



**Opportunity or Challenge?**

Empowering women and girls in India  
for the Fourth Industrial Revolution

# About Global Compact Network India (GCNI)

Global Compact Network India (GCNI) was formed in November 2000 and registered in 2003 as a non-profit society that functions as the Indian Local Network of the UN Global Compact (UNGC), New York. It is the world's first Local Network that is established with full legal recognition. The network also serves as a country-level platform for businesses, civil society organisations, and the public and private sectors. It helps align the stakeholders' responsible practices towards 10 Universally Accepted Principles of UNGC in areas of human rights, labour, environment, and anti-corruption. It also helps align it to the broader UN goals including the Sustainable Development Goals (SDGs) and other key sister initiatives of the UN and its systems.

At present, the India network is among the top 10 of more than 103 Local Networks in the world. It has also emerged as the largest corporate sustainability initiative in India and globally with a pan India membership of 350 leading business and non-business participants. This has strengthened their commitment to the UN Global Compact Principles by becoming proud members of the Local Network in India.

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# Contents

From the desk of the President GCNI	4
Foreword	5
Executive summary	8
Gender and 4IR	10
Mapping opportunities	18
Case studies	30
Conclusion	56
Acknowledgments	58

# From the desk of the President GCNI



**Shashi Shankar**  
**President – GCNI & CMD,**  
**ONGC Group of Companies**

India is one of the fastest growing economies in the world with an estimated growth rate of 7.2% in the current fiscal.<sup>1</sup> While there has been a growth in GDP in comparison to the previous year's 6.7%, the country is yet to leverage its full potential. With only 24% of its 497 million women population participating in the workforce (Census 2011), the country is nowhere close to 48% reported globally.<sup>2</sup>

Specific targets of SDG 5 for 'Gender Equality', calls for action to ensure equal participation of women in all spheres of life including economic participation. However, inadequate skill sets arising out of unequal access to enabling aspects such as education, training, resources and technology, limit women's effective participation in the workforce. The inequality in employment exacerbates in the presence of social and cultural barriers including stereotyped gender roles, forcing a larger population of the Indian women to take up semi-skilled and/or low paying (or non-cash) jobs.

With estimations of India reaching 9-10% economic growth rate if its women workforce participation matches the global rates<sup>3</sup>, it's the right time to make a joint investment in creating an enabling ecosystem to get more women to join the workforce, which can apply across the formal and informal sectors.

It is within this context, we along with Deloitte are proud to present a knowledge paper titled 'Empowering Women and Girls in India for the Fourth Industrial Revolution'. Leveraging the base document, we hope to create a discourse around women's participation in the workforce. The current paper delves into gender specific issues that prevent women from effectively participating in the workforce. It further outlines the opportunity that the Fourth Industrial Revolution potentially offers women through gaining future ready technical and soft skills that can provide second chances or entry points to work. Lastly, a few notable solutions in preparing women in future ready skills are documented in the paper.

The theme paper will provide its readers with critical insights on a potential way forward for bringing about women empowerment, by enabling their economic development.

Best wishes!

<sup>1</sup> Ministry of Statistics and Programme Implementation, sourced from <https://economictimes.indiatimes.com/>

<sup>2</sup> Niti Aayog official website. <http://www.niti.gov.in/>, IMF official website. <https://www.imf.org/external/index.htm>

<sup>3</sup> ibid

# Foreword



**Kumar Kandaswami**  
Partner & National Industries Leader

Being a large professional services organisation, Deloitte attracts some of the best talent in the world and has a strong diversity narrative. Our commitment to gender equality carries forward into communities through our flagship Corporate Social Responsibility initiative known as WorldClass. Our goal is to impact 10 million futures, specifically of women and girls in India, through educational, skill development, and entrepreneurship initiatives, by 2030. Our research indicates that empowering women with future-ready skill sets can enable their equitable participation in the workforce, following the emergence of the fourth industrial revolution (4IR)<sup>4</sup>.

Thus, Deloitte is delighted to associate with the United Nation Global Compact Network (UNGCN) India in bringing out the knowledge paper on **Empowering Women and Girls in India for the**

**Fourth Industrial Revolution.** Engaging women across the country through development initiatives can create equal chances for them to enter the organised sector. This in turn can boost India's GDP by 27%.<sup>5</sup> The economic and social empowerment of women is known to have transgenerational effects, especially on the girl child, across education, health, and other development parameters.<sup>6</sup>

However, achieving the above mentioned goal would mean multiple stakeholders making a collaborative effort to reduce disparities that cause only half as many women as men to participate in the workforce in India. Lack of adequate skills pushes 120 million Indian women (many of them from rural villages and semi-urban areas) to take up work in the unorganised sector (including agriculture).<sup>7</sup> Deloitte's research and consultations with industry, not-for-profits, government, and skill development agencies revealed the need to reimagine the educational ecosystem, repurpose skill development initiatives, and promote women entrepreneurship.<sup>8</sup> Women and girls in India should have access to relevant infrastructure and resources to build their skill sets in line with the emerging needs of the industry. Training programmes placing an emphasis on soft and life skills, in combination with technology-enabled technical expertise, are likely to enhance female employment prospects and growth during the

revolution. After entering the workforce, it is crucial to provide women, adequate mechanisms to update their skills and suitable compensation packages, as well as put in place policies, mechanisms, and structures to groom them to advance in their careers.

This document also has a collection of case studies that discuss approaches for preparing women for the future of work. We hope this paper provides actionable insights for stakeholders to work towards aligned actions, to ensure higher participation of women in the economy.

<sup>4</sup> Deloitte. September 2018. Preparing Tomorrow's Workforce for the Fourth Industrial Revolution.

<sup>5</sup> International Monetary Fund, 2018. Pursuing Women's Economic Empowerment. <https://www.imf.org/en/Publications/Policy-Papers/Issues/2018/05/31/pp053118pursuing-womens-economic-empowerment>

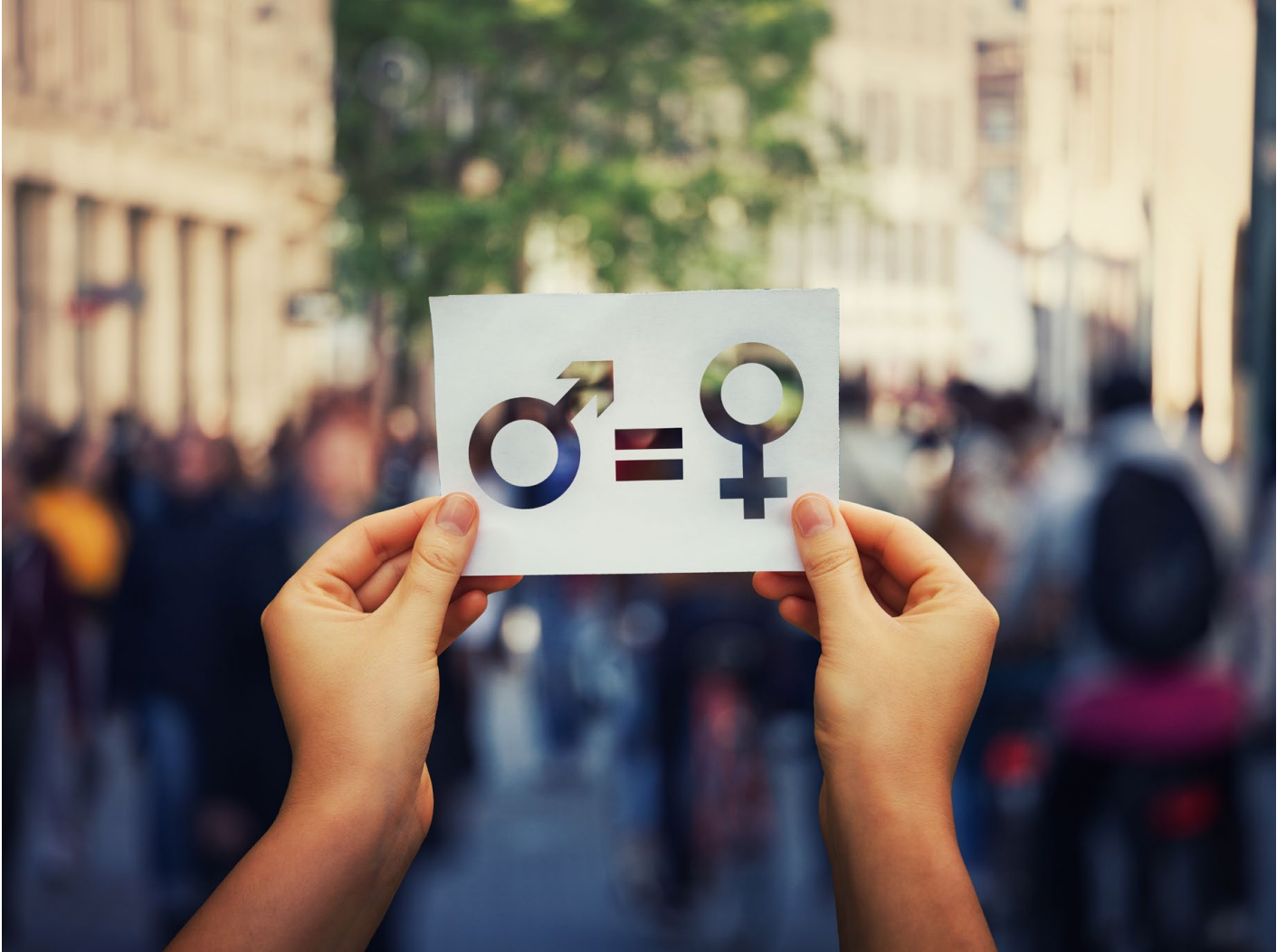
<sup>6</sup> International Monetary Fund. 2018. Pursuing Women's Economic Empowerment. <https://www.imf.org/en/Publications/Policy-Papers/Issues/2018/05/31/pp053118pursuing-womens-economic-empowerment>

<sup>7</sup> Ministry of Women and Child Development. 2016. Study of Working Women and Privileges in the unorganised sector. [http://www.wcd.nic.in/sites/default/files/FINAL%20DRAFT%20REPORT\\_0.pdf](http://www.wcd.nic.in/sites/default/files/FINAL%20DRAFT%20REPORT_0.pdf)

<sup>8</sup> Deloitte. A semi-structured survey administered to industry, not-for-profits, government officers and skill development agencies to understand the development challenges for women and to identify solutions to prepare women and girls for the future of work.







# Executive summary

The knowledge paper discusses a paradox around the fourth industrial revolution (4IR) as an enabler of gender equality or an accelerator of gendered disparities. Globally and in India, a decadal analysis of employment data reveals a declining trend of Female Labour Force Participation (FLFP).<sup>9</sup> The range of challenges for women and girls echoes across Asia in countries including India emerging from lack of education, access to quality education and a digital divide. These challenges limit girls

and women from gaining employable skill sets, entering the workforce, or establishing an enterprise. A set of underlying social, economic, and political barriers limit opportunities for women. Specifically in the India context, the female labour force participation has had a decadal fall from 36.7% in 2005 to 26% in 2018, with 95% (195 million) women being employed in the unorganised sector or engaging in unpaid work.<sup>10,11</sup> The United Nations Sustainable Development Goals (SDGs) agenda for

<sup>9</sup> World Bank. 2018. Labour Force Participation Rate. <https://data.worldbank.org/indicator/SL.TLF.CACT.ZS>

<sup>10</sup> International Labour Organisation. 2018. World Employment Social Outlook Women. Trends for Women. [https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms\\_619577.pdf](https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_619577.pdf).

<sup>11</sup> Ministry of Women and Child Development. 2016. Study of Working Women and Privileges in the unorganized sector. [http://www.wcd.nic.in/sites/default/files/FINAL%20DRAFT%20REPORT\\_0.pdf](http://www.wcd.nic.in/sites/default/files/FINAL%20DRAFT%20REPORT_0.pdf)



2030 highlights that engaging women in the workforce will be a key factor that will help achieve future growth aspirations.<sup>12</sup>

The emergence of 4IR provides invested stakeholders an opportunity to reset the gender agenda, changing it from what it was in the past three revolutions which seem to have widened gender disparities and gender stereotypes. However, the launch of new technologies, digitisation, and automation raises a concern that women employed in low-skilled and low-paying jobs may lose their place in the workforce.<sup>13</sup> On a positive note, the 4IR influences the future of work in terms of the nature of organisational realities and skill types (problem solving, creativity, people management, emotional intelligence etc.), as well as provides opportunities for gender inclusive work cultures to emerge.

Our survey and interactions with industry, not-for-profit, government, skill development agencies, and beneficiaries revealed the need to repurpose the education ecosystem through a set of system strengthening initiatives including the introduction of digital and STEM education in schools.<sup>14</sup> This will build strong foundational skills and give career choices to girls. In addition, mentoring adolescent girls on vocational training and apprenticeship avenues has the potential to build a strong linkage towards considering technology-linked training and employment options. Stakeholders also shared their views on repositioning skill development programmes and promoting women entrepreneurship with a focus on shifting societal perceptions, breaking gender stereotypes on careers choices, and acquiring new-age technical and life skills that can lead to economic and social empowerment.

The emergence of the 4IR for women and girls can lead to significant opportunities or solutions, placing importance on the adoption of technology, creativity, and innovation. Deloitte recommends skill development interventions for women to have a combination of four skill categories – workplace readiness, soft skills, technical expertise, and opportunities for entrepreneurship.<sup>15</sup> The way ahead could include opportunities for women to reskill or upskill in line with evolving industry requirements (through training labs, apprenticeships, on-the-job training, and learning and development programmes). This can empower women to succeed and grow at work organised and unorganised sectors. Creating a stronger ecosystem around women entrepreneurs to complete the entrepreneurship life cycle can result in economic empowerment and agency. The set of measures to support women entrepreneurs includes getting access to education; managerial and leadership abilities; soft skills, financial and digital literacy; influencing social settings and building support systems. Equally important is gaining access to resources – finance, technology, raw materials, and talent, and joining the right networks.

Some select case studies have been presented in the last section of this knowledge paper that present the outcomes of the initiatives designed across four skill categories-Tata STRIVE (soft skills training forms a 40% curriculum of all its technical courses); TRRAIN (Workplace preparedness of PwDs); Bandhan Konnagar (Preparing rural girls and women for the workforce); Agastya International Foundation (Innovative STEM modules for young children); upGrad (Online higher education platform); and Disha (Employment and entrepreneurship for women).

<sup>12</sup> United Nations. Sustainable Development Goals. <https://www.un.org/sustainabledevelopment/sustainable-development-goals/>

<sup>13</sup> World Economic Forum. 2018. The fourth industrial revolution can smash gender equality-or deepen it. <https://www.weforum.org/agenda/2018/03/the-fourth-industrial-revolution-could-smash-gender-inequality-or-reinforce-it/>

<sup>14</sup> Deloitte. A semi-structured survey to industry, not-for-profits, government officers and skill development agencies to understand the development challenges for women and identify solutions to prepare women and girls for the future of work.

