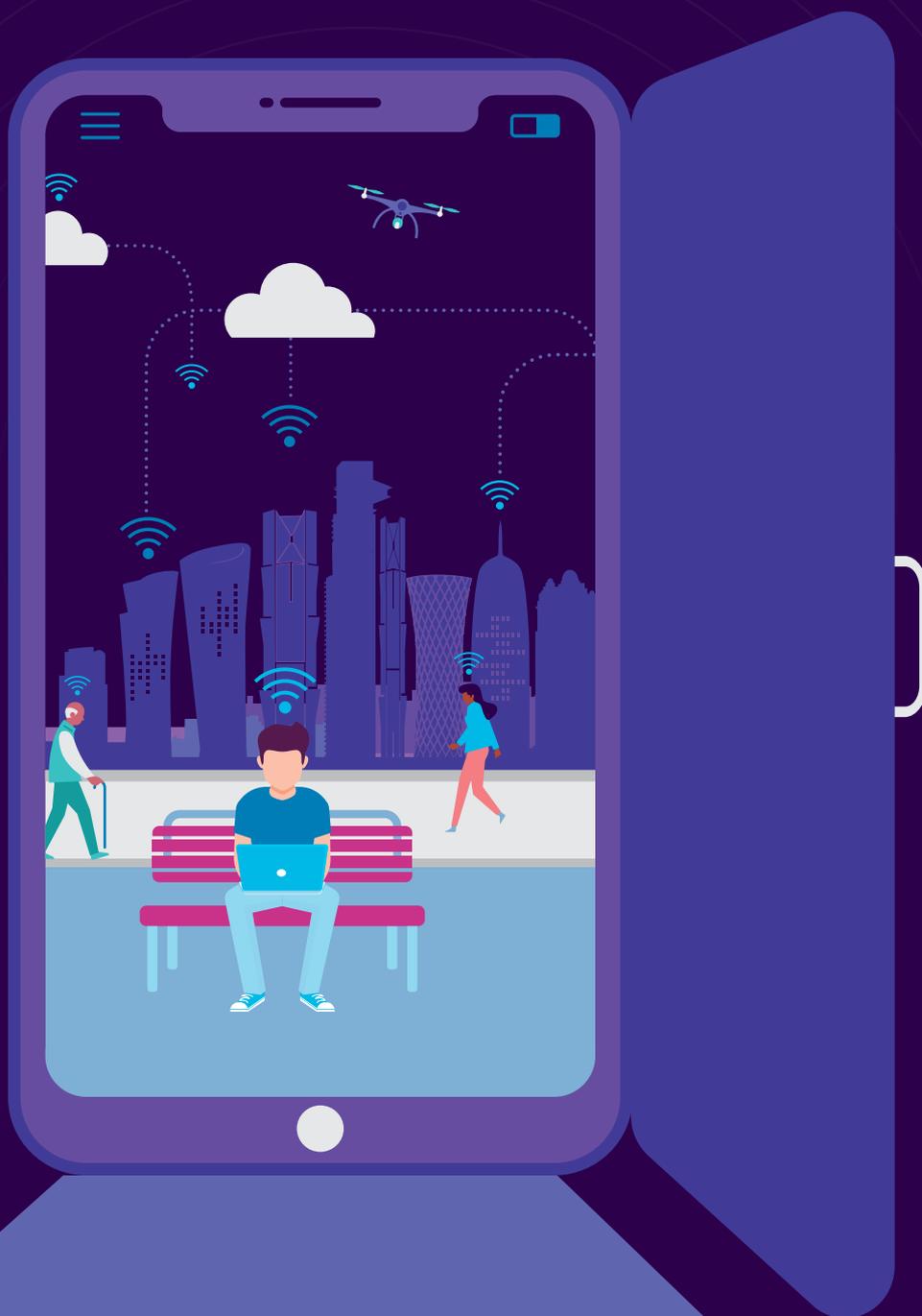


The Great **DIGITAL DIVIDE**

Why bringing the digitally excluded online
should be a global priority



Executive summary

In a world in which socio-economic inequalities are a pervasive problem, the absence of the internet in people's lives only serves to compound the problem. The internet is no longer a "nice-to-have" tool; it is a "must-have" societal necessity. Private organizations and governments need to urgently come together to fight digital exclusion and bridge the gaping digital divide.

What we heard in our research:

The offline population in our sample contains many younger people and people who have previous internet experience. The largest share of offline people are aged 22 to 36 (35% of our sample, which ran from those aged 18 to over 70). In addition, over half of the offline population are not internet novices – 59% have previously used it, probably because they did so when it was available during their academic studies or during a point in their life when they could afford it. The good news is that they are likely to already possess the digital skills needed to use the internet in the future.

