REIMAGINING WORK, EDUCATION, AND SKILLS *in* INDIA'S DIGITAL CENTURY

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EXECUTIVE SUMMARY

I ndia is undergoing rapid economic, demographic, and technological transformations. This report is the third in a series by the Observer Research Foundation exploring the opportunities for ensuring equitable employment and quality job creation. The first report, *The Future of Work in India: Inclusion, Growth and Transformation*, explored the impacts of emerging technologies and digitisation on the jobs landscape in India. It is based on findings from a survey of 774 companies across India, ranging from micro-sized firms to enterprises employing 25,000 workers. The second report, *Young India and Work: A Survey of Youth Aspirations*, looked at the education, skills and employment ambitions of India's young population. It is based on a survey of 5,764 individuals between the ages of 15 and 30 across seven states in India.

It is based on findings from a survey of 774 companies across India ranging from micro-sized firms to enterprises employing 25,000 workers.

The current report explores the job, skills, education, and aspiration challenges in India utilising data from both of these surveys. The questions that it attempts to answer include:

- How are education, skilling, and human capital needs evolving in India?
- What employability and skills-related challenges do firms in India face now, and what do they anticipate in the next five years? Is there a gap between the expectations of firms and those of the youth?
- How effective are existing initiatives in meeting individual needs and enhancing individual capabilities in the medium and long term?
- What policies, programmes, and initiatives are needed to ensure employability, greater equality of opportunity, and upward mobility for India's workforce?

Key findings are summarised below:

Degrees matter, skills follow

Degrees remain the greatest employment qualification in India. Organisations tend to prioritise years of work experience and educational attainment when considering new employees. Young people seem to understand this, as 96 percent of surveyed youth hope to attain higher education degrees, and 84 percent report thinking that higher education is a prerequisite for their ideal job. India's youth also indicate an interest in pursuing skills training to improve their employability and employment options, and to increase their salary potential.

Mind the gap

More than half of the surveyed companies report having no gap in their existing general

34 percent of youth respondents between the ages of **15 to 30** are not in education or employment.

and technical skills. Yet, 40 percent of companies anticipate needing different general and technical skills in the next five years, and 13 percent of firms expect to need very different skills. The five general skills that companies expect to become more important in the next five years include trustworthiness, teamwork, communication, personnel management, and analytical thinking. The technical skills that companies anticipate becoming more important for them in the next five years include technology design, accounting and auditing, IT, digital privacy and security, and business analysis and strategy.

Addressing changing requirements

Firms are evenly split in their approaches towards changing skill requirements. 28 percent of firms report addressing gaps in the general skills of their employees by having workers learn on the job. 27 percent of firms report hiring new staff, and 23 percent provide internal training. Similarly, to address gaps in technical skills, 31 percent of firms report hiring new staff, 24 percent hire temporary workers with the required skills, and 22 percent report having workers learn on the job. Interestingly, 11 percent of companies report not doing anything to address changing skills requirements. Only 6 percent of companies report working with vocational education centres to address gaps in their skills requirements. Just 37 percent of firms report a willingness to pay a 10 percent

premium for workers with high-quality skills.

Enhancing job opportunities and job quality

49 percent of surveyed youth perceive the availability of suitable job opportunities as being bad or very bad. A third of respondents that are currently employed report being unsatisfied with their job. 34 percent of youth respondents between the ages of 15 to 30 are not in education or employment. Ensuring that young people and the existing workforce alike have attractive job opportunities that are safe, rewarding, and remunerative will be a critical challenge for India. Youth report a number of barriers to finding ideal jobs, with 51 percent citing a lack of guidance in finding appropriate opportunities, and 44 percent a lack of work experience. Youth in India are looking for skills training that provides relevant information on vacancies, advice on applying for jobs and job placements, and career guidance and counselling.

Workforce employability

71 percent of surveyed companies report that new hires in the last five years were prepared or well prepared for work, compared to just 9 percent who report that they are unprepared. Similarly, 72 percent of firms report that first-time jobseekers are prepared or well prepared when they start. This reframes the skilling issue, and sheds light on the need to provide jobseekers with relevant support, rather than job specific skills.

Indian youth and companies are open to new formats of work; the social protection system is not

24 percent of companies report hiring contract workers, and 19 percent report hiring at least one freelance worker in the last year. Among youth respondents, 63 percent report being very or moderately interested in working in the gig-economy as a supplementary source of income, and 59 percent as a main source of income. This indicates openness towards new forms of work — among both firms and youth. Yet, there is a gap between youth expectations of job security, benefits, and protections, and the social security, protections, and benefits that firms are offering non-permanent employees.

The female dividend

There is a significant misalignment between the capabilities of India's female youth, and the opportunities being availed to them in education, skilling and work. India will only reach half of its potential if women are not participating equally in the workforce. 82 percent of female respondents report wanting full-time jobs, but 70 percent of surveyed firms have fewer than 10 percent female workers, and 30 percent have no female employees at all. While 85 percent of female respondents report a preference for full-time employment, females are significantly more likely to have part-time jobs. 23 percent

of youth report discriminatory employer biases as a main barrier they face in finding a desirable job. Similarly, while female youth indicate an interest in participating in skills development programmes, fewer females than males have actually participated.

Tapping into employment mobility

47 percent of India's youth report a willingness to move to another state for a job opportunity, 41 percent are willing to move to another country, and 39 percent are willing to move to another location within the same state. Very few firms report recruiting workers from outside of their locality. Tapping into India's labour force will require an inclination towards opening talent pools to individuals from elsewhere, more dynamic recruitment strategies, and the provision of attractive salaries and benefits.

Successfully navigating India's digital and technological transformation will require dedicated strategies for ensuring the creation of safe, rewarding, and remunerative work opportunities. This report provides insights into the demands of companies as they transition into the digital age, and insights into the expectations and ambitions of India's rising working age population with regard to work, education, and skills.

24 percent of companies report hiring contract workers, and **19 percent** report hiring at least one freelance worker in the last year.
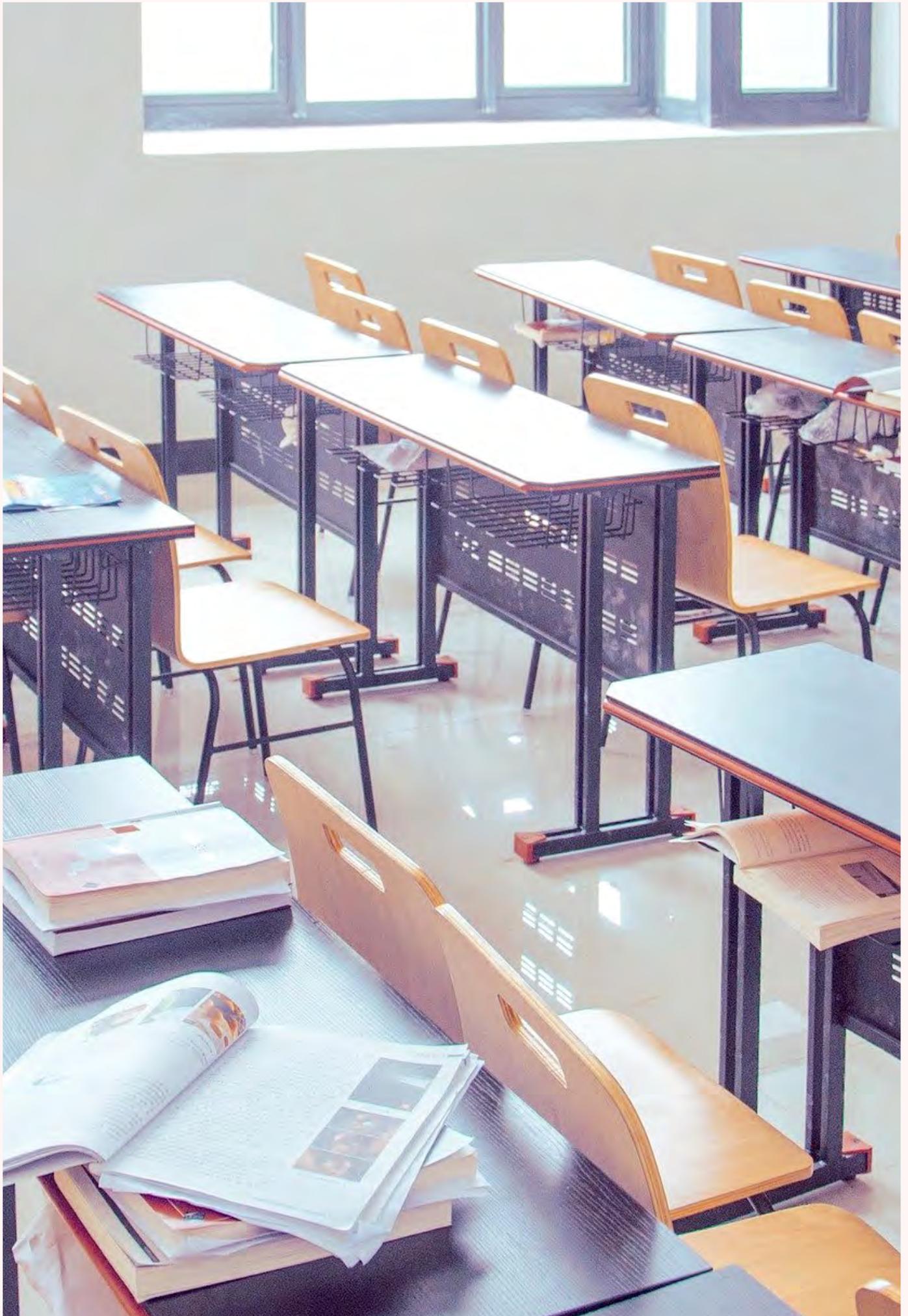
INTRODUCTION

India's greatest asset and challenge is the enormity of its young population, with 600 million people below the age of 25 and nearly two-thirds of the population of 1.3 billion below the age of 35.[i] Enabling its young demographic to fulfil their aspirations will be the defining challenge of the next half-century, and a key driver of growth and progress.

India's youth are seeking education and employment opportunities that will enable them to meet their remuneration and job security expectations, and allow them to be upwardly mobile. For this, it will be essential to ensure that India's youth have the solid educational foundation required, that they are prepared for a changing job landscape, and that there are sufficient employment opportunities for the rising number of entrants into the workforce.

India's youth are seeking education and employment opportunities that will enable them to meet their remuneration and job security expectations, and allow them to be upwardly mobile.

This report is the third in a series by the Observer Research Foundation. The first report in the series, *The Future of Work in India: Inclusion, Growth and Transformation,* scrutinised the changing job landscape in India with a specific focus on disruptive transformations such as emerging technologies and digitisation. It is based on findings from a survey of 774 enterprises across India, ranging from micro-sized companies to firms employing 25,000 workers from four key industries: banking and financial services, textiles, logistics, and retail. The second report, Young India and Work: *A Survey of Youth Aspirations,* examined the education, skills, and employment ambitions and preferences of India's young population. It is based on a survey of 5,764 individuals between the ages of 15 and 30. This current report utilises data from both the aforementioned surveys to explore the job, skills, education, and aspiration challenges in India.

Key findings reveal that there are critical gaps between youth aspirations and the expectations of Indian firms. The ambitions and capabilities of India's female youth, for instance, are not being met with adequate employment opportunities. Social security schemes that will allow youth to both take advantage of new forms and formats of work while receiving adequate social protection have yet to be discovered and implemented. At the same time, the skills ecosystem is still largely focused on short-term skills for employment, while employers continue to value education over job related skills. Addressing these gaps will be necessary to ensure that India's youth have desirable and meaningful employment opportunities.

Section 2 of the report provides background information on the labour market and education context in India, exploring expected trends in the future of work, the skilling mission in India, health and human capital, and the productivity challenge. *Section 3* outlines the methodology used in this research. *Section 4* discusses the complexity of the employability and skilling challenge in India. *Section 5* provides key insights around youth expectations and priorities, and *Section 6* suggests key policy and private sector recommendations for bridging the gap between youth aspirations and the expectations of India's firms. This is followed by a brief conclusion in *Section 7*.

CHAPTER TWO
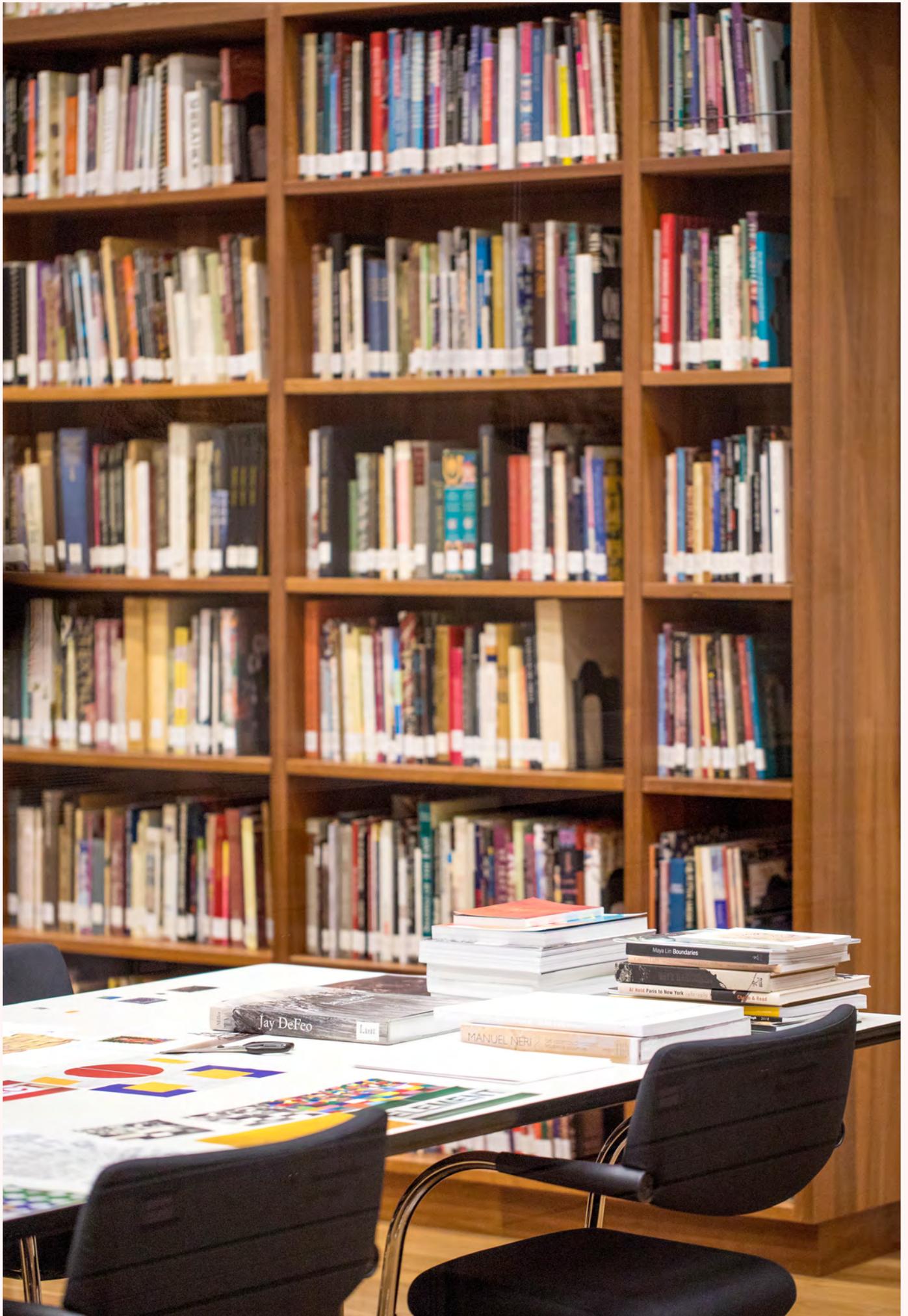
BACKGROUND

2.1 CURRENT SCENARIO

Nearly half of India's workforce is engaged in agriculture, down from 61 percent in 1999-2000. Among women, 62.5 percent still work in the agricultural sector compared to 42.5 percent of men. 92 percent of employment in India is informal, and unemployment in 2017 was estimated at 6.1 percent.[ii] The labour force participation rate among males stands at 96 percent, compared to just 27 percent among females.[iii] Underemployment is also a challenge, with one-third of individuals working part-time while seeking full-time employment.[iv]

Table 1: Distribution of All Workers by Industry Groups (Ages 15-64)

YEAR	INDUSTRY GROUP	ALL WORKERS (%)	MALE (%)	FEMALE (%)
1999-2000	Agriculture, Livestock, Forestry etc.	61.0	53.7	76.8
	Mining and Quarrying	0.6	0.7	0.3
	Manufacturing	10.6	11.3	9.1
	Electricity, Gas, and Water	0.3	0.4	0.0
	Construction	4.5	5.8	1.6
	Wholesale and Retail Trade	8.7	11.3	3.3
	Hotels and Restaurants	1.1	1.3	0.6
	Transport, Storage, and Communications	3.7	5.2	0.3
	Finance, Insurance, Real Estate etc.	1.2	1.6	0.4
	Community, Social, and Personal Services	8.3	8.7	7.5
2004-2005	Agriculture, Livestock, Forestry etc.	57.7	49.6	73.9
	Mining and Quarrying	0.6	0.8	0.3
	Manufacturing	11.8	12.2	11.1
	Electricity, Gas, and Water	0.3	0.4	0.0
	Construction	5.8	7.7	1.8
	Wholesale and Retail Trade	9.1	12.1	3.1
	Hotels and Restaurants	1.3	1.5	0.8
	Transport, Storage, and Communications	4.0	5.8	0.3
	Finance, Insurance, Real Estate etc.	1.6	2.1	0.6
	Community, Social, and Personal Services	7.9	7.8	8.1
2009-2010	Agriculture, Livestock, Forestry etc.	52.2	45.9	68.3
	Mining and Quarrying	0.7	0.8	0.3
	Manufacturing	11.2	11.3	10.8
	Electricity, Gas, and Water	0.3	0.4	0.1
	Construction	9.9	11.7	5.3
	Wholesale and Retail Trade	9.5	11.9	3.5
	Hotels and Restaurants	1.3	1.6	0.8
	Transport, Storage, and Communications	4.5	6.1	0.4
	Finance, Insurance, Real Estate etc.	2.2	2.6	0.9
	Community, Social, and Personal Services	8.3	7.7	9.6

	Agriculture, Livestock, Forestry etc.	48.1	42.5	62.5
	Mining and Quarrying	0.5	0.6	0.3
	Manufacturing	12.7	12.4	13.4
	Electricity, Gas, and Water	0.3	0.4	0.1
	Construction	10.8	12.7	6.2
2011-2012	Wholesale and Retail Trade	9.4	11.5	3.9
	Hotels and Restaurants	1.7	1.9	0.9
	Transport, Storage, and Communications	4.6	6.2	0.4
	Finance, Insurance, Real Estate etc.	2.8	3.4	1.4
	Community, Social, and Personal Services	9.1	8.4	11.1

Source: NSSO, Employment & Unemployment Round (55th Round – 1999-00, 61st Round – 2004-05, 66th Round – 2009-10, 68th Round – 2011-12)

2.2 FOUR TRENDS IN WORK

India is experiencing rapid technological change and digitisation. Companies are increasingly adopting time-saving and quality-improving technologies — from basic digital tools to integrated 4IR technologies. At the same time, individuals are becoming more digitally connected. Mobile phone subscriptions rose to approximately 1.12 billion in 2016 from 166 million in 2006.[v] Four trends in India's labour market stand out.[vi]

1. A greater share—33 percent—of surveyed companies in India report needing to hire additional workers owing to the introduction of new technologies, compared to 19 percent of companies that saw a reduction in the number of workers they employed.