<sup>15</sup> Deloitte. 2018. Preparing Tomorrow's Workforce for the Fourth Industrial Revolution



# Gender and 4IR

## Introduction

The World Bank's database indicates an increase in the number of women being educated and participating in the workforce.<sup>16</sup> However, across the world, contextual limitations on gender equality are still visible. Achieving gender equality is an important prerequisite to demonstrate progress on the United Nations' 2030 agenda for sustainable development under which global leaders have committed 'to achieve full and productive employment and decent work for all women and men, including for young

people and persons with disabilities, and equal pay for work of equal value' (SDG 8, target 8.5) and 'to achieve gender equality and empower all women and girls' (SDG 5).<sup>17</sup>

Across the globe, women and girls are seen to have limited access to education, financial and physical resources, employment opportunities, and freedom from violence. Access to information and technology, and avenues for social and political participation is limited for women. Recognising the criticality of gender

<sup>16</sup> World Bank. 2018. Labor Force Participation Rate. <https://data.worldbank.org/indicator/SL.TLF.CACT.ZS>

<sup>17</sup> United Nations. Sustainable Development Goals. <https://www.un.org/sustainabledevelopment/sustainable-development-goals/>

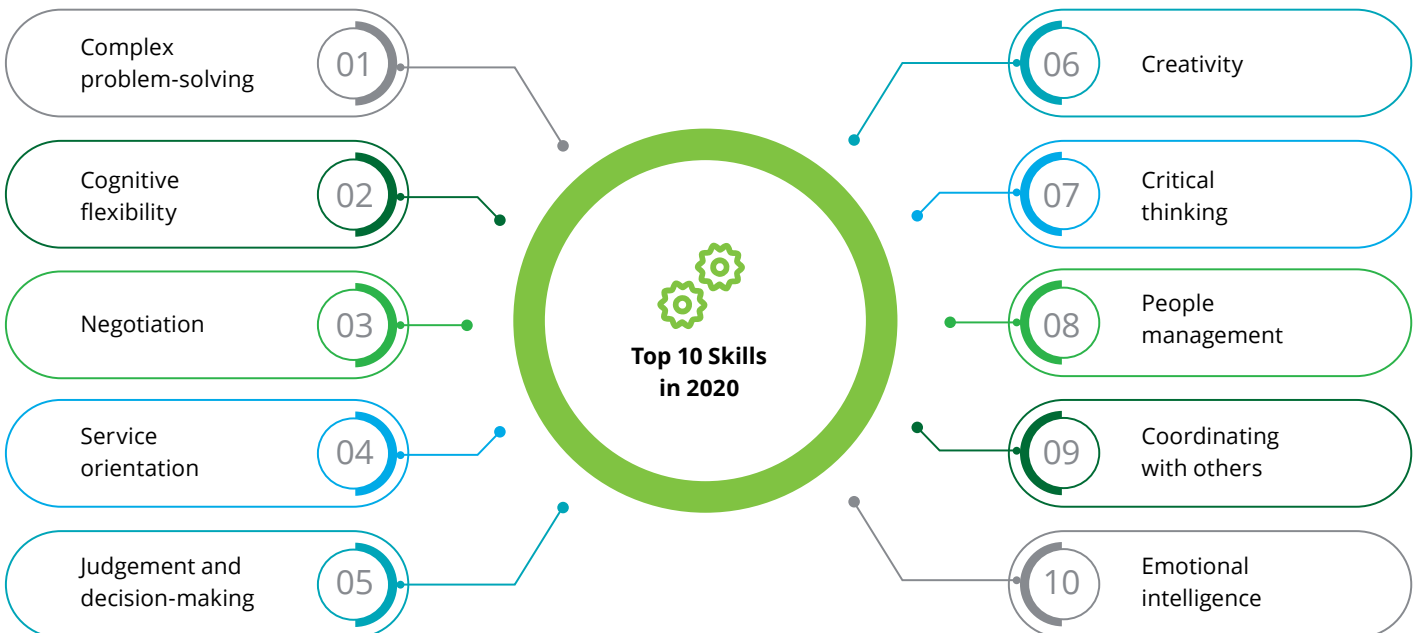
equality, SDG 5 is centred on women emerging as equally invested stakeholders in the development paradigm. A report by the International Labour Organisation (ILO) indicates 48.5% female labour force participation, which is 26.5% lower than men.<sup>18</sup> Women are largely employed in the unorganised sector; their number remains hidden or unknown.<sup>19</sup> The International Monetary Fund (IMF) has highlighted that women’s participation in the workforce results in economic and social empowerment at the individual, community, and country levels.<sup>20</sup>

In the Indian context, aligning the rise of 4IR in terms of exponential technologies, automation, and digitisation with its corresponding influence on the future of work through a gendered lens is a critical step towards trying to overcome the gender gap in the workforce.

**Rise of 4IR**

The 4IR flags the transition from simple digitisation in the third industrial revolution to disruptive innovation through a combination of digital technologies and platforms. These technologies are changing the ways companies will do business across the manufacturing, services, and agriculture sectors.<sup>21</sup> The term 4IR was introduced by Klaus Schwab, the Founder and Chairman of the World Economic Forum. He describes the revolution as a convergence of the physical, digital, and biological worlds that will reshape the manner in which people and businesses interact with technology.<sup>22</sup> The introduction of disruptive technologies, digitisation, internet of things, and big data will transform the future of work in terms of business models, nature of talent, and type of skills that will be required.<sup>23</sup>

**Leading skills for jobs in 2020**



Source: World Economic Forum. 2018. Future of Jobs. <https://www.weforum.org/reports/the-future-of-jobs-report-2018>.

<sup>18</sup> International Labour Organisation. 2018. World Employment Social Outlook Women. Trends for Women. [https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms\\_619577.pdf](https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_619577.pdf)

<sup>19</sup> International Labour Organisation. 2018. World Employment Social Outlook Women. Trends for Women. [https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms\\_619577.pdf](https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_619577.pdf)

<sup>20</sup> International Monetary Fund. 2018. India Country Report, No 18/254. file:///C:/Users/srshubha/Downloads/cr18254.pdf

<sup>21</sup> Shubha Srinivasan and Kumar, K. 2019. Preparing Youth in India from the Fourth Industrial Revolution. Chapter in Energising India. Fueling a Billion Lives. Rupa Books, India

<sup>22</sup> Klaus Schwab. 2018. The fourth industrial revolution, <https://www.weforum.org/about/the-fourth-industrial-revolution-by-klaus-schwab>.

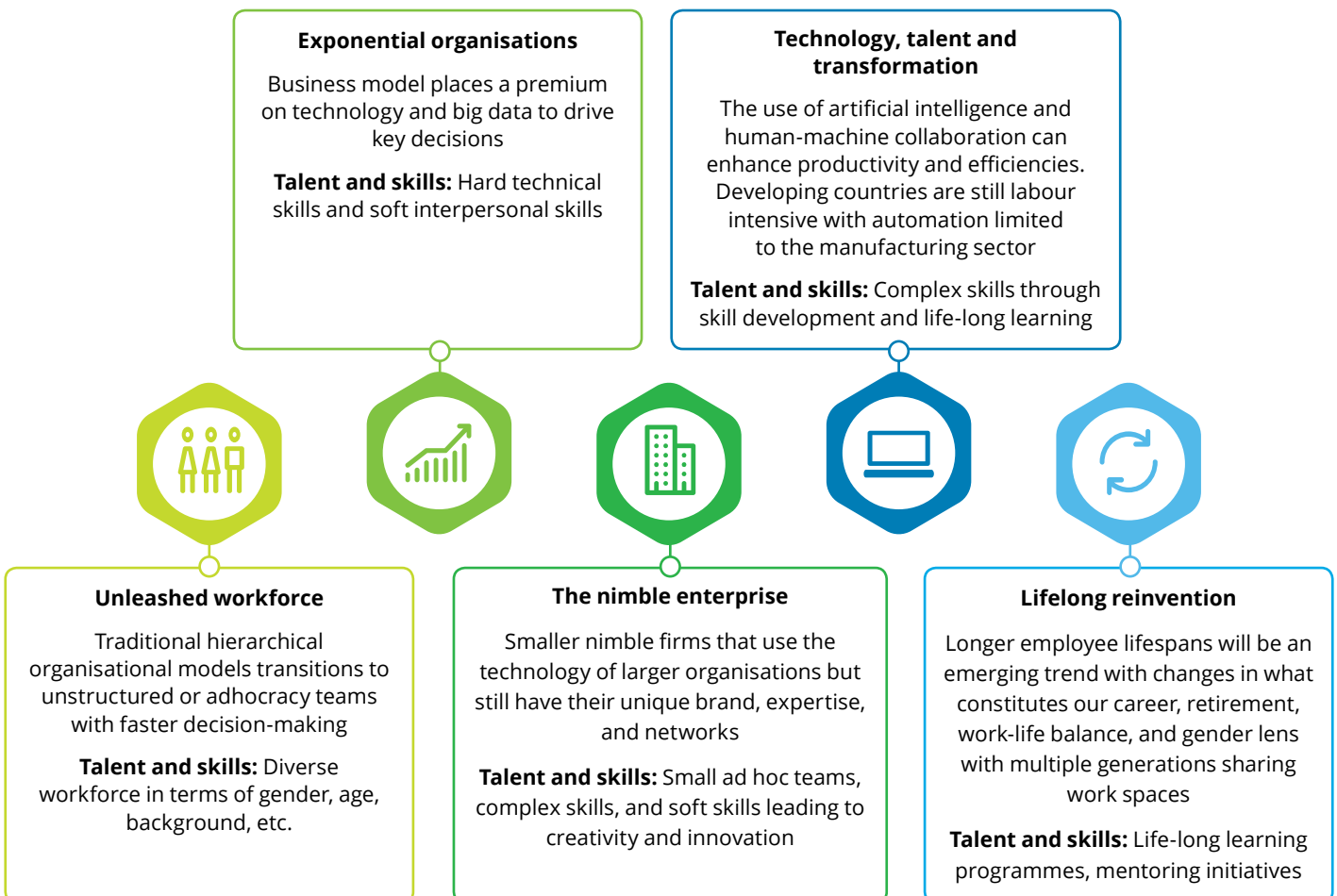
<sup>23</sup> Deloitte. 2018. The Evolution of Work.

## Opportunity or Challenge?

The success of the 4IR is centred on people benefitting from the revolution, in terms of accessing technology, and creating new products and services that can enhance the quality of life and decrease inequalities. The emergence of 4IR across markets is expected to be extremely varied and primarily influenced by development status, gender participation, and local social morals. It will take shape on the basis of local preferences, choices, and values, as well as shifting social, economic and political systems.

The introduction of new technologies and business models can in turn shape the kind of talent required, changing the nature of work and workforce. A recent report of Deloitte on the 'Evolution of Work' identified emerging realities of the future of work. These realities and their application (in terms of talent and skill sets that will enhance the preparedness of women towards the 4IR in an Indian context) are outlined below.<sup>24</sup>

### Emerging realities of the future of work



Source: Deloitte. 2018. The Evolution of Work. Shubha Srinivasan and Kumar, K. 2019. Preparing Youth in India from the Fourth Industrial Revolution. Chapter in Energising India. Fueling a Billion Lives. Rupa Books, India

The emergence of 4IR provided an opportunity to governments in developing economies to consider labour reforms, as the nature of work is largely labour intensive and where technology-driven

models are perceived to replace human efforts. This applies specifically to women who largely occupy high-intensity but low-skill and low-paying jobs.<sup>25</sup>

<sup>24</sup> Deloitte. 2018. The Evolution of Work.

<sup>25</sup> International Monetary Fund. 2018. India Country Report, No 18/4. <https://www.imf.org/~media/Files/Publications/CR/2018/cr1804.ashx>

Jobs in the manufacturing and construction sectors may be replaced by automation and most of the new jobs created between now and 2022 will have a technology aspect to them.<sup>26</sup> A report by the ILO anticipates that Asian nations can lose more than 80% of their jobs in the garment, textile, and apparel manufacturing sectors to automation (Sewbots). This can result in 9 million young girls losing their jobs.<sup>27</sup> The developmental challenges faced across Asia are similar—girls are dropping out of the school system, fewer girls are making the transition from education to employment, and they are five times less likely to take up a career involving technology or those linked to information and communications technology.<sup>28</sup> Apart from contributing towards digital equality, technology can help break gender stereotypes of the society. This is a positive outcome of the 4IR.

The government of Bangladesh and the UNDP have launched 5,000 digital centres run by a rural female entrepreneur that provide public services in remote areas.

India-UNDP and Ikea Foundation offer plastic and steel engineering courses to 100,000 young women, breaking gender stereotypes on shop floors.

Source: World Economic Forum. 2018. The 4IR fourth industrial revolution can smash gender equality-or deepen it. <https://www.weforum.org/agenda/2018/03/the-fourth-industrial-revolutioncould-smash-gender-inequality-or-reinforce-it/>

The disparities worsened by gender discrimination have largely limited women across Asia to lower paying jobs or unpaid jobs mainly in the unorganised sector. This raises the question—how prepared are women in terms of education and skill levels for the 4IR, especially in the Indian context?

### What is the preparedness of girls and women for the future of work?

In the Indian context, the government through the Ministry of Skill Development and Entrepreneurship has expressed a deep commitment towards improving female labour force participation. However, significant challenges persist, with gaps in formal education in terms of learning levels, drop-outs, and quality of education.<sup>29</sup> Current Labour Force Participation Rate (LFPR) has been documented to be 54% and only 5% Indians can be considered formally skilled.<sup>30</sup> Of 131 countries, India currently holds the 120th position in terms of the female labour force participation rates and gender-based violence witnessed.<sup>31</sup> Despite constituting 48% of the population, women and girls lack education and access to skill building and employment opportunities, resulting in to a fall in female employment rates from 35% of the workforce in 2005 to 28% in 2018. Female LFPR is currently 50% lower than male LFPR<sup>32</sup> in India, with 95% women (195 million) employed in the informal sector.<sup>33</sup>

<sup>26</sup> World Economic Forum. Jan 2018. Will the fourth industrial revolution be a revolution for Women? <https://www.weforum.org/agenda/2018/01/gender-inequality-and-the-fourth-industrial-revolution/>

<sup>27</sup> World Economic Forum. 2018. The fourth industrial revolution can smash gender equality-or deepen it. <https://www.weforum.org/agenda/2018/03/the-fourth-industrial-revolution-could-smash-gender-inequality-or-reinforce-it/>

<sup>28</sup> World Economic Forum. 2018. Tackling the toxic norms that hold women back in Asia. <https://www.weforum.org/agenda/2018/09/worried-about-the-fourth-industrial-revolution-in-asia-invest-in-girls/>

<sup>29</sup> Annual Status of Education Report, ASER. 2018. <http://img.asercentre.org/docs/ASER%202018/Release%20Material/aserreport2018.pdf>

<sup>30</sup> World Bank Group. Labour force participation rate. <https://data.worldbank.org/indicator/SL.TLF.CACT.ZS>

<sup>31</sup> The World Bank, 16 March 2018. Women in India's Economic Growth. <https://www.worldbank.org/en/news/speech/2018/03/17/women-indias-economic-growth>

<sup>32</sup> Economic Survey. 2018.

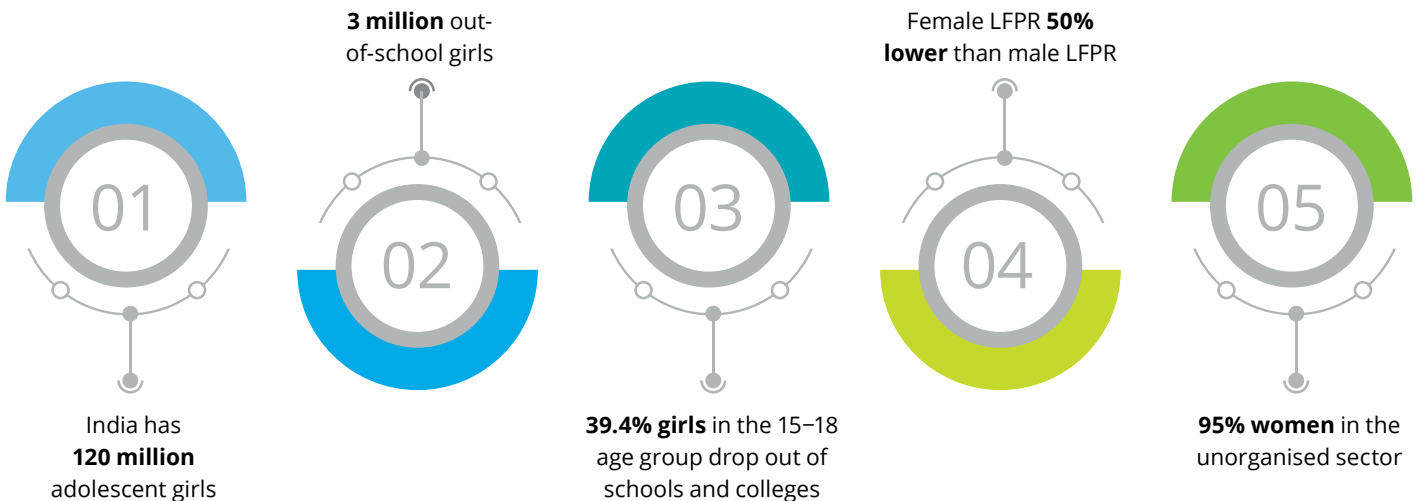
<sup>33</sup> Ministry of Women and Child Development. 2016. Study of Working Women and Privileges in the unorganised sector. [http://www.wcd.nic.in/sites/default/files/FINAL%20DRAFT%20REPORT\\_0.pdf](http://www.wcd.nic.in/sites/default/files/FINAL%20DRAFT%20REPORT_0.pdf)

## Opportunity or Challenge?

Gendered disparity triangulated through economic, social, and cultural barriers has resulted in poor education levels and employability of women and girls. This inequality increases with the emergence of the 4IR, with lower proportions of women demonstrating an understanding of digital technologies, automation, internet of things, and big data. At present, only 34% women in India have access to mobile technology.<sup>34</sup> A report by the Annual Status

of Education Report (ASER) captures the perceptions and extent of preparedness of 14–18 year olds to enter the workforce in rural India. About 60% of the youth who want to pursue higher education could not read a grade two text; only 43% of them could solve a simple division problem; and an entire cohort of youth had limited foundational reading and math abilities. In addition, 76% females had never used the Internet.<sup>35</sup>

## Education and employment gaps for girls and women



Source: World Bank Group. Labour force participation rate. <https://data.worldbank.org/indicator/SL.TLF.CACT.ZS>; Economic Survey 2018. Dasra. Tipping the scales. <https://www.dasra.org/assets/uploads/resources/Tipping%20the%20Scales%20-%20Strengthening%20Systems%20for%20Access%20to%20Justice%20in%20India.pdf>

<sup>34</sup> Harvard Kennedy School. Understanding the Barriers to, impact of, women's cell phone adoption in India. <https://epod.cid.harvard.edu/project/understandingbarriers-and-impacts-womens-cell-phone-adoption-india>

<sup>35</sup> All India Status of Education Report. 2017. Beyond Basics. <http://img.asercentre.org/docs/Publications/ASER%20Reports/ASER%202017/aser2017fullreportfinal.pdf>

Against this backdrop, the Indian government has launched gender-specific schemes, such as Beti Bachao Beti Padhao and Sukanya Samridhi Yojna, focused on providing equitable education opportunities for the girl child. In addition, skill training programmes translating into

sustainable employment options have also been launched under the Skill India Mission and Pradhan Mantri Kaushal Vikas Yojana, which have already provided training to 35 lakh women.<sup>36</sup>

In 2015, the Government of India developed the National Policy for Skill Development and Entrepreneurship to serve underprivileged communities and create a pool of globally competitive skilled workforce. Against this backdrop, the government conceptualised the National Skills Strengthening for Industrial Value Enhancement (STRIVE) programme to enhance the quality of training and improve the market image of vocational training provided at Industrial Training Institutes (ITIs) and through apprenticeships.