Cost, complexity, and a perceived "lack of interest" prevent people from being online. We found that there is no one single universal cause for why people are offline – the reasons differ by specific segment. For example, **cost** is a key reason for being offline for younger people aged 22 to 36 and those living in rural areas. **Excessive complexity or difficulty to use** are key reasons people with long-term health conditions or disabilities remain offline while a perceived **"lack of interest"** in using the internet emerged as a key reason why respondents aged 60+ and females are offline.

Being offline has significant social and economic implications today. A lack of digital skills and access to technologies can negatively impact all aspects of a person's everyday life. It can lead to social exclusion and limit career mobility. It can mean people are unable to access public services, as governments increasingly move services online. It can also cause financial hardship and create health inequalities. A lack of access to digital tools and the internet is particularly painful during a global crisis, such as the current global coronavirus pandemic, where digital technology becomes a critical medium to remain connected.

The offline population is keen to take advantage of the internet.

- Recognizing the benefits of the internet, 46% of offline respondents believe they would feel more connected to family and friends if they had access
- Nearly half (48%) of the offline population say that they would like to get internet access in the future
- Younger offline people are keen to use communication platforms online and also want to be online to help advance their careers
- Older offline people are most interested in getting online to manage their finances.

Private organizations, policy makers, and governments – in collaboration with NGOs, think tanks, and educational institutions - are well-positioned to help lead digital inclusion and reduce the digital divide.

Recommendations for private organizations:

- Invest in digital inclusion as part of your corporate social responsibility agenda
- Educate people on how to stay safe online
- Recruit candidates with digital skills from marginalized communities into the workforce.

Recommendations for policy makers and governments:

- Work towards making devices and the internet more accessible to marginalized communities
- Create greater accessibility for online public services.

Recommendations for private organizations and policy makers:

- Focus on public-private partnerships
- Educate and bring awareness to disadvantaged offline populations about the value of the internet.

Introduction

The ubiquity of digital technologies and internet access have been instrumental in transforming how people interact and work, and how companies operate and compete. However, not everyone has access to this connected world – there is still a very high percentage of people who are offline. In 2018, over half of the world’s population was finally using the internet. However, around 3.7 billion people remained offline.¹

The situation for these sizeable offline populations is becoming more difficult as jobs increasingly require digital skills and public services move online. While a lot of the attention paid to digital inequality focuses on developing countries, around 13% of the population in developed countries remains offline.²

To better understand this situation, and to explore the factors that keep people offline, we launched an integrated global research study in five developed countries (France, Germany, Sweden, the United Kingdom, and the United States), and one developing country (India). In this research, we looked at three dimensions:

- 1. The offline population:** We surveyed more than 1,300 people who are currently not online via phone and face-to-face discussions

- 2. The online population:** We surveyed more than 3,700 people via an online survey
- 3. The expert view:** We conducted interviews with executives at 22 non-profits, charities, NGOs, and private companies working in the digital inclusion space.

This report explores four key themes:

- Why are people offline?
- The consequences of being offline.
- Why the offline population is keen to access the internet.
- How organizations can support greater digital inclusion.



Who are the offline populations?

We define the offline population as two primary groups:

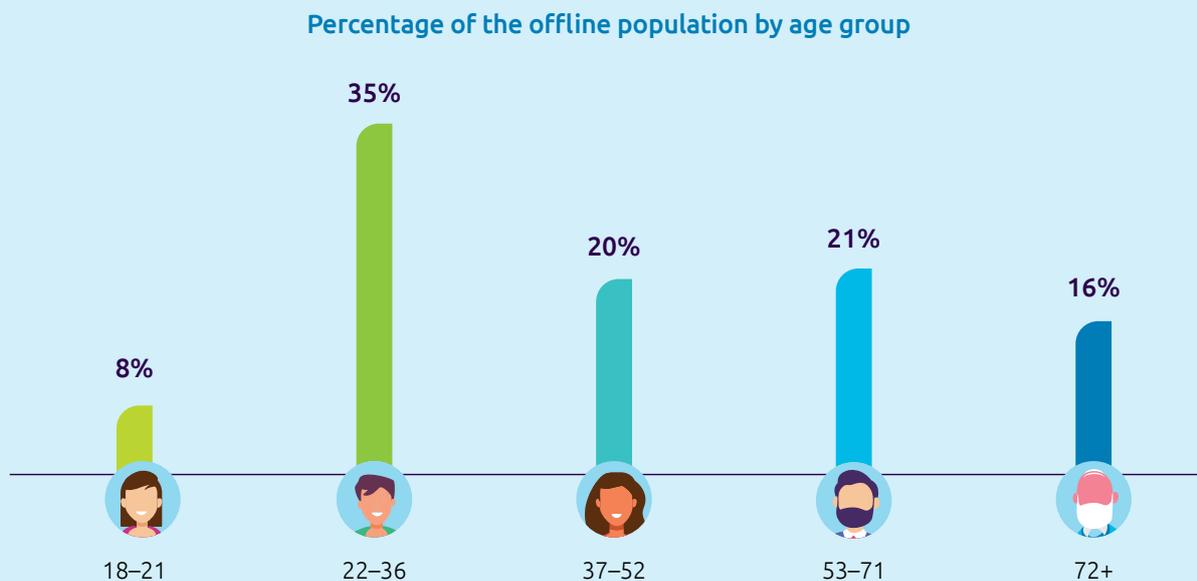
- Those who last used the internet over a year ago and do not use the internet currently through either personal or shared devices
- Those who have never used the internet or gone online.

