Closing the Skills Gap: Key Insights and Success Metrics

WHITE PAPER
NOVEMBER 2020
This white paper provides an overview of learnings from the World Economic Forum’s Closing the Skills Gap 2020 project. It summarizes the endeavour to uncover where, in a landscape of often divergent efforts, there is an opportunity for collective action to strengthen reskilling and upskilling initiatives. It includes case studies and lessons learned from various industries, impacting a range of stakeholder groups in multiple geographies. The white paper also details the project’s successful completion and integration into the World Economic Forum’s Reskilling Revolution Platform.

For more information, visit http://reskillingrevolution2030.org, or contact the World Economic Forum at reskillingrevolution@weforum.org.
Introduction

Education and training systems need to keep pace with the new demands of labour markets that are continually challenged by technological disruption, demographic change, shifting business models and the evolving nature of work. It is estimated that, on average, 42% of the skills demand for jobs across all industries will change between 2018 and 2022.1

The private sector is a leading stakeholder in managing this transformation through collective action on future-oriented skills development, thereby serving as a critical partner to governments and education and training providers to enable opportunities for all and to meet the needs of labour markets.

The concepts of reskilling and upskilling have a wide-ranging definition. They encompass the development of fundamental skills such as basic digital literacy, employability skills that boost people’s chances of getting a job, as well as business-specific or technology-specific skills that could help develop expertise in a particular field.

From 2016 to 2019, the World Economic Forum and Tata Consultancy Services (TCS) collaborated on a project to explore the current reskilling and upskilling efforts initiated by global businesses to prepare their workforces for the rapidly evolving nature of work and 21st-century jobs.

A first of its kind, the Closing the Skills Gap 2020 project was designed to serve as a platform to develop consensus among stakeholders about where, in a landscape of often divergent efforts, there was an opportunity for collective action to strengthen reskilling and upskilling initiatives. In doing so, the project built on a number of successful partnerships established through the Forum’s New Vision for Arab Employment, Africa Skills Initiative and Europe Skills Initiative.

This white paper explores lessons learned from this collaboration and showcases successful skills development programmes undertaken by participating companies over the 2016-2019 period.

It is structured as follows: The first section introduces the Closing the Skills Gap 2020 Business Commitment Framework, providing a brief overview of the issue and the objectives of the collaboration. The second section explains how different metrics may be aggregated and adapted to measure the success of skilling, reskilling and upskilling programmes. The third section elaborates on the overall impact achieved by the project and learnings from the programmes submitted by participating companies. The final section concludes by highlighting impactful ways to collaborate to close skills gaps, its relevance to all stakeholders, and how these lessons have been integrated into the World Economic Forum’s Reskilling Revolution Platform.

With the need for large-scale workforce skills building more urgent than ever in the context of the current COVID-19 pandemic, we hope that this white paper will become a valuable tool for business leaders and others aiming to design impactful reskilling and upskilling programmes.

---

The Closing the Skills Gap 2020 Business Commitment Framework
The increasing disconnect between education systems and labour markets, coupled with technological disruption, is creating instability and insecurity to the livelihoods of many. Governments around the world are under increasing pressure to find solutions and have channelled significant funds into projects designed to provide people with the skills they will need for the jobs of the future. Similarly, businesses around the world are increasingly taking the lead in upskilling and reskilling their workforces as well as their surrounding community – equipping what they hope will be the next generation of their workforce with skills for the future. As the global skills gap grows, a holistic resolution demands that individuals, governments and businesses move beyond working in silos to develop innovative, sustainable and scalable solutions.

With skilling, reskilling and upskilling becoming clear “no-regret moves” for all stakeholders, the Closing the Skills Gap 2020 project set out to develop a Business Commitment Framework to drive strategic action among global companies. The framework was designed to drive quantifiable commitments from global employers to invest in upskilling and reskilling their workforces and making similar investments within their community.

Organizations were invited to design new initiatives and/or align existing education and training initiatives that address at least one of the following target areas: basic education, higher education, technical and vocational education and training (TVET), and adult learning (Figure 1). These four target areas were developed to encapsulate a “lifecycle approach”, seeking to transform education and training ecosystems across the entire learning spectrum. At its core, this lifecycle approach supports and promotes the concept of lifelong learning.