Despite a 30% reservation for female students across ITIs, female enrolment is extremely low. The female-to-male ratio across ITIs is 1:10. Of 36 states/union territories, only eight states currently reflect a 30% or higher participation of women. Additionally, six states accounting for 32% of the total ITI enrolment have recorded below 5% female enrolment. Due to this challenge, ITIs that are solely for women have started enrolling male candidates to sustain themselves. Although, the enrolment of female candidates across conventional engineering trades is negligible, their enrolment across non-engineering trades, including dressmaking, computer operations, and programme assistance, is high. Further, only 4% of the apprentices are women, leading to low participation of women (31%) in the overall labour force.

The STRIVE programme seeks to address the gender gap prevailing across ITIs and has adopted various methods to enhance female participation in skill training. Using a performance-based funding approach, STRIVE intends to incentivise ITIs and industries to increase female participation in the workforce. Under the programme, funding will be disbursed to industry clusters to aid female apprentices. Labour market transition for students across genders is accentuated by enhanced ITI industry connect, better institutional autonomy, and tracking outcomes of placed alumni.

Source: RFP: "Gender Study" to identify constraints on female participation in skills training and the labour market in India. National Project Implementation Unit (NPIU). Ministry of Skill Development and Entrepreneurship (Government of India). 5 September 2018. <https://msde.gov.in/>

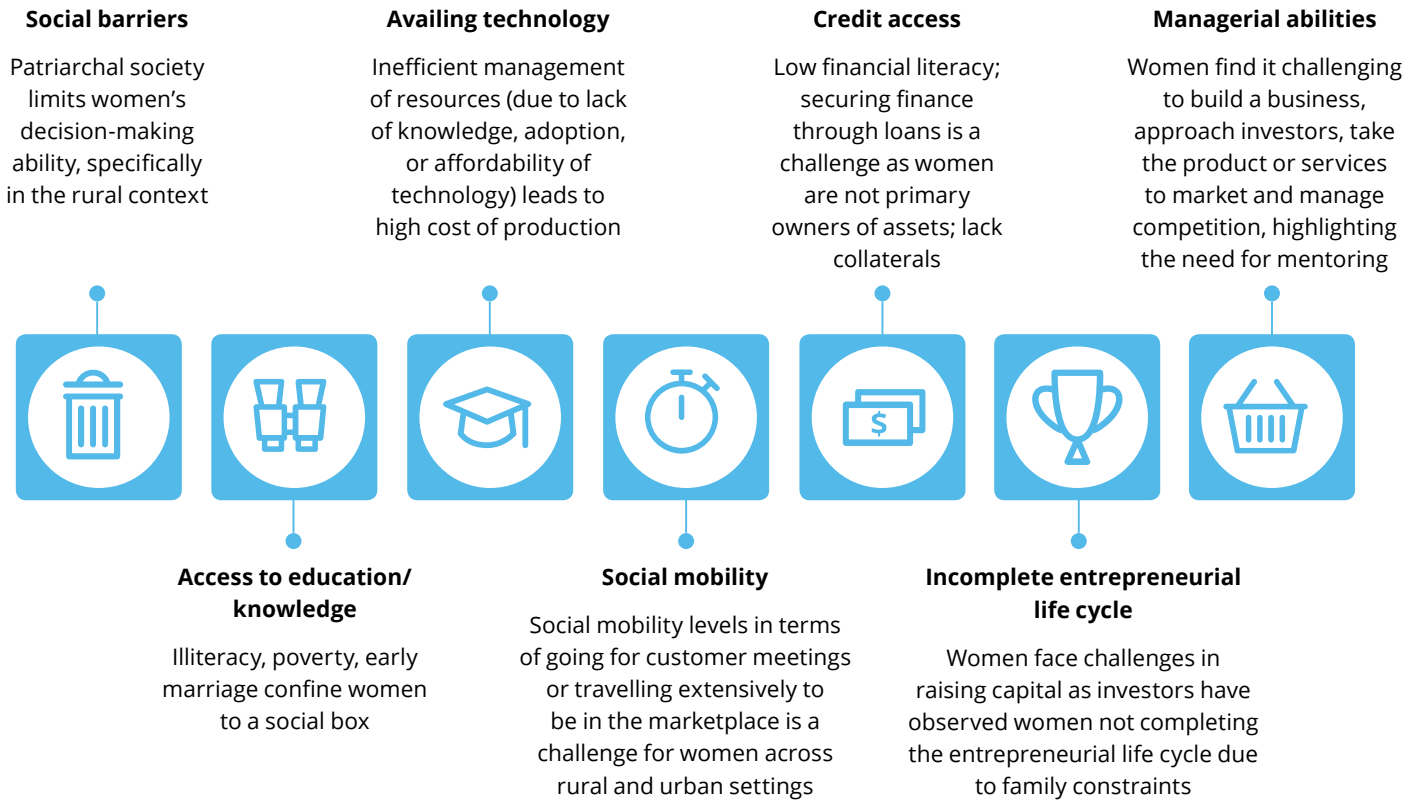
Entrepreneurship is considered as one of the key drivers of 4IR. The sixth Economic Census (2011) indicated that **women constituted only 14% of the 58.5 million entrepreneurs** in the country.<sup>37</sup> The

challenges faced by rural entrepreneurs include social barriers, limited access to a range of resources and knowledge, and low social mobility.

<sup>36</sup> Ministry of Skill Development and Entrepreneurship. 2018. [https://www.msde.gov.in/assets/images/latest%20news/Press%20release\\_Skill%20India%20empowers%20more%20than%2035%20lakh%20Women\\_8th%20March%202018.pdf](https://www.msde.gov.in/assets/images/latest%20news/Press%20release_Skill%20India%20empowers%20more%20than%2035%20lakh%20Women_8th%20March%202018.pdf)

<sup>37</sup> Census. 2011. Office of the Registrar General & Census Commissioner, India. <http://censusindia.gov.in/2011-Common/CensusData2011.html>

## Challenges for women entrepreneurs



Source: Bizztor Editors. 15 March 2018. The rise of women entrepreneurship in India [Infographics]. <https://bizztor.com/women-entrepreneurship-india/>; Singh V. & Gupta H. 2018. Women Entrepreneurship in Rural India- A Bang for the Buck in Economic Growth. <http://www.iosrjournals.org/iosr-jbm/papers/Vol20-issue4/Version-8/E2004082935.pdf>; Jahanshahi Asghar et al., 2010. Issues and challenges for women entrepreneurs in global scene, with special reference to India. [https://www.researchgate.net/publication/290309722\\_Issues\\_and\\_challenges\\_for\\_women\\_entrepreneurs\\_in\\_global\\_scene\\_with\\_special\\_reference\\_to\\_India](https://www.researchgate.net/publication/290309722_Issues_and_challenges_for_women_entrepreneurs_in_global_scene_with_special_reference_to_India); Danish Ansari. 2016. Women Entrepreneurship in India (An Empirical Study). <http://www.aejst.in/Women%20Entrepreneurship%20in%20India.pdf>

On a positive note, rebalancing the workforce in India and adding 235 million female workers can result in economic stability, growth, productivity, and income stabilisation. As an indirect impact, it can increase corporate profitability and lead to positive outcomes for women and children in areas such as health, education, and nutrition.<sup>38</sup> A recent research by the IMF predicts a 27% increase in India's GDP if women participation in the workforce increases to the same extent as men.<sup>39</sup>

The 4IR presents an opportunity for women to build skill sets needed to succeed in the future of work. The SDG framework calls for greater levels of coordinated involvement from governments, the private sector, not-for-profits, and communities (drivers and enablers of societal change) through an aggregated championing for gender equality.

<sup>38</sup> International Monetary Fund. 2018. Pursuing Women's Economic Empowerment. <https://www.imf.org/en/Publications/Policy-Papers/Issues/2018/05/31/pp053118pursuing-womens-economic-empowerment>

<sup>39</sup> Ibid







# Mapping opportunities

## Reimagining education and employment for women in the 4IR era

The emergence of the 4IR creates opportunities for women and girls to gain a new set of skills, which can allow them to emerge or grow as stronger participants in the workforce. Recognising the viewpoint that the 4IR can increase inequality as women are largely employed in the unorganised sector or in jobs that

require 'low skills' and offer 'low wages', transitioning or upgrading current skills levels using a set of enablers, could redefine the skilling landscape. The Deloitte survey findings and potential invention pathways can provide insights for invested stakeholders to build initiatives for women through accessing the right set of skills and joining the future of work.

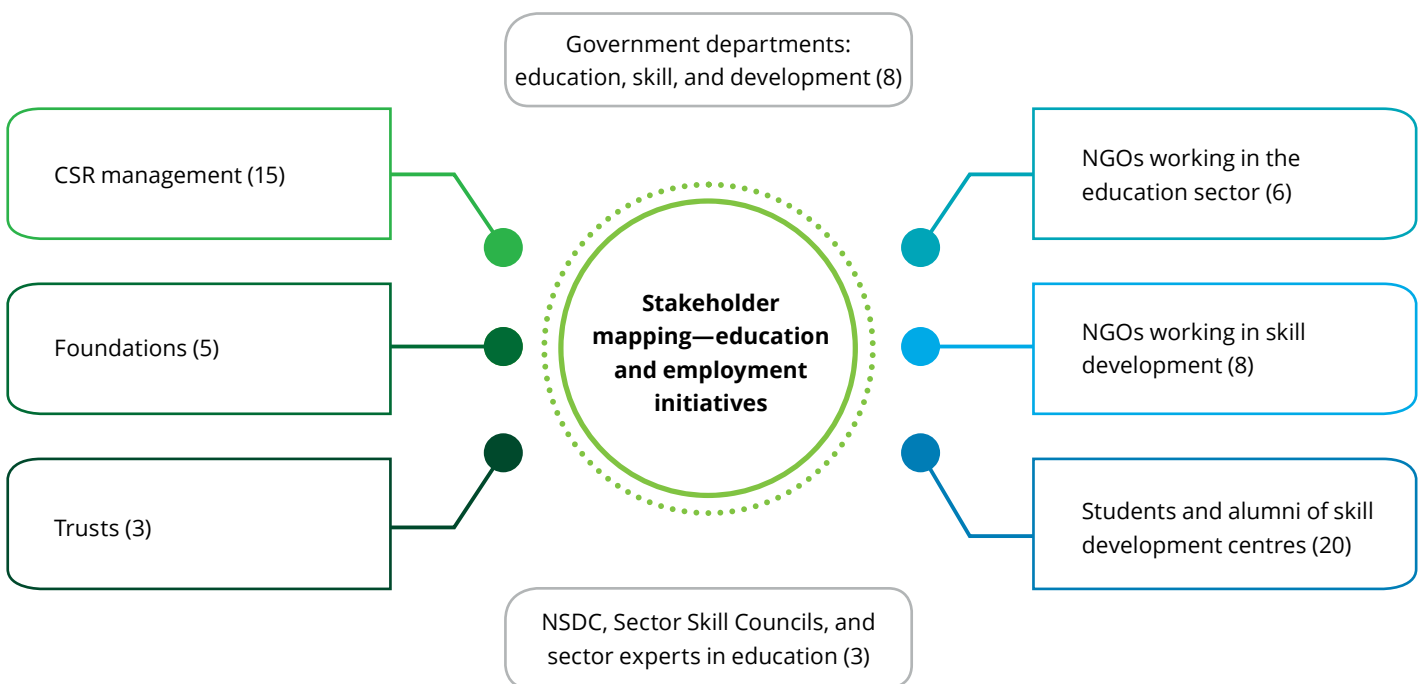
**Survey findings**

**Survey design**

Against this backdrop, we consulted with a range of stakeholders, including government officers in the education and skill development departments, Corporate Social Responsibility (CSR) teams and foundations, Non-Government

Organisations’ (NGOs) leaders, and select beneficiaries to understand key reasons for the current skill gaps and low employment levels of women. This was done to gain their perspectives on a set of actions that could improve the outcomes of education, skill development, and enterprise development initiatives.

**Stakeholder mapping**



**Key Findings**

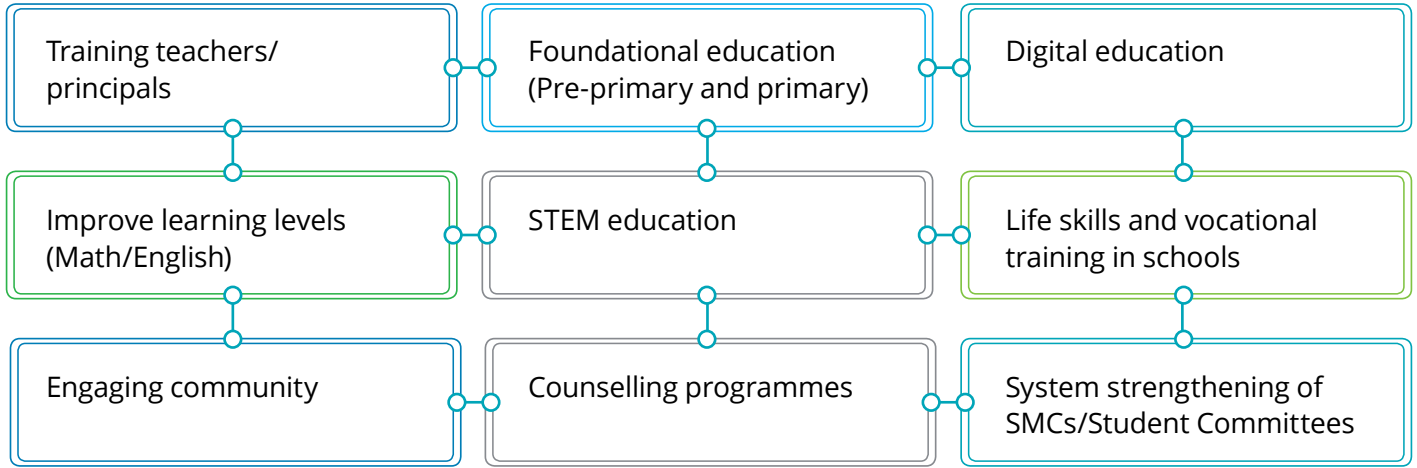
**Re-purposing education for the 4IR**

The survey findings indicate that preparing girls for 4IR will involve strengthening the education ecosystem through a basket of measures. These measures can create impact at a large scale by building capacities of teachers in government and private school in terms

of improved classroom practices, shifting from rote learning to engaged teaching techniques, etc.

The survey results outlining priority investment areas for education initiatives that can prepare youth and specifically girls for the 4IR are summarised in the figure below.

**Education initiatives to build skills of the future**



Government school teachers using technologies as critical tools for teaching children in classrooms were considered key differentiators. Another suggestion highlights the central role of digital education or technology in overcoming the shortage of 1.5 million teachers<sup>40</sup> by transitioning to a teacher-less or teacher-lite classrooms in remote or conflict-affected locations.

