
Communication  
Active learning, resilience, flexibility  
Digital Dexterity  
Analytical and Critical thinking

Employers want to nurture their work environment with ethics and thought leadership. The emergence of a more knowledge oriented workplace is not inclusive to India alone. The global demand for good communication skills, problem solving capacity and agile adaptability are high. These qualities were given utmost importance on par with domain knowledge in a given industry.

## Trending New Skills

The survey about hiring intent also showcased some of the vital advancements in today's job landscape. The emergence of data analysis and cloud computing as a business purpose has introduced key IT skills as the trending subject. Employers foresee the inevitable shift to a more technology oriented workplace, encouraging their prospect employees to be more tech savvy than previous years. The remote work culture made effective collaboration and business operations possible, owing to the technical adaptability and expertise of a company's workforce. This is due to the increasing stake of technology and software tools impacting the functions across the value chain. Industries have taken up new forms of technology, requiring qualified personnel to meet the demands of their business functionality.

There is a need to take on the mantle of bringing the industry-alignment and accountability to the education system. As the ways of working and technology are evolving faster every-day, there is an evident gap between the education system and the skills required in the real world. There is an imminent need for carefully structured programs that prepare students to deal with real-world problems and hit the corporate ecosystem running on day one. This again is not a new ask but significant attention needs to be paid NOW if the skilling issue needs to be solved. Few green shoots are seen in this space too. Outcome orientation in colleges is a new visible trend. Take for e.g. Sunstone Eduversity – A Gurgaon based institute, that offers a first-of-its-kind pay after placement program. They are bringing accountability through their unique models of engagement with the students as well as industry. During the pandemic, Virtual Onboarding, Virtual Interviewing, was need of the hour to ensure students are well versed with best practices. Sunstone launched a "WFH workshop for millennial managers" to ensure the graduates can effectively manage their teams in remote environments and corporates don't face challenges in training their new hires. There is a need for result orientation in curriculum, focal shift in specialization and training, and tailor-made talent availability that new players such as Sunstone and others are bringing to the table through courses which can immediately result in Jobs – like specialized courses on territory sales, Digital Sales, Edutech sales, etc.

The maximum skill gap that emerged during the covid19 pandemic was in the following areas. These are the emerging



areas that require a constant push to seal India's position in the global market as a major player in shaping the future.

Data Science  
Artificial Intelligence  
Natural Language Processing

Yet, these fields of study hold the key to India's technological advancements. Data analysts, cloud architects, network engineers, programmers, AI scientists and ML experts are growing in high demand. In every field of study, the employment of software and computerized techniques has created the premise to qualify students with advanced skill sets required in the future. To drive efficiency, computerized mechanisms and artificial intelligence have created integrated work environments where a majority of the load is taken by technology and computerized tools. Banks using chatbots, manufacturing deploying robots, and pharma and healthcare exploring AI are some examples that highlight the changing landscape of the workplace across industries.

Data analysis skills were found to be the most important by the employers from automotive and core (oil & gas, power, steel), manufacturing and e-commerce (rating >3.5 on a scale of 4). Similarly, Human-centred design is given quite an emphasis from manufacturing, pharma and IT sector employees. We also observe the spread of RPA use cases within various industries with twelve industries in our survey rating the need for data driven decision making at above 3/4 in future.

Technical skills in demand

When asked about the technicality of industrial growth, the response was heart-warming. Considering that a vast majority of India's youth have access to a computer or the internet, interested candidates can surely make the most of technical education. The pandemic served as an occasion for various students from different educational backgrounds to take up short term courses and online certifications. The increased access to technology and online education is a promising aspect of the technical skills required in the industry today.

The top rated in demand technical skills were.

Technical skills in demand  
Python Programming  
Neural Networks  
Cloud Computing  
Supply Chain  
General statistics

Considering the shift in business models and company infrastructure, more organizations are relying on data driven decision making. From fulfilling online purchases to the management of an entire fleet of ships, software has taken over as the preferred form of control. Additionally, supply chain automation has resulted in a huge demand for supply chain knowledge in many industries. To sustain the economy, qualified professionals must emerge with economic and social knowledge that can tackle even the most complex business problems.

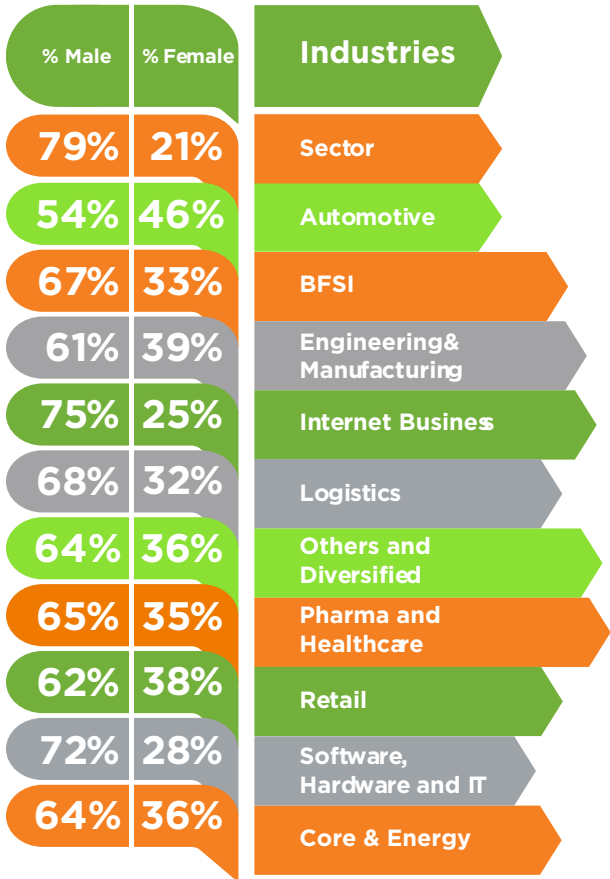
WOMEN PARTICIPATION SHOWS STEADY IMPROVEMENT

