Stepping forward
Connecting today’s youth to the digital future
In March 2020, PwC launched a three-year strategic, global collaboration with UNICEF in support of Generation Unlimited (GenU), which aims to help upskill millions of young people around the world. The collaboration brings together public, private and civil society stakeholders to develop programmes and innovations that support young people on their path to productive futures and engaged citizenship, and to conduct research on the global skills challenge. In addition, PwC and UNICEF, in support of GenU, are collaborating in India and South Africa to develop, expand and fund education and skills programmes for young people.

https://pwc.to/UWY-2020

New world. New skills. is PwC’s global programme to help millions of people around the world improve their understanding, skills and knowledge for the digital world. There is an urgent need for organisations, governments, educators and citizens to come together to address this growing problem. We are convening discussions and working with a broad group of stakeholders to help find solutions that work in each country. We’re helping organisations in the public and private sectors anticipate the skills they will need in the future and work together on comprehensive solutions. We are committing to upskilling as a firm—training our people, investing in technologies and supporting clients, communities and other stakeholders across our territories.

www.pwc.com/upskilling

UNICEF works in the world’s toughest places to reach the most disadvantaged children and adolescents—and to protect the rights of every child, everywhere. Across more than 190 countries and territories, we do whatever it takes to help children survive, thrive and fulfill their potential, from early childhood through adolescence. And we never give up.

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www.unicef.org

Founded in September 2018, Generation Unlimited (GenU) aims to create better education, skills, employment and entrepreneurial opportunities for young people worldwide by bringing public and private partners together, putting youth at the heart of everything, to crowd-in capital and deliver innovations at scale to address both global and local needs. In response to COVID-19, GenU is mobilising partners to ensure that all young people are digitally connected and have better access to education, skills development and livelihood opportunities. GenU has set forth an ambitious target of connecting 2 million schools online over the next five years and reaching 500 million young people by the end of 2021 with world-class digital solutions.

www.generationunlimited.org

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Stepping forward
Connecting today’s youth to the digital future

Foreword

One in three. That’s the proportion of students around the world—some 463 million young people—who were unable to access remote learning when schools closed as a result of the COVID-19 pandemic. In addition, one in six youth have stopped working since the beginning of the outbreak. Young people who do not have reliable access to the internet, or technology or devices, and who lack digital skills and acumen have been hit particularly hard. The pandemic has accelerated trends that were already in play and exposed, in a stark light, structural weaknesses in institutions and economies. Inequalities are rising at alarming rates for the most vulnerable in every society, particularly for the unconnected half of the world.

Just as the crisis is unique, so is the opportunity at hand. We can build a more inclusive world by closing the digital divide and equipping young people with the skills they need to step into a new digital reality and succeed in learning, livelihoods and life. The good news is that at a local level, there are many successful solutions and promising innovations. But we need to scale them—and we need to do it fast.

Achieving this ambition will require new public–private partnerships focused on building young people’s skills and expanding internet access. Global institutions, governments, companies, private capital, communities and young people all have a role to play. By leading and working together, we can create a new paradigm for a thriving society. We hope this report will inspire you to join us in taking action for young people worldwide.

Bob Moritz
Chairman of the PwC Network

Henrietta Fore
Executive Director of UNICEF
Establishing a bold new agenda for digitally disadvantaged youth

In the span of just a few months and for the first time in recent history, the world experienced a shared global event that has upended lives, families and livelihoods, and shattered people’s sense of normalcy.

The COVID-19 pandemic has exposed structural weaknesses in local, national and international institutions and economies, exacerbated inequalities, and accelerated existing social and economic trends. The global public health challenge has aggravated an economic one, straining national and local resources. The International Labour Organization (ILO) estimates that in the second quarter of 2020, working hours fell 17.3% from the fourth quarter of 2019—equivalent to approximately 495 million full-time jobs. Already disadvantaged communities, those that were barely making ends meet and were generally reliant on tenuous social safety nets, are being left behind at astonishing speed.