Almost all stakeholders across the Government, National Skill Development Corporation (NSDC), and industry sectors stressed on the importance of shifting the focus from the quantity of schools or infrastructure development to building foundational numeracy and literacy skills of children, specifically the girl child. This is expected to bridge an essential skill gap and increase the possibility of girls continuing their education past the primary and secondary levels of schooling. Nodal skill training agencies and NGOs highlighted that one of the

biggest reasons for women and girls not taking up vocational training beyond tailoring, hospitality or beautician courses is their lack of foundational and basic soft skills.

Embedding vocational training at the school level (secondary and higher) followed by apprenticeship opportunities and industry exposures were recognised by the industry as some key steps towards fueling the aspirations of girls. These girls can later enrol in vocational training courses at ITIs or other privately run centres.

Research indicates three key reasons for girls dropping out of the school system-societal constraints, lack of family support, and a limited understanding of career options. Our consultations revealed that education initiatives with counselling and mentoring avenues, life skills training, and exposure to career options could enable girls to take informed

<sup>40</sup> NDTV. 4 Dec 2017. Teacher's Crisis in India. Country Falls Short of 1 million teachers. <https://www.ndtv.com/education/indias-teachers-crisis-country-falls-short-of-1-million-school-teachers-1778220>

decisions. Responses from not-for-profit stakeholders highlighted the need for awareness initiatives for parents and community leaders or influencers, which could result in tangible shifts in socio-cultural barriers.

4IR pushes for inclusion of Science Technology Engineering and Mathematics (STEM) education in schools through innovative teaching methods, classroom practices, and pedagogy linked to the government curriculum. With a focus on skill-based economy centred on cognitive thinking, creativity and complex problem solving<sup>41</sup>, STEM in schools will foster a culture of innovation and curiosity.

### Repositioning skill development

Stakeholders highlighted that skill development programmes are likely to succeed if they are demand driven, and have training modules linked to national occupation standards (with strong industry inputs) and employment linked with sufficient opportunities for industry exposure or experiential learning. In addition, both corporates and not-for-profits engaged in training highlighted the criticality of embedding soft skills or life skills modules in training programmes and enhancing the workplace readiness of candidates using a range of measures.

Key enablers for reshaping gender-specific skill development initiatives for the 4IR include:

- Industry recognition of the possibility of employing women who have participated in vocational training programmes
- Demand-driven skill training
- Higher levels of inclusion to break gender stereotypes in vocational training courses
- Aligning courses to National Occupation Standards (NOS) to enhance employment opportunities
- Engaging industry in the delivery of training programmes
- Equipping training labs with newer technologies in consultation with or supported by industry through CSR initiatives (facilitating women entering the workforce with relevant technical skills)
- Creating apprenticeship and industry exposure opportunities
- Strong awareness initiatives for parents and community members to encourage women to consider working and staying in jobs
- Preparing women for placements and ensuring that they have the right support ecosystem – both locally or when they out-migrate for employment
- Skill based economy-From a talent lens, the industry offering skill set linked roles with growth opportunities can be critical for shifting perceptions on employing youth, specifically women graduating from vocational training courses
- With the nature and structure of traditional organisations evolving with the revolution, greater flexibility for working women across their lifecycle can be considered

### Promoting female entrepreneurship

Entrepreneurship and innovation are shaping the 4IR with the emergence of path-breaking business models and exponential technologies. In the Indian context, the sixth Economic Census (2011) indicated that **women constituted only 14% of the 58.5 million entrepreneurs** in the country, with 65% of them in the non-agriculture sector.<sup>42</sup> One of the key skill sets required to thrive in the 4IR is innovation and enterprise. Stakeholder consultations revealed that women entrepreneurs needed greater access to finance, resources, markets, networks, and mentorship to succeed in building smart

<sup>41</sup> World Economic Forum. 2016. The 10 skills you need to thrive in the fourth industrial revolution. <https://www.weforum.org/agenda/2016/01/the-10-skills-you-need-to-thrive-in-the-fourth-industrial-revolution/>

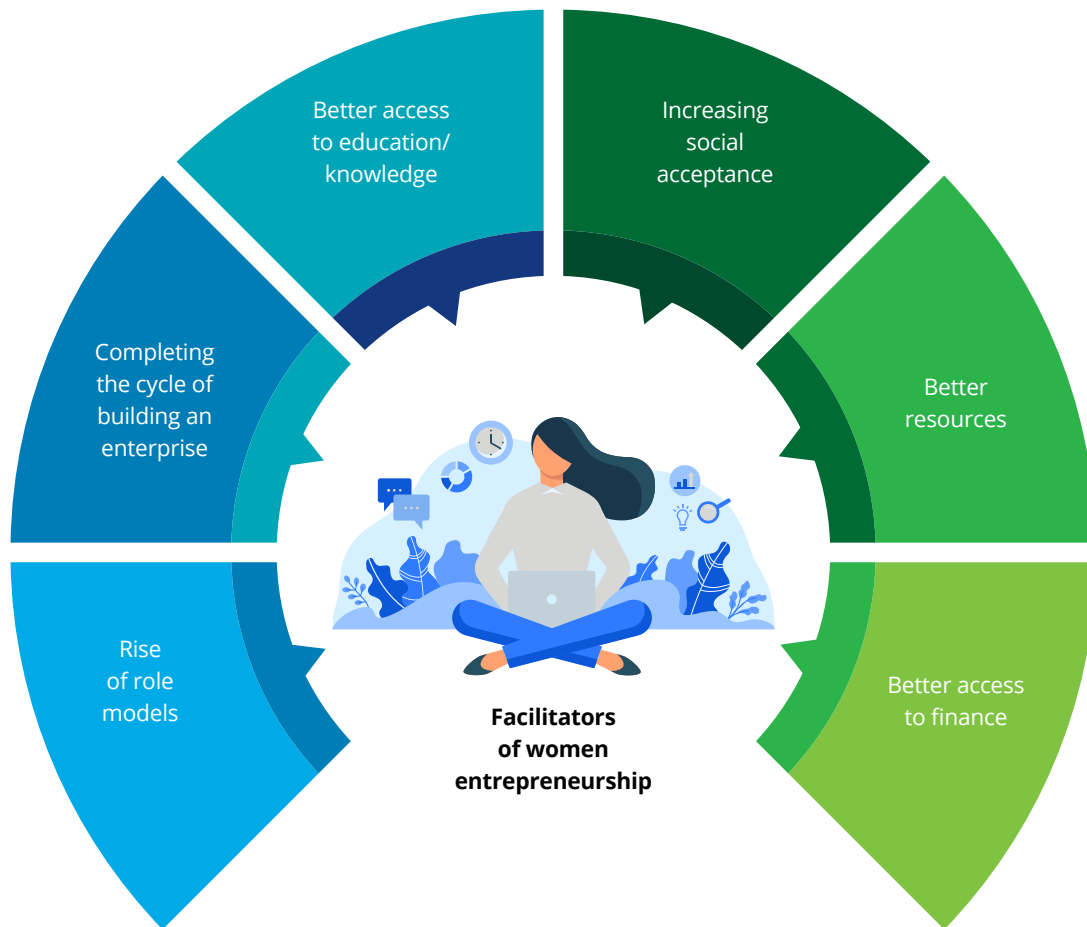
<sup>42</sup> MOPSI. Census, 2011. Office of the Registrar General & Census Commissioner, India. <http://censusindia.gov.in/2011-Common/CensusData2011.html>

## Opportunity or Challenge?

business models. Strong managerial and communication abilities, including ability to complete the entire entrepreneurship cycle, from building a business case to taking the concept to market with relevant

staying capacities, are required. Initiatives or advocacy programmes for increasing social acceptance of women leading enterprises will be a key enabler.

## Facilitators of women entrepreneurship



## Opportunity Areas for Empowering Women to Join the Workforce

A set of key considerations that can be interweaved into future interventions to shift the female narrative from disparity to empowerment include strengthening the government's education ecosystem

through building the capacities of teachers and education officials, integrating technology in the delivery of classroom lessons, focusing on digital literacy, and promoting STEM education in schools to build future-ready skills such as problem solving, critical thinking, and creativity.

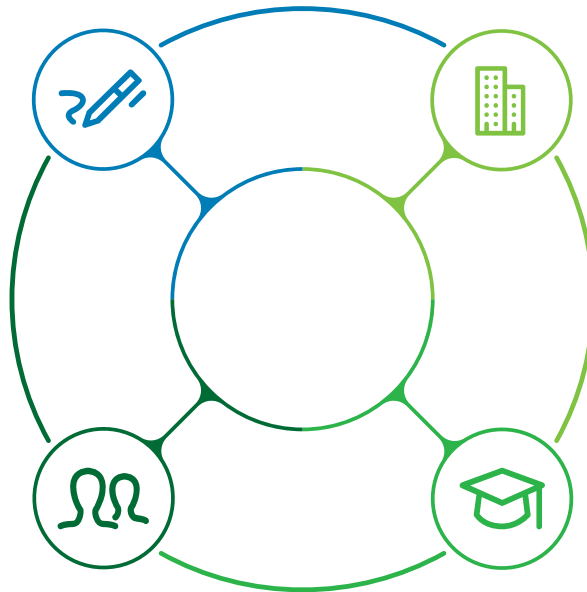
**Education Initiatives to nurture future ready skills**

**Quality of education**

Structuring of community and institution-centric education interventions aimed at improving outcomes of education

**Teacher training**

Training teachers and principals to improve classroom practices and introduce innovative pedagogy



**Engaging community**

Awareness at the community level on educating the girl child, to achieve shifts in perceptions and behaviour

**Career counselling**

Providing mentoring and guidance to children on continuing education and understanding career options

The survey findings and our extensive consultations validated our initial perceptions—women are enrolling largely in skilling trades that are considered ‘gender appropriate’ instead of building their skills to match their personal aspirations and meet industry requirements.

**Four skill categories to engage more women at workplaces**

Research indicates that the impact of introducing newer technologies will, in turn, influence job roles to complete technology-related tasks. The talent pool that is already a part of workforce

or those aspiring to join workforce may lack skills to perform those tasks. Hence, there is a need to build an agile workforce with future-ready skills, with the help of a constant learning cycle that involves reskilling and upskilling. With the launch of automation and robotics, globally 48% women are more likely to lose jobs, specifically office management and administrative roles.<sup>43</sup> The same report highlights that the low involvement of women in STEM education leaves women unprepared for the 4IR, with one woman across the globe gaining one STEM-related job for every 20 similar jobs lost.<sup>44</sup>

<sup>43</sup> World Economic Forum. 2018. [http://www3.weforum.org/docs/WEF\\_Future\\_of\\_Jobs\\_2018.pdf](http://www3.weforum.org/docs/WEF_Future_of_Jobs_2018.pdf)

<sup>44</sup> Ibid.

## Opportunity or Challenge?

In the Indian context, the gender divide in terms of education and skill development is wider. Deloitte recommends four skill categories—workforce readiness, soft skills, technical skills, and entrepreneurship—for the business community, the government, and the not-for-profit sector to internalise as invested

stakeholders to help women succeed in the 4IR.<sup>45</sup>

Introducing women to skill development models that include a combination of these categories is expected to support them in adapting to the shifting nature of work.

### Workforce readiness

Foundational skills to enter the workforce and be successful. eg. Digital literacy, resume writing, time management, professionalism

### Soft skills

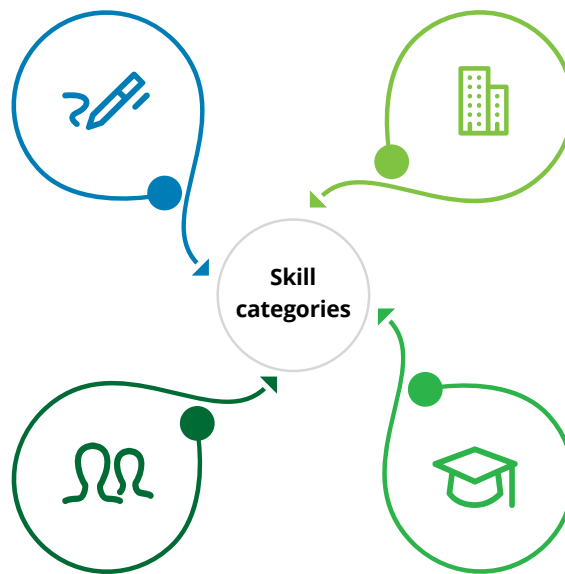
Social and communication skills that enable interactions with diverse stakeholders like customers, colleagues and management

### Technical skills

Knowledge and capabilities to perform specialised job tasks Eg. Computer programming coding, financial management, mechanical, scientific and technology linked skills job specific skills—electrician, welder, nursing

### Entrepreneurship

Providing knowledge and building abilities to translate an idea into a business plan, combined with digital and financial literacy and access to markets



Source: Deloitte. 2018. Preparing Tomorrow's Workforce for the Fourth Industrial Revolution.

<sup>45</sup> Deloitte. 2018. Preparing Tomorrow's Workforce for the Fourth Industrial Revolution



The figure below maps the gender specific challenges identified by the Ministry of Skill Development and Entrepreneurship that prevail in the Indian skilling ecosystem.

A set of potential intervention pathways linked to the four skill categories in line with the 4IR have been outlined below.