As recorded earlier, the percentage of employable women is much higher than men among the talent pool of India 2021. 41.25% of women were found employable, which is higher than the 38% of men found to be employable from the talent supply

data. Irrespective of this winning statistic, the total workforce consists only of 36% female employees. In terms of demand, there has been a steady increase in the BFSI domain where 46% of the workforce comprises women. Followed by the Internet businesses consisting of 39% women workforce and the Software & hardware industry with 38% of women professionals. Considering that technology driven hiring is favoring more women than any period in the past, the gender representation in corporations have improved. The Retail, Pharma & Healthcare as well as Engineering & Manufacturing domains have a female workforce higher than 30%. These statistics are still a huge concern, considering that only 36% of the overall workforce consists of women. The majority of 64% of employees in all industries are male. If India is to tackle the skill gap and emerge as a global player, the gender roles must be reversed. By breaking the orthodox mindset in society, Indian corporations can leverage the vast talent pool of females in India, to create equal opportunity across all industries. The education world has grown with the demand of talent in India, representing equal access to education and gender parity awareness. With increased access to technology, the skilling is only going to get better. Government initiatives, social organizations and educated women in the country are emerging as successful players in the local economy. In the coming year, provided that more companies hire from the existing talent pool of women, the future looks promising for the heights that India's economy and social welfare require. The common trend to be noticed is that knowledge-driven workplaces tend to hire more women employees than labor-intensive industries. The shift enabled by technology adaptation is a promising insight into a more equal and excelling workplace for all. Compared to last year, the participation of women has increased from 30% to 36% this year, indicating a strong hope for the future.

GENDER PARITY CONCERN: 64% Male : 36% female

HIRING MIX OF MALE & FEMALES PER INDUSTRY



However, in terms of women’s employment, India is still one of the lowest-ranked countries in the world. Women in India do not have employment. A vast majority that is employed, depends on the informal sector with irregular income. This concern is not just a national issue, but in the global context a question of social welfare. Considering the large population, government initiatives and awareness generated about gender parity, hope is dependent on the steps taken to make India the ideal society. The government requires a constant push to ensure that gender parity is no longer an issue, but the force that guides the talented workforce of India towards a future of prosperity. In fact, awareness starts with each household and each individual to ensure that people everywhere deserve equal rights, opportunity and consideration in the face of employment and livelihoods.

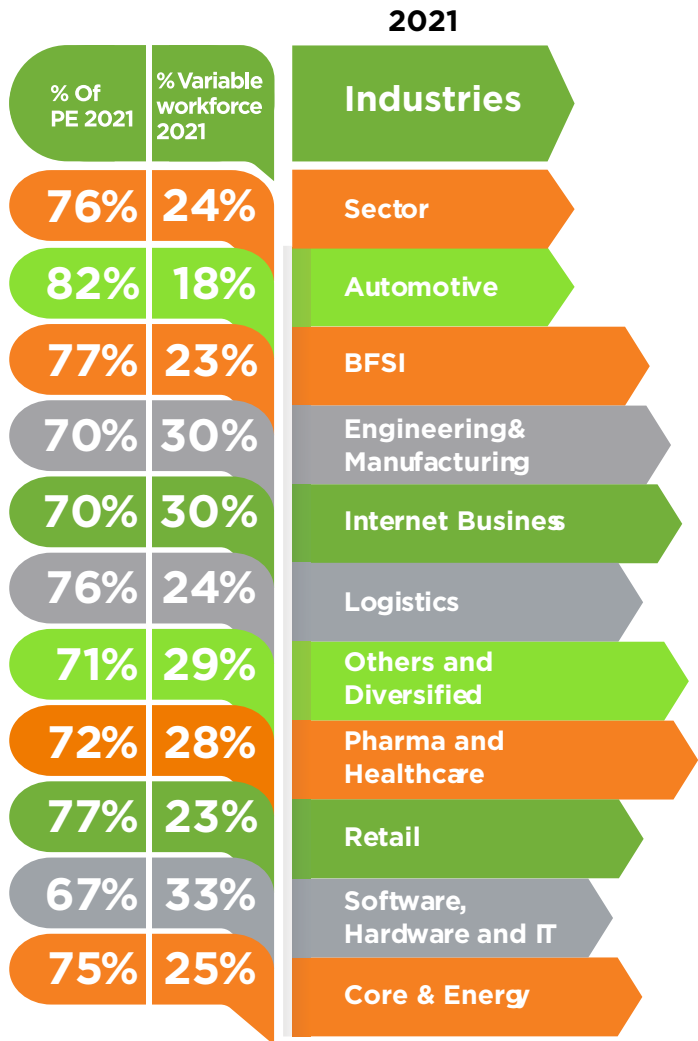
This requires coordinated effort from both entities to encourage more women to participate in all areas of work and across hierarchies in the organizations.



## EMPLOYERS PREFER PERMANENT EMPLOYEES

As indicated earlier, a vast proportion of leading industries consist of a variable workforce which is a short-term engagement with a company. Compared to the permanent employees, short term engagements and rotational employees do not seal their position in the industry. The role of gigs in the economy has also impacted the steady retention of employees in companies. Every corporate is looking to hire and retain their employees, to guarantee sustainability for their enterprise and business operations. For most freshers, the trend of experimenting with a job until inefficiency strikes is not a professional approach. Freshers and seasoned professionals alike should be able to pursue their interested career and aim for longevity to become a valuable asset in their organization. Whether self-employed or employed under the umbrella of a corporation, the stability is built with permanence and adherence to a job duty in order to grow as a professional. Let’s explore the variable workforce of India, shedding light on the hiring intent of corporates in the coming year. The variable workforce also represents an opportunity to retain existing employees for a better outcome in the long run, for corporates and businesses.

### VARIABLE WORKFORCE IN TOP INDUSTRIES



**variable workforce comprises fixed-term contractual employees, gig, and 3rd party affiliations.**

Furthermore, the rotational employees in each sector was recorded this year, to map out the potential of positive hiring intent predicted for the year 2021. Core and energy sector has the highest percentage of rotational employees, standing at 33%, followed by Logistics and the Internet businesses tying at 30% of their workforce being variable workforce. The variable workforce comprises fixed-term contractual employees, gig, and 3rd party affiliations. The variable workforce statistics are a key indicator of the employability landscape of the nation, attributed to the hiring pattern of top industries.