Digitally disadvantaged youth—those living without consistent, reliable access to the internet or other technology, or who lack the skills and acumen to navigate a digital world—have been hit particularly hard. Approximately 346 million 15- to 24-year-olds—nearly one-third of all youth worldwide—were not online in 2017, according to UNICEF. As COVID-19 has shifted essential activities and services online, including education, job training and work, the challenges for these youth to stay connected to their educations, jobs and communities have only grown. UNICEF reports that one-third of students around the world, at least 463 million, were unable to access remote learning when schools closed due to lack of enabling policies or equipment to connect from home. More than 40% of employed youth were working in sectors hit hard by COVID-19, and nearly 77% were in the informal economy, which made them particularly vulnerable when businesses and other workplaces closed or moved online in response to pandemic restrictions. The most marginalised and vulnerable communities are most deeply affected, among them young women and girls, people who live in rural areas, and those whose families are in the lowest income levels. Without intervention, youth who are barred from the digital world will almost certainly suffer long-term or permanent
GLOBALLY, 3 OUT OF 4 STUDENTS WHO CANNOT BE REACHED BY REMOTE LEARNING OPPORTUNITIES COME FROM RURAL AREAS AND/OR POOR HOUSEHOLDS.

UNICEF, COVID-19: ARE CHILDREN ABLE TO CONTINUE LEARNING DURING SCHOOL CLOSURES?, AUG. 2020

social and economic disenfranchisement as more facets of everyday life—education, work, healthcare, news, leisure, communication, voting—go or stay digital.

This grave crisis nonetheless represents a powerful and rare opportunity. As it rebuilds and restarts, the global community can tap into digitally skilled youth as the drivers of a new, more resilient economic system. This can be done in a way that supports sustainable prosperity, reduces disparities and promotes social progress, guided by the United Nations’ Sustainable Development Goals. Since the end of World War II, economic progress largely spurred societal progress; the two went hand in hand. But in recent years, social progress has become decoupled from economic progress. This moment calls for a new type of collaboration among all parts of society: governments, global institutions, communities and youth, as well as new actors such as private-sector businesses and private capital.7 Stakeholders must reimagine their roles as they collaborate to give all youth access to the four stepping stones that allow them to cross the digital divide: technological connectivity, non-technological access, digital literacy and work-ready skills development (see the next two pages). By addressing systemic, long-standing challenges and acting with urgency to take short-term pragmatic steps to improve conditions, we can develop a technologically skilled workforce that meets employers’ needs, create flexible and resilient economies, and build a more equitable society for all.
Crossing the digital divide

Four stepping stones enable youth to cross the digital divide and gain the necessary skills to thrive in a digital world. Youth may have to navigate multiple stepping stones simultaneously or repeatedly. Marginalised communities and vulnerable groups—young women and girls, low-income families or those who live in rural communities, among others—face some of the greatest challenges in navigating these stepping stones and in crossing the digital divide.

**CONNECTIVITY**

Elements youth must have to get online
- Reliable power
- Digital infrastructure: broadband, cell towers, access to the internet
- Devices: computer, mobile phone, storage devices and router
- Access to digital platforms where content and markets reside

**ACCESS**

Non-technological elements that allow youth to take advantage of their connectivity
- Cultural acceptance, including gender norms and equality, to be online
- Family engagement and support
- Steady family income from working adults
- Affordable fees for connectivity, services and devices
- Native-language content
- Wellness and emotional resources and mental healthcare

The examples under each stepping stone above are representative and do not constitute an exhaustive list.
DIGITAL LITERACY

Elements that allow youth to gain digital literacy—which is the basic knowledge and skills necessary to participate online
- Foundational skills, including basic literacy, numeracy and basic digital knowledge
- Relevant quality educational curriculum
- Quality, up-to-date educational resources in native language
- Digital literacy programs, courses and materials
- Awareness of online risks and dangers

WORK-READY SKILLS

Elements that help youth prepare for and thrive in a digital world
- Advanced digital skills programmes, courses and materials
- College, university or trade education
- Job-related, job-specific and/or vocational training opportunities
- Digital job internship and apprenticeship programmes and opportunities
- Access to platforms where digital jobs are posted
- Programmes that foster skills needed for a digital world, including creativity, innovation, interpersonal skills and more

Source: PwC and GenU analysis
The COVID-19 effect on digitally disadvantaged youth: Bad and getting worse

Before COVID-19, the world was grappling with five urgent, interdependent and accelerating forces identified by PwC that are changing how societies and individuals live, work and operate.