As part of the project, over the 2016-2019 period, 33 participating companies committed to reaching over 17.2 million people through skilling, reskilling and upskilling efforts. Over 41 individual initiatives – designed to address the growing skills gap among their current and future workforces – have been shared by these organizations.

Each business commitment individually has helped drive impact to close skills gaps and reshape education and corporate training for the future. Importantly, however, through the process of gathering and pooling commitments from individual employers, the Closing the Skills Gap 2020 project has also built a significant body of knowledge that may inform related efforts in the future. These insights and lessons learned are detailed in the following sections.
Skills Training Approaches and Success Metrics
Diversity of skills training approaches

While increasingly recognized as essential, the value of integrating lifelong learning within an organization’s culture has not yet been comprehensively documented. Until recently, a large number of companies viewed in-house training as a cost rather than an investment. This was, in part, due to the fact that training curricula were often not designed to focus on immediate business needs and did not keep pace with the dynamic changes in the organization. As a result, measures to evaluate the skills that individuals would gain through such training were partially ineffective.

Experience from the Closing the Skills Gap 2020 project suggests that successful organization-wide upskilling can only be fully achieved if an organization fully commits to the long-term learning and development of its workforce and takes the initiative to align such programmes to the company’s business strategy and growth objectives.

Even with these broad parameters, there is no one-size-fits-all model when it comes to training. The analysis conducted by the project has revealed that companies have adopted a range of interventions from traditional modes to blended and informal learning. Some have even adopted collaborative talent-driven learning models addressing the needs of a new generation of workers. Companies have also begun leveraging digital technologies to reimagine human resources and talent development functions, thereby investing in building global, diverse workforces that are result-oriented and high-performing.

Multiple industries are now rapidly adopting automation and cloud technologies while integrating agile into all their business functions in the context of the COVID-19 pandemic. For example, Tata Consultancy Services (TCS) has achieved the goal of becoming enterprise-wide agile in 2020. In an additional move to enhance its agility in response to the current pandemic, TCS has introduced the 25-25 model allowing 75% of their workforce to permanently work from home, enabling remote access for employees and setting up a suitable cybersecurity framework as well as project management practices and systems needed to ensure that work allocation, monitoring and reporting continues as normal. The company is not only evolving its core delivery model, but it is also changing its workspaces, contracting structure, appraisal process and even how it conducts meetings.

Such outcome-oriented, sprint-based models have prompted organizations to make substantial investments in digital learning platforms – integrated ecosystems that combine a virtual, physical and experiential learning infrastructure with high quality content that empowers employees to acquire new skills flexibly and on the go. For example, Manpower’s digital learning platform, powerYOU, encourages learning within the organization. It offers over 7,500 virtual and blended learning courses tailored by geography and career stage. Employees are able to learn in-demand skills via mobile learning, where content is delivered in bite size chunks and continually updated.

Increasing digitization and the Fourth Industrial Revolution have changed the learning process in multiple ways – making it engaging through gamification, allowing learning to happen anytime, anywhere while also driving down costs. More importantly, learnings from the Closing the Skills Gap 2020 initiative indicate that these trends have also changed the ways in which organizations measure the success and effectiveness of their learning programmes.

Success metrics

While flexibility in models and modes of delivery can encourage higher uptake of programmes among individual learners, from an organizational perspective the successful transition to a lifelong learning culture within the organization will depend on: understanding the strategic goals of the organization; recalibrating or developing new programmes that align with business objectives; and tracking the right metrics and gathering appropriate feedback.

Evaluation of the mastery of skills attained becomes especially critical when aiming to document and demonstrate the subsequent positive benefits to the business, thereby making the business case for large investments in training programmes. Developing, tracking and reporting the right metrics gives businesses the ability to invest in learning initiatives that are tailored to the needs of their workforce and the larger community.

Leaders are increasingly becoming aware of the challenges created by the Fourth Industrial Revolution. Over the next few years, human capital will be more critical than ever in business strategy and will be the primary factor in sustaining competitive advantage. Organizations, therefore, need to revolutionize and innovate their learning strategy in a way that aligns with their business strategy.
Evaluation of the case studies received through the Closing the Skills Gap 2020 project has demonstrated that a multi-pronged approach to measurement may yield the best results. In addition to company objectives, evaluation lenses such as stakeholder needs, learners’ backgrounds, diversity of the learning group and socioeconomic status can all impact the quality and success of a programme.