2. Companies appear to be optimistic about technology and digitisation and anticipate adopting new technologies and digital tools in the next five years. The greatest barriers experienced by companies are gaps in required skills at 34 percent, and financial constraints at 24 percent.

3. 71 percent of surveyed companies employ fewer than 10 percent female workers, while 30 percent of companies report having no female employees at all. When asked if they plan to bring on more women, 37 percent report that they prefer to hire men, while only 11 percent report planning to hire more female workers in the future.

4. Companies are increasingly hiring contract (temporary) and freelance (self-employed) workers. Companies report that the protections, benefits, and wages for these workers are significantly less than those for permanent employees.

Table 2: Key Facts: Education

INDICATORS	UNITS
Expenditure (2016, 2017-18)	
Government Expenditure on Education, Total	2.6%
Enrolment Rates (2015-16)	
Pre-Primary Total	13.0%
Primary Total	92.0%
Upper Primary Female	97.6%
Upper Primary Male	88.7%
Upper Primary Total	92.8%
Secondary Female	81.0%
Secondary Male	79.2%
Secondary Total	56.2%
Higher Secondary Female	56.4%
Higher Secondary Male	56.0%
Higher Secondary Total	56.2%
Tertiary Female	17.9%
Tertiary Male	20.8%
Tertiary Total	19.4%
Children Out Of School (2013)	
Female	935,040
Male	935,040
Literacy Rates (2015)	
Youth Female (Age 15-24)	87.3%
Youth Male (Age 15-24)	91.9%
Adult Female (Age 15+)	63.0%
Adult Male (Age 15+)	81.0%
Drop-out Rates (2014-15)	
Primary Female	3.9%
Primary Male	4.4%
Primary Total	4.1%
Upper Primary Female	4.6%
Upper Primary Male	3.5%
Upper Primary Total	4.0%
Secondary Female	16.9%
Secondary Male	17.2%
Secondary Total	17.1%

Source: Union Budget 2017-2018 (Expenditure – 2016, 2017-18); World Bank Data Bank (Children out of School – 2013, Literacy Rates – 2015); Data from the Indian Government's Online Portal (Gross Enrolment Ratio in Schools – All India 2015-16, Gross Enrolment Ratio in Higher Education – All India 2015-16, Drop-out Rates – All India, 2014-15)

2.3 THE LEARNING IMPERATIVE

India has made significant progress towards improving education in recent years. Primary school enrolment is now nearly universal, and between 2003 and 2013 the teacher-pupil ratio has declined by 20 percent. During the same period the share of schools with basic facilities such as toilets and electricity has more than doubled from 40 to 84 percent, and 20 to 45 percent respectively.[vii]

Despite improvement in inputs, recent evidence suggests that more progress is needed in student learning outcomes. In 2016, just 50 percent of grade 5 students could fluently read grade 2 level sentences. In 2015, on average, grade 6 students in New Delhi performed at grade 3 level in math.[viii] Overall, just 51 percent of primary school completers in India can read.[ix] While the expected years of schooling by the age of 18 is 10.2 years, when adjusted for the quality of learning, this number drops to 5.8 years.[x] When compared internationally, the two Indian states that participated in the Programme for International Student Assessment ranked 72nd and 73rd out 74.[xi]

Most education goals in India, along with the indicators for assessing them are based on inputs rather than outcomes. For instance, of the 817 indicators used in an information report card to evaluate the education system in Tamil Nadu, not one directly measured learning.[xii] Given India's continued success in improving education inputs, the goals and measures used for evaluating the education system must now shift towards the quality of learning outcomes.

Table 3: Labour Force Participation Rates

YEAR	FEMALE (%)	TOTAL (%)
1999-2000	26.2	40.5
2004-05	29.4	43.0
2009-10	23.3	40.0
2011-12	22.5	39.5

Source: NSSO, Employment & Unemployment Round (55th Round – 1999-00, 61st Round – 2004-05, 66th Round – 2009-10, 68th Round – 2011-12)

2.4 WOMEN IN THE WORKFORCE

In the last two decades, total fertility in India decreased from 4 to 2.5 children per woman, girls' primary school enrolment is now universal, and the share of women in education between the ages of 19 and 24 doubled from 16.1 percent to 36 percent.[xiii] At the same time, however, female participation in the workforce has remained low and saw a decline between 2004 and 2012. Women in India are burdened with additional barriers to economic participation when compared to men. These barriers include family restrictions, patriarchal social norms, unpaid work, care work, a gender-wage gap, and legal limitations.[xiv]

2.5 THE SKILLING MISSION AND WHY SKILLING IS NOT ENOUGH

The Government of India's Ministry of Skill Development and Entrepreneurship launched the 'Skill India Mission' in 2015, which set out a goal of training 500 million people by 2022. Under this, there are a wide range of programmes and initiatives, including the development of the *National Policy for Skill Development and Entrepreneurship 2015,* the main objective of which is to link skills development with improved employability and productivity.

The Ministry also introduced a wide range of schemes including the Pradhan Mantri Kaushal Vikas Yojana (PMKVY). The PMKVY is targeted at India's youth and aims to provide them with industry-relevant skills training opportunities. Participants in PMKVY are provided with training in soft skills, entrepreneurship, and financial and digital literacy. Other relevant schemes include the Skills Acquisition and Knowledge Awareness for Livelihood Promotion, and the Standard Training Assessment and Reward Scheme.

The Ministry of Labour and Employment implemented the National Career Service (NCS) Project as a Mission Mode Project in 2015. The project aims to provide the public with employment and career-related services including career counselling, vocational guidance, information on skill development courses, apprenticeships, and internships. The NCS online portal was launched in 2015. The Ministry has also launched the Pradhan Mantri Rojgar Protsahan Yojana, the main objective of which is to promote employment generation. It seeks to benefit employers by creating a larger pool of employable candidates, and to benefit

While the expected years of schooling by the age of **18** is **10.2 years**, when adjusted for the quality of learning, this number drops to **5.8 years**.

workers by finding jobs at these companies, supplemented by access to social security benefits from the organised sector.

In addition to these initiatives, programmes, and schemes, in 2017 the Government of India and the World Bank signed a $250 million loan agreement to enhance India's skills development efforts under the Skill India Mission Operation. It focuses on providing opportunities for skills training to underemployed or unemployed adult workers between the ages of 15 and 59, who have not completed primary level education. The target populations for the programme include women, and disadvantaged and marginalised communities, who have not had access to skills training.

Skills development in India primarily focuses on short-term, job-related skills training with the goal of gaining quick access to employment.[xv] There is little focus on developing long-term capabilities and enhancing individual growth. While the skilling mission in India seeks to increase productivity and access to employment, there is little evidence to suggest that this supports long-term increases in income or upward mobility. Comparatively, each additional year of schooling is associated with a 7-10 percent increase in individual earnings,[xvi] with greater gains for women.[xvii] This is important as school enrolment drops off significantly after primary

school. Further, more than twice as many firms in India report that their employees with a high-school degree are poorly prepared for work (10 percent) compared to those with higher education (4 percent), indicating a preference for those with higher education.[xviii]

2.6 HEALTH AND HUMAN CAPITAL

Human capital development is essential for progress, growth, and competitiveness. The human capital development agenda in India must seek to enhance individual capabilities and knowledge, and support innovation, growth, and equality of opportunity. This will require long-term strategies and investments to improve learning and health.[xix]

The links between poor health during childhood and learning outcomes are evident. Sick children are more likely to be absent from school than healthy children, they are often less able to concentrate in class, and tend to perform less well in school.[xx] Similarly, malnutrition is a major health challenge in India, leading to shortened attention spans, irritability, apathy, and behavioural problems among children. All of these issues negatively impact learning.[xxi]

The impacts of poor health have also been linked to long-term effects and adult outcomes. Malnutrition not only impairs cognitive, motor, and social development, it also increases the

Each additional year of schooling is associated with a 7-10 percent increase in individual earnings.

likelihood of children becoming malnourished as adults and increases their risk of disease.[xxii] Further, Hoddinott et al. find that the prevention of one fifth of stunting in the first 1,000 days from conception leads to an 11 percent increase in income later in life.[xxiii] In a further study it was found that stunting at the age of two leads to an average decrease in wages of 16 percent for men and 14 percent for women.[xxiv]

India has made large strides towards improving health outcomes in recent decades. Even so, a number of challenges persist, presenting an immense opportunity for improving child and adult health, as well as labour market outcomes and overall population wellbeing. As outlined in Table 4, 57.3 percent of children under the age of five are anaemic, which is known to affect mental development and functioning, and to cause attention difficulties and delayed learning in school. 38.4 percent of children under five are stunted, and 35.8 percent are underweight — both indicators of undernourishment and underdevelopment. Many interventions — for both children and their parents — have been found to have significant and positive impacts on child health and development outcomes later in life.

2.7 THE PRODUCTIVITY CHALLENGE

Of the 774 companies that we surveyed, 54 percent report an increase in productivity in the last five years. 39 percent of companies reported that their productivity stayed the same, and 7 percent reported a decrease in overall productivity.

The greatest increases observed were due to the hiring of additional staff, introduction of new technologies, and retraining of existing staff.

Table 4: Key Facts: Health

INDICATORS	UNITS
Life Expectancy (2016, 2017)	
Life expectancy at birth (Years)	68.5
Healthy life expectancy (Years)	59.6
Mortality (2017)	
Mortality rate, infant (per 1,000 live births)	32
Mortality rate, neonatal (per 1,000 live births)	24
Mortality rate, under-5 (per 1,000 live births)	39
Fertility (2016)	
Births attended by skilled health staff (% of total)	85.7%
Fertility rate, total (births per woman)	2.3
Child Health (2015, 2017)	
Prevalence of anemia among children (% of children under 5)	57.3%
Prevalence of severe wasting, weight for height (% of children under 5)	7.5%
Prevalence of Stunting, height for age (of children under 5)	38.4%
Prevalence of underweight, weight for age (% of children under 5)	35.8%

Source: World Bank Data Bank; healthy life expectancy from the WEF; National Family Health Survey (Child Health, 2015-16)

There are a number of drivers leading to low productivity gains in India.[xxv] First, while nearly half of all employment remains in agriculture, at 48 percent, workers are shifting in vast numbers into services, primarily construction, trade and hospitality, transport, education, and health.[xxvi]

Labour productivity has increased as a result of this shift, but there has simultaneously been a decline in formal employment, leading to a decrease in overall productivity.[xxvii]

Moreover, 87 percent of manufacturing firms in India are micro in size, employing fewer than 10 people. While almost 90 percent of employment in manufacturing is in micro-sized firms, they account for only one-third of total output.[xxviii] Stringent regulations and previous investment restrictions are important disincentives for scaling up in the manufacturing sector.[xxix] In addition, state ownership and public-sector firms may be a hindrance to competition and productivity in a number of industries. An analysis of the impacts of trade liberalisation in India on firm productivity found statistically significant increases among private firms, while productivity increases were not observed among government-owned companies.[xxx]

Figure 1: Workforce Productivity (%)
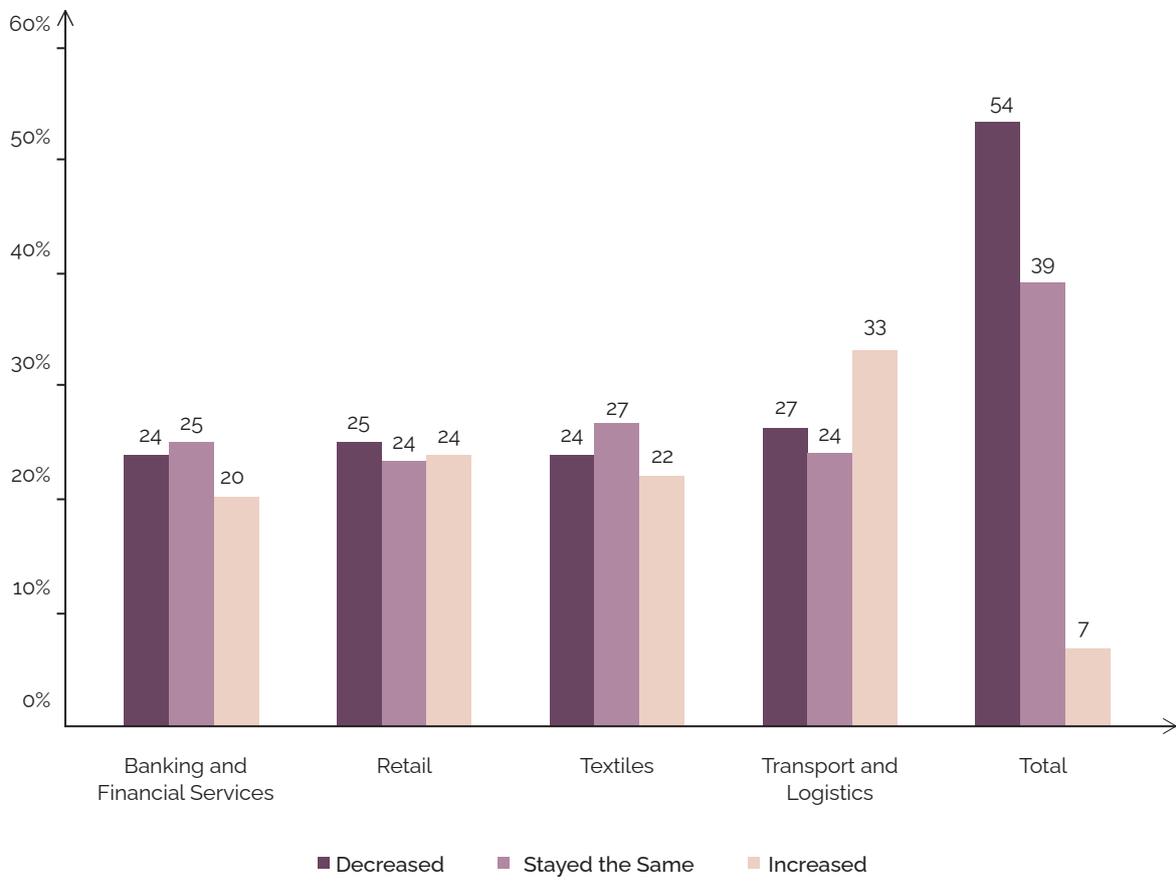
Figure 2: Reasons for Workforce Productivity Increase (%)

Legend:
- Employed new staff
- Investment in digital tools and ICT
- Investment in technology and machinery
- Retrained existing staff
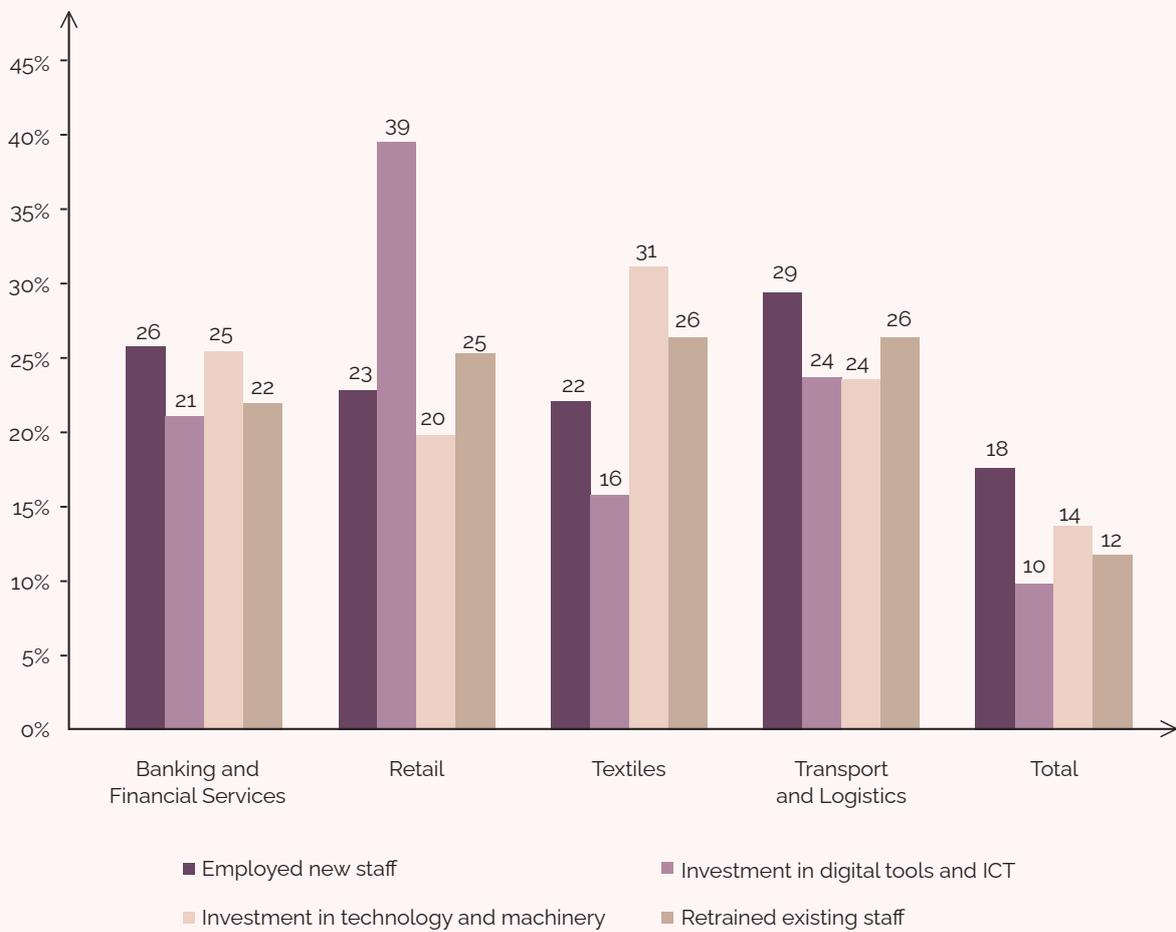
METHODOLOGY

The education and skills landscapes in India are complex and the contours of both are changing. The demographic transformation in India is putting new pressure on the education system. The rapid adoption of new technologies, machinery, and digital tools by firms is changing the competencies required of workers. Further, the desires and aspirations of the population are also evolving. It is in this dynamic context that we examine the future of education and skills in India. While this is a multifaceted challenge, it is also an opportunity to repurpose existing initiatives, systems, and programmes and to catalyse growth and development by leveraging the ambitions of India's population. This report aims to answer six critical questions:

- How are education, skilling, and human capital needs evolving in India?
- What employability and skills-related challenges do firms in India face now, and what do they anticipate in the next five years?
- What are the expectations of India's youth with regards to education, skilling and employment?
- Is there a gap between firm and youth expectations?
- How effective are existing initiatives in meeting individual needs and enhancing individual capabilities in the medium and long term?
- What policies, programmes, and initiatives are needed to ensure employability, greater equality of opportunity, and upward mobility for India's workforce?