These forces, abbreviated as ADAPT, are a growing asymmetry in wealth and social issues; disruption from climate change and the pervasive nature of technology; age demographics that are putting pressure on societies from populations that are getting older or younger; polarisation that is fracturing the world and increasing nationalism and populism; and declining trust in institutions that underpin society. Three ADAPT trends in particular were making things difficult for digitally disadvantaged youth, and the pandemic made them worse.

Asymmetry. Before COVID-19, global wealth, education and income gaps created an uneven distribution of access to technology and digital infrastructure among youth. Youth already were three times more likely than adults to be unemployed or were working in insecure, informal or poor-quality jobs with few social protections and limited career and training opportunities. Once COVID-19 struck, these youth suffered significant job losses, and one in six youth have stopped working. As public facilities such as schools, youth and community centres, and libraries shut down, already vulnerable youth lost access to two significant stepping stones: the connectivity and access needed to continue learning or working remotely. As a result, half of young people surveyed earlier this year reported being likely to complete their studies late, and 10% expect to not complete at all.

Disruption. Rapidly proliferating technologies are changing the nature of industries and increasing the need for new skills in the workforce. In a 2020 PwC survey, 74% of CEOs surveyed said they were concerned about the availability of key skills in the talent pool: transferable skills that organisations need and that help people think, act and thrive in a digital world. Of those CEOs, 32% said they were “extremely concerned.” The fault lines extend not only within countries but also between wealthy and less wealthy nations. As a result of COVID-19, the vital stepping stones of digital literacy and work-ready skills have become simultaneously more important to employment and less attainable, especially for youth in poorer or more remote communities.

Age. Nations with a disproportionately younger population will have a greater need to build digital-age skills among workforce entrants or else face massive unemployment. In Africa in 2016, 11 million youth were expected to enter
Stepping forward
Connecting today’s youth to the digital future

the workforce every year for the next 10 years, according to the World Bank. Furthermore, by 2050, Africa is expected to have more than half of the world’s population growth. This rapid growth in the number young people will increase the need to educate, employ and fundamentally prepare them for an evolving and digital world.

New structural constraints exacerbate the challenges

In addition to accelerating the ADAPT trends, COVID-19 has required massive national expenditures and led to broad constraints in the funding for and provision of non-emergency services. These compounding effects are making it harder, and in some instances nearly impossible, for digitally disadvantaged youth to access the resources, learn the skills and develop the attributes needed to succeed in a digital world, among them innovation, creativity and interpersonal skills.

Fewer resources are available. In what is projected to be the deepest global recession in decades, the International Monetary Fund in June projected global GDP growth of −4.9 percent for 2020. Governments have responded by attempting to spur growth through stimulus and emergency spending programmes. The government support programmes that emerging markets and developing economies have announced are an average of 5.4% of GDP, according to the World Bank—and for some countries are at least 10% of GDP. As a result, government debt has reached a record high of 51% of GDP in those countries. But there are limits to these interventions.

Private sources of support are also strained. Household resources, the second-largest source of a youth’s education funding, have weakened or disappeared due to illness, death, unemployment or job insecurity. Remittances may drop even further than they did during the 2008 global financial crisis. These payments are a critical source of income for many households in low-income and fragile countries, and as of 2018 were “the single most important source of income from abroad” for these countries, according to the IMF.
Stepping forward  
Connecting today’s youth to the digital future

COVID-19 has aggravated the challenge for digitally disadvantaged youth trying to break into the workforce. As noted by ILO Director-General Guy Ryder, the economic crisis stemming from the pandemic is affecting young people, and particularly young women and girls, harder than other cohorts and could have a generational effect. Before COVID-19, 267 million young people were not in employment, education or training—including more than one-third of young women, largely as a result of gendered expectations of unpaid family work and informal employment. Additionally, a May 2020 survey of technical and vocational education and training in 126 countries demonstrated that approximately 90% of respondents reported complete closure of training centres.