In our research, we conducted in-person discussions with a range of offline people, many of whom (69%) had a disadvantaged background with income below their country's definition of poverty. Our research spanned major geographies and included people from a range of occupations. For example:

- **India**, where we spoke to laborers, vegetable sellers, tailors, and stay-at-home women.
- **France**, where we engaged with maintenance workers, self-employed freelancers, students, and the unemployed.
- The **United Kingdom**, where we spoke to building caretakers, charity workers, care workers, manufacturing workers, and retirees.

Younger people constitute the largest share of the offline population

In our research, **43%** of the offline population is below the age of 36.



Source: Capgemini Research Institute, Digital Divide Research, Offline Population Survey, December 2019–February 2020, N=1,304 offline respondents.

Most offline people have not always been offline

- Overall, **59%** of offline respondents have previously used the internet – this percentage increases to **68%** among offline people aged 22 to 36.
- Among the offline population aged 72 or older, **70%** have never used the internet.

The number of offline respondents who have previous internet experience is, in one sense, positive news. It means that they are likely to already possess the digital skills needed to use the internet.

Nearly a third of offline people are employed full-time

- In our research, **28%** of the offline population is employed full time, and among them, **75%** live in poverty. This suggests that this group of offline people likely have more pressing needs than thinking about paying for internet access.

Cost, complexity, and “lack of interest” are three major factors why people are offline

In this research, we investigated what keeps offline populations away from the internet. We found that there is not one single universal cause – the reasons differ by specific segment. Suresh Reddy, director of the SRF Foundation – an organization that works towards digital inclusion for underprivileged children and youth in India – outlines how certain groups, such as offline women or the elderly, are excluded for different reasons: *“Women in certain sections of society are often denied access to smart phones while older people are not familiar with the internet and may even fear it. There are unique challenges for different groups. You therefore need to have differential strategies for different communities and think specifically about how to include these communities”*

In this section, we explore three main drivers as to why certain segments are offline

1. Cost is a key reason for being offline for:
 - Younger people aged 22 to 36
 - People living in rural areas.
2. The internet being too complex or difficult to use is a key reason for being offline for:
 - People with a long-term health condition
 - People with a disability.
3. A perceived “lack of interest” stemming from fear or a lack of confidence, skills, or experience in using the internet is a key reason to remain offline for:
 - Older respondents aged 60+
 - Females.

Cost

Cost is an impediment to internet access for those aged 22 to 36 and rural populations

Affordability remains the greatest barrier for many offline populations:

56%
of offline people aged 22 to 36 say the cost of a device is the reason they have never used the internet

- Nearly 40% of all offline people in poverty say they have never used the internet because a subscription is too expensive
- Over a third (35%) say the computer or mobile phone needed to access it is too expensive.

The Alliance for Affordable Internet (A4AI) defines internet access as affordable when 1GB of mobile broadband data is priced at 2% or less of the average monthly salary. In some countries, 1GB costs as much as 20% of the average monthly salary, making it “too expensive for all but the wealthiest few.”³ The cost for data also varies significantly by countries, even in developed economies. While one gigabyte (1GB) of mobile data costs \$3 to \$4 in France and Sweden on average, it costs \$6.66 in the United Kingdom and \$6.96 in Germany. Costs are especially high in the US, where the average cost for 1GB is \$12.37.⁴