## WHERE ALL THE HIRING HAPPENS

### Accessing India's Talent Pool

Recruiters have streamlined the hiring process with a mix of various channels to identify, interview and select candidates. The use of conference meetings is popular in training new recruits as well. Some of the best methods of accessing India's talent pool is through third party consultants and organizations. Among the third party recruitment portals, a vast percentage of recruitment services are on the internet. This includes, CutShort, Updazz, Naukri, Monster, Indeed, Shine, Google, LinkedIn and even Facebook. Recruiters have a wider access to the talent pool online, thereby easing the burden of strenuous documentation and tireless calls to land the ideal fit. Social Media plays a vital role in the research part of the hiring process. Especially LinkedIn, where career development is the prime focus. In the current scenario, internal referrals, job portals, professional networks, social media and recruitment services play a vital role in equipping companies with human resources. It is interesting to note that this year, the preference rating was more inclined to online HR solutions than ever before. Walk-in's were significantly eliminated and online HR rounds took prominence over the course of last year. This was largely attributed to the safety of employees amidst the global Covid19 pandemic. For candidates looking for a job, a simple Google search will uncover top listings from local businesses and multinational firms. The premise enabled by online recruitment has also minimized the requirement of job fairs and recruitment drives. Although campus placements are still popular, almost every process from the interview, screening to onboarding is virtual.

## HIRING BY GEOGRAPHY

### Top States

*Note: Job demand is more in the following states to be mentioned alphabetically*

**Maharashtra**  
**Karnataka**  
**Delhi - NCR**  
**Uttar Pradesh**  
**Haryana**  
**Tamil Nadu**  
**Andhra Pradesh**  
**Telangana**

While Tamil Nadu was listed as the most preferred destination along with Karnataka, the job demand is highest in Mumbai, followed by Bengaluru. The virtual hiring and remote work culture has also witnessed a massive employment from outer states in the top performing economies. This is due to the increased connectivity, where companies prefer to choose a more qualified professional from another state than resort to a less qualified applicant. The fact is that people from all over the country have been applying for jobs in the top employable states with highest employment in the tier 1 cities. Although geographical location hinders a majority of applications, the increased method of virtual hiring and work environments has seen to employ candidates from nearing states. Especially in start-ups where job requirements are mostly need-based, companies are looking for qualified skills in prospective employees. The arrangement particularly encourages people from states with less employment, to contribute to an organization and ultimately, the nation's overall workforce. Additionally, the growth of Non-tier 1 cities over the period of 2020 to 2021 has resulted in a vast talent pool emerging from cities with inadequate corporate infrastructure. Non-tier 1 cities showed an impressive growth of 13% amidst the global pandemic, a reflection of the way India handled the global crisis of Covid19 pandemic.





GROWTH OF NOT TIER 1 CITIES

Growth of non-tier 1 cities from 2020 to 2021	13%
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GIGS AND FREELANCE WORK

Internships are a big part of the corporate landscape. Internships offer companies to assess the quality and performance of human resources before employing them as permanent resources. According to respondents, corporates recruit any individuals who are a part of a government-initiated skill development mission or have an existing employee coming from such initiatives e.g. PMKVY, SANKALP, National Apprentice Promotion Scheme. Also, the virtual hiring has contributed to vast reach into the dynamic Indian talent pool, where recruiters can identify talent almost instantly. Industries also dedicate a large chunk of the onboarding activities for new employees, to train the candidates and monitor their growth. Such practice is relevant to almost every industry from Automotive, manufacturing, engineering to internet services, BPO, software development and management.

Furthermore, the popularity of online data entry, copywriting, social media management, e-commerce and online businesses have increased the number of freelancers and gigs available in the country. An estimated 15 million Indians rely on freelance work in 2020, a number expected to exceed in the coming year. Companies are also basing their hiring on the project experiences and freelance endeavors of prospects to ensure that they select the ideal candidate for the job.

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# INDUSTRIES' RESPONSE TO THE CRISIS



## An overview of employment in 2020

The first lockdown was officially announced by the government of India on March 23rd 2020. It was extended for another 21 days. The lockdown was again extended afterwards. Businesses began laying off employees and schools were closed for operation. Virtual classrooms became the norm for students of all ages. Online conferencing was adopted as the preferred mode of business communication. Many small businesses shut down, while numerous other small and medium businesses were operating with less than 50% of their employees. Large corporations laid off employees across various job roles, resulting in a high unemployment rate for the period of March to August 2020. 10.8 million jobs were lost in key sectors, including the travel, hospitality, aviation, automotive, BFSI, and IT industries.

After reduced COVID-19 cases were recorded due to lockdown measures, the government extended phased lockdowns with stringent measures in city areas until June. Then, the government began to unlock various areas with restrictive guidelines to control the spread of COVID-19. Unemployment went up to 24 percent in May 2020. In September 2020, India saw an unemployment rate of over six percent. This was a significant improvement from the previous months, yet a slow climb in the face of adversity. Around 140,000,000 Indians lost their jobs during the lockdown. The lockdown measures caused a damaging impact on almost every industry and sector that requires hands to function. Remote work was the only hope to salvage the leftovers of a vast economy that was ill-prepared for a global pandemic. The remote work culture during the pandemic, brought fresh insights into the competencies required in today's employability landscape.

## A gradual upward climb in the economy

Despite the spike in unemployment witnessed during early 2020, the economy was set for a slow revival. The fast moving

goods were groceries, medical supplies, masks, and protective gear. Monthly rations were offered in subsidised rates for citizens in various parts of the country. Food was supplied on the street corners to citizens by state governments in urban, rural and suburban areas. The crisis response saw many hospitals lacking medical supplies and protective equipment. Yet, the nation stood together in the face of a global pandemic that caused increased grievances. An outcry of migrant workers and daily wage workers moving back to their hometowns due to unemployment, caused concerns for the labor force in cities. The economy was not prepared to safeguard the more than 400 million strong workforce of India. Yet, the financial year of 2020 recorded a 4.2% annual GDP growth, lesser than that of 2019 but hopeful for the future.

Despite the massive unemployment and halted civic functions, India maintained its position as one of the fastest growing economies in the world. The sustenance of the economy is a reflection of measures taken by businesses to continue operations while focusing on the well-being of people in their organizations. The government stepped up with numerous initiatives with social organizations to reverse the economic impacts of the pandemic. The extensive use of technology played a vital part in uncovering the skills in demand today.