Competing priorities lead to lower prioritisation of key needs for digitally disadvantaged youth. Governments have had to manage a wide array of critical social challenges simultaneously. Declines in national revenues combined with greater demands for services and emergency financing will almost certainly trigger significant and lasting cuts in social services. Bolstering healthcare systems while supporting struggling small and medium enterprises and managing deep unemployment has lowered the priority of spending on or subsidising non-immediate items or services or longer-term investments. Globally, education spending may grow more slowly or even decline through 2020 and beyond. In a 2020 UNESCO survey of more than 100 countries, 86% of countries responding report using online platforms to deliver distance education to primary, lower and upper secondary education levels while only 20% are expanding access to online platforms by improving access to infrastructure and/or offering subsidized devices for access. At all levels, for those without digital access, education has been put out of reach.
PUTTING RESOURCES INTO DIGITAL LEARNING AND TRAINING FOR YOUNG PEOPLE IS AN ESSENTIAL INVESTMENT IN BUILDING SOCIAL COHESION AND IN REDUCING THE UNSUSTAINABLE INEQUALITIES THAT ARE BLOCKING HUMAN DEVELOPMENT AND ECONOMIC GROWTH. BUT THESE INVESTMENTS CANNOT BE TOP-DOWN. YOUNG PEOPLE THEMSELVES MUST BE AT THE FOREFRONT, WITH DECISION-MAKING POWER, BRINGING THEIR CREATIVITY, ENERGY AND PROBLEM-SOLVING SKILLS TO THE WORLD’S GREATEST CHALLENGES.

ANTÓNIO GUTERRES, UNITED NATIONS SECRETARY-GENERAL, AT “GENERATION UNLIMITED: CONNECTING HALF THE WORLD TO OPPORTUNITIES,” A VIRTUAL MEETING HELD 1 SEPT. 2020
Seizing the opportunities: Reimagining solutions for the 21st century

The bad news is evident. The good news? This is a moment to turn a crisis into an opportunity—not only to address the economic and social impacts wrought by the pandemic, but to rebound in a way that reverses long-standing challenges and puts youth on a more equal future footing. At the same time, we can also improve the economic fitness of societies at large, creating millions of workers with the skills necessary to thrive in the digital economy and the resources that enable them to sustain businesses and governments. For this to happen, however, stakeholders will have to think differently about the roles they play and the objectives they can achieve.

Reimagining the approach: Guiding principles to create more inclusive solutions

Stakeholders must adopt a new set of guiding principles to set forth parameters for developing programmes and solutions, and reimagine their roles to allow for new, safe, innovative solutions that are not encumbered with precedents or past assumptions and expectations.

Be globally minded and locally relevant. This is a global challenge with uniquely local implications. The most effective solutions will be sensitive and responsive to local needs, perspectives and capacity, as well as to language, culture, norms and other influences.

Identify, adopt and share best practices as a global baseline for all efforts. There is a nascent evidence base of what works to improve young people’s equitable access to the stepping stones of opportunity. Stakeholders should build on these efforts, focusing on developing youth-informed, empirically driven methodologies and frameworks that underpin the creation and scaling of solutions, and facilitating collaboration and pooling of resources to advance the knowledge base and achieve impact at scale.

Address the primary issue from many angles. Digital disadvantage is not an education or infrastructure problem with a digital component. Rather, it is a digital problem with education and infrastructure (and other) components. This complex, multifaceted challenge can only be addressed through integrated, cross-sector solutions that tackle each hurdle with technical, cultural and youth expertise and inputs from global and local sources. Stakeholders must work in parallel with those seeking to tackle issues such as massive unemployment, rising mental and physical health issues and struggling educational systems.