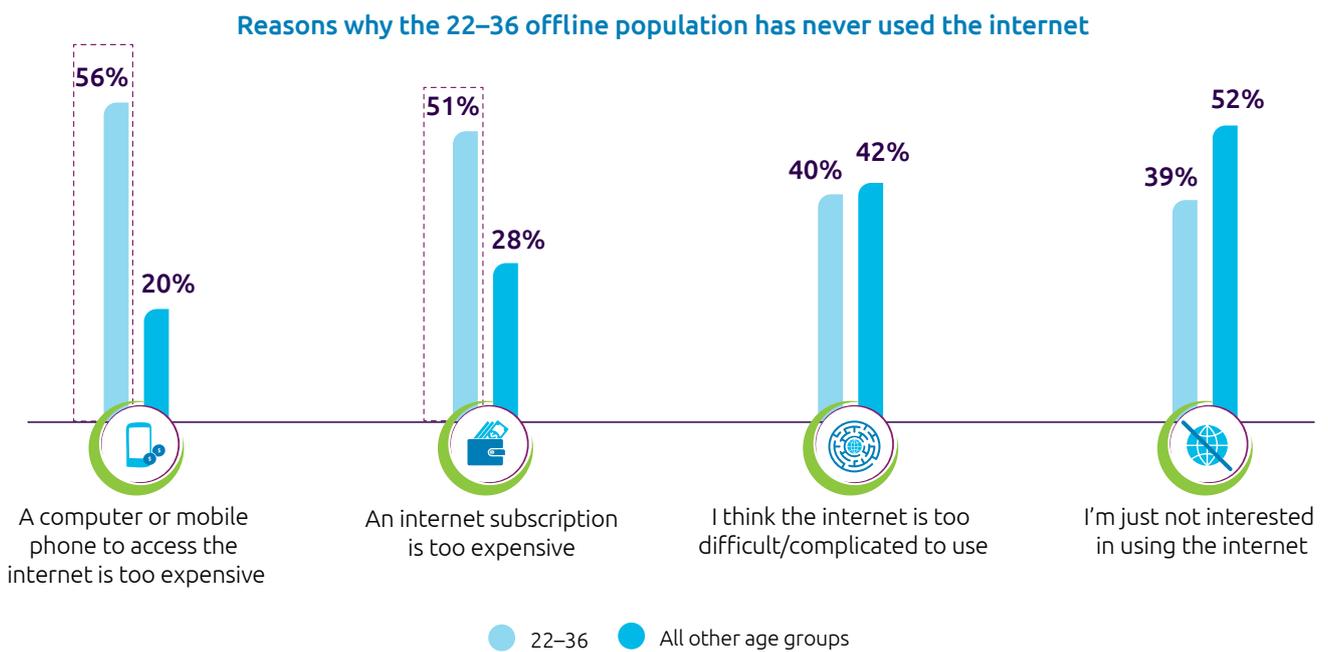
The 22 to 36 age group is not online primarily due to cost

Cost is a significant impediment for the 22 to 36 age group – 56% point to the cost of a device to access the internet and 51% point to the expense of an internet subscription (see Figure 1). Cost is a primary reason why this group stops using the internet (cited by over a third – 36%). It is also a key reason for not being online – coupled with the fact that many 22 to 36 year olds used to be online (68%) – it suggests

that extenuating circumstances are a factor. For example, representatives of this group might have suffered financial

hardship, persistent unemployment, or struggled to meet immediate needs, such as housing.

Figure 1. Over one in two offline people aged 22 to 36 say the expense of an internet device or subscription is the reason why they have never gone online



Source: Capterra Research Institute, Digital Divide Research, Offline Population Survey, December 2019–February 2020, N=1,304 offline respondents.

Reasons not to use the internet: the young offline population

“My computer and cell phone broke down and I could not afford to replace them on my salary, which meant that I could not use the internet.”

– 24-year-old offline female in France



“My internet service provider (ISP) continued to increase my subscription costs and I couldn't afford it. So, in the end, I cancelled it. I haven't used internet since.”

– 23-year-old offline female in Sweden



“I do not have it at home and my parents could never afford it.”

– 19-year-old offline male in the US



“We don't have the money to buy a mobile and use the internet. In the last few years, our expenses have increased so much that we can't make using the internet our priority.”

– 25-year-old offline male in India





The cost challenge is exacerbated in rural areas

Nearly half (47%) of offline people living in rural areas say they have never used the internet because an internet subscription is too expensive and 44% say the device is too expensive.

The Internet Society has shown that there is a vast gap between urban and rural internet access in the European Union. The share of households living in rural areas accessing the internet daily stood at only 62% (versus 88% in cities), driven by higher costs and long implementation times of broadband in rural areas.⁵

Amit Chakravarty of the India-based International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) – which works with the rural poor—outlines how people in remote communities continue to be excluded: *“Children in urban areas are exposed to the digital world almost from the time they are born. However, children in tribal, rural communities may never even have access to primary education, let alone the digital world. While literacy levels are going up across the country and connectivity is improving, people in remote areas remain*

excluded as a result of not having access to reliable, high-speed connectivity.”