The Observer Research Foundation (ORF) and the World Economic Forum (WEF) conducted two large surveys in 2018:

1. An enterprise survey of 774 companies in India, and
2. A survey of youth aspirations, capturing the views of 5,764 youth in India.

Drawing on key findings and data from both surveys, we present new insights, capturing the connections between education and skills development.

3.1 THE ENTERPRISE SURVEY

The Future of Work, Education and Skills Enterprise Survey 2018 was carried out in person with the leadership of 774 companies in 14 locations in India.[XXXI] The survey aimed to analyse and find answers to key questions, including:

- To what extent and at what pace are Indian companies adopting new technologies and digital tools?
- What are the impacts of technological adoption and digitisation on the workforce?
- What are expected trends in adoption and employment in the next five years?
- What are the general and technical skills gaps that firms face in potential job seekers and their present employees?
- What is the magnitude of the skills gaps? What are firms doing to bridge these gaps?
- Do firms anticipate new employability and preparedness challenges in the next five years?

The survey was carried out among companies in four key industries, namely banking and financial services, retail, textiles, and transport and logistics. The selection of these four industries was based on carefully chosen criteria. Due to the diversity of the Indian economy, 7 criteria were used in the selection of focus industries for the survey in order to make the survey as representative of this diversity as possible. These criteria and stylised facts are summarised in Table 5.

Table 5: Industry Selection Criteria

INDUSTRY	SKILL INTENSITY	AVERAGE DAILY WAGE (INR)	FORMAL/ INFORMAL EMPLOYMENT (%)	SPEED OFTECH ADOPTION	COMPANY SIZES M/S/M/L (%)	GEOGRAPHIC DISTRIBUTION	OVERALL EMPLOYMENT (%)
Textiles	Low to High	176.1	12/87	Low	56/13/ 10/18	Clusters (Rural/Urban)	1.8
Financial Services	High	701.4	59/40	High	26/13/ 16/36	Clusters (Urban)	0.97
Retail	Low to High	181.2	2/98	Medium	91/4/ 1/2	Distributed	8.0
Transport and Logistics	Low to High	308.0	16/84	Medium	72/6/ 3/12	Clusters (Urban)	4.4

Source: NSSO 2011–12.

Notes: Firm size classifications are based on NSSO classifications. Number of employees: Micro: <6; Small: 6-10; Medium: 10-20; Large: >20.
Numbers may not add up to 100 due to rounding off and unknown.
This table is adapted from ORF-WEF 2018.

Table 6: Target Companies by Industry

INDUSTRY	SKILL INTENSITY	
Textiles	• Export-oriented and large firms • Small and medium domestic-focused firms	Ludhiana, Delhi NCR, Lucknow: North/Northwestern cluster, woollen apparel Ahmedabad and Mumbai: Western region, traditionally cotton textiles and apparel Chennai and Bengaluru: Southern region, silk apparel Madurai: Southern region, hosiery
Logistics	• Truck fleet owners • Shipping lines • Container companies • Warehouses • Freight forwarders • Courier companies	Delhi NCR, Ludhiana, Ahmedabad, Mumbai, Indore, Lucknow, Bangalore, Chennai, Kolkata
Retail	• Large and medium online retail companies • Micro, small, medium and large brick and mortar retail companies	Equal distribution of firms between Tier I and Tier II cities
Financial Services	• Banking services • Non-banking financial service companies	Head offices in Mumbai, Delhi, Bangalore and Hyderabad; remaining sample equally distributed between cities in the North, East, South and West

Source: Adapted from the ORF-WEF 2018.

The sample companies range from micro to mid-sized firms in the retail sector, and small, medium, and large-sized firms in the other three industries. The diversity on the size spectrum of firms ensures that enterprises with varying numbers of personnel, different management structures and styles, and distinctive methods of operations are covered. The specific types of companies targeted within each industry are summarised in Table 6. This selection was based on the share of employment in each sub-sector within the industry.

The sample companies were identified using different approaches. A clustered approach was used for identifying companies in the textiles and transportation and logistics industries, as illustrated in Figure 5. The sample companies in the retail industry aimed at capturing sub-national variation by sampling a roughly equal number of companies in Tier I and Tier II cities, across the four main regions of the country. Finally, companies in banking and financial services were primarily based in the financial capitals, in order to capture some variation, we also sampled companies across the main regions.

Figure 3: Sample Clusters

Textile Clusters:

- Ludhiana, Delhi NCR, Lucknow
- Ahmedabad, Mumbai
- Kolkata
- Bengaluru, Chennai
- Madurai
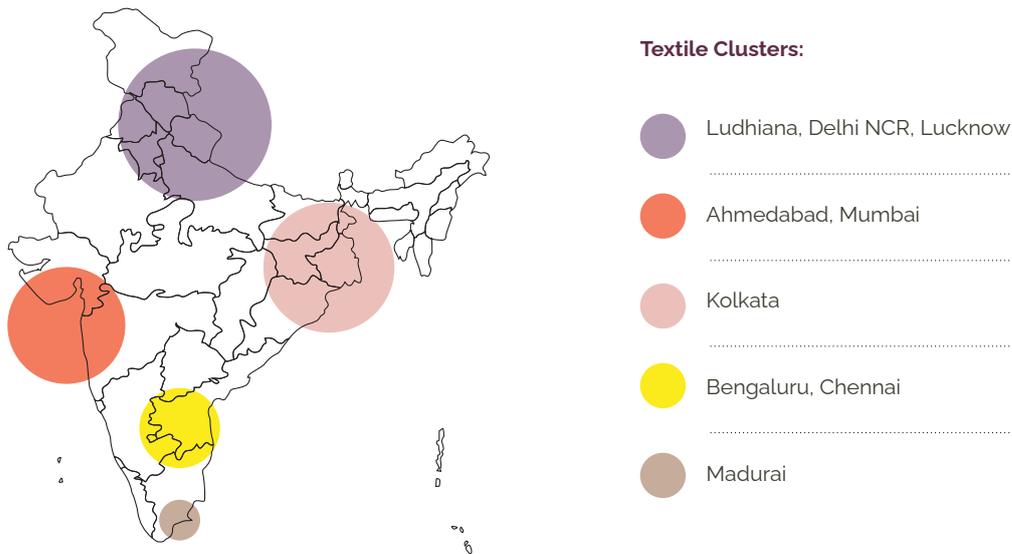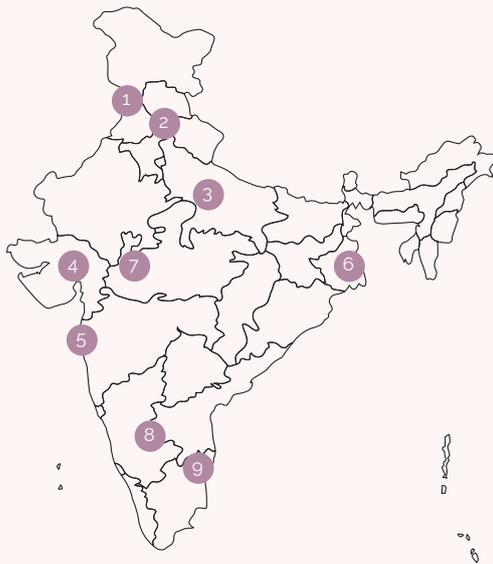
Transportation and Logistics Clusters

1. Ludhiana
2. Delhi NCR
3. Lucknow
4. Ahmedabad
5. Mumbai
6. Kolkata
7. Indore
8. Bengaluru
9. Chennai

Figure 4: Data Collection Locations for the Enterprise Survey
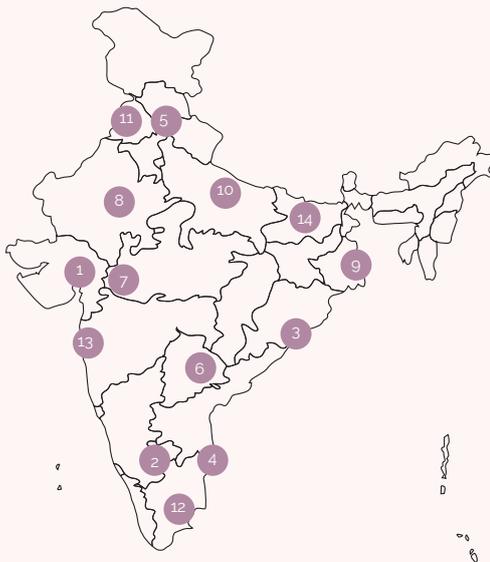
1. Ahmedabad
2. Bengaluru
3. Bhubaneswar
4. Chennai
5. Delhi NCR
6. Hyderabad
7. Indore
8. Jaipur
9. Kolkata
10. Lucknow
11. Ludhiana
12. Madurai
13. Mumbai
14. Patna

The survey sample is limited to formal enterprises. This is despite the expectation that the impact of the development of the education and skills ecosystem across the country would have a different impact on firms in the informal and formal sectors. Assessing this impact on informal sector enterprises should be taken up as a primary goal in a subsequent study.

Figure 5: Respondents Data from the Enterprise Survey (Number, %)

I. Number and Share of Respondents by Industry

- Banking and Financial Services
- Retail
- Textiles
- Transport and Logistics

II. Number and Share of Respondents by City (Number, %)

- Ahmedabad
- Bengaluru
- Bhubaneswar
- Chennai
- Delhi NCR
- Hyderabad
- Indore
- Jaipur
- Kolkata
- Lucknow
- Ludhiana
- Madurai
- Mumbai
- Patna
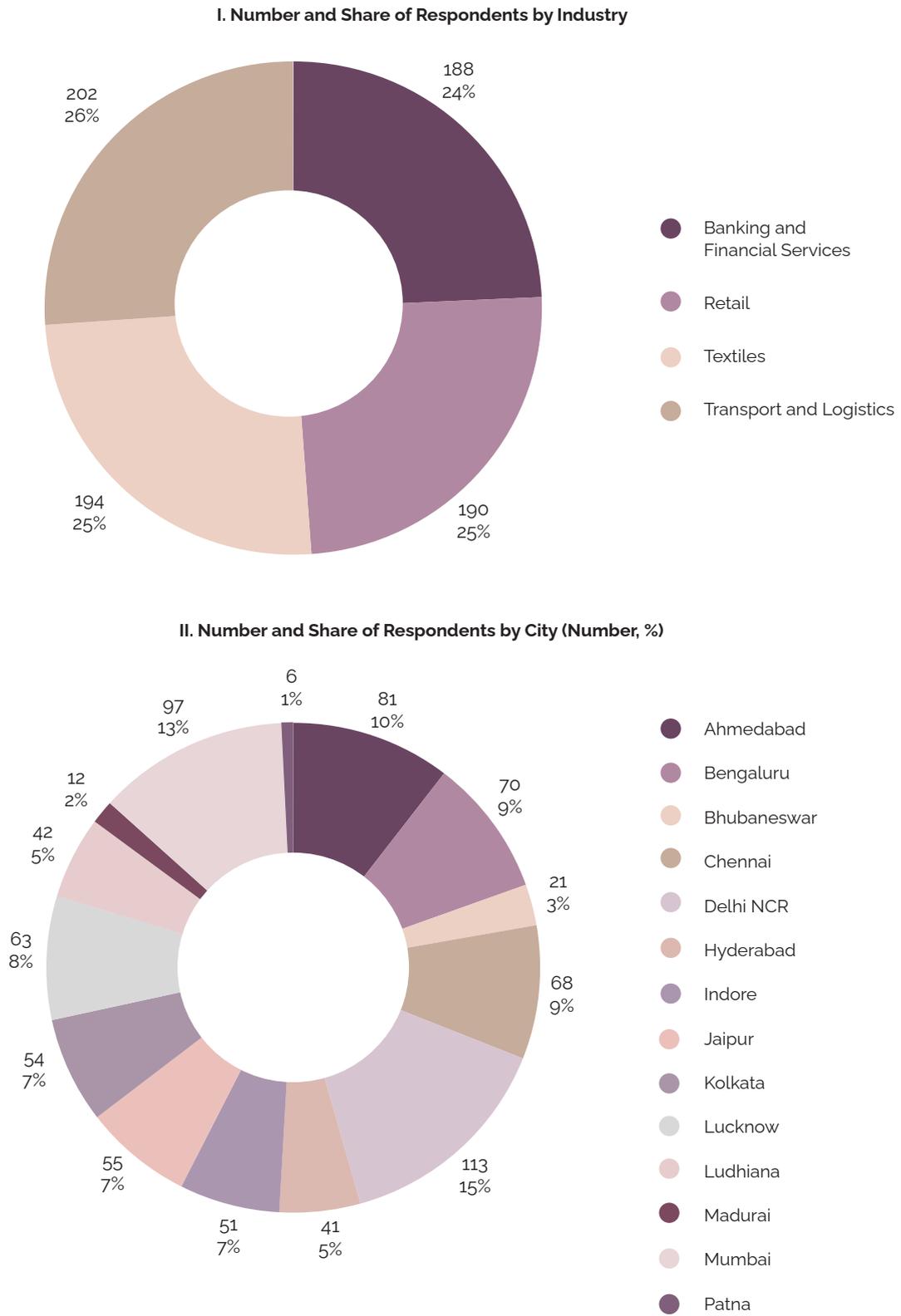
III. Number and Share of Respondents by Firm Size and Industry (Number, %)

137
18%

191
25%

335
43%

111
14%

- Large: More than 100
- Medium: 51 to 100
- Small: 10 to 50
- Micro: Less than 10
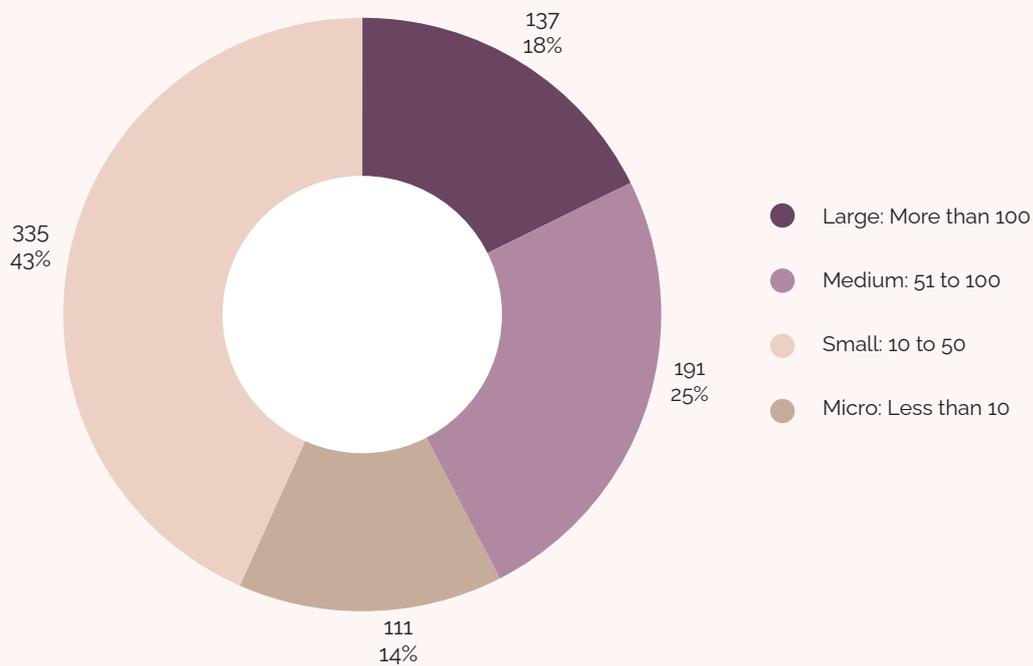
Note: Numbers may not add up to one hundred percent due to rounding off.

3.2 THE YOUTH ASPIRATIONS SURVEY

The *Youth Aspirations in India* survey conducted by ORF and the WEF in 2018 was conducted online, and collected data from 5,764 youth between the ages of 15 and 30. The key questions that the survey attempted to answer include:

- What are the career aspirations and job preferences of India's youth?
- What are the perceptions of India's youth around the adequacy and relevance of their education, skill sets, and preparedness for the labour market?
- How do youth perceive employment and work transformations as well as the availability of adequate and relevant opportunities for them in view of these transformations?

- What are the barriers faced by youth in meeting their education, skilling and employment aspirations?
- What strategies and policies are needed to bridge misalignments and information asymmetries in the labour market? How can capabilities be best enhanced to ensure youth in India are able to meet their career aspirations?

Data was collected in June and July of 2018 across seven states and union territories in India. Four of the sample states are among the ten most populous in the country, and collectively these states account for 41 percent of India's population. Due to India's vast size and substantial diversity, these data collection locations were selected to capture as much of this diversity as possible. Characteristics such

as population, GDP per capita, urbanisation, and poverty rates were used in their selection.

The sample consisted of 15-30 year olds, with a target sample of 50 percent female and 50 percent male respondents. A limitation to the survey is that it was administered online, automatically limiting access to the survey to those with access to devices and the internet.