A closer look at each initiative and the metrics used to measure the success of the programmes highlights that while adoption has varied based upon geography, skills and participants, there were several common success indicators frequently used to measure programme success which can serve as a guiding tool for businesses planning to undertake large scale reskilling programmes. Below are the five most frequently used metrics derived from analysis of the business commitments submitted by various organizations as part of the Closing the Skills Gap 2020 project.

**1. Number of learners and their demographic characteristics**

Measures related to learners’ participation in the programme provide meaningful insight into its success. Since learning takes place in a group setting, the demographic characteristics of the cohort are equally critical. Monitoring factors such as diversity of the group in terms of age, gender, experience level and role can be useful when delivering a high-impact programme within a short period of time.

**2. Successful learning completion**

The most commonly used metric for learning is completion of courses. It measures the efficiency of learning as proof of engagement, content mastery and learning environment.

**3. New role acquired or successful job transition**

A measurement of the effectiveness of programmes starts with measuring learning against actual outcomes. Conversion rates of learners into employable candidates or more productive workers into a new line of work is a visible evidence of success.

**4. Learner satisfaction**

The aggregate feelings or affective responses to the training can be evaluated to ensure long-term and sustainable adoption of the skill. Finding out if learners are satisfied with their experience is a crucial part of developing and delivering a modern learning experience. Depending on the programme, this information may be collected either at the end of each section of the programme, or at the end of the programme to evaluate the immediate reaction to the learning.

**5. Adoption of technology in delivering learning content**

As new technologies have become more reliable, viable and sometimes more affordable, many education and training providers have reconsidered how they teach, engage with, or involve learners through digital platforms. Successful adoption of such technology is an increasingly common metric to evaluate the efficacy of digital skilling initiatives.

---

**2.3 Measuring learning outcomes**

The above performance indicators are linked specifically to an individual training programme itself. They measure the efficacy of the programme and whether people are engaging with it. However, they do not measure if the learnings are put in practice at work, or if they bring any specific business impact. Irrespective of organization and background of participants, a training programme will be less effective if evaluation is superficial and limited to only understanding the learner’s views on the training programme, trainer and learning environment.

To build a more robust training and learning culture, key performance indicators (KPIs) that prompt change should be identified at the very outset – before training initiation. For any programme, it would be important to know whether people are putting their learning into practice and if it is impacting positively their performance in their role and the wider organization. A robust and consistent evaluation model may help to answer such questions.

An effective evaluation model, therefore, can have a significant impact on the success of a programme. While there are many training evaluation models in existence, for the purpose of the Closing the Skills Gap 2020 initiative – due to its simplicity and relevance across a wide range of industries and organization – this white paper utilizes the Kirkpatrick Model. The model outlines four levels of training evaluation (see Figure 2), with each successive level representing a more precise measure of the effectiveness of a training programme.

---

2 The Kirkpatrick Evaluation Model was first introduced in 1959 by Donald Kirkpatrick, Professor Emeritus at the University of Wisconsin. It has undergone several iterations over the years – the most recent update, called the “New World Kirkpatrick Model,” was released in 2016. It takes into account any style of training, both informal or formal, and can therefore be adopted across a wide range of programme types to analyse the impact of training. See: James D. Kirkpatrick and Wendy Kayser Kirkpatrick, “Kirkpatrick’s Four Levels of Training Evaluation”, Association for Talent Development, 2016.
### The Kirkpatrick Evaluation Model: How to measure training effectiveness

**FIGURE 2**

1. **Reaction**
   - Measure your participants’ initial reaction to gain an understanding of the training program and valuable insights into material quality, educator, and more.

2. **Learning**
   - Measure how much information was effectively absorbed during the training and map it to the program or individual learning objectives.

3. **Behaviour**
   - Measure how much your training has influenced the behaviour of the participants and evaluate how they apply this information on the job.

4. **Results**
   - Measure and analyze the impact your training has had at the business level, and be sure to tie it to the individual or program.