Angela Siefer, the executive director of the National Digital Inclusion Alliance, a US non-profit organization that advocates for national access to broadband, outlines how cost is a key driver of the digital divide in the US. *“Internet service in the US is a commodity, it is not a utility. In some rural areas it simply is not there. In many places, both rural and urban, it exists but there is very little competition, and prices are high. The lower a household’s income, the less likely that household is to have a home broadband subscription. We must consider how we address the high cost. Do we regulate it or do we subsidize it?”* she says. The Center for Public Integrity, a Washington DC-based think tank, found that US internet users face two hurdles:

- They pay more than their European counterparts (up to 3.5 times more)
- They have fewer choices when it comes to providers (only one or two providers in the US compared to seven on average in Europe).⁶

Complexity and difficulty of use

For people with health conditions or a disability, a perception that the internet is too complex or difficult is a key reason for staying away

"I suffer from dizziness and epilepsy, which generally affect my ability to use screens for long periods of time, which means that I do not use the internet."
 – 40-year-old offline male in France



"I suffer from epilepsy and staring at a computer screen can bring on an episode."
 – 27-year-old offline female in the UK



Respondents with a long-term health condition believe the internet is too difficult to use

In our survey, we found that 65% of respondents with a long-term health condition – and who have never used the internet – felt that it was too complicated to use (this drops to 36% for

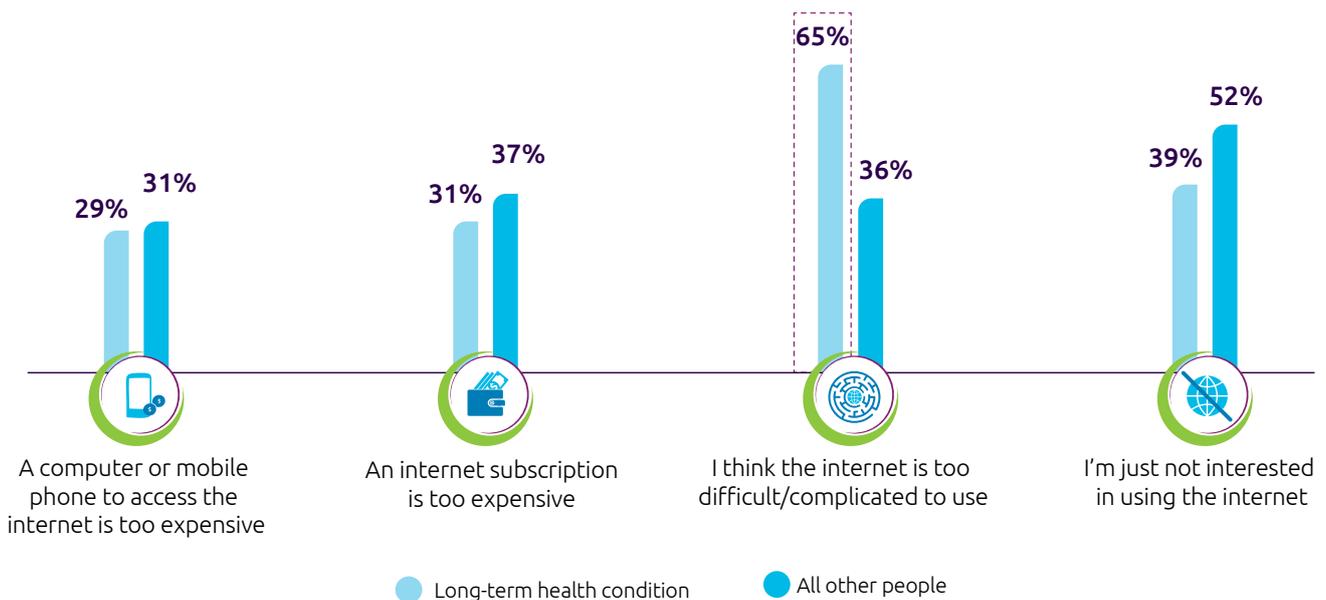
the rest of the sample) (see Figure 2). In fact, 40% of offline people with a health condition go as far as to say that they would feel “nervous” if they had to use the internet today. These are people who have suffered from a range of ailments – from trouble walking to migraines – and who have had the condition for more than six months.

Offline people with disabilities also believe the internet is too difficult to use

Sixty-one percent of offline people with disabilities say the internet is too difficult or complex to use. Forty-one percent also say if they had to use the internet today, they would feel “nervous.” This could be due to their inability to see the screen, use various hardware devices, or be forced to engage with disability-unfriendly interfaces. These are people who experience a range of disabilities, from sight problems to limited use of arms or fingers.