Recouple market economies and business goals to societal progress. Corporate or institutional governance, incentives, operations and the metrics by which private- and public-sector actors measure success will have to shift to a model that reflects their purpose beyond the financial and that reflects the needs of a broader set of stakeholders—and not just shareholders.
Commit for the long term. The focus and investment to address this challenge must be unwavering and long term. A sustained dedication of resources and political will—and frequent recommitment to the issue—can inspire and galvanise further action and investment, and ward off fatigue as other priorities compete for limited resources.

Reimagining stakeholder roles

Bridging the youth digital divide is too large and complex an undertaking for individual stakeholders to tackle on their own. They must come together in new ways to share knowledge, build expertise and co-create solutions in innovative, data-driven, scalable, inclusive and locally relevant ways. To succeed, they must identify and dismantle historical silos regarding information sharing, policy creation and product development. As the most effective partnerships are likely to arise from non-traditional collaborations and from enabling existing alliances to scale and sustain effective practices, stakeholders must seek out new partners and develop new partnership structures and financing arrangements. Public-private partnerships that leverage the full complement of stakeholders collaborating as equal partners will lay the groundwork for a new working model.

- **Global institutions** provide subject matter and technical expertise, structure and frameworks for understanding the global nature of the problem and best practices. Multilateral organisations have deep experience in creating data-driven methodologies, creating and implementing programmes, and influencing policy. They provide the foundation on which to build and deliver location-specific solutions. International financial institutions, for example, can offer implementation and financing platforms, including innovative impact bonds for youth educational and digital literacy services.

Spotlight on Generation Unlimited and Reimagine Education

Generation Unlimited is a multi-stakeholder partnership platform that brings together public, private, not-for-profit and multilateral organisations to expand education, training and employment opportunities for young people across the world. As part of that objective, it is supporting Reimagine Education, a flagship initiative launched by UNICEF to connect every child and young person—some 3.5 billion by 2030—to world-class digital solutions that offer personalised learning to leapfrog to a brighter future. By capitalising on its unique strengths and membership, GenU helps achieve large-scale results by attracting investments, technical and financial resources, high-level advocacy and engagement with young people.

Success will arise when this diverse set of stakeholders leverages their strengths to help digitally disadvantaged youth get the resources and skills to cross the digital divide, and do so in a transparent, innovative and accountable way. This belief is at the heart of GenU and its partners and inspires the work they do together.
Stepping forward
Connecting today’s youth to the digital future
• **Governments** provide the governance, resources, infrastructure and regulations for building forward-looking solutions. Government data and policies are fundamental to ensuring that youth are able to receive support across all four stepping stones and to helping improve youth outcomes in an inclusive, sustainable manner aligned with broader social goals and economic growth.

• **Corporations and private capital** are essential as employers, engines of the digital economy and investors in communities. Their approach to problem-solving, resource allocation and values-driven results brings a novel and urgent perspective. Programmes and initiatives led or supported by businesses may include providing technology or connectivity, community education reskilling or upskilling programmes, career awareness, early and continuing education and training, internships and apprenticeships, training of trainers, support for the establishment of national equitable policies, and community education. The wide variety of actors in this space can help advocate for, create and implement innovations at scale that support broader policy goals.

• **Communities**, including schools, local NGOs, religious institutions, research organisations and other community service organisations, bring an understanding of local needs and expertise to develop policies and solutions that are locally relevant, repeatable and culturally appropriate. **Youth and youth-serving organisations** within communities play a unique role in championing, informing, designing, implementing, testing and evaluating solutions or prototypes for digitally disadvantaged youth. Youth in these communities and the networks supporting them are best placed to dispel myths and bridge information gaps about what they want and need, and the best ways to serve them. With the right support, tech-savvy and digitally enabled youth are in a prime position to advance innovation in a future-forward manner.
Reimagining collaborative solutions for the 21st century

Building a new path across the youth digital divide will require reimagined solutions for the 21st century and every sector—public, private, not-for-profit—and civil society must be involved. Historical operating silos should be dismantled, old assumptions should be discarded, and everything from who is involved to how solutions are created should be reconsidered.