### Grouping of reported success metrics of programmes submitted for the Closing the Skills Gap 2020 Business Commitment Framework according to the Kirkpatrick Model

**FIGURE 3**

<table>
<thead>
<tr>
<th>Reaction</th>
<th>Learning</th>
<th>Behaviour</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Beneficiaries reached</td>
<td>- Pass percentage</td>
<td>- Employee engagement and productivity</td>
<td>- Job placement</td>
</tr>
<tr>
<td>- Learner satisfaction</td>
<td>- Usage and adaption of ICT</td>
<td>- Vendor engagement</td>
<td>- Start-up supported</td>
</tr>
<tr>
<td>- Attendance</td>
<td>- Promotion</td>
<td>- Increase of efficiency and/or effectiveness</td>
<td>- Entrepreneurs supported</td>
</tr>
<tr>
<td>- Volunteers</td>
<td>- Certification obtained</td>
<td>- Company goodwill</td>
<td>- Community impact</td>
</tr>
<tr>
<td>- Number of events</td>
<td>- Career choices</td>
<td>- Return on investment (ROI)</td>
<td>- Job created</td>
</tr>
<tr>
<td></td>
<td>- Access to education services</td>
<td>- Apprenticeship and traineeship opportunities</td>
<td>- Apprenticeship and traineeship opportunities</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Health and security of entrepreneurs business</td>
<td></td>
</tr>
</tbody>
</table>

Source: TCS Analysis
Grouping the data of the programmes received under the Closing the Skills Gap 2020 project into the Kirkpatrick Model’s four levels (Figure 3) highlights some of the potential shortcomings of currently widely adopted metrics. For example, the majority of current reskilling programmes are mainly focused on measuring immediate reaction of the learners and on the knowledge and skills acquired, rather than on measuring what impact this had on learners’ behaviour and business outcomes (Figure 4).

FIGURE 4
Frequency distribution of reported success metrics of programmes submitted for the Closing the Skills Gap 2020 Business Commitment Framework according to the Kirkpatrick Model

Source: TCS Analysis

Evaluating “behaviour” outcomes involves measuring learners’ capabilities to use their newly acquired skills on the job. Evaluating “impact” measures the effectiveness of the initiative for business performance. Although it is normally more difficult and time-consuming to measure these higher level outcomes, it provides information that is of increasingly significant value as it proves the worth of investing in learning to the business as a whole by documenting and strengthening the link between training programmes and improved business performance.

Potential outcomes for a successful reskilling programme may help define the metrics to evaluate and the indicators to track. For example, what are the organization’s specific goals in terms of productivity, agility, engagement and customer satisfaction, and how is the programme improving upon these? Has employee or customer satisfaction improved? Have those who were trained found employment or been promoted within their current employment? What has been the effect of the programme on employee performance and retention rates?

The key to using frameworks such as the Kirkpatrick Model effectively is to make training evaluation an integral part of training design from the beginning. Thus, many training designers use frameworks such as the Kirkpatrick Model backwards as a guide for developing effective training. They begin by identifying the outcomes they hope to achieve from the training and use those desired results to design a programme to achieve them. By working backwards on the Kirkpatrick Model’s four levels, one may then develop training initiatives that are effective and impactful – and directly tied to measurable business outcomes.³

³ https://www.lucidchart.com/blog/how-to-use-the-kirkpatrick-evaluation-model
Key Insights from Business Commitments
The Closing the Skills Gap 2020 project was set up with the aim to provide an analytical and business commitment framework to activate skills development efforts globally. Over the 2016-2019 project period, participating businesses committed to skill, reskill or upskill more than 17.2 million people by 2020, far exceeding the original 5 million target envisaged by the initiative. In total, the dataset gathered by the project contains 44 unique programmes, with 79.2% of the pledged commitments deriving from large organizations with an employee base greater than 50,000. The pledges are grouped into 10 representative industry clusters with wide geographic coverage:

- Aerospace
- Supply chain and transport
- Aviation, travel and tourism
- Consumer
- Energy utilities and technologies
- Financial services and investors
- Global health and healthcare
- Information and communication technologies
- Infrastructure
- Professional services

Insights and recommendations derived through this project are not necessarily limited to the industries and geographies represented here. Indeed, they can be adapted to a wide range of geographies, industries and skills taxonomies.