Figure 2. 65% of offline people with a health condition believe the internet is too difficult

Reasons why offline people with a health condition have never used the internet



Source: Capgemini Research Institute, Digital Divide Research, Offline Population Survey, December 2019–February 2020, N=1,000 offline respondents.

A perceived “lack of interest” stemming from fear or a lack of confidence, skills, or experience

A perceived “lack of interest” in using the internet is a key reason for the 60+ and female populations being offline

The 60+ age group are staying away because of a “lack of interest”

As Figure 3 shows, close to two-thirds (65%) of the 60+ offline population say they have never used the internet because they are not interested in doing so (this drops to 38% for the rest of the sample).

While the 60+ population report a general “lack of interest,” the causes of this viewpoint and behavior stem from a range of factors. Recent research conducted by the UK’s Lancaster University found that older adults’ resistance to digital technologies is not due to accessibility issues, but rather stems from perception that online tools are arduous and time consuming to use, their concerns regarding its impact on

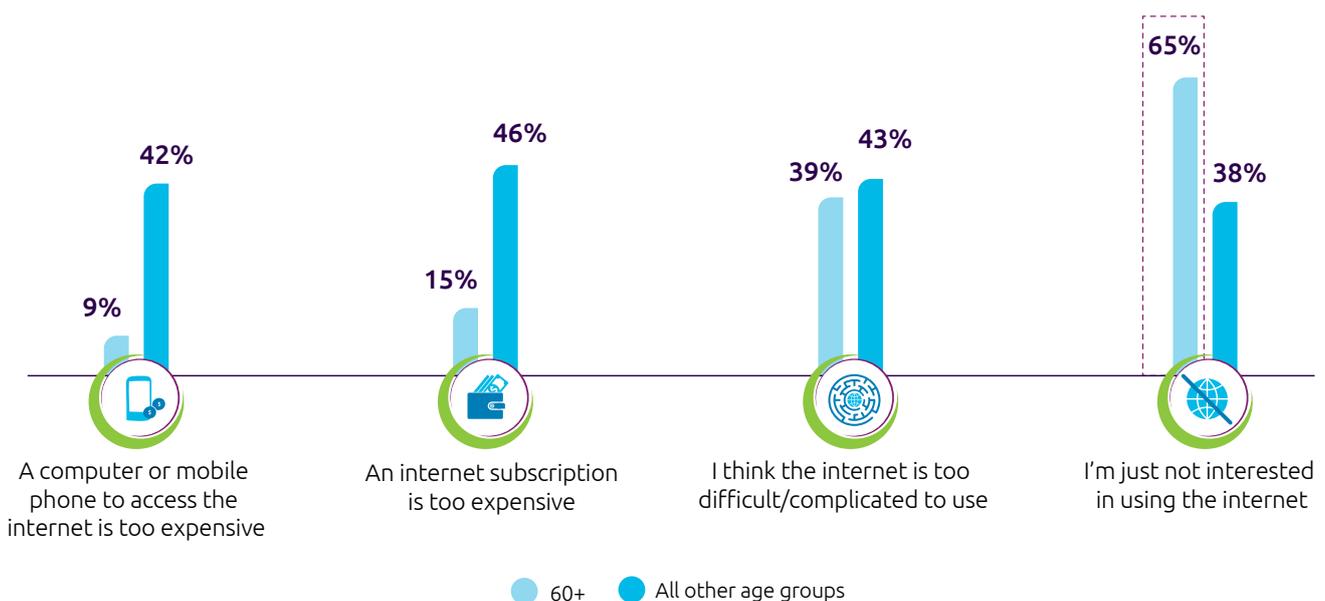
society (e.g., online shopping taking business from local shops, threatening their towns), and their fears of making a mistake. These were all identified as significant factors holding back technology use among this population.⁷

Given that most of the offline 60+ age group have never used the internet (57%), this “lack of interest” could also be explained by lack of exposure to digital technologies. They may not understand what they could potentially do on the internet, are not convinced of the value of the internet and/or they are afraid of making a mistake.

Sally West, policy manager at Age UK – a charity that provides companionship, advice, and support for older people – echoes this sentiment. She says: *“There can be a range of issues for the older population. Part of it is not being brought up in a digital world. Health issues to a certain extent can also be a driver for non-use. Some level of cognitive impairment can be particularly common for older age groups as well or just taking a bit longer to learn and retain things. That extra difficulty in picking up new skills when you are older because your cognitive abilities are not quite as sharp as they were can be a hindrance to confidence.”*

Figure 3. More than three in five offline people aged 60+ report “no interest” in using the internet

Reasons why the 60+ offline population has never used the internet



Source: Capgemini Research Institute, Digital Divide Research, Offline Population Survey, December 2019–February 2020, N=1,304 offline respondents.