Figure 6: Data Collection Locations for the Youth Aspirations Survey

- Andhra Pradesh
- Assam
- Delhi NCR
- Maharashtra
- Odisha
- Uttar Pradesh
- West Bengal
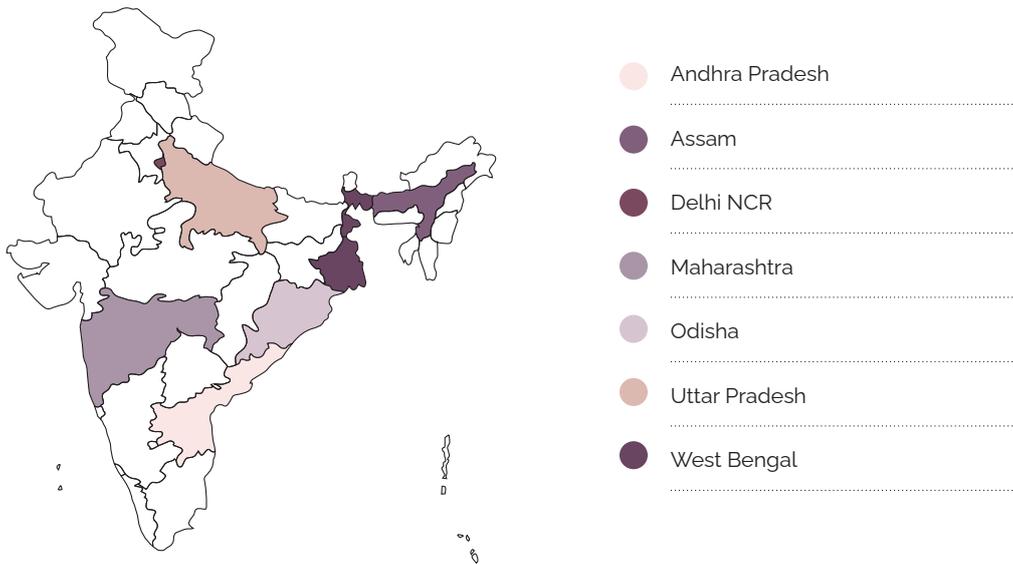
Figure 7: Respondents Data from the Youth Aspirations Survey (Number, %)

I. Number and Share of Respondents by Age Group (Number, %)

1,043
18%

1,316
23%

3,405
59%

● 26 to 30 Years

● 21 to 25 Years

● 15 to 20 Years
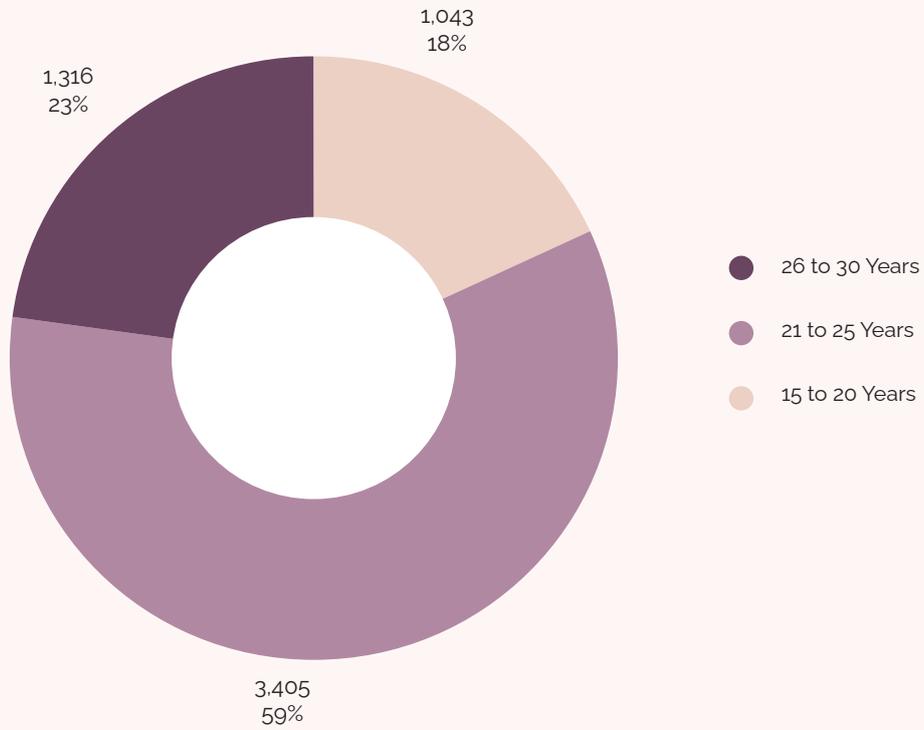
II. Number and Share of Respondents by Gender (Number, %)

16
0%

2,139
37%

3,609
63%

● Male

● Female

● Non-Binary
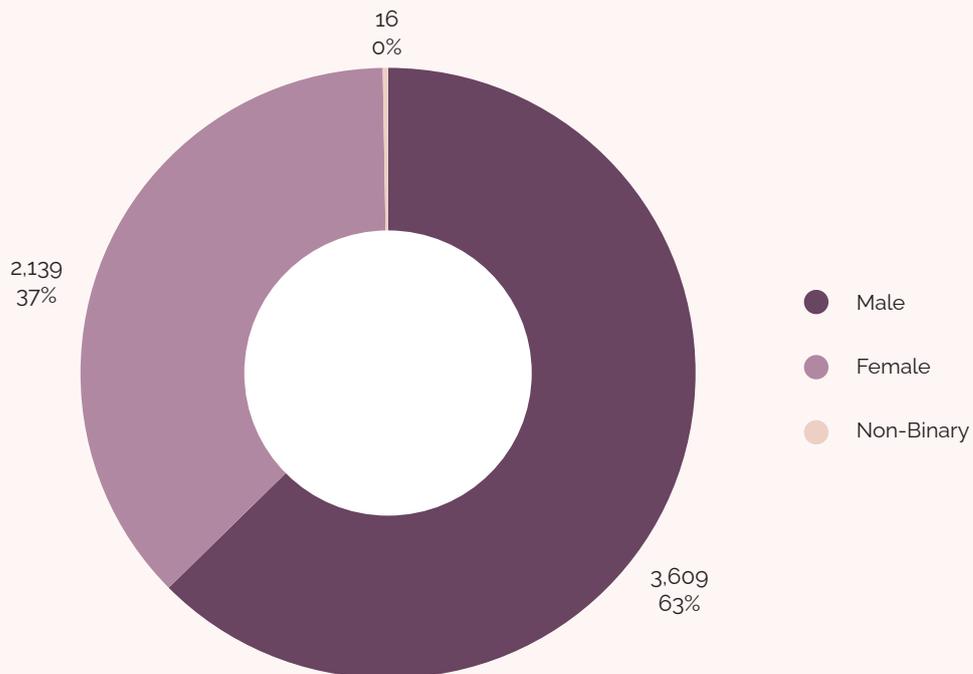
III. Number and Share of Respondents by State (Number, %)

- Andhra Pradesh
- Assam
- Delhi NCR
- Maharashtra
- Odisha
- Uttar Pradesh
- West Bengal
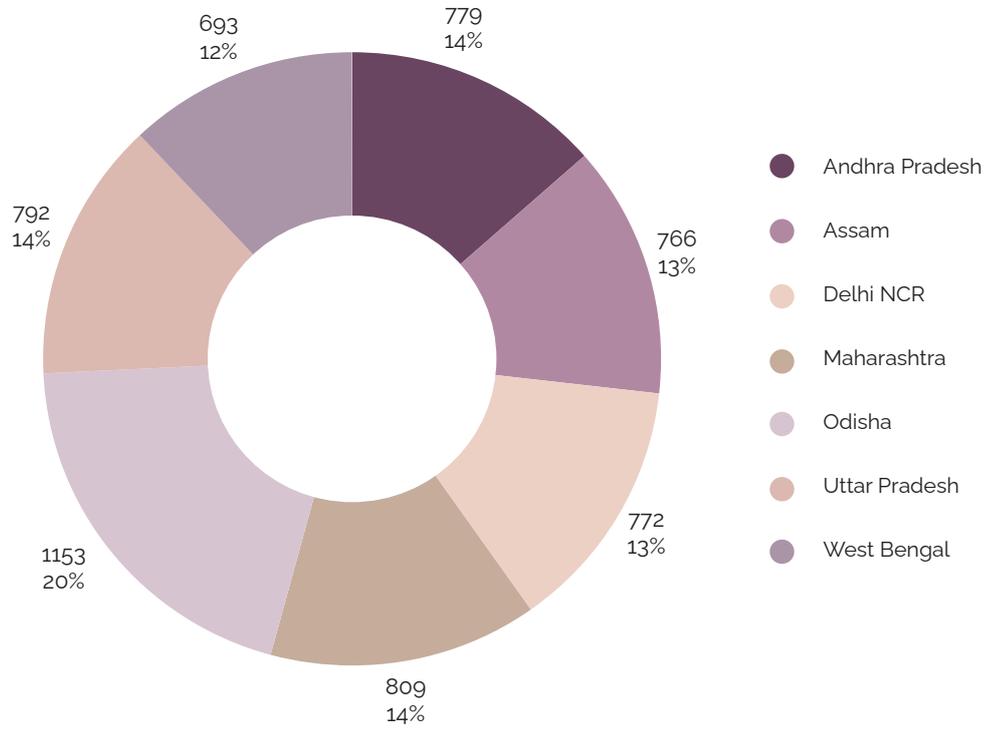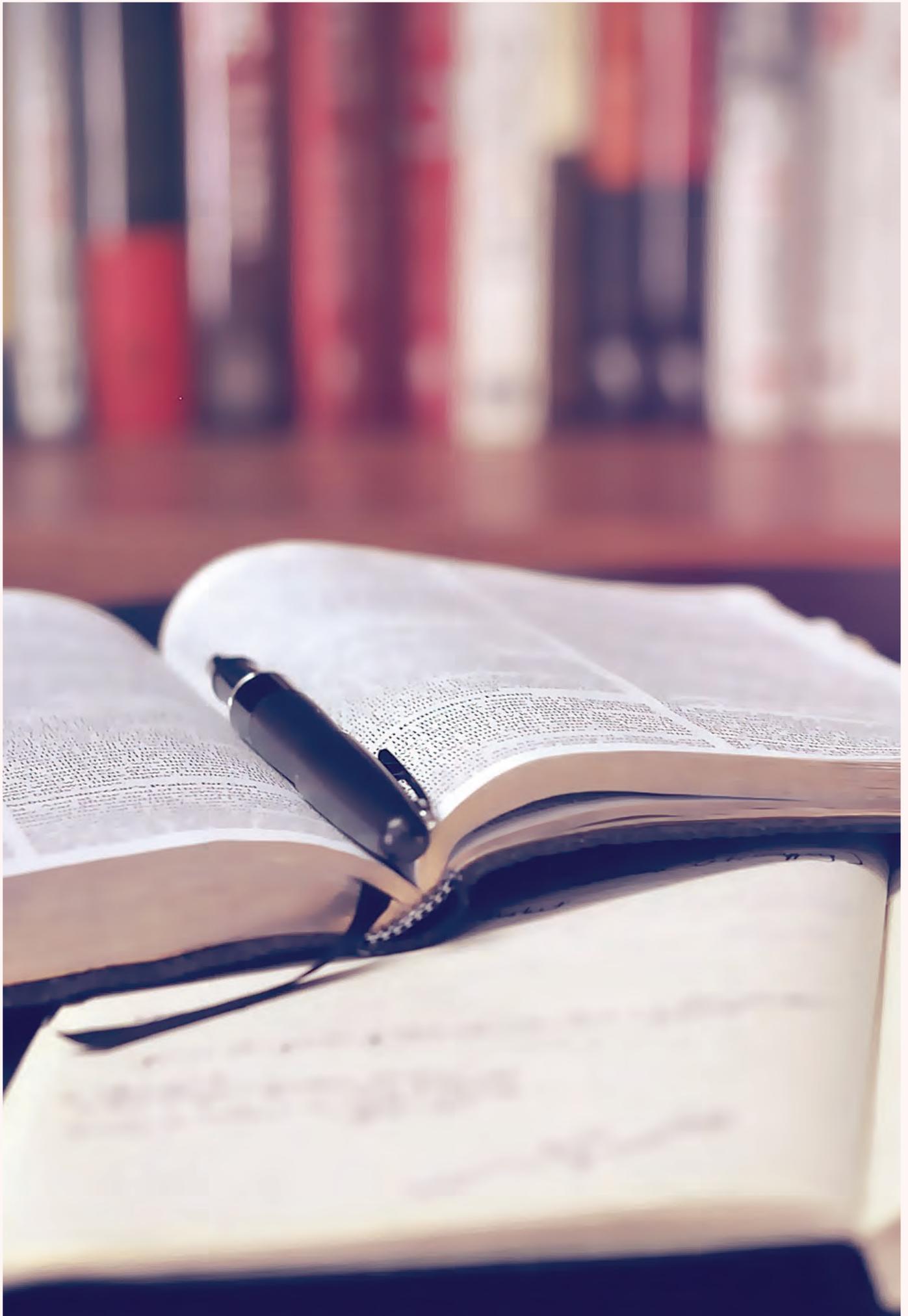
SURVEY RESULTS AND DISCUSSION

This chapter will outline some of the key findings relating to the impact of technological adoption on employability and skills among Indian firms. The first section will highlight trends in the level and pace of technology adoption among Indian companies. This is followed by a discussion of workforce preparedness and the employability of new hires and first-time job seekers. The results indicate a higher-than-expected level of readiness among both new hires and first-time job seekers as reported by firms. Section 4.3 will discuss how companies interpret skills availability and suitability in their companies today. Our survey results suggest that few companies report having a large gap in their required general and technical skills currently. Section 4.4 looks at changes already experienced by companies in their

skill requirements. We asked firms what they have noticed in terms of changing demand for general and technical skills in the last five years. While many firms report not having experienced a change, others indicated an increasing demand for both general and technical skills.

Section 4.5 looks at companies' expectations for the next five years with regard to changes in skills requirements. This section sheds light on key issues and opportunities for policies aimed at addressing skills gaps and enhancing employability.

Table 7: Definition of Terms General and Technical Skills

GENERAL SKILLS	TECHNICAL SKILLS
General, or soft skills, are an individual's intrinsic skills relating to character or personality. These skills could alternatively be known as "interpersonal" or "people" skills. They are more difficult than technical skills to acquire and modify. General skills are subjective, and thus hard to quantify and measure.	Technical, or hard, skills are individual-specific talents and expertise which enable them to perform specific tasks or jobs. These skills are teachable, and can be learned and mastered with practice over time. Technical skills are quantifiable and measurable.
Examples: Examples: Trustworthiness, teamwork, time management, complex problem solving, critical thinking, analytical thinking, resilience and stress tolerance, emotional intelligence, persuasion and negotiation and leadership.[xxxii]	**Examples:** Accounting and auditing, technology installation and maintenance, financial modelling, technical analysis, advanced math, legal expertise, machine operations, big data management and analysis, database expertise, food safety and standards etc. [xxxiii]

Source: Adapted from Kenton and Abbott, (2019, April 14). Soft Skills; and Barone, A. (2019, May 05). Technical Job Skills.

Key Insights:

1. India's workforce and first-time job seekers are relatively well prepared for new jobs. 71 percent of surveyed firms report that new hires in the last five years were prepared or well prepared for work, compared to just 9 percent who report that they are unprepared. Similarly, 72 percent of firms report that first-time job seekers are prepared or well prepared when they start work.

2. Technical skills are not a high priority for firms recruiting new employees. The most important factors that companies consider when hiring new staff include the years of work experience, educational attainment of the applicant, and basic soft skills.

3. More than half of firms report that their workers have the needed skills for their positions. 56 percent of firms report having no gap in existing general skills, and 57 percent report having no gap in technical skills.

4. 40 percent of firms report expecting to need different general skills in the next five years, including, trustworthiness, teamwork, communication, service orientation, and attention to detail. The technical skills that firms expect to become more important include technology design, accounting and auditing, IT, digital privacy and security, and business analysis and strategy.

5. 28 percent of firms report addressing gaps in general skills by having workers learn on the job, 27 percent report hiring new staff, and 23 percent provide internal training. Similarly, 31 percent of firms report hiring

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new staff to address gaps in technical skills, 24 percent hire temporary staff with the required skills, and 22 percent report having workers learn on the job. 11 percent of firms report doing nothing to address skills gaps in their firms.

6. 31 percent of firms report providing no form of professional development for their staff, 27 percent report providing internal training, and just 6 percent say that they collaborate with vocational training centres and schools. Importantly, firms also indicate an unwillingness to pay a premium for employees with skills.

4.1 TECHNOLOGY ADOPTION AMONG INDIAN FIRMS

Companies in India have high expectations for technological and digital adoption.[xxxiv] For instance, 64 percent of surveyed firms expect to adopt aspects of Internet of Things (IoT) in the next five years. Similarly, 52 percent of firms expect to introduce big data analytics. The use of digital tools such as digital accounting, inventory, and customer service remains limited today. However, 78 percent of companies not currently using email report that it is likely or very likely that they will do so in the next five years. 75 percent of companies that do not use internet banking, and 69 percent that currently do not use digital accounting plan to do so.[xxxv] 61 percent of companies not already making sales online expect to participate in e-commerce in the next five years.[xxxvi]

The introduction of new technologies, machinery and digital tools inevitably alter production processes, staff requirements and the capability needs of workers. More companies expect job creation rather than job loss owing to the introduction of new technology, machinery, and digital tools. 33 percent of firms report that the introduction of new industrial technology and machinery in the last five years has led to a need for new skills, and 22 percent report the creation of new teams. Of the companies that have introduced new digital tools in the last five years, 29 percent report needing new skills, and 21 percent needing to create new job roles as a result.

The job roles with the most hiring in the next five years are expected to be customer service, sales, information technology support, accounting and auditing, and marketing and public relations. While companies expect a decline in secretarial work, physical security, and human resources and recruitment.

While new technologies are anticipated to be the main driver of job change in the next 5-10 years, 37 percent of companies report that improved skills through training and education will be important drivers shaping the future of jobs in their company.