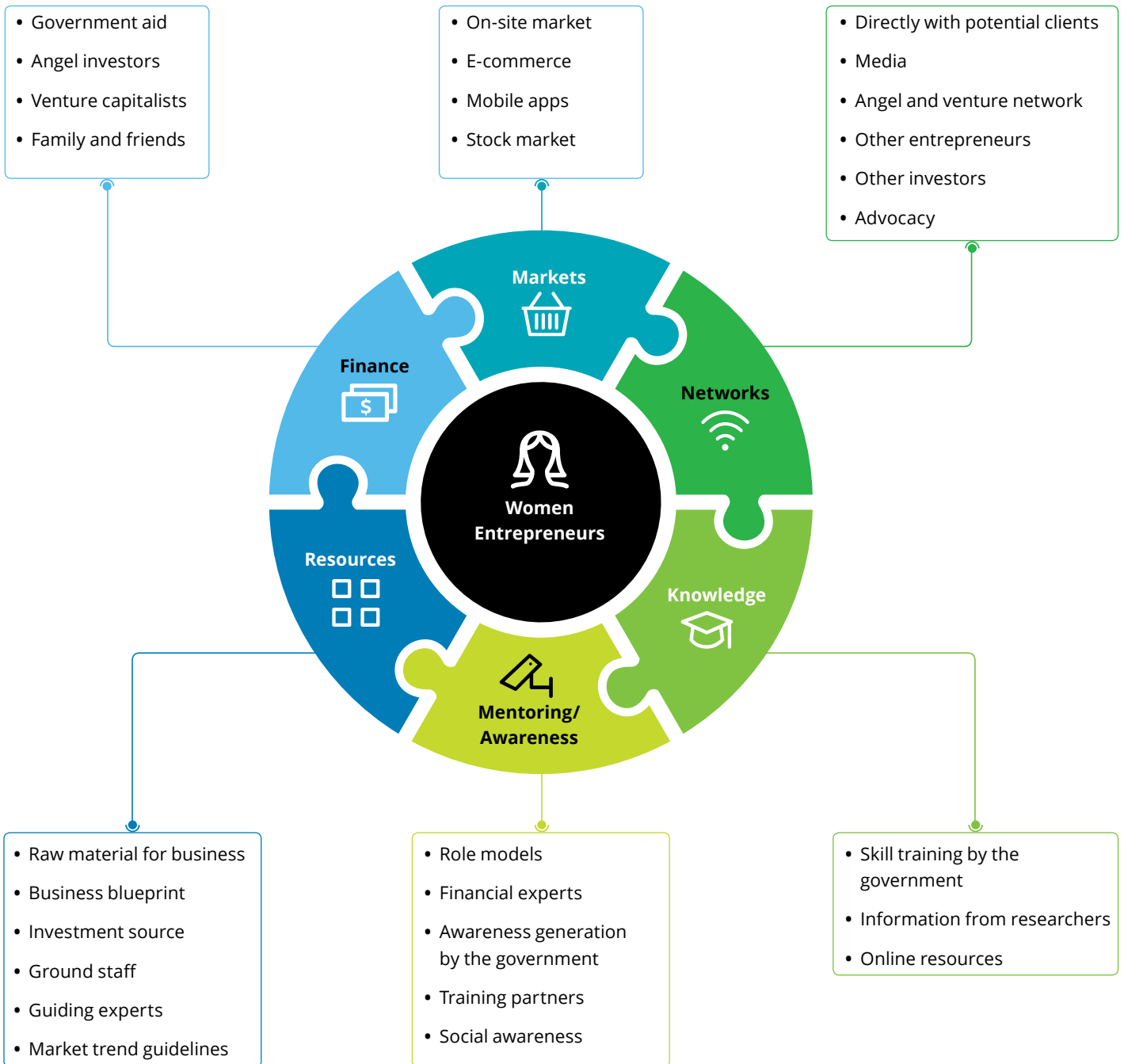
Challenges in India's skill development & entrepreneurship ecosystem	Potential areas of intervention
<ul style="list-style-type: none"> <li>• Lower female workforce rates participation for women due to social, economic, and cultural barriers</li> <li>• Skills mismatch – demand and supply</li> <li>• Limited focus on building soft skills and life skills</li> <li>• Challenges with the mobilisation of women; these are accentuated at the placement stage</li> <li>• Gender stereotyping in the uptake of courses, such as sewing and beautician</li> <li>• Women have limited industry exposure</li> <li>• Limited opportunities for gaining education, access to capital, technology and resources for enterprise development</li> </ul> <p>Source: Ministry of Skill Development and Entrepreneurship. 2017-17. Annual Report. <a href="https://www.msde.gov.in/assets/images/annual%20report/Annual%20Report%202016-2017%20-%20English.pdf">https://www.msde.gov.in/assets/images/annual%20report/Annual%20Report%202016-2017%20-%20English.pdf</a></p>	<p><b>Improving workforce preparedness</b></p> <ul style="list-style-type: none"> <li>• Workforce readiness is necessary for entry and ongoing success in the workplace. It ranges from initial job search to maintaining continuous employment.</li> </ul> <p>Areas of intervention</p> <ul style="list-style-type: none"> <li>• Supporting women in finding and securing appropriate employment</li> <li>• Enabling them to succeed within their workplace by equipping them with updated curriculum and pedagogy</li> <li>• Supporting skill development programmes that include literacy, numeracy, digital literacy, resume writing, time management, and professionalism</li> </ul> <p><b>Improving soft skills</b></p> <p>Soft skills are personal attributes, and social and communication skills that support interpersonal relationship development</p> <p>Areas of intervention</p> <ul style="list-style-type: none"> <li>• Supporting programmes that enable candidates to better adapt with internal and external stakeholders at their workplaces</li> <li>• Supporting skill development programmes that stress on improving communication, collaboration, adaptability, teamwork, and self-confidence</li> </ul> <p><b>Improving technical skills</b></p> <p>Technical skills are the knowledge and capabilities of performing specialised tasks</p> <p>Areas of intervention</p> <ul style="list-style-type: none"> <li>• Supporting skill development programmes that provide women technical and domain expertise to perform job-specific tasks through gender neutral reskilling and upskilling with a focus on experiential practical training</li> <li>• Skill development programmes that include sessions on computer programming, coding, project management, financial management, and mechanical functions</li> </ul> <p><b>Supporting entrepreneurship</b></p> <p>Entrepreneurial skills are the knowledge and abilities that help create and build a business model out of an idea</p> <p>Areas of intervention</p> <ul style="list-style-type: none"> <li>• Supporting women in understanding entrepreneurial models and establishing their own businesses</li> <li>• Supporting skill development programmes that include sessions on innovation, creativity, resourcefulness, risk-taking, and business acumen</li> </ul>

Source: Derived from the Four Skill Categories in Deloitte. September 2018. Preparing Tomorrow's Workforce for the Fourth Industrial Revolution

**Promoting women entrepreneurs**

A set of broad measures to engage women entrepreneurs has been outlined below. A one-size-fits-all approach may not

work taking into consideration the access, availability, and relevance of influencing factors in the urban and rural contexts.



**01. Developing a business blueprint**

Women entrepreneurs need support and the know-how to prepare a blueprint or prototype for their business and envision how to map out their plans in terms of approaches for obtaining finance, resources, technology, and the right networks to shape their business plans.<sup>46</sup>

**02. Training and mentoring**

Avenues to access training and mentoring before establishing a business can provide female entrepreneurs the pre-requisite edge. Initiatives such as mobile training

centres and innovation incubation centres could be potential delivery methods to engage more women. Sowing seeds at the school level or catching them young with a cultivated interest in science, engineering, IT, and research can carry the spark forward as they reach adulthood. The government should also provide skill training on using technology at start-ups. Girls in schools need to be treated and trained in an equal manner to boys with a mindset to become entrepreneurs of the future in fields such as science, engineering, IT, and research.<sup>47</sup>

**The Atal Innovation Mission (AIM)** is a flagship initiative set up by the NITI Aayog to promote entrepreneurship, cross-learning, and innovation across the country. AIM is also envisaged as an umbrella innovation organisation that would play an instrumental role in alignment of innovation policies between central, state and sectoral innovation schemes to promote innovation and entrepreneurship across school, science, engineering and higher academic institutions, SME/MSME, industry and not-for-profits.

Some of the key initiatives under AIM are outlined below:

**Atal Tinkering Labs (ATLs)** are being set up in schools to promote creativity and innovative mind sets in schools across the country. This includes dedicated workspaces spread over 1200-1500 sq ft. and equipped with do-it-yourself kits of modern technologies (such as 3D printers, robotics, internet of things, and miniaturised electronics) enable students (Grade VI to Grade XII) to learn and work on innovative solutions.<sup>48</sup> AIM provides a one-time establishment cost of INR 10 lakhs and operational expenses of INR 10 lakh for a maximum period of five years to each ATL.<sup>49</sup>

Currently, 5441 schools were selected for ATL grants. By the end of 2019, 5,000 schools are expected to be operational with ATLs.<sup>50</sup> ATLs are currently training more than 60 lakh students across India.<sup>51</sup>

AIM has also set up **Atal Incubators (AICs)** at the university, NGO, SME, and corporate industry levels to promote entrepreneurship in universities and industry. These incubators are built specifically to support start-ups from various fields. AIM also provides a grant of up to INR 10 crore and support to successful applicants to start or scale up greenfield incubators. Currently, of a total of 2,676 applicants, 10 Existing Incubation Centres (EICs) and 100 greenfield incubators (AICs) have been selected. In addition, the Atal New India Challenge (ANIC) has been launched to promote specific product innovations that can have a social or economic impact.

<sup>46</sup> John Kaviarasu. 2018. Women Entrepreneurship in Indian Context: A Critical Study of its Challenges and Solutions. [https://www.researchgate.net/publication/327097837\\_Women\\_Entrepreneurship\\_In\\_Indian\\_Context\\_A\\_Critical\\_Study\\_Of\\_Its\\_Challenges\\_And\\_Solutions](https://www.researchgate.net/publication/327097837_Women_Entrepreneurship_In_Indian_Context_A_Critical_Study_Of_Its_Challenges_And_Solutions)

<sup>47</sup> MENA OECD Investment Programme. 2008. Promoting Women's Entrepreneurship in the MENA Region-Background Report and Policy Consideration. <http://www.oecd.org/mena/competitiveness/36086903.pdf>

<sup>48</sup> Digital Learning. June 2018. Atal Innovation Mission: Promoting Innovation and Entrepreneurship. <https://digitallearning.eletsonline.com/2018/06/atal-innovation-mission-promoting-innovation-and-entrepreneurship/>

<sup>49</sup> Niti Aayog. 2019. Application for Atal Tinkering Laboratories. <http://niti.gov.in/content/atal-tinkering-laboratories>

<sup>50</sup> Niti Aayog. 2019. Atal Innovation Mission. <http://www.niti.gov.in/content/atal-innovation-mission-aim>

<sup>51</sup> Atal Innovation Mission. Atal Tinkering Labs. <https://www.aim.gov.in/hubs-of-innovation.php>

With an objective of supporting women entrepreneurship in the country, NITI Aayog launched the **Women Entrepreneurship Platform (WEP)** in March 2018 on the International Women's Day. In addition to providing services such as free credit ratings, mentorship, and funding support to women entrepreneurs, apprenticeship and corporate partnerships, WEP will encourage entrepreneurs to share their entrepreneurial journeys, stories, and experiences to encourage mutual learning.<sup>52</sup> Various corporates and industry bodies, such as NASSCOM, CRISIL, SIDBI, Shopclues, CII, FICCI, and Facebook, have committed to mentoring women entrepreneurs.<sup>53</sup>

**The WEP intends to build a collaborative environment between various stakeholders**



Source: Women Entrepreneurship Platform. <https://wep.gov.in/>; Atal Innovation Mission. 2018. An Overview. <http://www.niti.gov.in/content/atal-innovation-mission-aim>

**03. Access to finance**

Women entrepreneurs need access to seed capital, growth capital, credit and stronger financial management abilities. The barriers for women to access finance are largely non-financial; these include education, economic background, and orientation of financial institutions. Despite, women borrowers demonstrating a stronger ability to repay loans, significant opportunities are available to strengthen the ecosystem from both the supply and

demand sides.<sup>54</sup> From the supply side, the knowledge of financial products and services, access to and control of physical resources or collaterals will improve the prospects of women entrepreneurs to access finance. Similarly, on the demand side, banks can develop gender-specific products and services, such as the World Bank Finance Initiative, Annapurna Scheme (State Bank of Mysore), and Cent Kalyani Scheme (Central Bank of India), tailored to the needs of women entrepreneurs across sectors.<sup>55</sup>

<sup>52</sup> Vikaspedia. 2019. Women Entrepreneurship Platform. <http://vikaspedia.in/social-welfare/women-and-child-development/women-development-1/women-entrepreneurship-platform#section-3>

<sup>53</sup> HerStory. March 2018. NITI Aayog launches Women Entrepreneurship platform on International Women's Day. <https://yourstory.com/2018/03/niti-aayog-launches-women-entrepreneurship-platform-international-womens-day>

<sup>54</sup> World Bank. 2013. Improving Access to Women Owned Businesses in India. <https://www.ifc.org/wps/wcm/connect/a17915804336f2c29b1dff384c61d9f7/Womenownedbusiness1.pdf?MOD=AJPERES>

<sup>55</sup> News 18. 2017. 9 Schemes for Women Entrepreneurs. <https://www.news18.com/news/indiwo/work-and-career-9-schemes-for-women-entrepreneurs-in-india-1522125.html>

**04. Pricing of cooperatives**

Women tend to price their products lower due to lack of self-confidence or ability to negotiate in the marketplace and manage competition. The formation of women-led co-operatives can result in building platforms to get peer support and set fair prices.

In developing economies, the World Bank has structured intervention concepts such as safe transport, flexible schedules, and childcare support for women (from rural and semi-urban areas) enrolled in vocational training or enterprise development courses to improve their chances of taking up or continuing employment.<sup>57</sup> Interestingly, as the nature of work shifts with constructs such as the unleashed workforce, women with relevant skill sets are expected to have improved opportunities for further flexibility and inclusion.<sup>58</sup>

**05. Developing managerial and leadership skills**

Women need mentoring to build life, soft and core domain skills, the ability to negotiate, manage day-to-day business operations, and work in teams for other women.

**06. Social awareness and advocacy**

Women, specifically rural women, face numerous social, economic, and cultural barriers to development, which extends to building or owning their own business. While the government has taken significant steps (such as the Atal Innovation Mission) to remove these barriers, it is critical to understand how technology can enable a shift in societal perceptions and practices. Women in rural areas express an interest in learning skills required for local jobs. This demonstrates potential for the local-level scaling up of enterprise development initiatives for women such as those introduced by Mann Deshi or Development Alternatives.<sup>56</sup> These programmes demonstrate outcomes such as economic empowerment, social inclusion, and increased agency.

**07. Accessing the right networks**

Providing women opportunities to network and interact with role models can be integral to building their businesses further and gaining insights on managing work-life priorities. Family pressure and responsibilities are one of the key reasons for not completing the entrepreneurial life cycle and accessing finance. Platforms such as NITI Aayog's women entrepreneurship, ASCENT, Hen India, Women Entrepreneurs India, and Federation of Women Entrepreneurs offer women opportunities to interact with peer groups and gain access to compliance, mentoring, finance, and technology.<sup>59</sup>

<sup>56</sup> Mann Deshi Foundation. <http://manndeshifoundation.org/> and Development Alternatives. <https://www.devalt.org/>

<sup>57</sup> World Bank. 2018. Women in India's Economic Growth. <https://www.worldbank.org/en/news/speech/2018/03/17/women-indias-economic-growth>

<sup>58</sup> Adhocracy refers to flexible, adaptive and informal work structures that are aligned to realities such as the unleashed workforce and nimble enterprise.

<sup>59</sup> Women entrepreneurship platforms. <https://wep.gov.in/>; <http://www.fiwe.org/>; <http://henindia.com/>; <https://www.womenentrepreneursindia.com/businessnetworking.php>



# Case studies

A set of narratives that can shape our understanding of training women for the future of work is outlined in this section. The cases attempt to answer a few key questions:

01. What barriers do women face in accessing the right set of skills and entering the workforce?
02. What are the unique solutions that build women's capacity to emerge as major stakeholders in the 4IR?
03. What are the key enablers for women to enter the workforce or establish an enterprise?

04. What can be considered the continued impact of such initiatives?

These narratives have been shared under four skill categories that are likely to enable women to succeed in the 4IR. However, the case studies will illustrate a significant overlap across the skills of the evolving future based on industry, geography, and social setting.

## Skill categories



Soft skills



Technical skills



Workplace readiness



Entrepreneurship



**1. Soft skills**

Employers and skill training experts assert that it is not just domain or technical skills that enable women to enter and stay in the workforce. Women innately demonstrate high-value soft skills (in terms of communication skills), ability to build

interpersonal rapport and multi-task.<sup>60</sup> It is critical to build on of these essential life skills to set personal targets and goals; develop abilities to work in teams and build confidence; as these traits are sought by employers in youth and specifically women entering workforce.



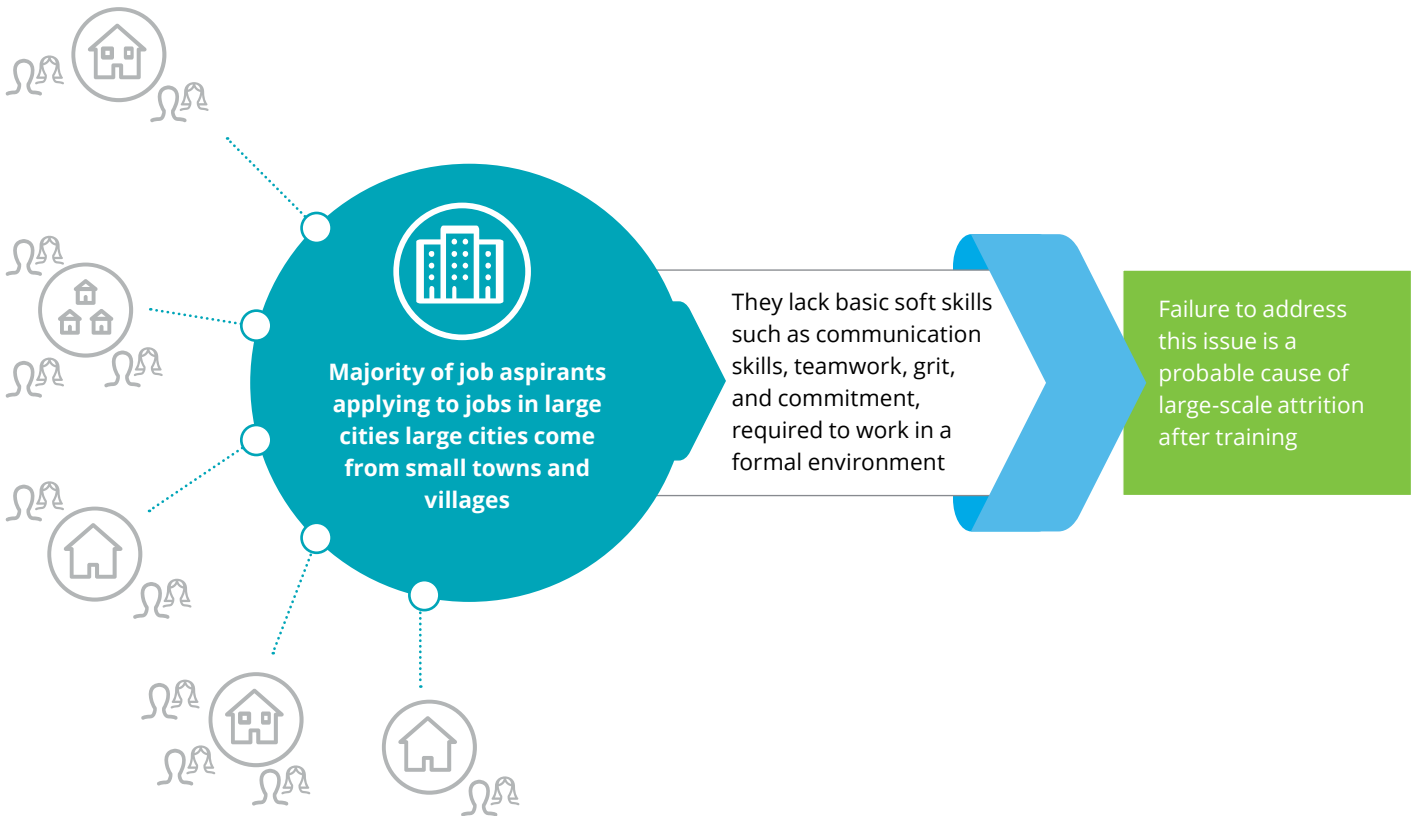
**Tata STRIVE: Empowering today's youth to effectively take on job roles**



<sup>60</sup> World Economic Forum. Jan 2018. Will the fourth industrial revolution be a revolution for Women? <https://www.weforum.org/agenda/2018/01/gender-inequality-and-the-fourth-industrial-revolution/>



**Issue**



**Impactful solution**


Since its inception, Tata STRIVE felt the need to train youth on skill sets, including soft skills, life skills, and foundation skills. Its offering, the Youth Development Module (YDM), is a training programme that provides a mix of these skills.