Jean Deydier, founder and president at Emmaus Connect – a French NGO dedicated to making digital a driver of socio-economic integration – explains why older populations might not be confident in the internet. *“The perceived risk on the internet is an important reason for exclusion among older populations. The risk of sharing personal data online, being the victim of financial scams or reading information that is not true are all real risks that have decreased the motivation of older people to use the internet,”* he says.

“This is the most important problem that we face when we try to train older people. They are afraid of digital. They do not have confidence in digital. And of course, there is a lack of basic digital skills – very often they are dependent on younger members of their family to help them online, if they get on at all.”

Reasons not to use the internet: the views of the older offline population

“I’m afraid to use the internet because I don’t know how to use it.”

– 65-year-old offline female in France



“I have never had a reason to use the internet. All my hobbies and interests are offline such as reading newspapers and magazines at the library”

– 75-year-old offline male in the UK



“I really think the internet is a waste of time.”

– 78-year-old offline female in Sweden



“The internet is spoiling the interactions of our community in our nation. I only need a phone to make calls and send messages. I don’t need the internet.”

– 69-year-old offline male in India



“Nothing about the internet really impresses me. I think it has stopped people from talking to each other, thinking for themselves, and using some initiative.”

– 70-year-old offline female in the UK



For offline females, a “lack of interest” is a key driver

Over half (54%) of offline female respondents also say they have never used the internet because they are not interested in using it, compared to 43% of males offline. As with the

older population, this lack of interest could stem in turn from a lack of skills and confidence or a fear of making mistakes – a tendency we examine below, in “Lack of access to smart devices affecting abilities and confidence.”

Reasons not to use the internet: the views of offline females

“I never needed internet for my work and, other than that, I don't have much to do with it. If there are things which can only be done online, I ask for help from my family. Having the internet is a luxury we cannot afford.”

– 52-year old in the US



“I found that there was a constant pressure to keep up to date on social media and it all became too much, so I decided to completely abstain from the internet.”

– 27-year-old in the UK



“I could not afford to continue paying the high costs of maintaining my broadband and mobile subscriptions, so I deleted them. My cost of living is high, so I had to remove the non-essential items.”

– 27-year-old in France



“My kids are young, and they need my attention. That is why there is no time left for using the internet. Other than this, the times when I have used internet, unwanted and bad things opened up and that is why I stopped using it.”

– 35-year-old in India



There can be a range of issues for the older population. Part of it is not being brought up in a digital world. Health issues to a certain extent can also be a driver for non-use.

Sally West, policy manager, Age UK.

Lack of access to smart devices affecting abilities and confidence

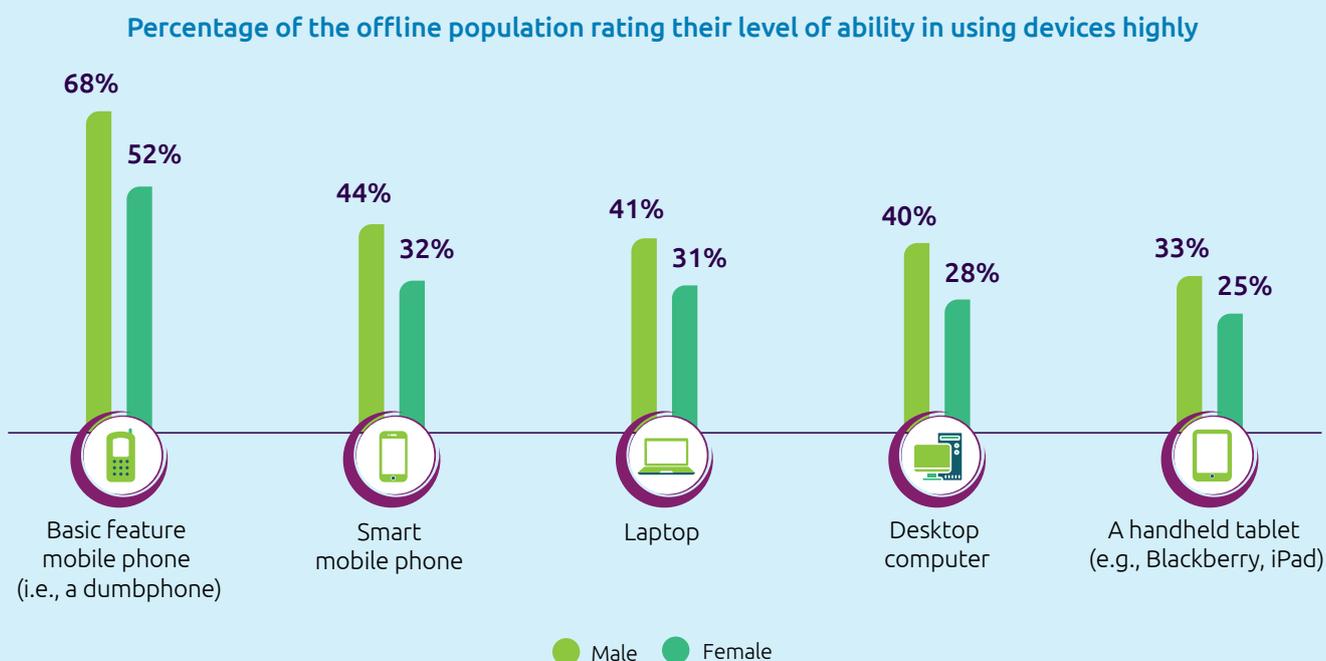
Not surprisingly, the offline population is most comfortable with a basic-feature phone and least comfortable with a tablet. As Figure 4 shows, there are also differences that emerge along gender lines. For example, 44% of male respondents see themselves as having a strong ability with smart mobile phones, but this drops to 32% for female respondents.