Figure 8: What factors will be most important in shaping the future of jobs in your company in the next 5-10 years? (%)

■ Banking and Financial Services ■ Retail ■ Textiles ■ Transport and Logistics ■ Total
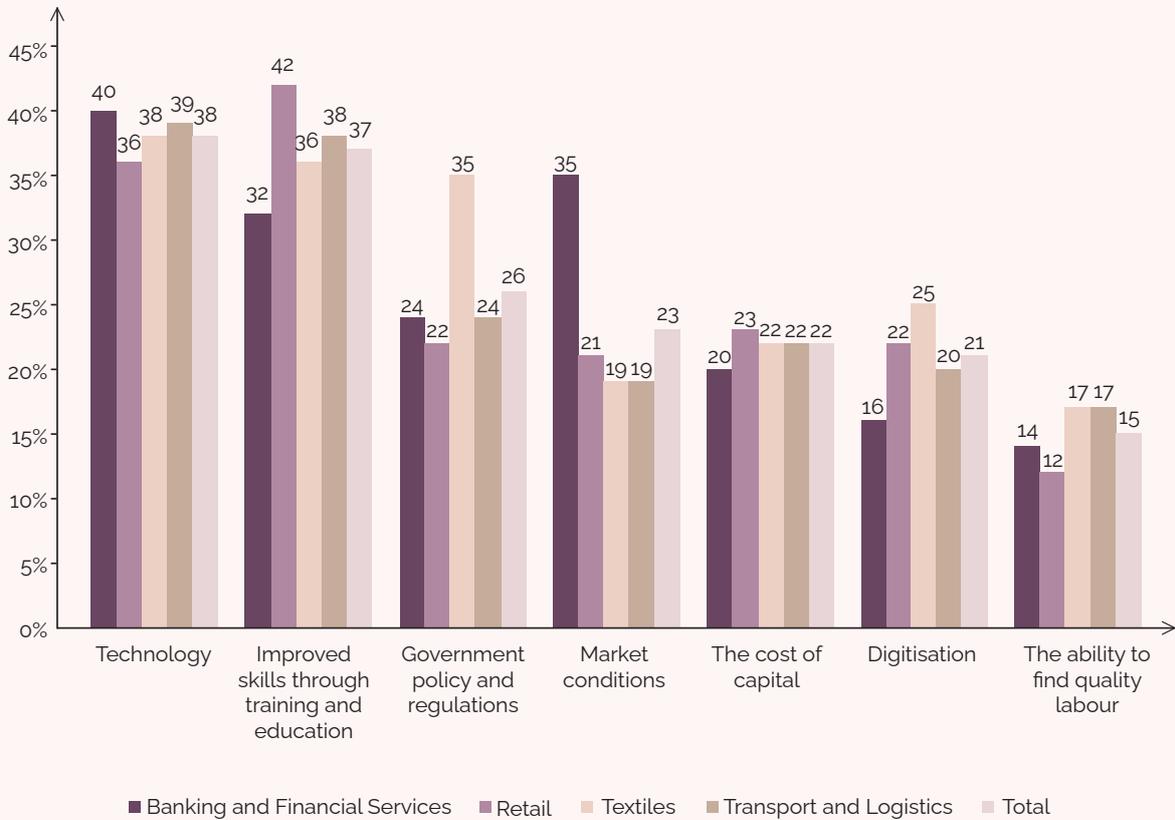
Note: May not add up to one hundred percent as respondents could select multiple options.

4.2 EMPLOYABILITY AND PREPAREDNESS OF THE WORKFORCE

While it is widely believed that India's workforce, particularly its youth, is unprepared for employment, our survey results reveal a surprising level of readiness. 71 percent of firms report that new hires are prepared or well prepared for work when they join. This is compared to just 9 percent reporting that new hires are not well prepared.[xxxvii]

71 percent of firms report that new hires are prepared or well prepared for work when they join.

47

Figure 9: In general, how well-prepared are new hires for the job? (%)
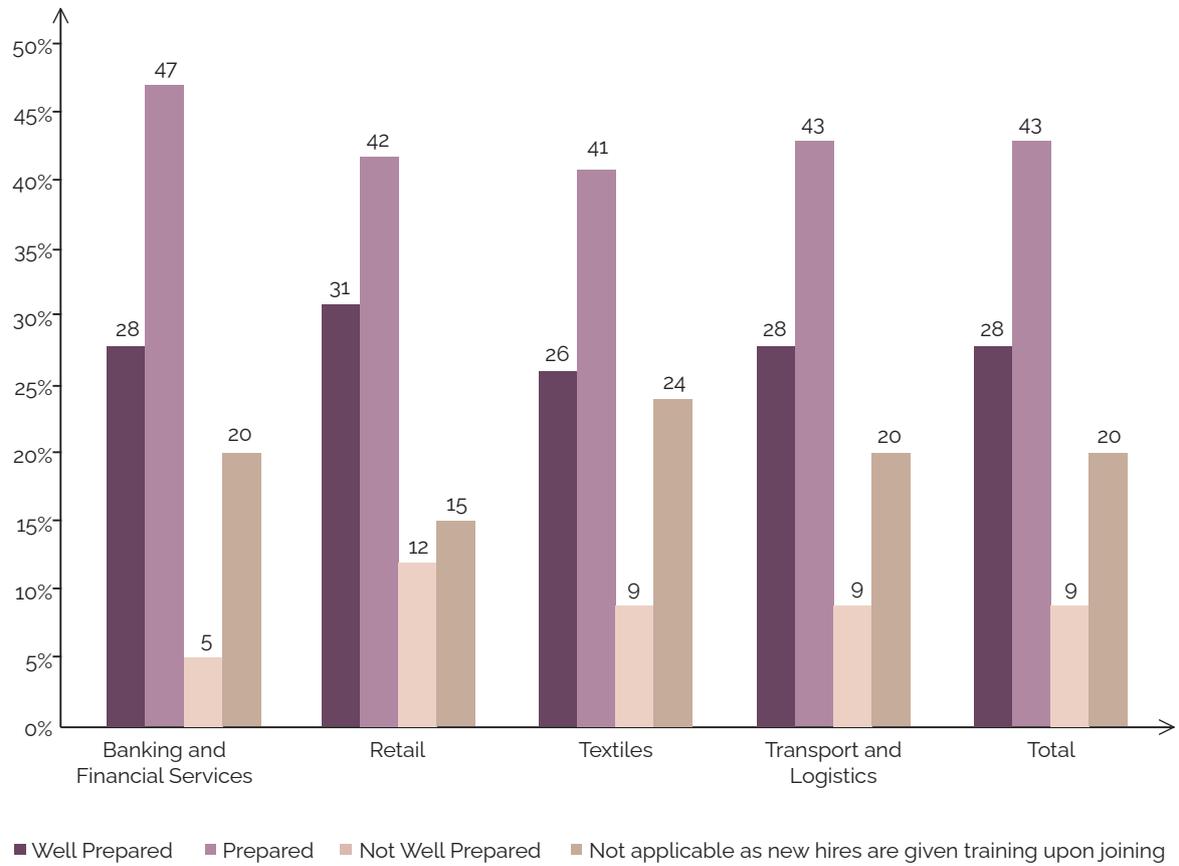
Firms report that first-time job seekers are also relatively well prepared to start work. 32 percent of firms report they are well prepared, and 41 percent of firms report that first-time job seekers are prepared. Slightly more firms report that first-time job seekers with university or higher education are more prepared than those without a degree and those with technical or vocational training. That companies are not reporting a significant employability challenge puts into question existing policy priorities that focus on enhancing the employability of the workforce.

Figure 10: If you have hired first-time job seekers in the last 5 years, how well-prepared were they for the job? (%)

First-time job seekers overall ▪ **First time job seekers with secondary education** ▪ **First time job seekers with technical or vocational education** ▪ **First time job seekers with university or higher education**
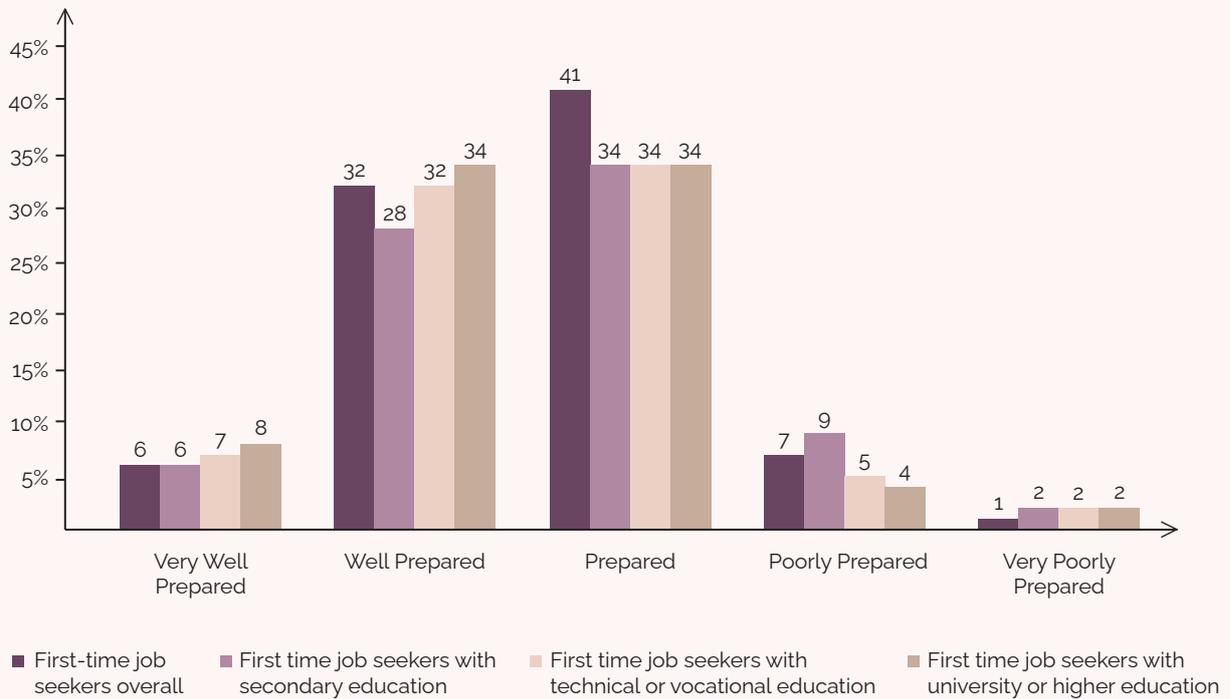
NOTE: MAY NOT ADD UPTO ONE HUNDRED PERCENT AS "NOT APPLICABLE" WAS REMOVED.

4.3 WHAT FIRMS ARE LOOKING FOR IN NEW HIRES

When hiring a new employee, 37 percent of companies identify years of work experience, 35 percent the level of education, and 32 percent identify basic and soft skills as being the most important factors they consider. Firms rate candidates' general skills as being of more importance than their technical skills.

4.4 RECENT TRENDS IN SKILL REQUIREMENTS: OBSERVATIONS FROM THE LAST FIVE YEARS

Companies were asked to assess changes in skill requirements over the last five years. Companies report that trustworthiness, teamwork, clear communication, complex problem solving, and basic reading and writing are the five *general skills* that have become more important in the last five years.[xxxviii]

Firms rate candidates' general skills as being of more importance than their technical skills.

49

Figure 11: What are the most important factors that your company considers when hiring a new employee? (%)

Years of Work Experience
- Banking and Financial Services: 40
- Retail: 38
- Textiles: 37
- Transport and Logistics: 48
- Total: 37

Basic and Soft Skills
- Banking and Financial Services: 29
- Retail: 23
- Textiles: 26
- Transport and Logistics: 31
- Total: 35

Education Attainment (Level of Education)
- Banking and Financial Services: 30
- Retail: 27
- Textiles: 29
- Transport and Logistics: 31
- Total: 32

Technical Skill Level (Hard Skills)
- Banking and Financial Services: 26
- Retail: 25
- Textiles: 31
- Transport and Logistics: 27
- Total: 22

Performance in an Interview
- Banking and Financial Services: 21
- Retail: 19
- Textiles: 20
- Transport and Logistics: 24
- Total: 23

Years of Work Experience in a Similar Position or Field
- Banking and Financial Services: 20
- Retail: 20
- Textiles: 21
- Transport and Logistics: 16
- Total: 23

The Applicant's Potential
- Banking and Financial Services: 15
- Retail: 13
- Textiles: 16
- Transport and Logistics: 16
- Total: 15

Educational Institution (Where Studied)
- Banking and Financial Services: 10
- Retail: 10
- Textiles: 7
- Transport and Logistics: 8
- Total: 15

Gender of Applicant
- Banking and Financial Services: 7
- Retail: 9
- Textiles: 6
- Transport and Logistics: 7
- Total: 5

Legend: ■ Banking and Financial Services ■ Retail ■ Textiles ■ Transport and Logistics ■ Total

50

Table 8: What are the general skills you need today in your company that you did not need 5 years ago? (%)

INDUSTRY	BANKING AND FINANCIAL SERVICES	RETAIL	TEXTILES	TRANSPORT AND LOGISTICS	TOTAL
Trustworthiness	13	22	12	11	14
Teamwork	16	12	7	9	11
Clear Communication	12	7	6	12	9
Complex Problem Solving	5	7	11	12	9
Basic Reading and Writing	5	12	9	10	9
Quality Control and Safety Awareness	5	10	8	6	7
Attention to Detail	4	11	4	8	7
Active Listening	9	4	3	8	6
Time Management	7	5	5	6	6
Service Orientation	7	8	7	4	6
Critical Thinking and Analysis	6	3	7	9	6
Leadership	6	4	7	8	6
Math	5	6	3	9	6
Management of Personnel	4	7	9	5	6
Coordination and Time Management	7	5	3	3	5
Analytical Thinking	6	4	3	6	5
Creativity, Originality and Initiative	6	4	6	4	5
Management of Financial and Material Resources	7	3	2	5	4
Resilience, Stress Tolerance and Flexibility	5	1	1	4	3
Emotional Intelligence	4	4	2	4	3
Reasoning, Problem Solving and Ideation	3	2	4	2	3
Instruction and Mentoring	1	6	1	5	3
Persuasion and Negotiation	1	5	2	3	3
None	1	1	2	1	1

Note: May not add up to one hundred percent as respondents could select multiple options.

When asked about the *technical skills* that have become more important in the last five years, 14 percent of companies identified accounting and auditing, 10 percent reported technology installation and maintenance, and 9 percent IT and digital privacy and security expertise, and technical analysis. Nearly a third of companies reported that they do not require different technical skills today compared to five years ago.

Table 9: What are the technical skills you need today in your company that you did not need five years ago? (%)

INDUSTRY	BANKING AND FINANCIAL SERVICES	RETAIL	TEXTILES	TRANSPORT AND LOGISTICS	TOTAL
None	27	37	30	24	29
Accounting and Auditing	15	13	9	18	14
Technology Installation and Maintenance	5	10	16	8	10
IT and Digital Privacy and Security Expertise	11	10	9	7	9
Technical Analysis	8	6	8	13	9
Technology Design	6	10	13	4	8
Transport Experts	3	4	3	16	7
Financial Modelling	11	4	4	6	6
Fund Management (In Financial Services)	10	3	5	5	6
Process, Product and Service Quality Control	5	8	6	4	6
Machine Learning Capabilities	5	7	5	5	6
Transport and Retail Logistics Programme Operators	3	5	3	12	6
Big Data Management and Analysis	11	2	4	5	5
Business Analysis and Strategy Planning	6	6	6	3	5
Programming	5	7	4	5	5
Advanced Math	5	4	3	6	5
Logistics Expertise (Setting Up Processes for Supply and Distribution)	3	3	2	12	5
Database Expertise (Building and Maintaining)	6	3	2	5	4
Inventory Expertise	3	6	4	3	4
Legal Expertise	2	3	4	3	3
Machine Operators	1	3	3	4	3
Troubleshooting and User Experience Expertise	3	2	1	2	2
Engineers	1	2	2	2	2
Food Safety and Standards	0	2	0	3	1

Note: May not add up to one hundred percent as respondents could select multiple options.

4.5 THE CURRENT SKILL SCENARIO

When companies were asked about the general skills of their employees today, such as analytical thinking, creativity, and emotional intelligence, 56 percent reported having no gaps in required skills. Similarly, when asked about technical skills such as machine operations, legal expertise, and programming, 57 percent report having no gap in required skills.[xxxix]

Just 3 percent of companies report having a large gap in their general skills. This is in line with the findings of another recent study which found that 46 percent of surveyed Indian companies report having no skilling requirements for their workforce.[xl]

Figure 12: Is there a gap in the general skills that you require and the skills your existing employees have? (%)
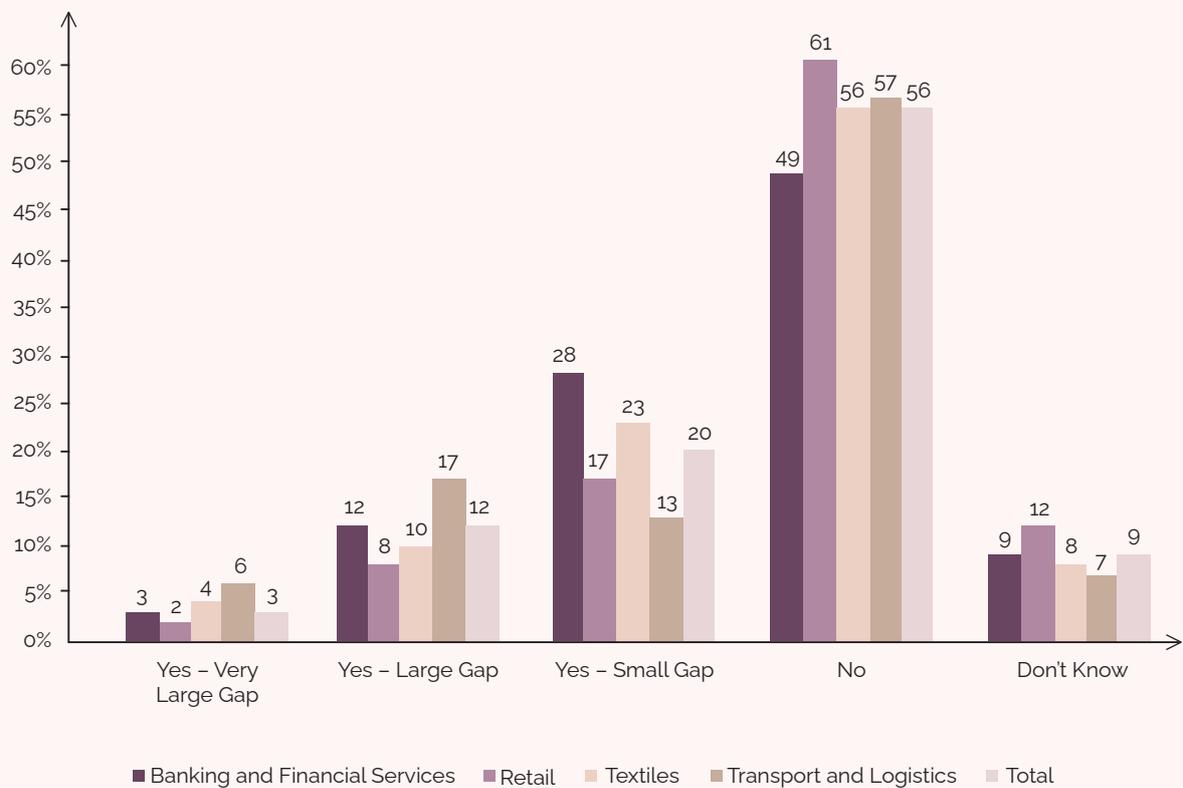
When asked to assess the general skill areas where the competency gap among their employees are the greatest, companies report **TEAMWORK**, **TRUSTWORTHINESS**, and **QUALITY CONTROL** and **SAFETY AWARENESS** as being the greatest.