The Tata STRIVE programme seeks to develop youth holistically, by focusing on the connection between the Head-Heart-Hand. The YDM aims to cultivate and nurture behavioural components, such as attitude, emotions, values, and motivations. Based on the Ice-Berg model (stating that our 'above the surface' behaviour visible to others is driven by things hidden to others 'below the surface'), the module is designed around immersive experiences. Techniques used are hands-on, leading to a greater probability of bringing positive behavioural changes. The YDM has 300 hours of content developed in-house and modules that are designed as independent plug and play components. This allows great

flexibility in selecting and customising the curriculum as per requirement.

The YDM comprises 40% of all the training programmes irrespective of the technical skill being taught. Tata STRIVE ensures the integration and effective implementation of technical or cognitive skills content with non-cognitive skills or the YDM. Such skills (both personal and professional dimensions) then make the beneficiary employable—a major differentiating factor of Tata STRIVE's skill development initiative.

At the heart of the YDM is the belief that the shift from 'me' to 'happy me' is a result of three fundamental processes—self-management, relationship management, and responsible decision-making. This is backed by key course elements, such as grit, goal setting, change management, sustainable thinking, systems thinking, relationship management, and communication strategy.

 Tata STRIVE ensures integration and effective implementation of the technical or cognitive skills content with non-cognitive skills or the YDM.

 YDM covers job readiness components, such as mapping career goals, preparing for interviews, ensuring safe migration, and managing challenges at workplaces.

## Opportunity or Challenge?

Each module is carefully curated to be relevant, and adaptable to the learner's personal goals and potential. The beneficiaries that form the target audience of Tata STRIVE, often come from backgrounds where parents struggle to make ends meet and do not have the 'mind space' to invest in building value systems, goals, and beliefs. The 'Self Discovery' module in particular focuses on key internal motivators, such as grit and goal setting. What we learned from our learners' experiences was that they often quit their jobs because they did not know how to deal with superiors. Teaching them grit, determination, relationship management, and other life skills becomes essential.

Some of the most essential and transformative sessions of the YDM are on change management. It is important to explain to learners that change (organisational or personal) is inevitable, and thus teach them to cope with change effectively. Change management is taught through three major components: understanding that change is here, analysing the attitude towards change, and adopting and managing change through helpful tips and tricks. In doing so, the class also takes turns at introspective questions, such as "Why is change so difficult?" Such questions are discussed to enable learners to plot their journey on their personal 'change journeys' and aid the process of adopting change.

Another important component of the YDM is the module on workplace preparedness. The module covers job readiness components such as mapping career goals, preparing for interviews, ensuring safe migration, and managing workplace

challenges. The module aims to make women more confident to deal with work-life challenges.

Continuous assessments in the form of Youth Development Score Card (YDSC) are crucial for the programme. These assessments include monitoring trainee's progressive participation and performance both during and after the programme. Facilitators do not only compare entry-level and exit-level mindset and skill sets. They also provide appropriate remedial and reinforcement capsules to further assist youth to move easily and effectively across the training programme.

Given the unique design of the YDM and the persistent challenges faced by beneficiaries, having a specially trained faculty becomes a critical part of the programme. They are not just facilitators, but also coaches and mentors.

Achieving behavioural transformation in a limited period is a challenge. Hence, the YDM is made a part of the daily curriculum for the entire training period of 2–6 months. This move makes the YDM one of the most memorable and powerful experiences that learners take back with them. It is common for graduating youth to speak passionately about how the YDM has made a lasting impact on their lives. For Tata STRIVE, enabling the journey of every beneficiary and learner along with their personal growth continuum of 'I AM-I CAN-I WILL' is a source of joy. This takes the company one step closer to its vision of enabling sustainable livelihoods.<sup>61</sup>



### Skills integration

The YDM includes soft skills and workplace readiness and comprises 40% of all training programmes irrespective of the technical skill being taught.



### Monitoring of youth development

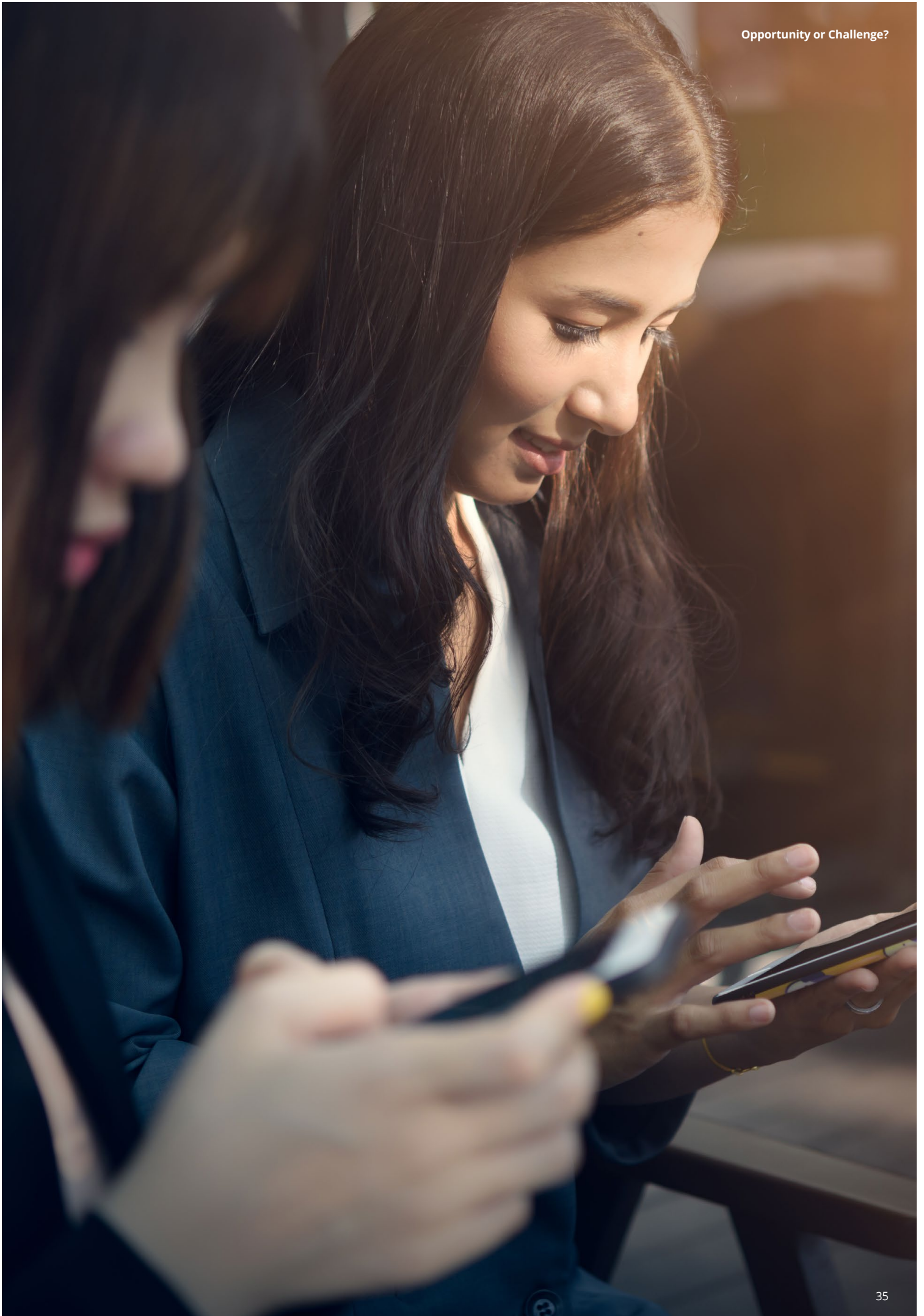
The youth development score card monitors youth's progressive participation and performance during and after the training.



### Faculty training

Facilitators undergo 'empowerment coaching' modules that provide them the skills to mentor and coach beneficiaries.

<sup>61</sup> Data points and information shared by Tata STRIVE. <http://tatastrive.com/>



## 2. Workplace readiness

Sometimes, simple tasks, such as building a strong curriculum vitae and a personal brand (to thrive at workplaces), accessing the right foundational skills, achieving

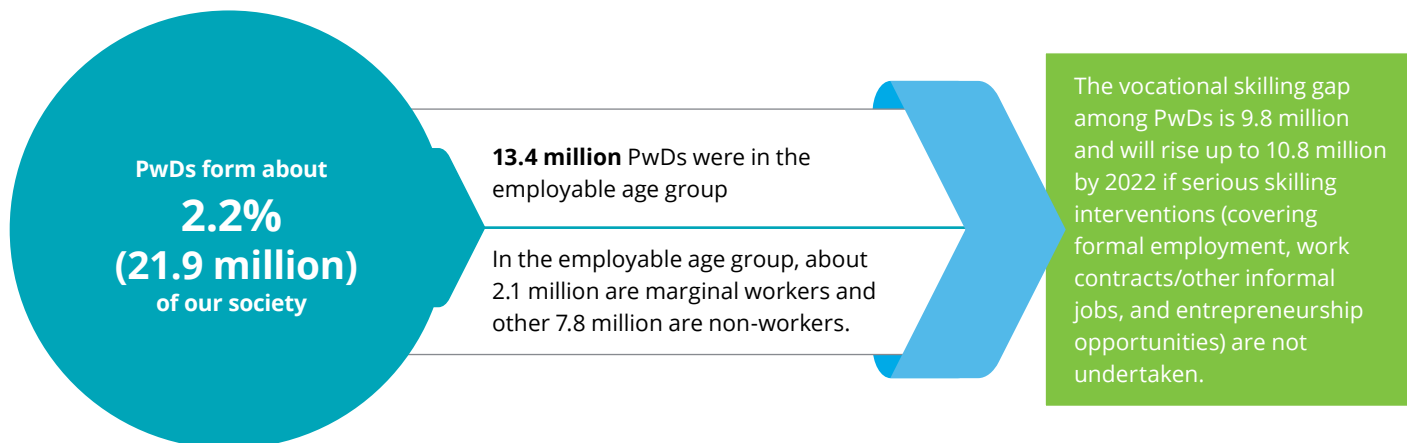
digital and financial literacy, gaining an understanding of the market or industry perspective, can help women be a greater part of the workforce.



### i. TRRAIN: Driving self-sufficiency among people with disabilities (PwDs)



**Issue**



**Solution**

Trust for Retailers & Retail Associates of India (TRRAIN) was founded in 2011 by Mr. B S Nagesh with the vision of empowering people in the retail sector and making efforts to achieve immediate and lasting changes in the lives of retail associates in India.

TRRAIN's PANKH – Wings of Destiny program aims to train Persons with Disabilities (PwDs). The programme also aims to create employment opportunities for PwDs in the retail industry, thereby creating sustainable livelihoods for PwDs and promoting inclusive growth in the retail sector.

A large part of this initiative also entails organisations to adopt the philosophy of 'inclusion and diversity' to improve business performance and practices. For this, creating awareness about the inclusion of PwDs among industry leaders is important. To do so, TRRAIN helps conduct inclusion-awareness workshops and sensitisation training.

A second initiative called 'TrainHer' (a Women Livelihood training programme) by TRRAIN tries to address the gender equity gap by providing training and employment opportunities to female PwDs in the nation.

These training programmes provide the complete spectrum of skills in a very interactive and easy-to-learn manner with a focus on three key skills — life, English language, and retail-specific skills. Women and girls are also provided visits to malls to give them exposure to various retail formats, quick-service restaurants, hypermarkets, supermarkets, apparel stores, and luxury stores.

On the completion of training, retail organisations are invited to evaluate and interview candidates for jobs. The training programmes aims to achieve a minimum of 70% placements for its trainees.

## Opportunity or Challenge?

### Impact

The programmes offered by TRRAIN operate in various geographies pan India—Maharashtra, Rajasthan, Gujarat, Andhra Pradesh, Tamil Nadu, Kerala, Karnataka, West Bengal, Assam, Punjab, New Delhi, Haryana, and Uttar Pradesh.

Since its inception in 2011, the PANKH programme has trained more than 11,000 PwDs; the alumni are employed in the retail industry with more than 150 retailers.

Besides these numbers, qualitative milestones include improved economic status and increased confidence to perform one's job. Industry leaders have been sensitised to generate employment opportunities for PwDs and young women. Strategies have also been designed to address a high attrition risk that women face in the retail sector. Lastly, a trustworthy brand as an alternative to recruitment agencies has been created.<sup>62</sup>



Photo credit: Trust for Retailers & Retail Associates of India (TRRAIN)



### Skills integration

Interactive and easy-to-learn modules on three key skills—life, English language, and retail-specific skills in the context of training PwDs, especially women PwDs.



### Industry sensitisation

Inclusion awareness workshops and sensitisation training for employers and industry bodies to complement trainees' workplace readiness.



### Women PwDs

Addressing the relatively wider gender equity gap in training and employment opportunities for female PwDs in the country.

<sup>62</sup> Data points and information shared by TRRAIN Foundation. <https://www.trrain.org/>





## ii. Bandhan Konnagar: Enabling rural girls and women to become economically independent



### Issue

Rural women constitute **81.29%** of the Indian female labour force

Most of these women work as agri-labour. **56%** of these employed women are illiterate.

The overall participation of women in workforce decreased from 42% to 31% over a period of 18 years.

The NSSO data added that the marginal rural women workers dropped out when their households' income increased from any source. This proves that their only justification to join workforce was to earn more money for their households<sup>63</sup>.

<sup>63</sup> Rounak Gunjan. 25 June 2018. How India's Women Work: 80% Employed in Rural Areas, More than Half Suffer Illiteracy. <https://www.news18.com/news/india/howindias-women-work-80-employed-in-rural-areas-more-than-half-suffer-illiteracy-1789009.html>



## Solution

Through a comprehensive skilling programme, Bandhan Konnagar informs, empowers, and equips rural women with various skills that would help them attain self-sufficiency or contribute significantly to their families' income.

The programme begins with a rigorous mobilisation process that entails mass campaigning through leaflet distribution, poster displays, college visits, reaching out to Self Help Groups (SHG), and visiting clubs to create awareness about employment opportunities and recent trends in the industries that the programme caters. During this time, young adults and their guardians are made to attend informative sessions and camps that collectively address queries and make parents equal stakeholders in the change process. To ensure a high girl enrolment in the programme, special sessions are conducted for parents to educate them on the benefits of how a strong career could positively affect their girls' lives. The vision is to create the sense of accountability within the community to ensure an equal participation of both girls and boys. Evidence-based interventions tailored at sharing best practices of alumni, connecting current students with previously trained women, or even directly reaching out to an alum are conducted frequently.

Once the selected candidates are enrolled, training emphasising both theoretical and practical components takes place. Most candidates enrolled are from remote areas within a district with little exposure. This makes it important to tailor a training programme that would arm students with skills to take on the workplace.

Besides domain training, Bandhan conducts specific classes on personality development, conflict resolution, and grooming for workplace readiness. Alumni and employers are invited to share their experiences and expectations. Further, exposure visits are conducted by Bandhan to enable the candidate to get a real-time understanding of the workplace. Lastly, short internship opportunities (spanning at least one month) equip candidates with a hands-on experience of the workplace before recruitment actually takes place.