## COVID19 THREATENS INDIA'S GROWTH

The lockdown restrictions halted most economic activity in the nation, leading to loss of employment in the formal and informal sector. The government took precautionary steps to curb the virus spread by restricting movement within regions, but the virus continued to spread and wreak havoc for the citizens. India is one of the most affected countries from the coronavirus pandemic. After six months of lockdown and closure in India, the country recorded the second highest number of cases in the world registering more than 10 million positive cases and more than 155, 000 deaths nationwide. The government

lifted lockdown restrictions in a phased implementation while the shutdown took a toll on the country's economy. Health Workers were in grave danger as they risked their lives to save the affected populace. The pandemic also impacted businesses nationwide. During six months, the GDP dropped and unemployment rose.



## Healthcare Sector

Rising cases of the lack of healthcare facilities like shortage of beds, lack of protection equipment showed the weakness in India's health sector. According to a survey conducted by LocalCircles, which includes responses from over 17,000 individuals located in more than 211 districts across India, only 4 percent of patients who needed an ICU bed were able to find one while 78 percent used connections in the hospital to secure an ICU bed. Healthcare infrastructure was the main focus in the unprecedented global Covid19 pandemic. Within the first few days, it was evident that India was unprepared and lacking in the necessary infrastructure. A vast population of non-resident citizens returned back to their homeland, amidst a pandemic that couldn't accommodate the existing population. Health care workers were in huge demand as social organizations and the private sector jumped into action. Security forces, nurses, doctors and first responders were on duty 24/7.

## GDP contracted

In the first quarter of the fiscal year 2020 India's Gross Domestic Product collapsed by 23.9 percent amid the nationwide coronavirus lockdown. The pandemic led to a shutdown of business, industries and services of all sectors and sizes. From the manufacturing domain to real estate, hospitality sector to mining and energy, every business has been impacted as the economy records its sharpest drop in 41 years.

## Job loss

The pandemic has wreaked havoc on the job landscape in the nation. The talent supply was affected by schools shutting down and online classes restricting movement. The demand was affected by the losses incurred by corporations due to a description in the supply chain. According to the Centre for Monitoring Indian Economy (CMIE) almost 21 million salaried employees lost their jobs during April and August. There were an estimated 86 million salaried jobs nationwide, during 2019-2020. In August 2020, the number of salaried jobs dropped down to 65 million, mostly among the industrial workers and white collar workers, according to the CMIE. This statistic does not cover the informal sector of 400 million Indians living on an irregular income.

## Income loss for vulnerable section shows inadequate resources

According to an analysis by Scroll, during just the first two months of lockdown in March, India's vulnerable section of the economy lost incomes amounting to as much as INR 400,000 crores, amounting to nearly 2% of India's annual GDP. This statistic is a clear reflection of the impact that the pandemic took on lives and livelihoods in India.

## Suicide rates increased among students

The ongoing pandemic affected the mental health of a significant majority among the youth. According to data compiled by a team of researchers at Jindal Global School of Law, suicides were the leading cause of over 300+ non-coronavirus related deaths in India from March 19 to May 2. This saddening news was attributed to the distress triggered by the nationwide lockdown. The average age of the deceased was recorded at 29 years old, shaking the foundation of India's youth development and mental health initiatives.

## INDUSTRIES RESPOND TO THE PANDEMIC

### Travel & tourism industry

Among the most affected sectors, travel & tourism was impacted gravely by the restrictions nationally and globally. According to data from the Confederation of Indian Industry (CII) and a hospitality consulting firm Hotelivate, tour operators, including both online businesses and offline businesses along with inbound and outbound operations will lose an estimated \$4.77 billion in recapturing their market. The whole value chain linked to the Travel & Tourism industry is likely to lose around 500,000 crore which is USD 65.57 billion, with the formal sector likely to lose USD 25 billion just because of the global pandemic. This impacted the employment in travel & tourism sectors, with many rural areas in India heavily dependent on travel and ecotourism.

### Hospitality industry

The CII-Hotelivate report also says that the shutdowns were initially expected to affect revenue streams till the month of October, now having indicated only 30% of occupancy in hotels till midway of 2021. Today, hotels are seeing an 80% erosion in revenue streams and are gravely impacted by travel restrictions and social distancing measures. The hospitality industry, across all hotels and similar services will incur a massive revenue loss of \$19.31 billion as per research. This is just a fragment of the loss incurred globally, but a devastating impact on the national economy of India.

### Metro rail services & Transport sectors

The country was under lockdown since March 25 due to the novel coronavirus outbreak, which included imposing strict restrictions on social activities and travel across the country. Since then, the metro rail was also shut down. The government later eased restrictions, allowing metros to resume services from September 7th 2020. But the losses incurred were heavy, where the Union Housing and Urban Affairs Minister Hardeep Singh Puri stated that the Delhi, Bengaluru, Lucknow, Chennai and Kochi Metro Rail Corporation incurred a loss of almost 2000 crores during the period of March 2020 to September 2020. This shutdown was similarly reflected in the entire transport sector. Buses reported almost 90% less travels and the profitable transport sector was incurring losses. Although



the public sector did not lay off their logistics employees, transport services in the private sector witnessed a streak of unemployment during the lockdown.

## Indian railways

The coronavirus crisis suspended passenger services from March up until May 3rd 2020. The Railway Board chairman VK Yadav stated that the Indian Railways expect a revenue loss of up to INR 35,000 crores from the passenger train segment during the FY21. The reduced train travel is a massive hit on the transport sector which plays a vital role in public and private sector logistics. Many businesses that rely on public transportation were affected severely.

## Education sector

The major impact in terms of talent supply was witnessed in the education sector. The pandemic disrupted educational activity across the nation, in an attempt to curb the spread of the virus. Most of the schools and colleges remain closed ever since lockdown began in March. As few institutions have slowly reopened their doors, the premise of online education is still gaining more momentum. Many children are struggling to keep up with the online classes and report challenges in accessing educational material and fulfilling their studies. This has a significant impact on the graduation in colleges and schools, where many exam dates were postponed and functions cancelled. Some schools reported to have cut down on their syllabus to accommodate learning for the FY20. Students and teachers in cities, towns and villages were scrambling to cope with the demands of the harsh times. In September 2020, students of class 9-12 were allowed to attend schools physically on a voluntary basis as per the government's Unlock 4 guidelines. This is a slow revival of the education sector. Considering that only 44% of the youth is job-ready, the rising demands in the future requires a skilling initiative from academia, industries and state governments to equip the future with necessary opportunities.