The following principles should serve as a baseline for reimagining solutions to the youth digital divide in the 21st century:

- Successful solutions will be globally minded and locally relevant.
- Best-in-class practices should be identified, researched and shared widely, regularly and often, in order to establish a global baseline for creating solutions.
- Bridging the digital divide will require a multi-faceted approach made up of integrated, cross-sector solutions that address different aspects of the challenge in a deliberate and coordinated fashion.
- Private- and public-sector actors should continually assess how they can better recouple economic and financial goals with social progress objectives, and how they can work with other actors and sectors across all aspects of their operations.
- There is no fast or easy way to bridge the youth digital divide. Stakeholders must commit to addressing these issues for the long term as a way of making their people, communities and economies stronger.
Stakeholders must come together in new ways to share knowledge, build expertise and co-create solutions in innovative, data-driven, scalable, inclusive and locally relevant ways.

**GLOBAL INSTITUTIONS**
- Multilaterals
- International NGOs
- International organisations and forums
- International financial institutions

Provide leading practices, data, methodologies

**GOVERNMENTS**
- National
- Regional
- Local

Provide funding, resources and infrastructure, and develop policies

**COMMUNITIES**
- Youth
- Youth groups
- Local NGOs
- Religious institutions
- Schools
- Research organisations
- Other community-based organisations

Provide community relevance, local history and access to local populations

**CORPORATIONS AND PRIVATE CAPITAL**
- Ultra-high-net-worth individuals
- Corporations
- Financial institutions
- Other private businesses and organisations

Provide technology resources, innovation, training, jobs, apprenticeships

Source: PwC and GenU analysis
Ultimately, the question isn’t how we will help bridge the youth digital divide. Rather, it is whether we will be able to harness the political will and gumption necessary to lay down and maintain the robust network of stepping stones that will support young people as they march into the future.

We have the tools and resources to build a more equitable world. We know how to make technology available to hundreds of millions of people, provide access to digital technologies and equip people with the skills and literacy necessary to thrive in the digital world. And, by doing so, we create the engine to drive a newly energised, future-oriented global economy.

Achieving this will not be easy or quick. Success requires mobilising financial, in-kind and technical resources, building political will and coordinating concrete institutional and organisational commitments. Simultaneously top-down and bottom-up, this approach must combine the efforts of global, national and local governments and civil society, businesses and youth, working in new ways and with new partners. As we embark upon this journey, we need to have frank conversations about how more must be done, urgently, to overcome the digital divide and how moving forward can look different. It will be important to identify the biggest barriers to scale and settle on the most significant actions that all stakeholders can support to achieve a meaningful impact. Stakeholders should adopt a ‘start from yes’ approach, in which the opening premise is that new solutions will look different than in the past. Helping youth step across the digital divide will be possible only when we agree to muster the requisite level of political and social good will. The future of the world’s youth, quite literally, depends on it.

WE NEED TO MAKE SURE YOUNG PEOPLE IN VULNERABLE COMMUNITIES HAVE ACCESS TO ALL OPPORTUNITIES, REGARDLESS OF THEIR LIVING CONDITIONS.

WE NEED TO ENSURE THAT EVERYONE HAS ACCESS TO NEW KNOWLEDGE, SKILLS AND JOB OPPORTUNITIES ONLINE. I LOOK FORWARD TO A FUTURE WHERE EVERY YOUNG PERSON WHO HAS A DREAM WILL NEVER FEEL THEIR DREAM IS LIMITED BECAUSE OF THEIR CIRCUMSTANCES—THAT THERE IS NO SKILL THAT IS UNREACHABLE BECAUSE OF WHO YOU ARE OR WHERE YOU ARE.

MARYAM ELGONI, 25, SOUTH AFRICA
Authors’ note: This is the first in a series of articles related to the social and economic implications of digitally disadvantaged youth. Follow-on articles that focus on related issues will be found at https://www.pwc.com/digitaldivide
Endnotes


7. Private capital in this context refers to ultra-high-net-worth individuals, family businesses and other privately owned companies and sources of capital.


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