Women mostly opt for courses and obtain employment in courses such as business process outsourcing, guest relations, beauty and wellness, and retail and sales. Breaking gender stereotypes, Bandhan has a sizeable number of girls who have been trained in technical domains, such as hardware networking, and are successfully employed in a relevant job role inspiring others through their entrepreneurial journeys.

A significant component of the skilling process comprises a focus on soft skills. These skills are critical in day-to-day interactions with people and how one sets one's image. Thus, soft skills are embedded in the regular course curriculum for both technical and non-technical domains. Effective communication techniques and leadership courses constitute about 30% of the course curriculum. Such classes are conducted by industry experts and veteran soft skill trainers. To promote collaborations across centres, trainers from other regions are invited to take classes.

## Opportunity or Challenge?

Lastly, trainers and staff members regularly sensitise employers to enable them to understand the plight of girls coming from rural areas. Before seeking any partnership with new employers, Bandhan invites them at the centre to interact with candidates to get a glimpse of the targeted community. Bandhan leverages its relation with employers to ensure that girls traveling long distances are not assigned night shifts and a safe mode of transportation is arranged for them. Many employers go to the extent of providing accommodation for girls. Besides this, within a six-month tracking period after the completion of the course,

Bandhan is continuously in touch with alumni and the employer to ensure job retention.

### Impact

The programme spans across 24 districts and 102 villages of Madhya Pradesh, Odisha, Bihar, and West Bengal, as of December 2018. The initiative constitutes more than 105 well-equipped trainers and field staff. Under the programme, 19,255 candidates have been trained. Of these, 6,243 candidates were women and 4,081 of the trained women were placed. The programme has also indirectly touched the lives of 19,797 families.<sup>64</sup>



<sup>64</sup> Data points and information shared by Bandhan Konnagar. <http://bandhanfoundation.org/>



**Skills integration**

Specific classes on personality development, conflict resolution, grooming for workplace readiness, effective communication techniques, and leadership constitute about 30% of the course curriculum.



**Breaking gender stereotypes**

Breaking gender stereotypes by providing training to rural girls/women in technical domains, such as hardware networking, and propagating their success stories.



**Bridging the rural urban divide**

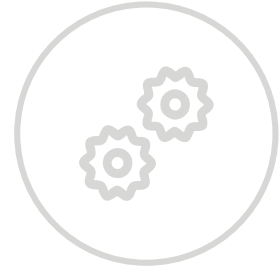
Employer sensitisation through interaction with candidates at training centres prior to recruitment, and trainer and staff sensitisation visits to employer locations.



### 3. Technical skills

Training women in technical skills focused on robotics, automation, computer skills, higher levels of human-machine interface, coding, data analytics, and digital marketing, can help break gender stereotyping in the skilling ecosystem. It could enable more women to be engaged in the manufacturing and services sectors, transitioning out of the unorganised

sector into the gig economy or the formal sector. Reskilling or upskilling women on basic education other than STEM-based grounding, from the humanities or management education is also expected to allow women to transition to new roles, experience, and lifelong learning. This can result in growth and leadership opportunities for women at workplaces.

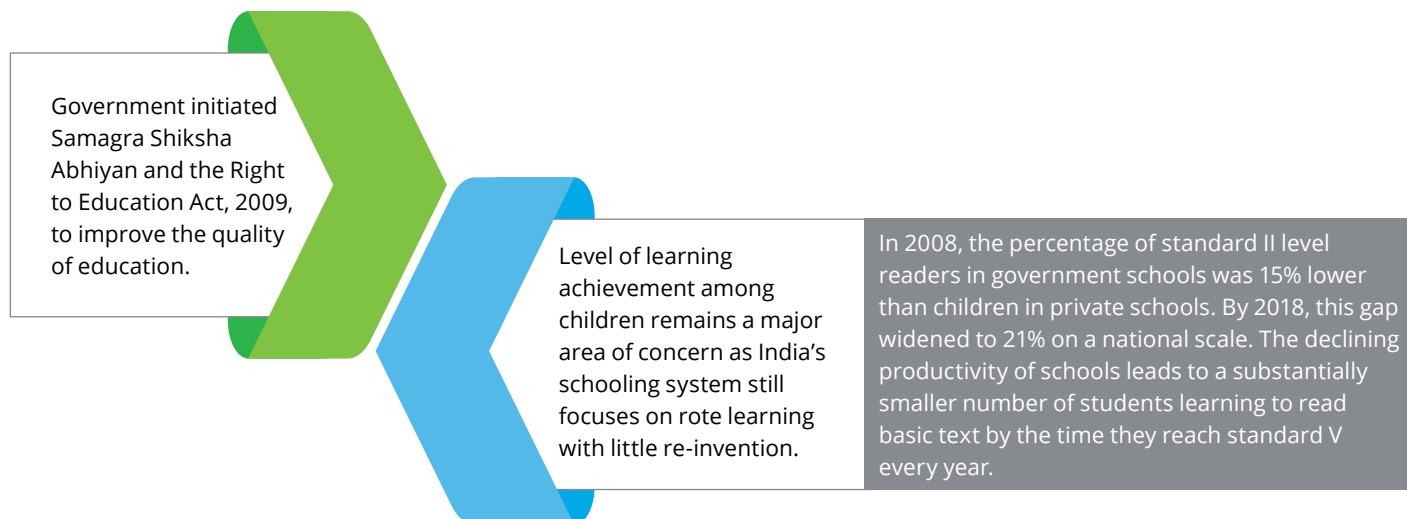


## i. Agastya International Foundation: Innovative STEM education solutions for young children



Photo Credit: Agastya International Foundation

## Issue



Source:  
Pratham Education Foundation. 2018. Annual Status of Education Report. <http://img.asercentre.org/docs/ASER%202018/Release%20Material/aserreport2018.pdf>

## Solution

Agastya International Foundation was established under the leadership of Mr. Ramji Raghavan, a former international banker, with a vision to change the way learning happens. The idea was to re-define education at the grass-roots level by sparking curiosity and nurturing a scientific spirit among economically disadvantaged students and teachers in the nation.<sup>65</sup>

Through strong partnerships with various state governments, Agastya International Foundation, along with corporate CSR departments, aims to inculcate a scientific habit among children by giving them access to hands-on learning and by training government school teachers in different experiential learning methodologies. The programme is targeted at children in classes 5–10. The idea is to enable such students to go through a learning method, transform them into 'active learners' who can apply scientific concepts already being taught through the regular NCERT school curriculum.

The first phase entails hands-on learning through observation and interaction,

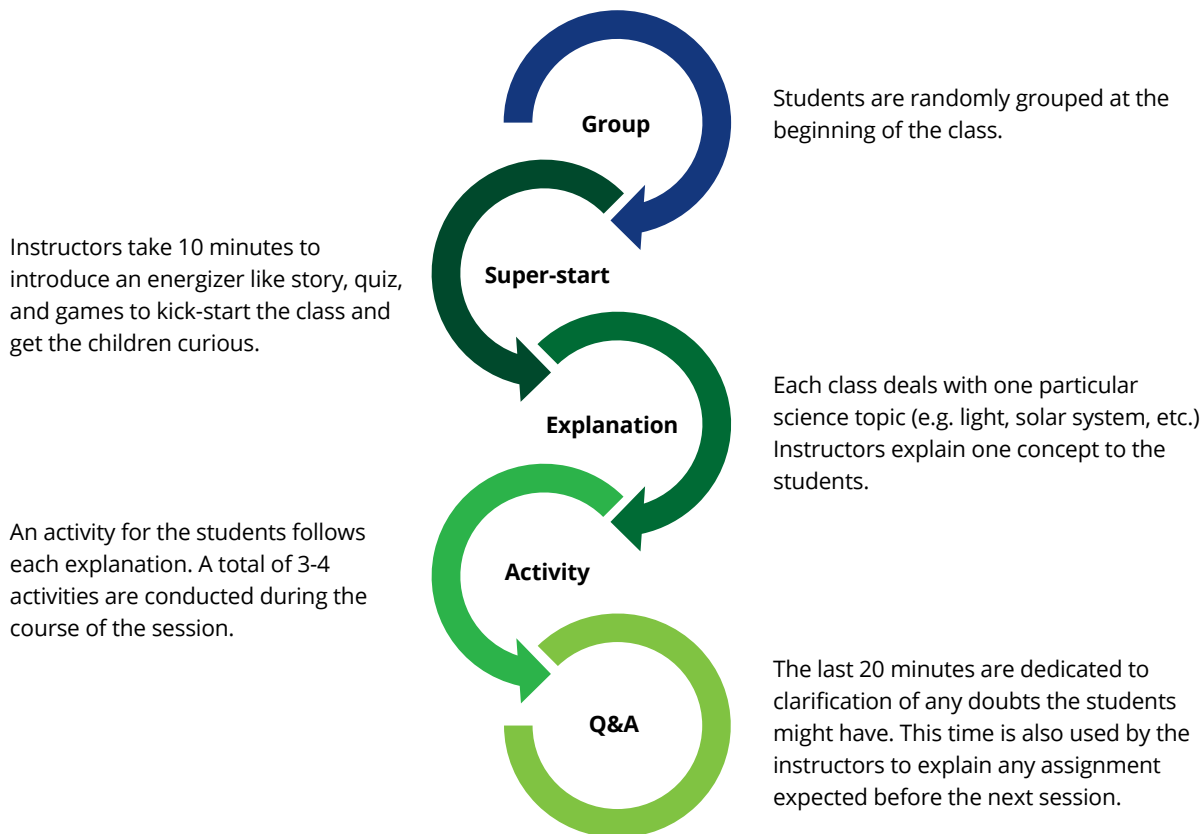
which is followed by a project-based 'workshop mode' to promote deeper questions and drive critical thinking, curiosity, and an analytical mind. Select students then move to the 'explorer' stage where they are encouraged to create models/experiments and participate in school-wide 'Science Fairs'. The next few steps push students to become a Young Instructor assisting the teacher, and eventually an innovator. All classes are tailored to facilitate active learning through simple, cost-effective scientific models, and peer-to-peer learning to boost confidence levels, communication and leadership skills among young students.

This is done through a delivery channel where new methods, lessons, models, and experiments are designed and developed in a 172 acre 'Creativity lab'. Science centres in various states and cities/urban areas serve as 'Hubs' and 'Mobile vans' and 'Labs on Motorbikes' are used to disseminate knowledge to teachers and students in rural, semi-urban, and urban areas. Ideas are scaled up through teacher engagements in 'Lab-in-a-box', where models are used on a rotational basis to intensify learning in schools.<sup>66</sup>

<sup>65</sup> Agastya Foundation. 2016. Founder's Story. <http://www.agastya.org/founders-story/>

<sup>66</sup> World Bank Group. 2017. Agastya: Improving Critical Thinking and Leadership Skill. [https://www.innovationpolicyplatform.org/system/files/Agastya%20case%20study\\_April20%202017.pdf](https://www.innovationpolicyplatform.org/system/files/Agastya%20case%20study_April20%202017.pdf)

### Mobile science lab and iMobile lab session in a typical school



<b>Frequency - Monthly</b>	<b>Duration - 2-4 hours</b>	<b>Venue - School premises</b>	<b>Time - In between school hours</b>
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### Impact

Agastya runs one of the largest hands-on science education programmes for teachers and children in the world with more than 200 Mobile Science Labs, 70 Science Centres and around 60 Lab on a bike/Tech La bike programmes in 19 Indian states. The initiative currently benefits over 1 million children and more than 15,000 teachers directly every year. Agastya reaches another 1 million children indirectly every year through teacher training.

From 2006–2012, Agastya began building a network of Science Centers throughout Karnataka and stationing mobile labs in communities far from any central hub, in

Gujarat, Maharashtra, Rajasthan, Bihar, Meghalaya, and elsewhere. Agastya has reached directly more than 12 million children till date.

Agastya's programmes aim at sparking Curiosity (Aah!), Nurture Creativity (Aha!), and Instill Confidence (Ha-Ha!) and thus, bridging an important gap among educators and students. It encourages creativity, innovation, and a practical, scientific frame of mind that can drive innovators of the future. This can also aid in improving student learning outcomes as students go deeper into the concepts they learn in class and witness them through a hands-on, experiential way of teaching and learning.<sup>67</sup>

<sup>67</sup> Madanmohan Rao. 15 March 2018. Innovation and education are about Aah, Aha, and Ha-ha: Ramji Raghavan, Agastya International Foundation. <https://yourstory.com/2018/03/innovation-education-aah-aha-ha-ha-ramji-raghavan-agastya-international-foundation/>





## ii. upGrad: An online higher education platform



### Issue

28.1% population in the age group of 0-14 years.

Market for e-learning programmes is estimated to grow to **USD 1.96 billion by 2021** with a user base of 9.5 million.

**39.4%** of the adolescent girls within the age group of 15-18 years were not attending any educational institution.

- Low workforce participation of women in India at 23.3%
- Reasons for low participation and workspace attrition:
  - Family pressure
  - Societal pressure
  - Workplace bias
  - Issues in reapplying after family-related breaks



The current demography of India with about 28.1% population in the age group of 0-14 holds a great growth opportunity for the education sector. Diverse players have entered this space to tap the market potential. The country is next only to the United States in terms of a market for e-learning programmes. This sector is estimated to grow to USD 1.96 billion by 2021 with a user base of about 9.5 million.<sup>68</sup>

However, female enrolment statistics paint a dismal picture. Based on a recent research paper by the National Commission for Protection of Child Rights (NCPCR), 39.4% of the adolescent girls in the age group of 15–18 were not attending any educational institution.<sup>69</sup> The numbers decline further in terms of women entering the workforce. The total Indian workforce had only 23.3% of the women in 2017–18.<sup>70</sup> A large number of these working women face challenges in continuing with their jobs when family life takes precedence. Such career breaks make it difficult for women to return to the workforce.<sup>71</sup>

### Solution

Online learning portals offering upskilling courses are a great opportunity for women who want to enter the workforce with enhanced skill sets. A learning platform that is witnessing a surge in female enrolment is a case in point. upGrad Education Private Limited was launched in March 2015 by Ronnie Screwvala, Mayank Kumar, Ravijot Chugh, and Phalgun Kompalli, with a vision of 'Building careers of tomorrow'. Since its launch, the portal has recorded an increase in the number of working professionals and job aspirants

who enrolled in programmes on data science, technology, and management. The programmes are delivered in association with established academic partners such as the International Institute of Information Technology (Bangalore), Mudra Institute of Communication (Ahmedabad), the University of Cambridge Judge Business School Executive Education, the Institute of Management Technology (Ghaziabad), and the Birla Institute of Technology and Science (Pilani). Distinguished university faculties and leaders in the field with the help of modern pedagogy deliver programmes relevant for the industry. The immersive online learning experience allows users to access programme content anytime.<sup>72</sup>

### Impact

The percentage of female enrolment was a meagre 9% in 2016, which increased significantly to 24% in 2018. In this period, growth in the number of female candidates surpassed growth for male candidates by a factor of 3.72x. The portal envisages a further increase in women enrolment in 2019. According to the trends until February 2019, women constituted 27% of the total enrolment.

The journey of Manisha highlights the importance of such credible technology learning platforms. She had a dream of working in the 'Big Data' space, which got lost somewhere managing responsibilities of a family and as a mother. After giving birth, Manisha was freelancing from home for four years. When she finally started exploring full-time positions, her profile did not interest any company. That time she came across BITS Pilani's PG programme in Big Data Engineering,

<sup>68</sup> IBEF. 2018. Education & Training Industry in India, India Brand Equity Foundation. <https://www.ibef.org/>

<sup>69</sup> NCPCR. 2017. Vocational & Life Skills Training of Out-of-School Adolescent Girls in the age group 15-18 years. <http://ncpcr.gov.in/showfile.php?lang=1&level=1&&sublinkid=1357&lid=1558>

<sup>70</sup> National Sample Survey Office (NSSO) 2017-18. Periodic Labour Force Survey (PLFS). <http://mospi.nic.in/Periodic-Labour-Surveys>

<sup>71</sup> Vineeta Dwivedi. 11 Dec 2017. India needs its women in the workplace: Livemint. <https://www.livemint.com/Opinion/id94nUrvoIN8BaloLIYJ6O/India-needs-its-women-in-the-workplace.html>

<sup>72</sup> upGrad. 2019. Official Website. <https://www.upgrad.com/about>

## Opportunity or Challenge?

offered in collaboration with upGrad. The name of an esteemed academic partner made her enrol in the programme. Manisha worked on her resume and prepared for interviews with guidance from her mentor at upGrad. As a result, she is currently working with a renowned online education portal in India.