3.1 Key learnings

1. To compete with the future demands of the markets, organizations need to have a committed, highly engaged and productive workforce. Data gathered for Closing the Skills Gap 2020, show that companies understand the value of enhancing the skills and human capital of their workforce and broader community and are driving investment within these areas.

- 56% of participating organizations engage in sponsoring learning and development initiatives to bridge local and global skills gaps. For example, Alghanim Industries partners with INJAZ, a youth-centred non-profit organization for education and training in workforce readiness, financial literacy and entrepreneurship throughout the Arab World. Alghanim Industries, jointly with INJAZ, provides Kuwait’s youth with the skills they need to build successful careers in the future. Training is based on four main thematic areas: financial education, life skills, business and entrepreneurship, and employment. Over 4,400 students from schools and universities have been trained.

- 44% of participating organizations have developed their own programmes globally or in select geographies based on their business operations and workforce demand. For example, the National Industrial Training Institute (NITI), a joint venture between Saudi Aramco and Saudi Arabia’s Technical and Vocational Training Corporation (TVTC), came into existence to train and qualify young Saudis to meet current and future workforce requirements in the oil, gas, chemical and related energy industries through multidisciplinary apprenticeship programmes. Over 43,000 Saudi nationals have benefited from this training, boosting local workforce competency.

2. While organizations are increasingly creating interactive and customized learning platforms for their current workforce, they also realize the learning gap among the next generation workforce. In the context of the Fourth Industrial Revolution rapidly reshaping the ways enterprises do business, companies need to play a proactive role in democratizing access to new economic opportunities. Computational thinking skills are one such potential equalizer, giving learners a problem-solving mindset for the 21st century and preparing them for the adoption of technologies such as artificial intelligence and machine learning, opening doors to new career opportunities across all sectors and industries.

- 91% of the pledges gathered through Closing the Skills Gap 2020 had some component focused on preparing the future workforce. For example, Tata Consultancy Services’ “Ignite My Future in School” (IMFIS), in partnership with Discovery Education, is one such programme. Since its launch, it has enabled over 11,300 educators and 669,000 students to adopt a transdisciplinary approach and incorporate computational thinking into every subject in 81 school districts across the US.
Barclays LifeSkills is another example of an initiative that has been successful in equipping young people with the critical skills needed for the 21st-century workplace. Educators at schools, colleges, universities, charities and youth groups can access over 60 hours of free curriculum-linked employability resources, videos, interactive tools and lesson plans, as well as dozens of interactive tools for young people to learn on their own time or in conjunction with their parents. The programme focuses on skills such as CV writing, interview skills, networking, problem-solving, creativity, resilience, communication and managing an online reputation.

3. The growing skills gap is beginning to threaten the sustainability of businesses around the world. While a significant part of this gap is related to a shortage within the STEM talent pipeline, there also exists a gap within transferable employability skills such as communication, negotiation, decision-making and leadership.

37% of Closing the Skills Gap 2020 commitments analysed are focused on technical vocational education and training (TVET), and 35% on adult training; 25% of the programmes blend vocational and adult learning, indicating that learning on the job is also a critical area of concern. For example, Gapura Digital, an initiative by Google, is a blend between vocational and adult learning where businesses and entrepreneurs in ASEAN countries can learn in-demand skills through free, in-person workshops. The Gapura Digital programme includes classes on how to utilize the internet better for any kind of company, from home-based businesses to office-based enterprises, including digital marketing, SEO tips and others.

30% of programmes committed within Closing the Skills Gap 2020 impart both technical skills and employability skills and 25% of the programmes train participants on foundational skills (e.g. literacy, numeracy, ICT, foreign languages) in addition to technical and employability skills. For example, Nestle needs YOUth helps prepare young people for working life and improve their job prospects. Launched in 2013, it aims to help 10 million young people worldwide access economic opportunities by 2030.

4. Many Closing the Skills Gap 2020 participants are deploying multiple programmes simultaneously to address existing skills gaps, with a particular focus on developing cross functional skills. These programmes not only promote tech and digital literacy, but also provide a platform to develop employability and leadership skills to prepare individuals for jobs in the future.

Programmes such as Barefoot Computing by British Telecom (BT) are focused on basic education along with adult learning and foundation skills. BT aims at developing curiosity among young people on how existing and new technology works. They focus on sustained learning to ensure individuals are confident of their use of these technologies and can transform ecosystems through their advanced knowledge of these. Launched in England in 2014, Barefoot Computing has reached more than 60,000 teachers in over 60% of primary schools across the UK and, through them, is on its way to impacting 2 million children, aged 5-11.