## Impact on Street Vendors

India is home to over 10 million street vendors and moving merchants who rely on foot traffic for a means of survival. Livelihoods of the street vendors depending on busy public places were impacted hard by the unprecedented lockdown measures. With less people out in the streets during the lockdown, the vendors in cities lost their source of income. Many people were unable to feed their families, which led to starvation and deprivation, numerous migrant workers moving back to their rural hometowns. Post the lockdown restrictions were lifted, many street vendors still reported a drastic decrease in their income compared to the times before the pandemic outbreak. The vast majority of Indian women employed in the informal sector were unprepared to face the challenges that lay ahead. Although the Union organizations in cities and rural areas came alive, there's very little that could be done to sustain the livelihoods of street vending in India. The rise of e-commerce and online purchases indicates that more people would rather buy online than risk their lives during a global pandemic.

## Internet activity rises during the pandemic

Data from the department of telecommunications indicated that between the period from March 22 to March 28 alone, Indian citizens consumed an average of 307,963 TB or 307 petabytes (PB) of data. This is a huge spike in the internet activity, that shows the access to internet services and facilities even in the most remote regions of the country. Internet consumption in India rose by 13% instantly since the nationwide lockdown was implemented to curb the spread of Covid-19.

While this is hopeful for every sector that thrives on internet communications for business operations, the education sector did not make optimum use of the internet. It was revealed that 79% students used smartphones to access education online and attend classes, while a whopping 29% school students had no access to online education whatsoever. Internet businesses and remote work opportunities flourished under the premise of a wider audience available online. From this year's analysis of the WNET employability ratings, only 45.9% are considered employable. The access to the internet for a vast majority of the college level students is a hopeful indicator of skill development in the nation. Many streaming services such as YouTube, Netflix and Facebook took measures to downgrade video quality on their platform which did not reduce any engagement. Online education portals and certifications capitalized on the situation to promote their services and reach out to the youth with in-demand skills of the day. Since many students express interest in online classes, the vocational training institutes across the country will play a pivotal role in developing skills for the nation's workforce in the coming years. Among the daily internet activity, video streaming was identified as the highest form of engagement online. This is also an indication of the type of online learning that would appeal to a vast majority of the Indian youth. The internet is being leveraged by organizations in the government, public sector and private sector to upskill the workforce of India. Increased internet activity is opening the window into information and technology for a large population. The increasing dependence on technology for various businesses and industries is evident with the statistics that show high internet activity and connectivity during the lockdown.



# CLOUD COMPUTING AND ARTIFICIAL INTELLIGENCE



## Harnessing the latest technology

Mr Piyush Goyal, the Minister of Commerce & Industry and Railways, Govt of India said, “The only way to remain competitive in this globalised world is to harness new and emerging technologies and we need to educate and skill our people to absorb these technologies. Indian graduates will play an important role in not only shaping India’s destiny and future but will also help in charting out the roadmap for the world.” His words are the clear path that lies ahead for India to remain competitive in the global market. With a vast majority of the population being in the workforce, India’s fate depends on the youth. The emerging technologies have already led to new economic activities, resulting in an overall shift in industry dynamics. If India’s talent can meet the demands of emerging technologies with skills related to the new jobs, the country will be pivotal in influencing technology and innovation. The minister Piyush Goyal also said that technology is a powerful tool that can democratise development, resulting in social and economic equality. We couldn’t agree more. The use of technology can bridge the gaps in every industry, creating a more efficient and skill oriented workforce. In order to make the youth more employable and relevant to the current job market, technology training is vital. As the minister said, “we also need to grow and nurture leaders who will shape our destiny.”

While the Prime Minister’s Atmanirbhar Bharat is already making waves in the country, technology is shaping India’s economic future and prosperity. The automation in e-governance and online portals have made government resources more accessible to citizens. At the beginning of 2021, PM Modi’s keynote address included a call to invest in India’s talent in the global community. Having expressed the great potential of one of the world’s largest workforces, the Prime Minister urged foreign investment in India’s talent. The vaccines to tackle Covid-19 were made in India, showing the scientific progress of India’s industries. Rising up to the challenge of a pandemic, the global community has begun to invest in the Indian economic model for crisis management. The vaccine development is just one example of how India is a self-sufficient global power that employs homegrown scientific research and innovation.

The IT industry and banking sector further express India’s vast talent that positions this country as a future leader in the global workforce. With the advanced technology and skilling initiatives, India’s talent can match the requirements of the future by producing future-ready professionals in every sector and domain. The Prime Minister has repeatedly addressed the vast youth of India, urging academia and industries to play a vital role in shaping India’s talent for the growth of its economy. As a symbol of unity, the Prime Minister of India has often expressed his vision for the country resting in the hands of the able youth.



**“I dream of a Digital India where quality education reaches the most inaccessible corners driven by Digital Learning.”**  
— Narendra Modi



## Catching up to cloud infrastructure

The Indian cloud infrastructure alone is estimated to grow by \$7.1 billion by 2022. Considering that companies spend an average of 3% of their revenue on maintaining cloud infrastructure, the new jobs that come into the market are technology oriented. Data analysts, data engineers, server programmers, network specialists and computer engineers are expected to occupy a huge chunk of the jobs. A report by Outlook India states that 80% of businesses will adopt cloud technology in some form or the other by 2025. This is a clear direction of the talent demand in coming years. Evidently, the online learning for cloud related courses, web design and server administration are popular among the youth. Qualified computer science graduates add cloud computing skills and data management to their resume just to stand out in the vast market of youth employability. Public cloud services and private cloud services are gaining momentum as a preferred business tool for asset management and efficiency. Although India's revenue represents only 1.2% of the global public Cloud services in 2020, the country is ranked among the top 9 nations with a growth rate that is higher than the global average growth rate. Since 2018 public cloud services revenue in India increased by 24.3% reported by Gartner. With increasing investment in cloud technology and computing power, India's economy is making space for qualified cloud administrators and engineers. Cloud computing is making its presence known in healthcare and pharma to agriculture and civil engineering. With immense focus on a technology driven workplace, businesses are adopting the latest technologies to stay relevant and compete in the national and global market. Adoption of cloud technologies within Indian organizations is on the rise, with a majority of companies moving towards a Hybrid multi-cloud strategy started in 2020 onwards.