In their assessment of where the biggest gap in technical skills lies among their employees, **14 percent** of companies reported **IT**, **DIGITAL PRIVACY**, and **SECURITY EXPERTISE**, and **TECHNOLOGY INSTALLATION AND MAINTENANCE**. **12 percent** reported a gap in **ACCOUNTING** and **AUDITING**, **TECHNICAL ANALYSIS**, and **TECHNOLOGY DESIGN**.

Table 10: In which areas do you notice gaps in general skills?

INDUSTRY	BANKING AND FINANCIAL SERVICES	RETAIL	TEXTILES	TRANSPORT AND LOGISTICS	TOTAL
Teamwork	17	18	20	10	16
Trustworthiness	8	16	18	10	13
Quality Control and Safety Awareness	9	10	12	8	10
Clear Communication	9	11	9	12	10
Active Listening	8	8	5	17	10
Service Orientation	5	11	12	13	10
Management of Personnel	10	8	9	8	9
None	8	10	7	6	8
Complex Problem Solving	7	7	6	12	8
Creativity, Originality and Initiative	7	7	8	5	7
Coordination and Time Management	6	12	4	6	7
Basic Reading and Writing	6	5	12	6	7
Analytical Thinking	10	4	5	2	6
Reasoning, Problem Solving and Ideation	10	3	4	5	6
Time Management	9	3	4	8	6
Instruction and Mentoring	7	1	7	8	6
Attention to Detail	3	5	6	8	6
Critical Thinking and Analysis	10	4	4	2	5
Management of Financial and Material Resources	6	3	4	3	4
Leadership	4	4	5	1	4
Emotional Intelligence	2	5	2	7	4
Persuasion and Negotiation	4	1	2	2	3
Resilience, Stress Tolerance and Flexibility	4	1	4	3	3
Math	2	1	1	3	2

Note: May not add up to one hundred percent as respondents could select multiple options.

Figure 13: Is there a gap in the technical skills you require today and the competencies your existing employees have? (%)

Legend: Banking and Financial Services, Retail, Textiles, Transport and Logistics, Total
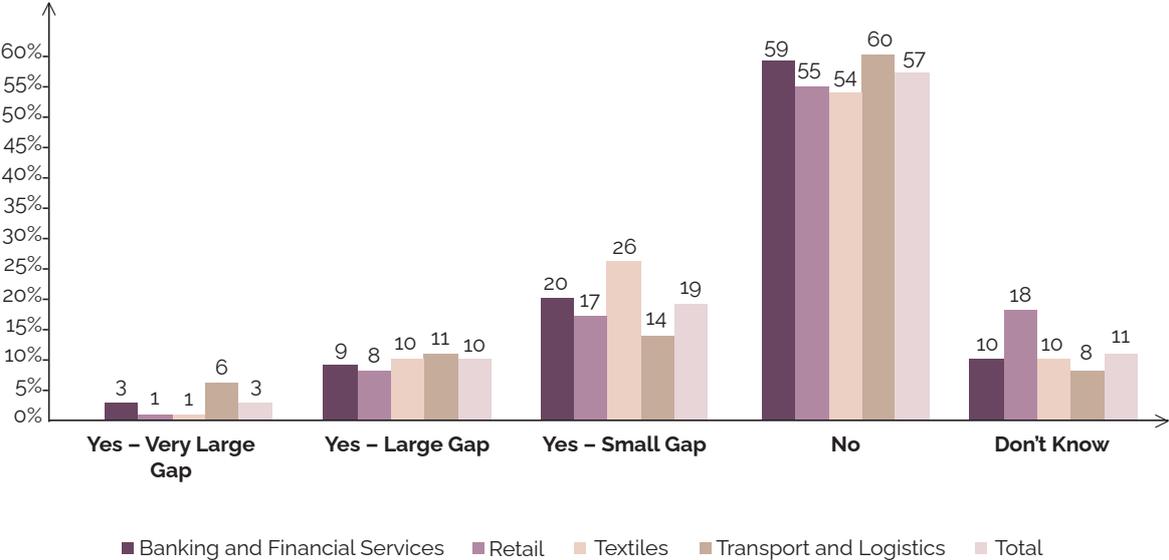
Table 11: In what technical skills is the gap the biggest? (%)

INDUSTRY	BANKING AND FINANCIAL SERVICES	RETAIL	TEXTILES	TRANSPORT AND LOGISTICS	TOTAL
IT and Digital Privacy and Security Expertise	15	10	20	8	14
Technology Installation and Maintenance	7	14	23	13	14
Accounting and Auditing	19	8	9	14	12
Technical Analysis	17	8	13	11	12
Technology Design	10	16	16	6	12
Transport Experts	5	8	10	22	12
Financial Modelling	24	4	7	5	10
Transport and Retail Logistics Programme Operators	3	8	7	20	10
Business Analysis and Strategy Planning	10	8	10	6	9
Machine Learning Capabilities	7	14	7	9	9
Logistics Expertise (Setting Up Processes for Supply and Distribution)	5	8	4	19	9
Process, Product and Service Quality Control	7	4	13	8	8
Database Expertise (Building and Maintaining)	9	6	7	5	7
Machine Operators	7	12	4	8	7
Troubleshooting and User Experience Expertise	3	10	7	6	7
Big Data Management and Analysis	10	8	3	5	6
Fund Management (In Financial Services)	9	6	6	5	6
Programming	5	4	6	6	5
Legal Expertise	5	2	7	5	5
None	7	2	4	2	4
Engineers	3	10	0	3	4
Inventory Expertise	2	10	1	5	4
Advanced Math	5	2	1	3	3
Food Safety and Standards	0	2	3	5	3

Note: May not add up to one hundred percent as respondents could select multiple options.

4.6 HOW COMPANIES ARE ADDRESSING COMPETENCY GAPS TODAY

In order to address the general skills gaps identified by companies, 28 percent said that their employees are required to learn new skills on the job, 27 percent said they hire new staff with the required skills, 20 percent said they provide internal training for their employees. Other methods of bridging skills gaps include bringing in temporary staff with the required skills, and sending staff for external training. Companies prefer their employees learn independently or receive on-site training, as opposed to providing them with expert or off-site training.

Figure 14: How do you go about bridging gaps in general skills? (%)
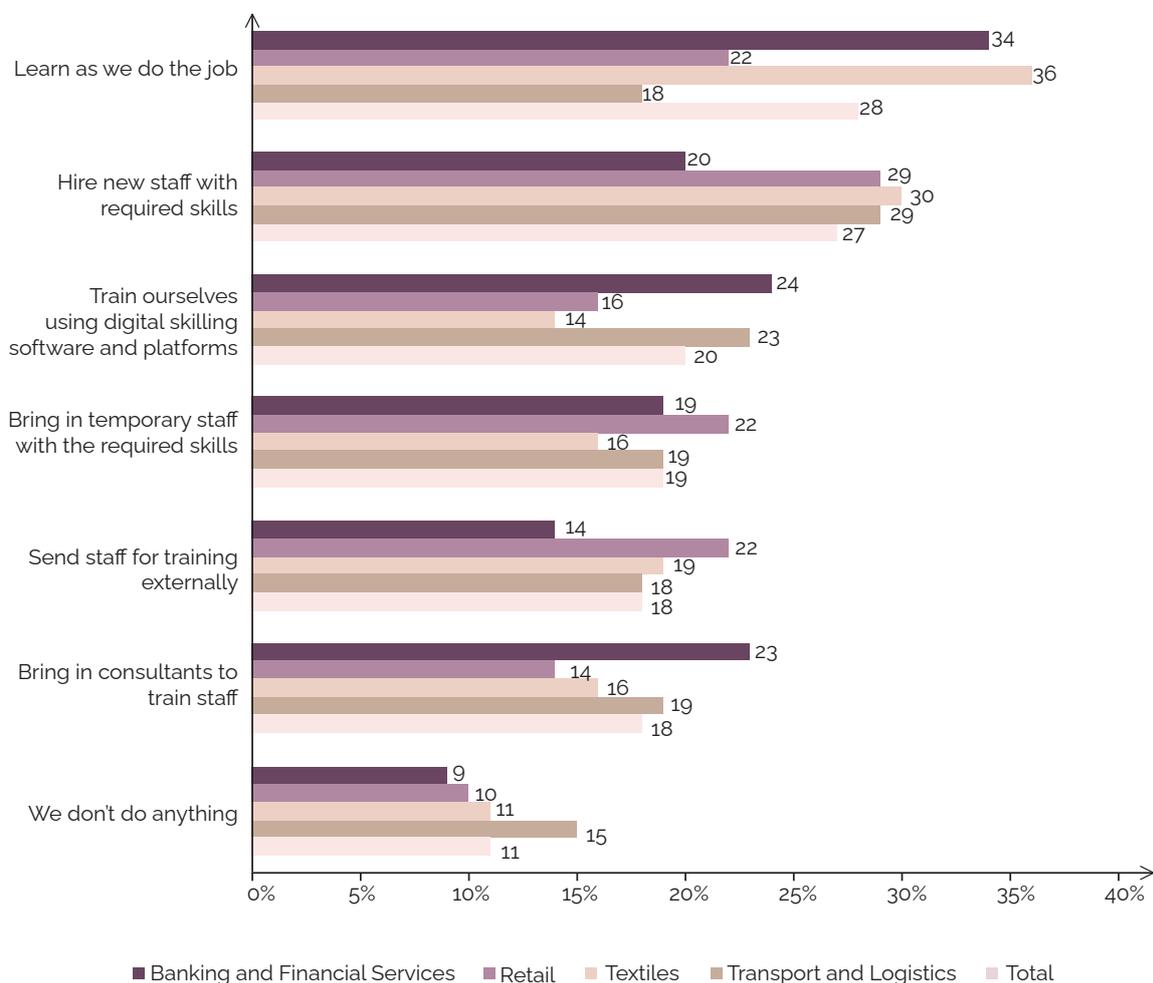
Note: May not add up to one hundred percent as 'None' and 'Don't Know' were removed.

To bridge the gap in required technical skills, 31 percent of companies report hiring new staff with the required skills, 24 percent report bringing in temporary staff with the required skills, and 22 percent report that their employees are required to learn these skills on the job.

Figure 15: How do you go about bridging gaps in technical skills you require? (%)
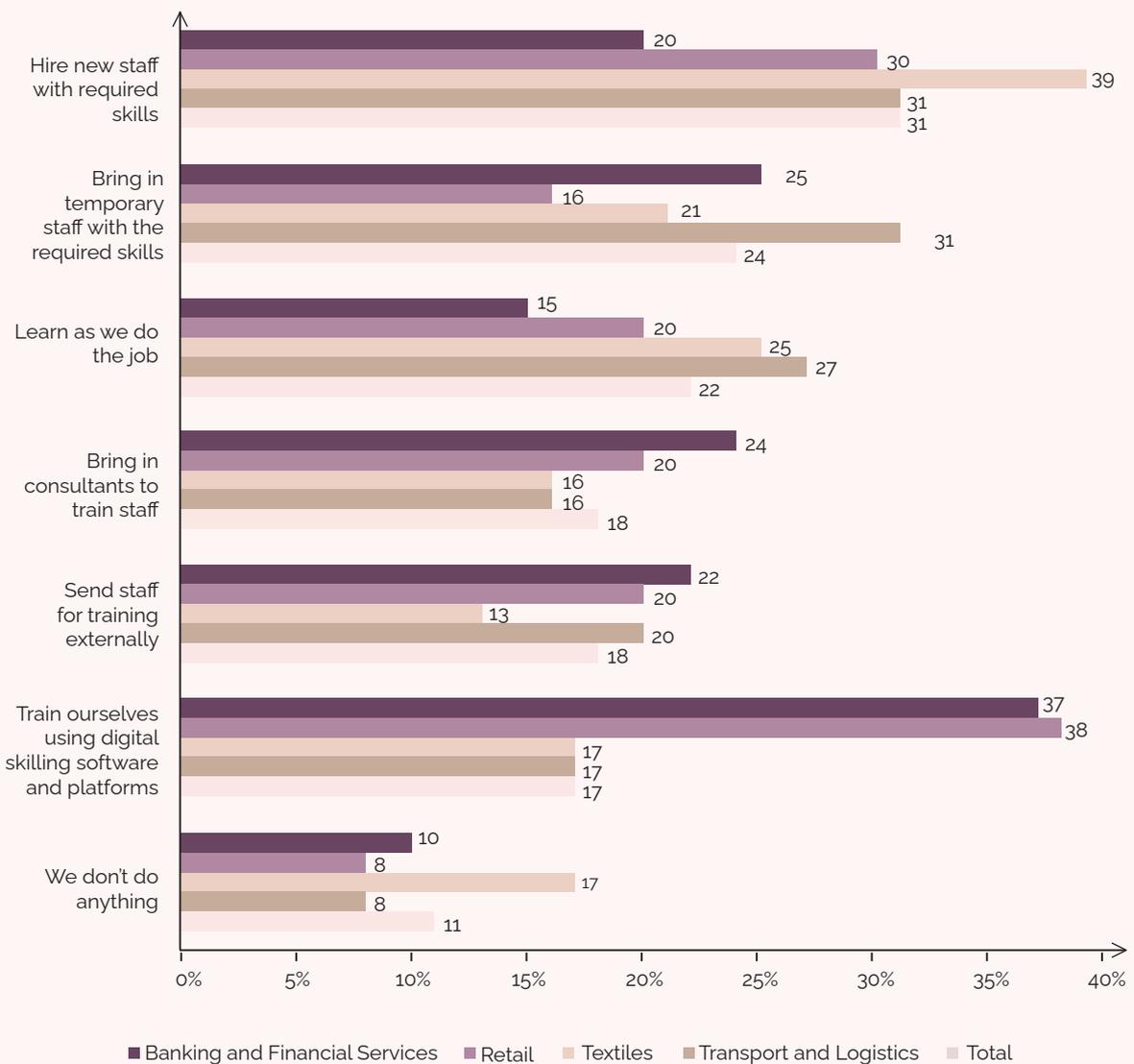
Note: May not add up to one hundred percent as 'None' and 'Don't Know' were removed.

When asked what kind of professional development opportunities firms provide for their employees more broadly, 27 percent of companies report offering internal training courses, 17 percent indicate having employees attend conferences and events, and 11 percent provide executive coaching and mentorship programmes for their staff. A third of all firms report providing no training or professional development programmes for the betterment of their staff's general and technical skills. Just 6 percent of firms report working with vocational and trade schools.

Figure 16: What types of training and professional development programmes does your company offer to prepare new employees and retain experienced workers? (%)
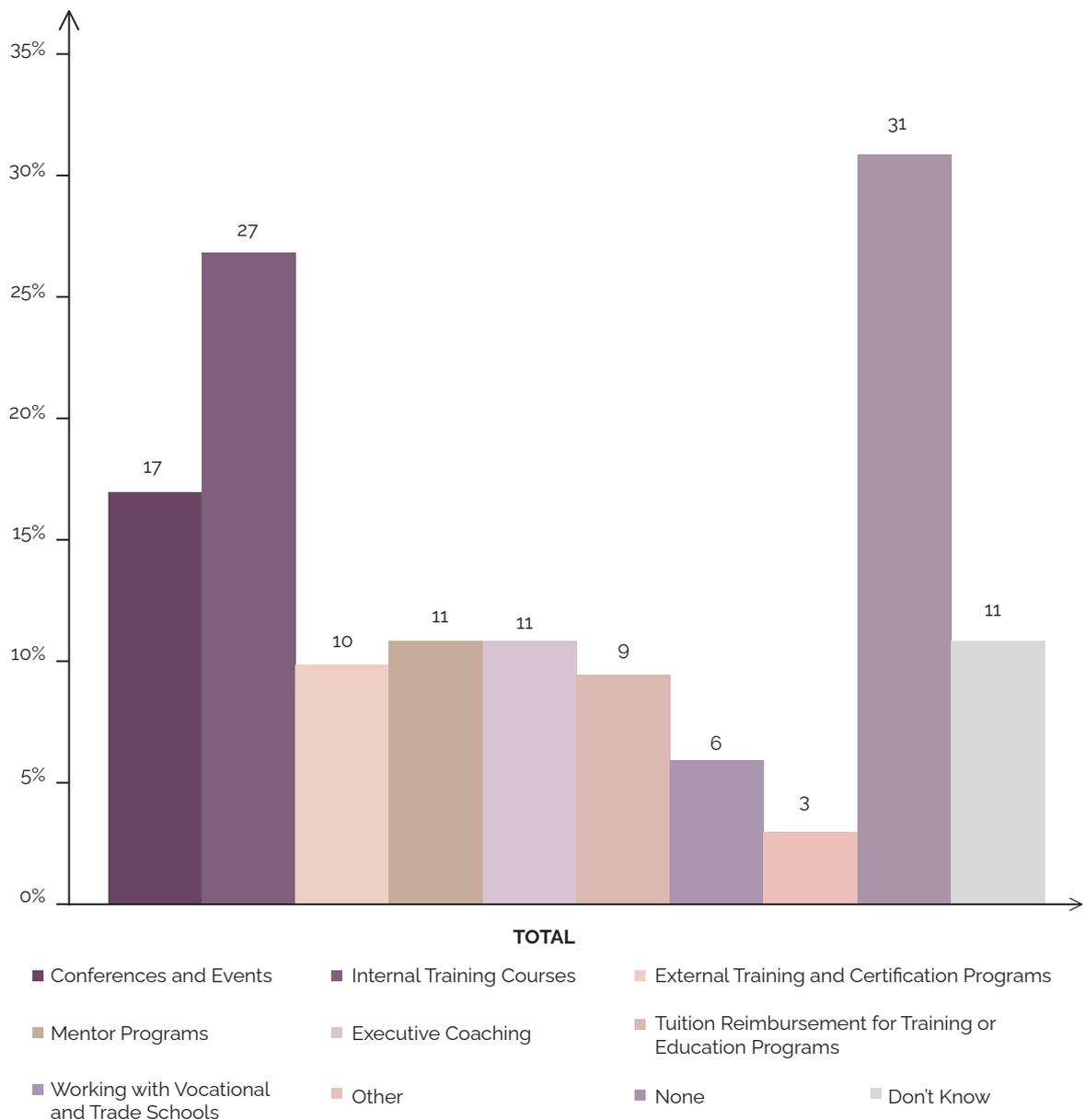
Note: Numbers may not add up to one hundred percent due to rounding off.