For a detailed overview of programmes and commitments received as part of the Closing the Skills Gap 2020 project, please refer to the Annex.
Conclusion: Towards Collective Impact for a Reskilling Revolution
The World Economic Forum and Tata Consultancy Services began their journey on the Closing the Skills Gap 2020 project with a view to identifying and aggregating opportunities for collective action on closing the skills gap. The dialogue that this effort has sparked over the 2016-2019 period is very promising, with participants from across stakeholder groups working beyond traditional models of skills development and looking to identify novel ways of addressing reskilling and upskilling challenges. Closing the Skills Gap 2020 has surfaced a range of approaches being equally successful. However, one key aspect common to all of these approaches is the importance of commitment from multiple stakeholders and collaboration among them. Such collective efforts have helped the programmes achieve scale and adoption across multiple sectors and geographies, creating significant impact for large numbers of people.

Key stakeholders include:

- **Individuals** – Since the individual learner is at the centre of the learning journey, an individual’s ownership and openness to embrace change is key. The project has demonstrated that the success of a learning programme often lies with the individual. When individuals identify with being lifelong learners, training programmes can promote development in shorter spans of time. Introduction of collaborative platforms and gamification can help create a learning culture that allows individuals to learn at their own pace and grasp complex concepts and test conclusions through sustained peer support.

- **Education ecosystems** – There is a growing need for education ecosystems to address the growing skills gap. All efforts to address this gap should be grounded in providing access to education that is relevant and contextual. Current education policies should be reformed to place greater emphasis on mastery of skills over gaining qualifications. This includes an evolution in the curriculum as well as the modes of instruction to meet the dynamic demands of the new economy. Digital platforms and collaboration mechanisms allow for learning to happen within and outside the classroom. Industry collaboration to understand new trends and skills demands will be integral to helping students access in-demand jobs across industries.

- **Government** – Governments and policy-makers have a vital role to play during times of transition. Public investments are critical to setting the tone for large-scale upskilling of workforces to enable entire economies to move up the value chain. Along with providing an appropriate regulatory framework to close the skills gap, policy-makers are also crucial for enabling a wider ecosystem that enhances the collective capacity of all stakeholders. Such efforts may include facilitating collaborative measures across geographies, developing financial and non-financial reward mechanisms for investment in skills development, and disseminating accurate information on the jobs and skills landscape.

- **Civil society** – Civil society, composed of a diverse ecosystem of individuals, communities and organizations, may play a critical role in closing the skills gap, as a facilitator, convener and innovator as well as a service provider and advocate. It can be leveraged to raise awareness, create access to beneficiaries, aid in implementation, and promote adoption. In some cases, the role of civil society may also be expanded to developing competency standards and certifications, assisting in course design, and promoting lifelong learning among populations across age cohorts.

- **Labour unions** – Labour unions’ involvement in raising awareness among the existing workforce about the benefits of continuous learning and curated skill development programmes can often be key to ensuring wide-spread adoption and acceptability. Labour unions may also effectively leverage their position to boost investment in training programmes among employers, including, in particular, programmes aimed at addressing challenges presented by globalization, technological change and fluctuating skills demand.

- **Business** – As businesses begin to proactively take more responsibility and ownership of delivering learning programmes – not just for their existing workforce, but also for their community at large – they can play a unique role in identifying and communicating job trends and related skills demands from markets, supporting the development competency frameworks and credentialing standards, and delivering these through collaborative ecosystems and digital learning platforms. To ensure skills gaps are addressed holistically, businesses will have to work closely with all other stakeholders, in addition to continuously evolving traditional efforts such as apprenticeship, internship, and mentorship schemes.
The findings of the Closing the Skills Gap 2020 project over the 2016-2019 project period point to a range of opportunities for skilling, reskilling and upskilling initiatives to have deeper impact. However, more avenues remain to be explored. The current COVID-19 pandemic makes this need even more urgent.