"One aspect of technology is that unlike manufacturing or outsourced production systems, you don't have physical movement of freight. It goes through the large pipes that the telecom networks have built and it doesn't get disrupted due to a lockdown."

Ajit Isaac, Chairman and Managing Director of Qess Corp

### Top 5 skills

Technical	Soft Skills
Python Programming	Problem Solving
Neural Networks	Communication
Cloud Computing	Active learning, resilience, flexibility
Supply Chain	Digital Dexterity
General statistics	Analytical and Critical thinking

## Reskilling a majority of India's workforce

According to a Future of Jobs 2018 report, more than 50% of India's workforce will need to be reskilled to meet the demands of the evolving employability landscape by 2022. The fourth industrial revolution requires hands to carry the vision of a fast-growing economy forward. The report also found that talent availability is the determinant of job locations for transnational businesses that have operations in India. In hubs like Bangalore, Delhi, Hyderabad and Mumbai, the increased foreign investment is because of the cheap labor and qualified resources available. An estimated 67% of businesses are expected to outsource their core functions by 2022. This is a

response to the changing skill requirements of corporations. A similar trend is witnessed in industries like healthcare, where telemedicine and remote diagnostics are taking flight. The production and manufacturing of goods has also been impacted by the inclusion of technology. Bioengineered food produce is becoming a bigger part of the Indian diet. Mass production of goods is easier with technology that enables efficiency. The entire supply chain for FMCG industries can be based on cloud intelligence that manages business operations remotely. With advanced data analytics, businesses have everything within reach to make an informed decision. With these advancements, the youth must be prepared with new norms and latest technologies. Start-ups are also leveraging the potential of internet technologies, with numerous software developers and product designers creating native applications to make work life easier. To close the skill gap in the Indian industries, skilling initiatives by the government and private sector will play a vital role. Social organizations and vocational training institutes will become a big player in skilling, upskilling and reskilling the Indian youth. Considering that 45.9% of the youth were found employable in 2021, there's a lot of ground to cover in specific domains where the skill gap is highest.

## Skill gap is maximum here

Data Science  
Artificial Intelligence  
Natural Language Processing

### Data Science

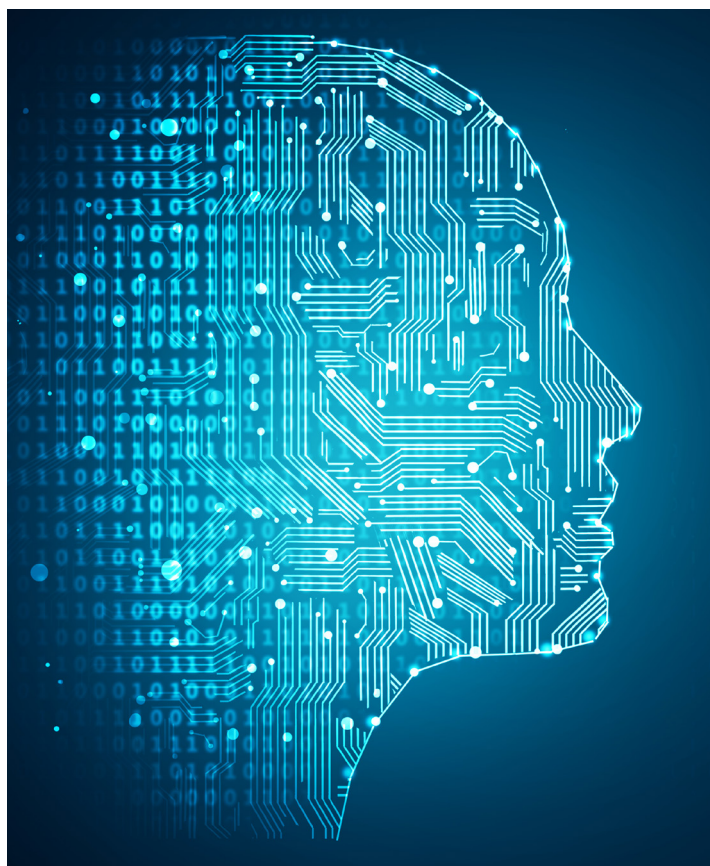
Data science is an interdisciplinary field that uses scientific methods, processes, computer algorithms and systems to extract knowledgeable insights from large sets of structural and unstructured data. Data science is related to data mining, machine learning and big data handling. Companies with large assets and expansive operations find data science professionals ideal for their work environments. Data analysts and scientists are responsible for drafting business insights and operational reports about a company's performance. They are also responsible for managing crucial data about a company by maintaining security and smooth operations. Since most companies depend on a centralized software to track their supply chain logistics, data science is becoming more popular. Amazon, Google, Microsoft, Accenture, Concentrix and Honeywell are some top corporates constantly in search of Data Science professionals. For many small and medium businesses, qualified data professionals can be the backbone to successful digitisation and commercial activity. Data driven business decisions is the basis to modern communication and business intelligence. With technology, people can manage large operations in a timely manner. With cloud computing, almost any amount of data can be managed, extracted and operated effectively. Large financial assets and online stock trading is an example of how cloud infrastructure has reformed modern business. The use of data to create medicines and food allows scientists to further their research and automate strenuous, lengthy processes. The need for qualified data professionals will emerge in every industry across the nation in coming years.

### Artificial Intelligence

The India Hiring Intent Survey also revealed the maximum skill gap in artificial intelligence. Artificial intelligence (AI) is the simulation of human intelligence in machines that are programmed to think like humans and mimic their actions. The term is also applied to any machine that exhibits traits associated with a human mind such as learning and problem-solving. We live in an age where computers can perform tasks faster than humans. This makes artificial intelligence that much



more valuable. Voice command for home automation and device functionality is an example of the leaps and bounds AI has covered in the past few years. Automated self-driving cars are another great example of the incorporation of AI that is accessible to the working class. The biggest players in the automotive industry globally are manufacturers of electric vehicles, in an attempt to promote sustainability. AI can also assess numerous algorithms simultaneously to produce matching reports about chemicals that can be used in medicine or food. AI has also evolved tremendously in India, where AI powered surveillance systems and AI driven software is gaining much prominence. AI professionals are in huge demand in industries dealing with technology and innovation like software development, cloud computing, machine learning, data sciences, business analysis and product management. The skill gap in qualified AI professionals can be solved in the coming years. The introduction of various AI courses and Machine Learning certifications online are a huge boost for the youth of India. In fact, colleges have already incorporated AI and ML as a core subject matter for computer science candidates.