When asked what firms offer to attract top talent, 43 percent of companies reported attractive wages, 41 percent reported attractive benefits, 35 reported job security, and 15 percent flexibility in the hours and location of work.

Figure 17: What does your company offer in order to attract top talent? (%)

■ Attractive Wages   ■ Attractive Benefits   ■ Job Security   ■ Flexibility in Working Hours/Location   ■ None
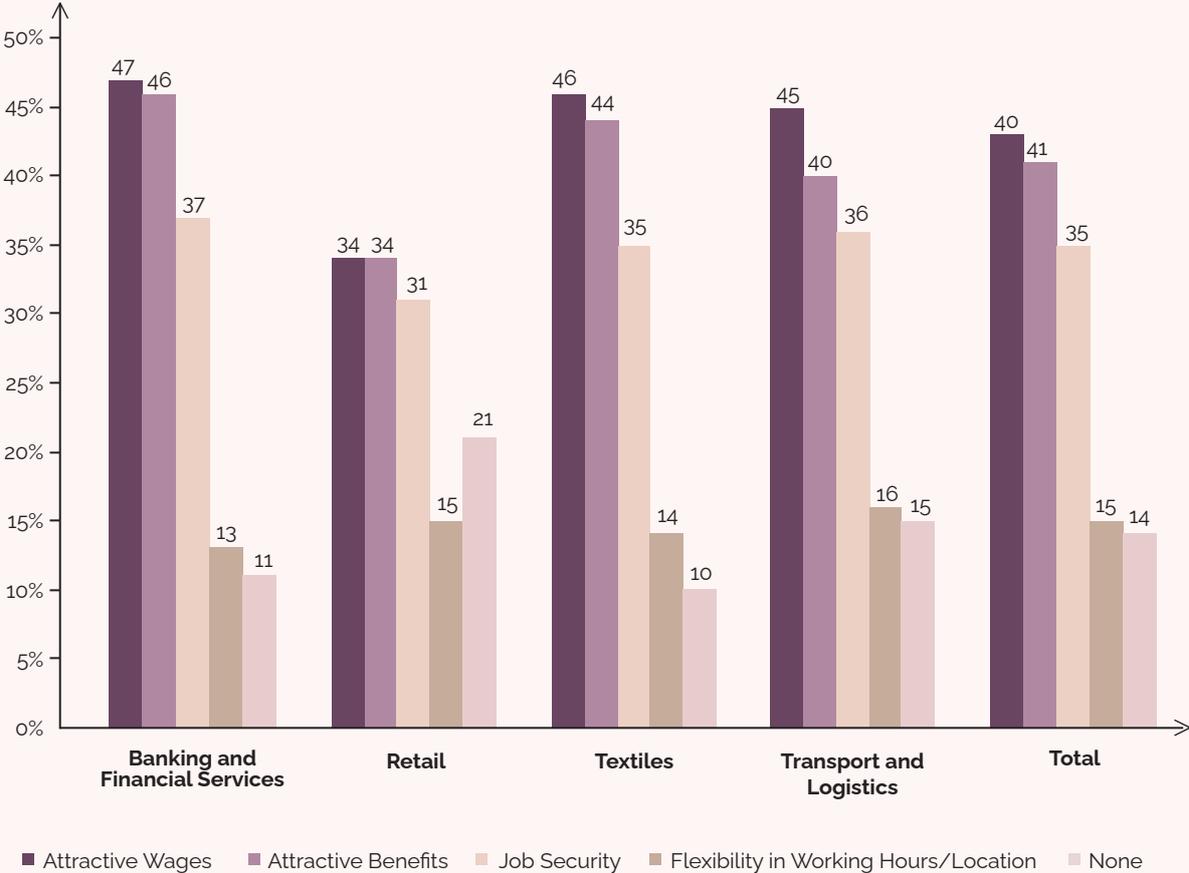
Note: Numbers may not add up to one hundred percent as "Other" was removed.

Figure 18: In the next five years, do you expect to need different general skills in your employees?
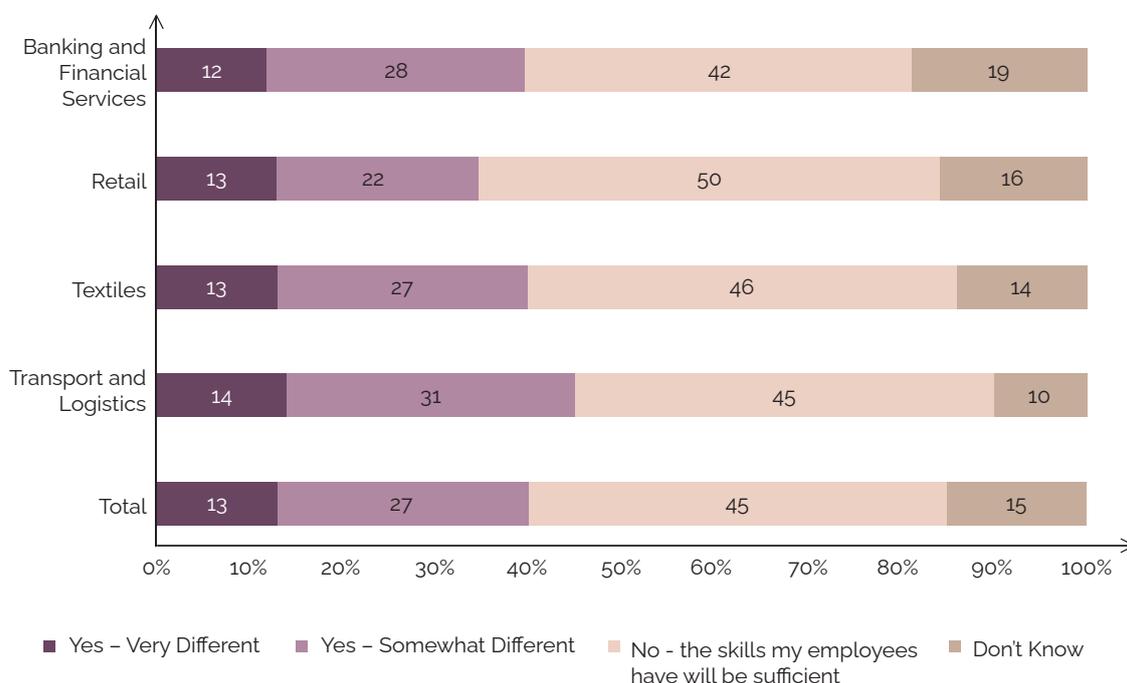
Note: Numbers may not add up to one hundred percent due to rounding off.

4.7 ANTICIPATED CHANGES IN SKILL REQUIREMENTS IN THE NEXT FIVE YEARS

Companies were asked about their expectations for skill requirements in the next five years. 45 percent of companies report that they believed their employees' existing skills will be sufficient for them to adequately perform their duties in the next five years. This is consistent across all four industries. 27 percent of employers report that somewhat different skills will be needed in the next five years, and only 13 percent report that very different general skills will be required.

23 percent of firms reported that trustworthiness is a general skill that they anticipate becoming more important in the next five years. 20 percent of firms report this as being teamwork, 18 percent said clear communication, and 14 percent said service orientation.

13 percent report that very different general skills will be required.

Table 12: What general skills do you expect to become more important in the next five years?

INDUSTRY	BANKING AND FINANCIAL SERVICES	RETAIL	TEXTILES	TRANSPORT AND LOGISTICS	TOTAL
Trustworthiness	16	30	22	24	23
Teamwork	21	22	17	21	20
Clear Communication	18	19	12	24	18
Service Orientation	14	15	14	12	14
Attention to Detail	9	14	13	11	12
Creativity, Originality and Initiative	9	10	13	10	11
Quality Control and Safety Awareness	8	10	13	11	11
Management of Personnel	15	9	7	9	10
Complex Problem Solving	11	9	10	11	10
Time Management	9	8	13	6	9
Active Listening	9	5	10	11	9
Basic Reading and Writing	5	9	6	15	9
Management of Financial and Material Resources	12	6	6	3	7
Instruction and Mentoring	8	9	5	5	7
Coordination and Time Management	7	7	9	5	7
Critical Thinking and Analysis	6	12	4	6	7
Emotional Intelligence	6	8	8	5	7
None	6	7	10	7	7
Analytical Thinking	9	3	5	6	6
Leadership	8	2	7	7	6
Resilience, Stress Tolerance and Flexibility	9	4	3	5	5
Persuasion and Negotiation	6	3	1	5	4
Reasoning, Problem Solving and Ideation	6	3	6	2	4
Math	3	6	1	5	4

Note: May not add up to one hundred percent as respondents could select multiple options.

When asked about the need for different technical skills in the next five years, companies are split in their assessment. 45 percent of employers believe that their employees' current skills will suffice in the future. 27 percent believe that somewhat different technical skills will be required, and 13 percent report that very different skills will be required. 15 percent of companies report not being sure whether they will require different technical competencies among their employees in the next five years.

When asked which technical skills firms anticipate becoming more important, 16 percent

of firms reported technology design. 15 percent of firms say accounting and auditing will be more important, 14 percent lay emphasis on IT, digital privacy, security expertise, and business analysis and strategy planning.

While policies and programmes in India have focused on improving the employability of the workforce, our findings indicate that new workers and first-time job seekers are relatively well prepared when they begin work. While there has been a significant push towards ensuring that individuals have the required job-specific and technical skills required for

Figure 19: In the next five years do you expect to need different technical skills in your employees? (%)
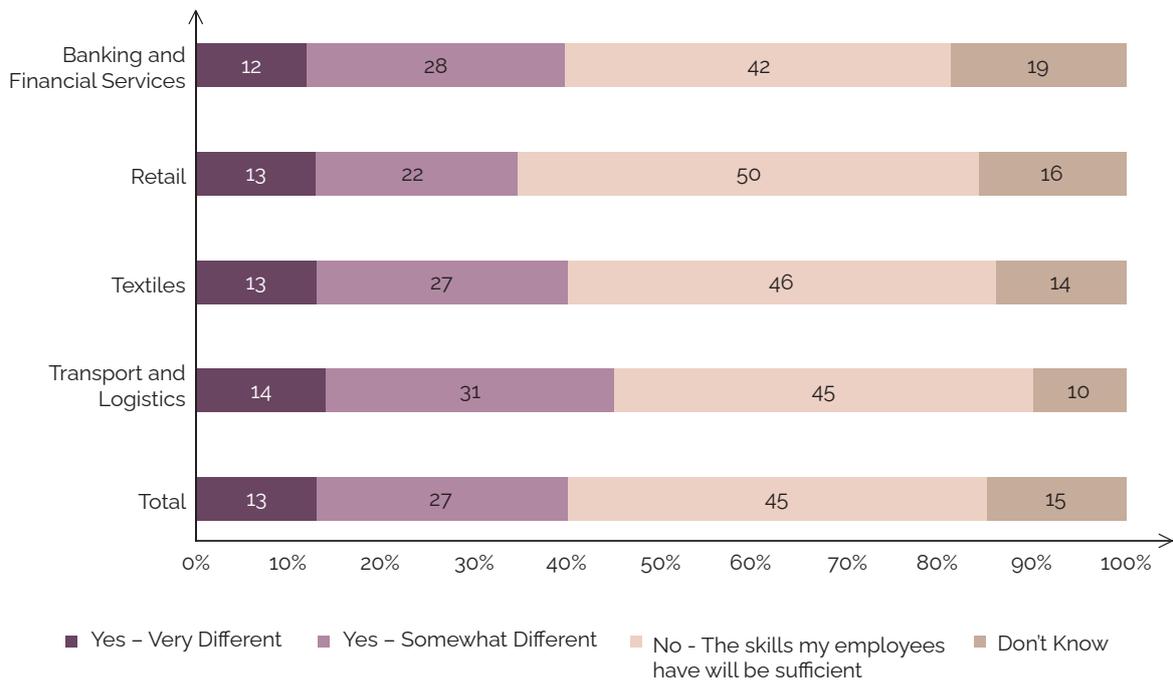
Note: Numbers may not add up to one hundred percent due to rounding off.

Table 13: What are the technical skills you expect to become more important in the next five years? (%)

INDUSTRY	BANKING AND FINANCIAL SERVICES	RETAIL	TEXTILES	TRANSPORT AND LOGISTICS	TOTAL
Technology Design	10	22	20	12	16
Accounting and Auditing	21	14	12	14	15
IT and Digital Privacy and Security Expertise	22	19	12	7	14
Business Analysis and Strategy Planning	21	12	12	12	14
Financial Modelling	26	7	15	7	13
Process, Product and Service Quality Control	19	14	11	7	12
Technical Analysis	11	18	9	10	12
Logistics Expertise (Setting Up Processes for Supply and Distribution)	3	8	8	27	12
Transport Experts	3	5	11	24	12
Machine Learning Capabilities	12	14	8	6	10
Transport and Retail Logistics Programme Operators	3	4	7	24	10
Big Data Management and Analysis	21	3	7	7	9
Fund Management (In Financial Services)	18	5	7	8	9
Technology Installation and Maintenance	10	11	13	3	9
Advanced Math	8	7	4	8	7
Legal Expertise	6	7	3	11	7
Programming	7	8	3	8	6
Database Expertise (Building and Maintaining)	4	7	9	3	6
Machine Operators	3	11	8	4	6
Troubleshooting and User Experience Expertise	8	3	4	3	5
Inventory Expertise	6	8	4	3	5
Engineers	6	5	3	2	4
Food Safety and Standards	3	8	1	3	4
None	3	4	4	3	4

Note: May not add up to one hundred percent as respondents could select multiple options.

getting a job, employers value work experience, educational attainment, and basic skills more highly. This suggests that the programmes aimed at enhancing the readiness of the workforce should place an increasing emphasis on helping individuals gain work experience through internships and apprenticeships, and that education remains valuable with regard to employability. Basic and soft skills such as teamwork, communications, and creativity are significant and of increasing importance to employers. These are skills that are typically learned at school and in early childhood.

At present, more than half of the surveyed companies report not having any gaps in their required skills. Yet, 40 percent of companies report anticipating a change in skills requirements in the next five years, with 13 percent expecting very different skills requirements. Firms currently prioritise having workers learn on the job, with 31 percent reporting that they provide no professional development opportunities to their workers. This highlights a need for greater incentivisation for companies to invest in the upskilling and reskilling of workers in the coming years. Very few firms work with vocational education centres, also indicating a reluctance and distrust in the quality and relevance of skills learned there. Companies will have to play an increasing role in preparing workers for changes in job roles and skills in the medium term as they introduce new technologies and digital tools.

AMBITIONS AND EXPECTATIONS OF INDIA'S YOUTH

The employment challenge in India is particularly pertinent for India's youth who are entering the working age population by the millions each year. It is of critical importance that job creation not only provides India's workforce with income, but also opportunities for upward mobility. Our survey results indicate that 34 percent of Indian youth between the ages of 15 and 30 are not in education or employment. This number closely matches an OECD estimate of 30 percent.[xli] Drawing on data from the *Youth Aspirations in India* survey, this chapter looks at the ambitions, expectations and preferences of India's youth with regard to education, skills, and work. Section 5.1 explores the education aspirations of India's youth. Section 5.2 outlines the characteristics of an ideal skills programme that would be most helpful for youth in attaining

Our survey results indicate that 34 percent of Indian youth between the ages of 15 and 30 are not in education or employment.

desirable jobs. Section 5.3 presents finings on youth perceptions of non-standard work arrangements such as the gig economy and entrepreneurship. Section 5.4 looks at youth perceptions of their preparedness for work. Section 5.5 outlines the key characteristics that youth consider important for a desirable job. Finally, Section 5.6 assesses key issues around gender parity and work.

Key Insights:

1. 96 percent of youth respondents hope to pursue a higher education degree, and most view this as a prerequisite for their ideal job.
2. 49 percent of surveyed youth perceive the availability of suitable job opportunities to be bad or very bad, and 30 percent of respondents that are currently employed reporting being unsatisfied with their job.
3. Youth report a number of barriers to finding desirable jobs, with 51 percent citing a lack of guidance in finding appropriate opportunities, and 44 percent a lack of work experience.
4. 42 percent of employed female respondents report that they are working without a contract.
5. 49 percent of youth report wanting a job in the public sector.
6. 85 percent of female respondents report a preference for full-time employment.
7. Youth are looking for a skills programme that provide them with relevant information on vacancies, advice on applying for jobs, and job placements. They report an overall lack of career guidance and career counselling.

8. Despite widespread interest in participating in a skills development program many youth don't. The main barriers that youth face in pursuing skills development include awareness of opportunities, financial restrictions, and time constraints.

5.1 EDUCATION ASPIRATIONS

96 percent of the 5,764 youth report wanting to achieve a university degree or higher.[Xlii] 84 percent of youth report thinking that a university degree or postgraduate degree is a prerequisite for their ideal job.[xliii] This points to the high value that India's youth places on education, as well as their ambitions towards pursuing higher education.

When asked about their interest in skills development, 76 percent of youth said they were very interested in participating in a programme.[xliv] Of those that report being interested, 70 percent indicated that they wanted to participate in order to increase their choices in employment, followed by 48 percent who reported an interest in increasing their salary.[XlV] Youth respondents' preference for higher education attainment, and their interest in skills development is reflective of a tension between legacy expectations and the perceived demands of a rapidly changing labour market.

5.2 THE IDEAL SKILLS PROGRAMME

When asking youth about the kinds of skills development programmes that are attractive and useful for them, it was found that certification is an important criterion, with 71 percent of respondents reporting that their skills programme of choice would result in certification.[xlvi] Monetary compensation is also an important factor for youth, with 80 percent of respondents reporting a preference for programmes that offered compensation such as a stipend.[xlvii] For many respondents, this would be a decisive factor in whether or not to participate. More than half the respondents indicated a preference for a programme of between two weeks and six months, and for programmes that have combined online and classroom components.[xlviii]

Despite high levels of interest in participating, 71 percent of respondents report never having enrolled in a skills programme.[xlix] The main barrier that they report facing is a lack of awareness of existing opportunities. Furthermore, the types of training and development that youth deem most useful are different than those being offered by firms and the public sector alike.