Announced at the World Economic Forum Annual Meeting 2020 in Davos-Klosters, Switzerland, the Reskilling Revolution Platform aims to provide better jobs, education and skills to 1 billion people by the year 2030. Incorporating the best learnings, partnerships and commitments pioneered by the Closing the Skills Gap 2020 project, the platform will offer a holistic space for collaboration between business, government and civil society to build a fairer, more inclusive world that will deliver benefits to economy and society for generations to come.

It is our hope that more partners will join this effort and realize the vision of a prosperous future for all in the new economy. We welcome further engagement from businesses, countries, organizations and communities in identifying and leading opportunities for shared action and advancing this critical issue.
Annex: List of Skilling, Reskilling and Upskilling Programmes

<table>
<thead>
<tr>
<th>Programme</th>
<th>Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barefoot Computing and Basic Skills</td>
<td>BT Group</td>
</tr>
<tr>
<td>Collaboration with Cherie Blair Foundation for Woman</td>
<td>Mercer</td>
</tr>
<tr>
<td>Developing employability and entrepreneurship skills</td>
<td>Crescent Enterprises</td>
</tr>
<tr>
<td>Digital Literacy</td>
<td>Sea Group</td>
</tr>
<tr>
<td>Digital Ready Asia</td>
<td>Cisco Systems</td>
</tr>
<tr>
<td>EY Badges</td>
<td>Ernst &amp; Young</td>
</tr>
<tr>
<td>Fostering leadership and entrepreneurship skills</td>
<td>Alghanim Industries</td>
</tr>
<tr>
<td>Future Ready</td>
<td>Microsoft</td>
</tr>
<tr>
<td>Gapura Digital</td>
<td>Google</td>
</tr>
<tr>
<td>Grow Vibrant eCommerce Ecosystem</td>
<td>Lazada Group</td>
</tr>
<tr>
<td>LifeSkills</td>
<td>Barclays</td>
</tr>
<tr>
<td>National Industrial Training Institute</td>
<td>Saudi Aramco</td>
</tr>
<tr>
<td>Nestle needs YOUth</td>
<td>Nestle</td>
</tr>
<tr>
<td>PowerYOU and Experis Academy</td>
<td>ManpowerGroup</td>
</tr>
<tr>
<td>Promoting vocational training in travel and tourism</td>
<td>Jumeirah Group</td>
</tr>
<tr>
<td>Digital literacy programmes</td>
<td>SAP</td>
</tr>
<tr>
<td>Collaboration with Save the Children</td>
<td>Nokia</td>
</tr>
<tr>
<td>STC Academy</td>
<td>Saudi Telecom</td>
</tr>
<tr>
<td>Education, skill and youth employment Initiatives</td>
<td>Tata Consultancy Services</td>
</tr>
<tr>
<td>Structured learning and internship opportunities</td>
<td>Alshaya group</td>
</tr>
<tr>
<td>Youth employability programmes</td>
<td>The Adecco Group</td>
</tr>
</tbody>
</table>

Note: The table contains a subset of the total set of 44 initiatives submitted to the Closing the Skills Gap 2020 project over the 2016-2019 period for which sufficiently comprehensive information was available for a full analysis.
Acknowledgments

Closing the Skills Gap: Key Insights and Success Metrics is a white paper published by the World Economic Forum's Shaping the Future of the New Economy and Society platform, in collaboration with Tata Consultancy Services, and using the information provided by Members and Partners of the Forum's Closing the Skills Gap 2020 project.

The white paper has been published by the World Economic Forum as a contribution to a project, insight area, or interaction. The findings, interpretations and conclusions expressed herein are a result of a collaborative process facilitated and endorsed by the Forum, but whose results do not necessarily represent the views of the World Economic Forum, nor the entirety of its Members, Partners, or other stakeholders.

Project team

For Tata Consultancy Services

Balaji Ganapathy
Global Head, Corporate Social Responsibility

Aditi Trehan
Senior Manager, Corporate Social Responsibility

Poonam Ashara
Workforce Experience Consultant, Digital Workplace and Project Collaborator; Seconded to the World Economic Forum

For the World Economic Forum

Till Leopold
Head, Frontier Solutions Practice, Shaping the Future of the New Economy and Society
The World Economic Forum, committed to improving the state of the world, is the International Organization for Public-Private Cooperation.

The Forum engages the foremost political, business and other leaders of society to shape global, regional and industry agendas.