## Natural Language Processing

Natural language processing (NLP) is a branch of artificial intelligence that helps computers understand, interpret and manipulate human languages. This is evident when a person speaks into the phone and the speech is transcribed to text. This way, the phone uses AI to identify and match the speech with relevant information. Voice search is just one example of natural language processing. There is software that can extract the lyrics from multiple songs played at once. Software for voice command features are also gaining momentum in the market. By providing people access to the new technologies in Natural Language Processing, the way people interact with the world is also changing. Without having to stop a task, people can use their language to order food, make calls, book a cab and much more. Alexa by Amazon is an example of voice bots that are used to further the NLP. India is a huge market for companies with voice bot technologies and speech services. As of 2020, Google offers its search engine in 149 languages, including

regional languages like Tamil, Hindi, Telugu, Bangla, Kannada, Malayalam among others. Natural Language Processing has redefined communication technology by enabling access to even the most remote locations on the planet. With basic technical know-how people can communicate across cultures and further their pursuit with human-centric technology tools enabled by NLP. Since the number of smartphone users in India was estimated to reach over 760 million in 2021, and number of smartphone users worldwide expected to exceed 3.8 billion users in 2021, technologies in this domain will attract more of the talented youth of India.

## Sustainable growth and education

Sustainable growth of the Indian economy is reliant on the education opportunities of its youth. When online learning is becoming more popular, there are still a lot of requirements for trained personnel in the industries. Skilling initiatives by the government have targeted these requirements by providing various avenues for aspiring professionals to gain hands-on experience. Internships and campus recruitments were a common trend of corporates before the pandemic. Virtual hiring and online applicant assessments will determine whether a potential employee is hired or not. These trends will continue to impact the employability landscape of India. Education remains the unbroken link between sustainability. The academia is responsible for generating awareness among the youth about in-demand skills and relevant technologies of the market. The world of education must prepare candidates with the necessary knowledge to tackle today's industry demands. The subject matter can often confine people to a unilateral exploration of the economy. When technology is employed in every industry of the economy, adequate knowledge and skilling must be provided to the youth. Students who graduate from college should be aware of the areas that they can apply their skills. Technical knowledge about software, hardware and IT should be the common platter for computer education. The role of big data in business analytics should be documented and presented for students to implore. Sustainable growth is a byproduct of a well-equipped youth that is employable by the highest standards. The need for soft skills and business communication is also more. With the increased competitions, students should be able to stand out in their eccentricity, with soft skills that showcase their professionalism. A collaborative effort to skill the Indian youth can be the premise that builds sustainability for the future economy. India has a huge population of english speakers, making it a prime destination for foreign investment in India's talent. The premise for cheap labor is another motive for companies to invest in India. When the economy is built on the capitalization of global connectivity, more opportunities are coming to the country. The vast youth population must be ready to tackle the evolving economy with sustainable skill development and holistic professionalism. This is a duty of each student, teacher, parent and industrialist alike.



## ISR 2021 overview

This edition of the “India Skills Report 2021” sheds light on the changing employability landscape of the nation, post-COVID pandemic. The primary research covers the talent demand and supply nationwide, offering students, corporations, academia and policymakers a congruent view of the impacts of COVID-19 and pertinent lockdowns on the economy. The impacts of globalisation, demographics, policies and economic activity have been highlighted to furnish the evolving demands of India’s job landscape. While the workforce of tomorrow has been shaped by decades of industrial activity and economic development, the ISR 2021 explored youth employability and skills required to take India’s workforce forward. Rapid advancements in science and technology, paired with data driven business models have facilitated the opportunity for industries at large, to adopt technology driven infrastructures. The workforce of India has been changing gradually, to meet the growing demands of modern industrialization through digitisation. The pandemic revealed the increasing reliance on technology in every sector. Citizens tapped into the concept of remote work culture and automated business processes, which have long been the basis of many successful industries. The eighth edition of this report unchains the economic drivers of progress in India’s technology driven innovation. E-commerce is on the rise, defining modern entrepreneurship. High-end software is a part of company infrastructure and business operations. Internet businesses and online activity is a driving force of the socio-political and economic landscape. The internet has reformed thought leadership in many ways, for industries and academia alike. Online education and remote learning has become more popular during the lockdown measures of the COVID-19 pandemic. With increased access to technology, it is estimated that close to a billion Indians will have uninterrupted internet access by 2030. Considering that the average age of the Indian population is 26-27 years old, the vast workforce available to cope with technological advancement is a hopeful indicator for the future. By analyzing the demand and supply of talent in India, ISR uncovers the premise for employment and employability among India’s vast and able workforce. As a key stimulant of economic growth, some of the various forces in play include the government, private sector, social welfare and technology driven communications. The way people interact with the world is changing and this has a huge impact on work culture today. Industries have adopted measures to adapt with the inclusion of technology for access, efficiency and control, while a skill gap emerges in time to address the future of skilling initiatives in India. With specific insights into the varying factors like the demographics, gender representation, variable workforce, hiring intent and youth employability, the ISR provides an informed outlook on the talent demand and supply in the nation post-COVID. The amalgamation of supply side data and demand side data are the basis to address key insights about India’s talent demand that emerged during the global pandemic. We always aim to provide an accurate premise that highlights the employability landscape of India by assessing employment opportunities, trends and technologies of the day. With the youth employment data, the ISR 2021 furnishes the talent ecosystem with valuable statistics to encourage sustainable skill development and employability enhancement for the future. Measuring the job-readiness for available jobs and the demand for new skills will showcase the evolving industrial growth of India. This report is curated to give direction to the skilling ecosystem in India, where the government, students, parents, corporations, training institutes, policymakers and academia can take necessary steps and address the skilling in India.