5.3 THE FUTURE OF WORK: STANDARD OR NON-STANDARD?

Youth in India show an openness towards non-standard forms of work such as opportunities in the gig-economy, freelancing, and entrepreneurship. 63 percent of youth are open to the gig economy as an additional source of income, and 59 percent as a main source of income.[l] The reasons youth are interested in the gig economy include flexibility in hours and schedule, greater autonomy and decision-making power, and the variety in work.[li] The respondents' optimism about the gig economy also comes with certain worries including a lack of career progression and opportunities for personal growth, which serve as deterrents for participation.

The Ideal Skills Programmes for the Youth

A moderate time commitment is preferred

	15 to 20 Years (%)	21 to 25 Years (%)	26 to 30 Years (%)	Total (%)
More than 1 year	9	7	8	8
Up to 1 year	45	6	64	0
Up to 6 months	24	37	30	35
Up to 4 weeks	41	43	42	42
Up to 2 weeks	27	27	31	28
1 day	7	8	9	8

	FEMALE (%)	MALE (%)	NON-BINARY (%)	TOTAL (%)

Money matters

	FEMALE (%)	MALE (%)	NON-BINARY (%)	TOTAL (%)
Paid	44	42	36	42
Stipend	40	37	60	36
Unpaid	13	17	13	16
Other	2	4	0	8
Up to 2 weeks	27	27	31	28
1 day	7	8	9	8

Certification is important

	FEMALE (%)	MALE (%)	NON-BINARY (%)	TOTAL (%)
Certified	71	71	88	71
Other	56	55	44	55
Post-exam certificate	13	15	13	14
Participant certificate	13	14	25	13
Certification doesn't matter	6	10	6	8
Uncertified	1	1	0	1

Blended learning is optimal

	FEMALE (%)	MALE (%)	NON-BINARY (%)	TOTAL (%)
Online and classroom	55	58	63	57
Online	36	37	38	37
Classroom	33	35	44	34
Distance learning	26	25	19	26
Other	2	5	6	4

Skills training should support employability

	FEMALE (%)	MALE (%)	NON-BINARY (%)	TOTAL (%)
Support in job placement	75	74	75	74
The development of job-specific skills	63	63	63	63
Interlinked internships or work experience opportunities	58	50	69	53
The development of general skills	44	43	50	43
The timings and duration of the course	47	34	50	39
The proximity of the course to my home	19	15	31	16
Provision of child care	6	8	25	7

Youth want more mentorship and career counselling services

	FEMALE (%)	MALE (%)	NON-BINARY (%)	TOTAL (%)
Services are very accessible	13	21	13	18
Services are moderately accessible	44	44	31	44
Services are not accessible	34	27	38	30
Can't say	8	8	19	8

Existing career counselling mechanisms focus on job applications

	FEMALE (%)	MALE (%)	NON-BINARY (%)	TOTAL (%)
Information on relevant vacancies	39	44	29	42
Advice on how to look for a job	34	41	43	39
Guidance on applying for desirable jobs	38	36	29	37
Guidance on training or educational programmes	33	34	29	34
Placement for jobs	32	34	14	34
Placement in educational programmes	22	25	29	24

Interaction with industry professionals is considered useful

	FEMALE (%)	MALE (%)	NON-BINARY (%)	TOTAL (%)
Talks/seminars with industry professionals	48	50	43	49
Interaction with counselling professionals	50	44	29	46
Workplace visits	36	47	57	43
Reliable career guidance website/magazine	44	43	29	43
Talks with alumni from educational institutes	35	38	29	37
Not applicable	9	8	14	9

Barriers to participation

	FEMALE (%)	MALE (%)	NON-BINARY (%)	TOTAL (%)
Lack of financial resources	38	32	0	34
Time constraints	39	28	0	31
I don't know	24	26	0	25
Lack of signicant value addition to my career aspirations	19	21	0	20
High lead time between pursuing skills programmes and employment	19	21	0	20
Poor quality of available training programmes	14	21	0	19
Poor quality of institutes offering training programmes	11	18	0	16
Other	1	3	0	2

Youth are unaware of existing programmes

	FEMALE (%)	MALE (%)	NON-BINARY (%)	TOTAL (%)
No	79	66	81	71
Yes	21	34	19	29

Youth offer solutions

	FEMALE (%)	MALE (%)	NON-BINARY (%)	TOTAL (%)
Government action and favourable economic policies	56	63	63	60
Career counselling and mentoring opportunities	51	40	38	44
More investment in new hires by the private sector	39	43	31	41
Quality apprenticeships and internships	42	37	25	39
On the job trainings	40	36	25	37
Specfic skilling strategies and skill development programmes	38	37	31	37
Incorporating vocational training and technical skills in school curriculum	40	35	19	37
Companies providing skilling and upskilling opportunities to employees	35	32	31	33
Promotion of entrepreneurship by the government	30	31	38	30
Data systems to streamline information on vacancies	20	18	13	19

Note: May not add up to one hundred percent as respondents could select multiple options.

72 percent of youth reported an interest in starting their own business,[lii] and 64 percent of youth feel very or moderately prepared to do so. India's youth are interested in embracing the novelty and excitement of going forth with their entrepreneurial pursuits, but are aware of the risks that come with starting a new venture.

At the same time, while youth appear to be open to new formats of work, they still seek the job security and contractual benefits that accompany full-time, permanent jobs. Ensuring that aspiring entrepreneurs and individuals working in non-standard arrangements have access to the benefits and protections availed to permanent and full-time workers is an essential policy priority.

5.4 SKILLS AND EMPLOYABILITY

The assessment of youth regarding their preparedness for their ideal job closely matches the assessment of firms with regard to first-time job seekers. 39 percent of youth report feeling prepared or very prepared for their ideal job. 38 percent report feeling moderately prepared, and only 4 percent say they are not prepared.[liv]

While half of surveyed youth who report an interest in participating in a skills development programme report wanting to do so to increase their pay, just 37 percent of companies are willing to pay a 10 percent premium for high quality skills. 35 percent are not willing to pay a premium at all. Similarly, just 9 percent of companies report reimbursing employees for training. However, this isn't true of all companies, 12 percent are willing to pay an extra 15 percent for needed technical and general skills. Until companies are willing to increase wages for

individual investments in skills, there is little incentive for individuals to do so.

5.5 THE IDEAL JOB

Youth view the following factors as the most important when considering a job opportunity: While companies report that they are paying attractive wages, providing benefits, job security, and flexibility to attract top talent, the benefits provided to workers are limited — few companies provide flexible work arrangements, and more companies are hiring temporary and contract workers.

Moreover, there appears to be a mismatch in company recruitment strategies, and the job search approach taken by many youth. 81 percent of youth report looking for jobs online, while only 14 percent of firms report advertising for jobs online.[lv] Further, almost half — 47 percent — of youth report a willingness to move to another state for employment, 41 percent a willingness to move to another country, and 39 percent to move to another location within the same state for a job. Yet, the vast majority of firms are recruiting locally, hiring few employees from other states.[lvi]

5.6 GENDER PARITY

There are gaps in the aspirations of India's female youth and the availability of opportunities to match those aspirations. This is true of both skilling, and employment opportunities. While 82 percent of female respondents report wanting full-time jobs,[lvii] of the 774 firms that were surveyed in the Enterprise Survey, 71 percent of firms employ fewer than 10 percent female workers, and 30 percent have no female employees at all.[lviii]

84 percent of report being unaware of India's 2013 law regarding sexual harassment at the workplace, underscoring a low awareness and prioritisation of safety and security — particularly for women — among companies. 66 percent of employers report not having a gender equality policy.

One of the barriers that youth report in finding a desirable job is discriminatory employer biases. These gaps are also evident in the lower rates of participation in skilling programmes, the low

female labour force participation rate and the low prioritisation among companies of bringing more women into the workforce. These are crucial findings and point to the need for urgent remedy.

With just over one third of 15- to 30-year-olds not in education or employment, ensuring access to quality opportunities is challenging. Poor recruitment strategies among firms for reaching this demographic may explain part of youth's perception of the poor availability of

Table 14: Most Important Factors for Getting a Job

FIRM RESPONSES	YOUTH RESPONSES
1. Years of work experience 2. Level of education attainment 3. Basic and soft skills 4. Relevant work experience in a similar position 5. Performance in an interview	1. Performance in an interview 2. Level of education attainment 3. Basic and soft skills 4. Relevant work experience in a similar position 5. Years of work experience

Figure 20: Are you willing to pay a premium for high-quality technical and general skills? (%)

Legend:
- Yes - 100% extra
- Yes - 50% extra
- Yes - 30% extra
- Yes - 10% extra
- No - Not willing to pay a premium
- Don't know
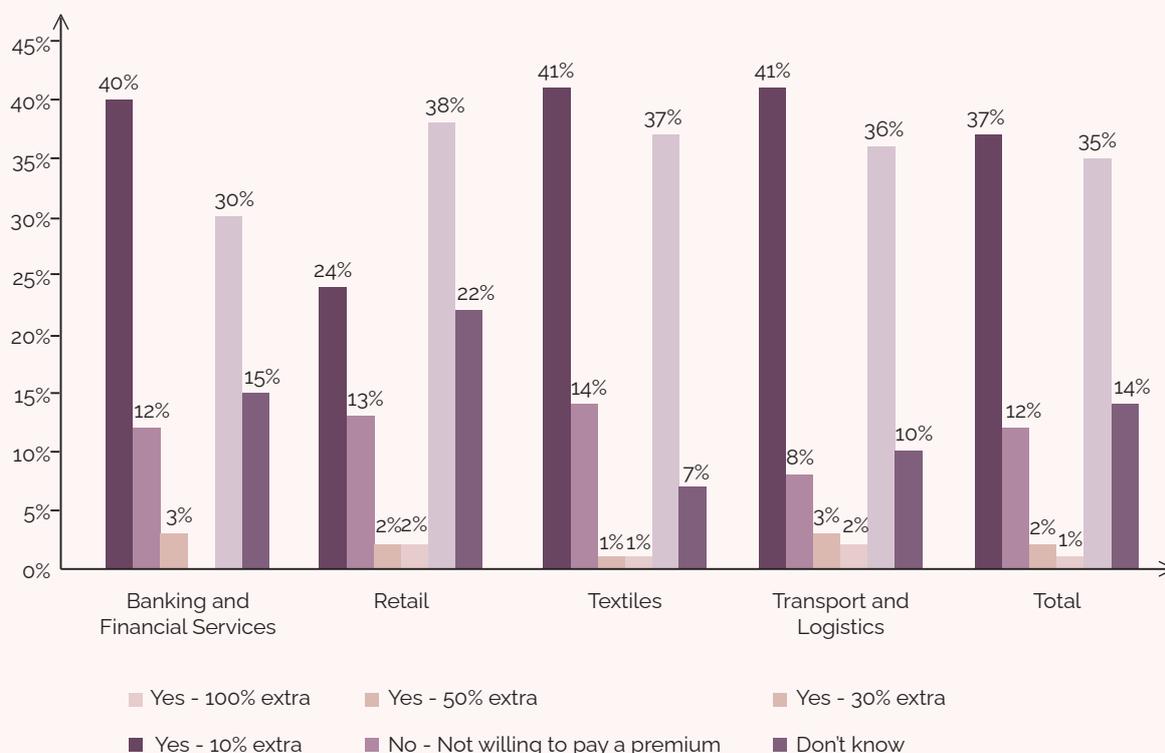
employment opportunities. This should also be a part of public sector strategies, as youth report that the main barriers they face in finding a desirable job is a lack of career guidance and a lack of work experience. Our research suggests that there are specific characteristics of skills programmes

1 SALARY

2 OPPORTUNITIES FOR PROMOTION AND CAREER DEVELOPMENT

3 JOB SECURITY

4 FLEXIBLE WORK ARRANGEMENTS

5 SAFETY AT WORK

One of the barriers that youth report in finding a desirable job is discriminatory employer biases.

that are attractive and useful for young people. The barriers that youth face in participating in skills programmes should also be addressed; these include a lack of awareness of available opportunities, and financial and time constraints. Nimble, dynamic, and well-crafted programmes can assist in addressing financial and time constraints to participation.

With regard to job satisfaction, firms have a long way to go in ensuring the wellbeing and satisfaction of their workers; this may assist in improving the workers' commitment to their firms. A challenge often discussed is the high rate of attrition among workers. Greater investment in employees may improve this condition, and prove to be a worthwhile investment in the medium and long term.

Half of the youth respondents indicated a preference for working in the public sector. This, in combination with their openness toward the gig-economy, freelancing and entrepreneurship, suggests that what is attractive about the public sector is security, salary, and stability. The tension between legacy sectors and the opportunities of the digital economy can be managed by carefully crafting policies and programmes that provide social security and protections to freelance workers that are typically available only to those in full-time, permanent jobs.

Finally, female youth face unique and significant challenges in attaining desired employment opportunities. Addressing this and creating an equal employment scenario is the prerogative of firms and the public sector alike. Female youth are equally qualified and ambitious and deserve to have access to opportunities that help them realise their economic, employment, and education ambitions.

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BRIDGING THE GAP

There are some critical differences in youth aspirations and the expectations of Indian firms. The ambitions and capabilities of India's female youth, for instance, are not being met with adequate employment opportunities. A social security system that would allow youth to take advantage of new forms and formats of work, while receiving adequate social protection has yet to be discovered and implemented. At the same time, the skills ecosystem is still largely focused on short-term skills for employment, while employers continue to value education over job-related skills. Addressing these discrepancies will be necessary to ensure that India's youth have desirable and meaningful employment

opportunities.

There are a number of opportunities for bridging the gaps in expectations of India's companies and its youth to allow for improved employment opportunities and increased upward mobility. Below are suggestions for the public and private sectors for addressing these gaps.

1. Education attainment remains one of the most important factors in employability. At the same time, higher education is an aspiration of nearly all youth. It will be critical for the public sector to increase and diversify pathways towards higher education attainment, particularly among less well-off students.

2. Companies identify work experience as one of the most important recruitment criteria for new workers. Youth identify a lack of work experience as a key challenge to obtaining a desirable job. Public sector skilling initiatives should increasingly focus on creating high-quality apprenticeships and internships to increase the work experience and thus employability of first-time job seekers.

3. Youth report a lack of information and guidance as the main barriers they face in finding desirable job opportunities. Youth identify career counselling and mentorship opportunities as the most beneficial support for finding jobs. Both should be introduced as integral parts of publicly run skills programmes and secondary school curricula.

4. Firms know best what they are planning with regard to new technology adoption and digitisation. They are best placed to anticipate firm-specific technical skills requirements in the short and medium term.

Companies must invest in their employees' upskilling and reskilling, or be willing to pay a premium for highly skilled workers.

5. The general skills that companies expect to become more important in the next five years including trustworthiness, teamwork, communication, and analytical thinking are skills that are developed from a young age. These skills need to be integrated as core components of early childhood and primary school education.

6. Government skills programmes should incorporate the characteristics identified by youth as attractive and useful; these include the ideal formats of programmes, and content, including relevant information on vacancies, advice on applying for jobs and job placements, and career guidance and counselling.

7. In the context of informality and rising contractualisation, it is critical that India's social protection frameworks are adapted to meet the evolving needs of individuals.

Youth have a strong preference for government jobs as they provide job and income security. In order to leverage emerging employment opportunities in the digital economy, protections against income shocks and other risks need to be addressed.

8. Companies should leverage the availability of human capital from various geographies. To support this, public benefits need to be made portable to facilitate the movement of individuals and families across state borders.

9. Firms must increasingly take the lead in addressing gender discrimination in hiring, promotions, and pay. While policies are making strides towards improving workplace equity, firms have a critical role to play in implementing these initiatives.

10. The responsibility of individuals, the state, and employers must explicitly address the issue of safety and security of workers even if they are conducting work in intermediate spaces.

CONCLUSION

India entered the 21st century in a state of flux — amidst economic uncertainty, changing demographics with a rising young population entering the workforce each year, and new disruptive technologies. Mismatches in expectations of employers and employees, and indeed, those of citizens and the state, give rise to questions about changing dynamics and uncertainties.

This report brings together the findings from ORF's two earlier reports: *The Future of Work in India: Inclusion, Growth and Transformation* and *Young India and Work: A Survey of Youth Aspirations.* It explores the challenges to education, skilling, and jobs in India in the 21st century.

The Future of Work report examined the role and influence of new technologies and digitisation on the Indian labour market. The report highlighted that Indian firms view their future positively, anticipating job creation as opposed to job loss with the adoption of new technologies. In spite of barriers to technological adoption, firms are making strides in incorporating new technologies. They recognise the potential of Big Data, machine learning and AI, and the Internet of Things (IoT), and choose to incorporate these into their existing business models and operations. Discrepancies emerge in the hiring process for two reasons: first, a significant number of companies do not have online job portals, creating a misalignment of needs as most candidates, especially India's youth, look for jobs online; and second, recruiters hire a disproportionate number of male candidates. Contractualisation and new forms of work, such as the gig economy, are emerging and attractive to youth as well as enterprises.

The *Young India and Work* report, meanwhile, explored the ambitions of India's youth regarding education, skills, and employment.

The report found that personal interest and keenness were the youth's primary reasons for pursuing their fields of study. They value higher education, but want targeted, short-term, certified skills training to supplement their classroom learning. While there is an avid interest in undertaking public sector jobs, youth aspire to be entrepreneurs — setting up and running their own businesses. The misalignment in online versus offline job searches and application processes between recruiters and applicants is prevalent, but will change with time. Moreover, information asymmetry adds to hesitation among youth when planning for their future. Youth are also cautiously optimistic about the gig economy. They — especially young women — seek full-time jobs.

The current report is the culmination of the first two. It seeks to define pathways for bridging the gap between youth and firm expectations, challenges, and needs with respect to education, work, and skills. Despite discrepancies in aspirations and misaligned expectations, the workforce and India's firms share a common drive to be more receptive and resilient, which will be the hallmark of the labour force in India's digital future.

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xxxv. Chapman et al., "The Future of Work in India," pp. 36.

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xxxvii. The remaining 19 percent report that this question is not applicable as they provide new hires with appropriate onboarding and training when they start.

xxxviii. Vidisha Mishra, Terri Chapman, Suchi Kedia and Sriram Gutta, "Young India and Work: A Survey of Youth Aspirations," *The Observer Research Foundation and the World Economic Forum,* 2018: 53.

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xlii. Mishra et al., "Young India and Work," pp. 17.

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xliv. Mishra et al., "Young India and Work," pp. 57.

xlv. Mishra et al., "Young India and Work," pp. 58.

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lvi. Mishra et al., "Young India and Work," pp. 21.

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lviii. Chapman et al., "The Future of Work in India," pp. 9.