Prasasthy shares a similar narrative. She was working as a software developer when she went on a maternity break. She was aware that resuming her career would now come with its fair share of challenges. Prasasthy enrolled in upGrad's PG programme in Data Science, offered

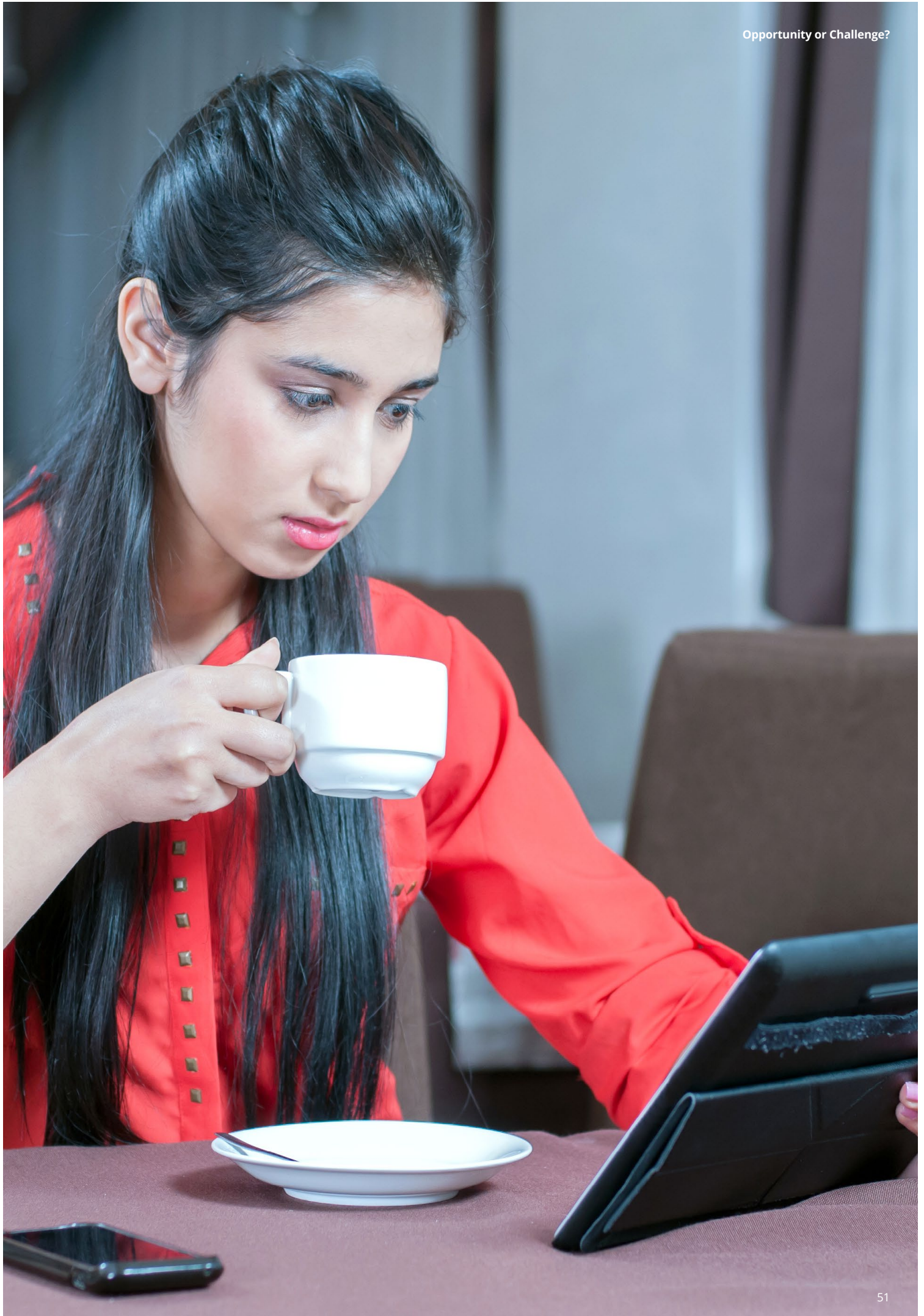
in collaboration with IIT Bangalore, and used her son's playschool hours to finish modules.

Manisha and Prasasthy are not alone in their struggle. Women trying to make a career transition or looking at upskilling face inherent challenges. An upskilling portal, such as upGrad, allows for greater flexibility in managing work-life balance. It also helps women gain a new skill set and explore growth opportunities. These two women are classic role models who prove that it will never be too late to go back to work as long as one is focused on self-growth.<sup>73,74</sup>



<sup>73</sup> Data points and information shared by upGrad. <https://www.upgrad.com/>

<sup>74</sup> Data points and information shared by upGrad. <https://www.upgrad.com/>



#### 4. Entrepreneurship

Factors such as shifting societal perceptions about women entrepreneurs, gaining support through the entire

entrepreneurship cycle (by getting access to finance, resources, and markets) have shaped powerful narratives of women-led enterprises.

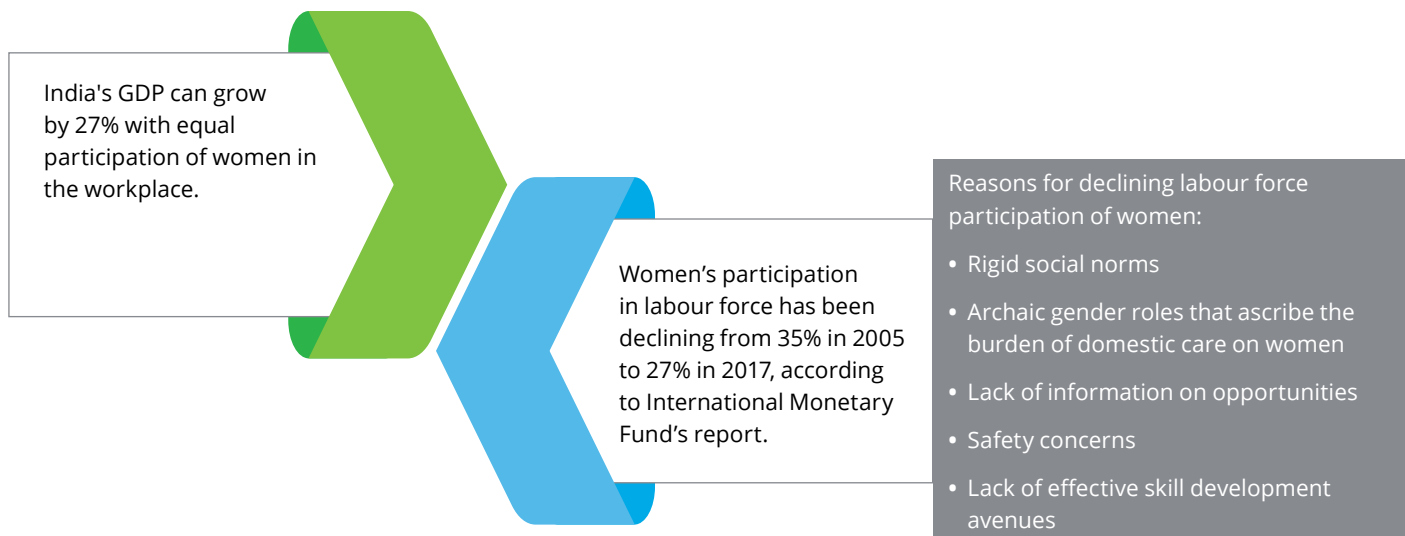


### i. Disha Programme: Creating employment and entrepreneurship opportunities for women in India



Photo Credit: United Nations Development Programme (UNDP)

**Issue**



Women's participation in the Indian workforce is one of the lowest in the world, with their labour force participation declining from 35% in 2005 to 27% in 2017, according to a report by IMF.<sup>75</sup> Rigid social norms, archaic gender roles that ascribe the burden of domestic care on women, lacuna of information about opportunities, safety concerns, and lack of effective skill development avenues contribute to the poor presence of women (especially the underprivileged) in workforce. Private sector too suffers from a severe shortage of appropriately skilled candidates. Despite a big push towards the development of the Indian skilling ecosystem by the government of India in the past few years, the unorganised sector remains unskilled.

Equal participation of women in the workforce can significantly boost India's economic growth. For this shift to occur, women need to be linked to suitable opportunities to work and thrive. Although we are witnessing more women enrolment in secondary and higher education, it is not translating to them joining the workforce. Further, interventions that connect aspiring women candidates to appropriate opportunities in industry are crucial in strengthening the skilling ecosystem for women.

**Solution**

The United Nations Development Programme (UNDP) India, in partnership with the India Development Foundation and support from IKEA Foundation, conceptualised a four-year programme known as Disha in 2015. The programme aims to improve the lives of 1 million underprivileged women in India, by enabling them to acquire marketable skills and become employable. Disha supports women to become economically self-sufficient so that they and their families can seek better and equitable opportunities. The project also works towards developing innovative and scalable public-private partnership models and establishes a continuum that connects education to skills, jobs, and growth.

The Government of India counterparts of the project include the Ministry of Skill Development and Entrepreneurship and their partners, the UNDP, and the India Development Foundation. On the other hand, the implementing partners are state government, state skills missions, NGOs, corporates, and private-sector companies, such as Paytm, Hero MotoCorp Ltd., and L&T Infotech.

<sup>75</sup> World Bank. 2018. Labour Force Participation Rate. <https://data.worldbank.org/indicator/SL.TLF.CACT.FE.ZS>

## Opportunity or Challenge?

The Disha programme is based on four models:

- Model 1: The Career Guidance and Counselling (CGC) framework
- Model 2: The creation of employment marketplace
- Model 3: Micro-entrepreneurship and
- Model 4: Value chain

**Model 1:** Through the CGC model, young girls receive counselling and take computer assessments in colleges such as Indira Priyadarshini Government Degree College for Women (in Hyderabad) to determine which jobs are suitable for them.

**Model 2:** Women are trained on soft skills, beauty therapy and customer relations skills through implementing partner Development Alternatives and have been placed at beauty parlours and retail stores. Via Quest Alliance, one of the implementing partners in Delhi, train young girls on industrial mechanics. They are taught to make switches and circuits. With this training, young girls aspire to take on engineering roles in the future.

Next, women are trained to be job ready through mock interviews. For example, private-sector banks conduct interviews at the SNDT university in Mumbai and hire some of them as interns to give them an idea of work. Later, many of these young women are hired by same banks.

**Model 3:** Furthermore, women use technology to empower themselves, especially as it is extremely important to prepare them for the 4IR. For instance, in this model, micro-entrepreneurship, women are being trained on using computer aided design software in Telangana to design sarees and then sell them to master weavers. They are able to do so with the support of Disha project (offering one and half months of training on using this software). Under this model, women are trained as 'Biz Sakhis'. They are trained on entrepreneurial skill and later they support other women to start their own businesses.

**Model 4:** The Disha project trains women farmers on how to manufacture organic pesticides with the support of the project and its partners. Through the partnership titled 'KraftSamla' ('to join our forces' in Swedish) with the Swedish Embassy, women are trained to make them readily employable for the industry; build value chains; and transform ecosystems in Maharashtra.

The four models explained above are incorporated in the three pilots that IKEA Retail supports. The company is also promoting organic farming among women farmer; their produce is used in its in-house cafe in Hyderabad. Apart from this, it provides training and job placements, and promotes women to build capacity in

the area of modular furniture assembly. Hence, the Disha project works as a catalyst in the skilling ecosystem through innovative public-private-partnerships with government, businesses, academia, training institutions, and civil society to empower women.

**Impact**

Despite challenges associated with the target numbers, Disha was able to emerge as a successful initiative on account of its strong partnerships. The project has rolled out 70 pilots since 2015, and benefited about 8,00,594 underprivileged women across five states.

Priyanka, a college student and a beneficiary of Model 1, was unsure of what she wanted to pursue earlier. She is now determined to work in the corporate sector, after completing the CGC session.

The Disha project, through its Model 2, helps women break social stereotype by taking on roles that were taken up mostly by men in the past. Model 2-Employment Marketplace aims to connect job seekers with employers. In 2016, a batch of 20 young women from Rohtak, Haryana had enrolled in a skills training programme in stainless steel application. The programme was a one-of-its-kind public-private partnership initiative led by Jindal Steel Lifestyle Limited. The programme was aimed to equip young women with the skills and knowledge to enhance their employability and help them secure jobs in the steel industry. Women who completed this certification programme sought employment at Jindal Steel and the Central Institute of Plastics Engineering & Technology.

Sharda Devi who completed class XII and is a direct beneficiary of Model 3 lives in Lalawala Chowk Mohalla, Mahendergarh with her husband and two daughters. She attended the Start and Improve Your Business (SIYB) training<sup>76</sup> organised in Mahendergarh in March 2017, post which she started making bags at home. She started her shop in April 2017 with an initial investment of INR 10,000. She also started training other women on how

to make bags. She has now employed two women workers who assist her in making and selling bags. She has a shop where she has a stock worth INR 1 lakh (approximately). She sells bags worth INR 1500 daily and has a monthly profit of INR 10,000, which she spends on household expenditure and meeting family needs. Apart from successfully managing her business, Sharda is now training other women in the community and motivating them to be financially independent.

As a consequence of Model 4, Rihana Hussain Talafdar, who stayed in the slums of Bhim Kranti Nagar, Nigadi, Pune with her family and got married at an early age of 14 years, met a representative from LIFT Academy. The representative took her through the “Kraftsamla Project” in February 2018. She went through the assessment and was shortlisted for the forklift training programme. She was convinced and confident of getting a job in the organised sector. She decided to quit her school job and attended the one-month training. However, she did not inform her husband because she felt that he would not support and allow her to quit her school job. She attended one month of the forklift training programme that included both classroom and practical training. To make her ‘work ready’ in the organised sector, over and above LIFT Academy’s Service Excellence programme, she went through various industry sessions organised by KraftSamla. On completion of her training programme, Rihana was assessed by a third-party recommended by the Logistics Skill Council. She successfully cleared her assessment and received the certificate from NSDC. With the NSDC certification, Rihana was more confident and prepared to start her career as forklift operator and break the stereotype of male dominated roles.<sup>77</sup>



**Using technology**

Computerised assessments are used to determine job suitability and computer aided design software.



**Building a skilling ecosystem**

The Disha project works as a catalyst in building innovative public-private partnerships with government, businesses, academia, training institutions, and civil society to empower women.



**Women entrepreneurship**

Women are trained on entrepreneurial skill development as ‘Biz Sakhis’ – who in turn support other women to start their own businesses.

<sup>76</sup> ILO. 2015. Start and improve your own business. [http://www.ilo.org/wcmsp5/groups/public/---ed\\_emp/---emp\\_ent/---ifp\\_seed/documents/publication/wcms\\_315262.pdf](http://www.ilo.org/wcmsp5/groups/public/---ed_emp/---emp_ent/---ifp_seed/documents/publication/wcms_315262.pdf)

<sup>77</sup> Data points and information shared by UNDP. <http://www.in.undp.org/>



## Conclusion

The 'World Economic Forum Future of Jobs' report highlights that women are the most underutilised talent as business resources and growth drivers.<sup>78</sup> The rise of the 4IR, specifically digitisation, artificial intelligence, and machine learning can result in the loss of low-skill and mid-skill tasks through automation, adversely affecting women in India.<sup>79</sup> Conversely, harnessing the potential of women, largely considered a latent growth enabler, can emerge as a key differentiator in India's growth story. Most businesses in the country are repurposing their talent strategies to recruit, train, and promote

women at workplaces. The top 10 skills in 2020 include people management, emotional intelligence, and the ability to work with others<sup>80</sup>, where women potentially have a leverage, according to recent research.<sup>81</sup> Empowering girls and women through targeted education and reskilling interventions, combined with reframing societal constraints, can potentially accelerate their learning and enhance their skill sets. This will result in women emerging as an equitable stakeholder in workforce, households, and communities.

<sup>78</sup> World Economic Forum. 2018. Future of Jobs. <https://www.weforum.org/reports/the-future-of-jobs-report-2018>

<sup>79</sup> World Economic Forum. 2018. Here's why women should be more concerned about the robot technology than men. <https://www.weforum.org/agenda/2018/11/women-technology-and-the-future-of-work/>

<sup>80</sup> World Economic Forum. 2018. Future of Jobs. <https://www.weforum.org/reports/the-future-of-jobs-report-2018>

<sup>81</sup> Maryam Meshkat & Reza Nejati. July-September 2017. Does Emotional Intelligence Depend on Gender, Sage. <https://journals.sagepub.com/doi/pdf/10.1177/2158244017725796>





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Network India

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