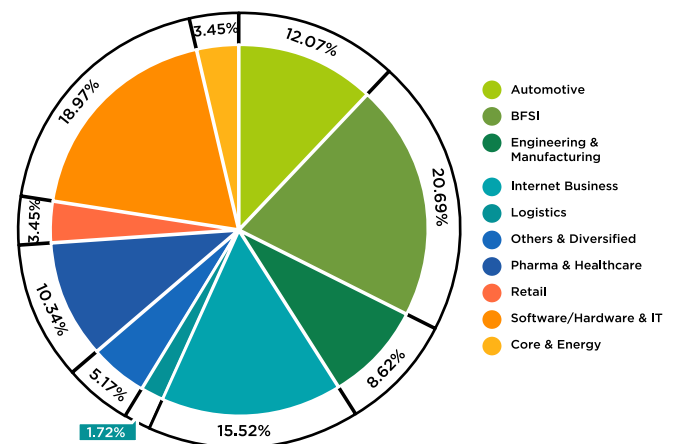
# APPENDIX



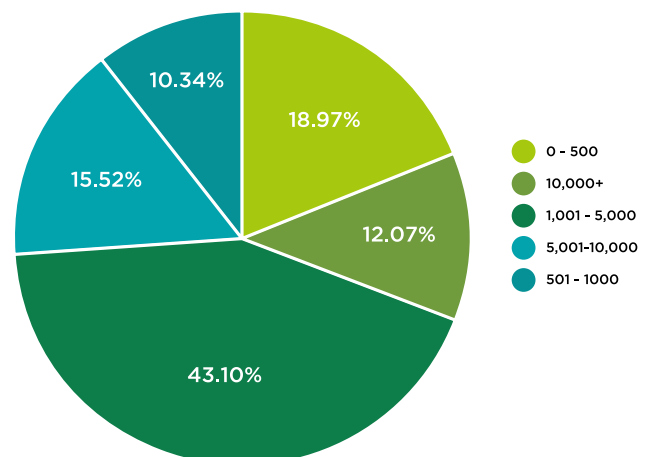
## SURVEY METHODOLOGY & DATA ANALYSIS

The India Skills Report is a merger of two distinct and cohesive studies from the Wheebox National Employability Test – which analyzed the employability among youth and the India Hiring Intent Survey – which is a primary research survey conducted for 150+ corporates across 15 industries. The Wheebox National Employability Test or WNET, assessed the employability amongst students evaluating the job-readiness for the evolving market in India. The India Hiring Intent Survey of 2021 studied the hiring trend and preferences of employers in top industries for the coming year 2021. For WNET, we reached out to over 65000 students from various domains and educational backgrounds, through an online skill assessment across the nation. All the responses were collected online through a structured survey including respondents' demographic information. Responses were assessed and analysed using statistical tools to represent data in this report. The assessment scores were collected on all demographic parameters to eliminate any possibility of data polarisation. Students were asked specific questions related to their education along with a psychometric assessment which helped us understand their non-technical skill profile. The outcome of the survey was analyzed around various parameters such as educational domain, specific skill oriented employability, state specific employability, thereby narrowing down to the top 10 states, city specific employability to identify the top 10 cities in terms of employability, gender specific employability, expected salary ranges, interest for internship opportunities and user data. The Hiring Intent Survey was carried out by Taggd, by PeopleStrong – who reached out to more than 150+ organizations and corporates from 15 different sectors. An online survey conducted between September and November received 150+ completed responses which were considered for the analysis.

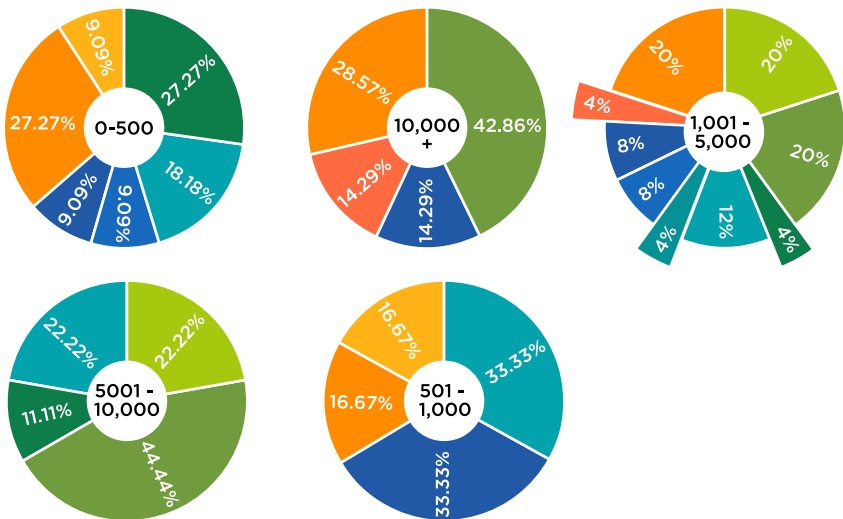
### Participation by company type



### Participation by employee strength



Participation by industry workforce



The India Skills Report 2021 Team



**Shweta Jha**  
Head - Intellectual Properties  
Wheebox



**Elim Panda**  
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**Addiya Singh**  
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School



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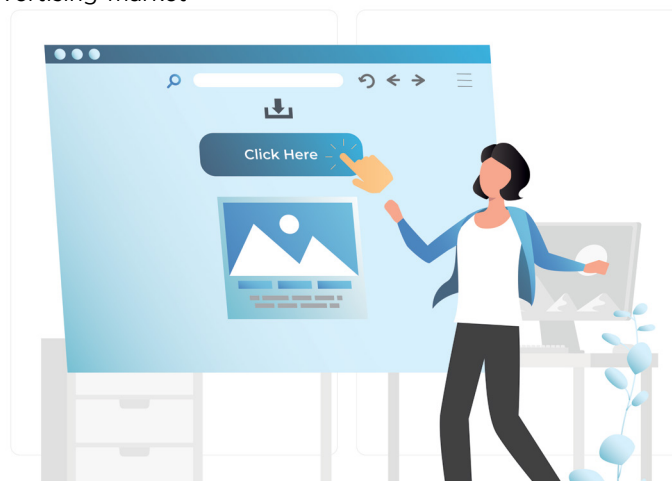
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