These differences in perception by gender could also reflect unequal ownership levels for these devices. A recent study by GSMA, an industry organization that represents the interests of mobile network operators worldwide, suggested that women in low- and middle-income countries are 10% less

likely than men to own a mobile phone.⁸ Oliver Quinlan, from Raspberry Pi Foundation – a UK-based charity that works to put the power of computing and digital into the hands of people all over the world – says:

“Our mission is about making computing and digital available to everyone. We look at how we are making our programs accessible to a wide range of people in a wide range of areas and targeting particular groups. One area that we are looking at the most now is gender across the board, because the take up of computing in many contexts is imbalanced between males and females.”

Figure 4. Comfort with different devices by gender



Source: Capgemini Research Institute, Digital Divide Research, Offline Population Survey, December 2019–February 2020, N=1,304 offline respondents.

Maneesha Chadha, head of CSR and Philanthropy at J.P. Morgan India, points out that this gender imbalance is a significant issue in the country. *"I think a big digital challenge that we are seeing for women specifically in India is access to smartphones. While in urban environments, particularly in big cities, women have their own phones, in tier 2/tier 3 cities most of them do not own one. It is usually that they have a feature phone and potentially the husband or the adult son will have a smartphone which women will occasionally use. As a result, we find a varying degree of digital literacy in women across groups."*

This lack of access to smart devices is limiting digital skills development. Anne Kjær Bathel, CEO and co-founder of Berlin-based ReDI School of Digital Integration – a non-profit coding school for tech-savvy people with refugee status – says: *"A key component in digital skills is learning how to use the hardware. When you have never used a laptop before, you need to learn all the different components. For example, understanding how a computer mouse works. The required hand-eye coordination for some people, particularly, the most deprived people we work with, is a challenge, and is something that needs to be learned. It is not intuitive."*



Being offline now impacts all aspects of life

A lack of digital skills and access to technologies can negatively impact all aspects of a person's everyday life. It can compromise everything from taking advantage of career opportunities to accessing public services. Here, we examine the key consequences for those offline.

Being offline leads to social exclusion

Internet access (or its absence) has been found to shape patterns of social exclusion. A UK study found that people who take part in "active living" (e.g., they attend cultural events, read, listen to music, dance, take part in sport, volunteer) are significantly more likely to have internet access than those who do not, even after demographic and socioeconomic factors (education, income, employment) are taken into account.⁹

The offline population is susceptible to increased feelings of isolation, inadequacy, or loneliness as they cannot use digital mediums to connect with family, friends, or community. These feelings are heightened in a crisis such as the global coronavirus pandemic, where digital technology becomes a critical medium to remain connected. When access to physical spaces is limited and physical distancing is required to decrease the spread, virtual spaces facilitated by the internet provide opportunities to work and learn remotely, and to keep in touch with friends and family, among other such possibilities, as we have been witnessing during the pandemic.

Forty-six percent of offline respondents said they would feel more connected to friends and family if they had access to the internet. Frédéric Bardeau, founder of Simplon, a provider of free digital training in France, believes that not having digital skills impacts parental roles. He says: *"If you lack basic digital skills it can be very difficult to be a citizen, a consumer, or even a parent. Parents must educate their children on digital literacy. And if you are not digitally literate yourself, it can be a problem to transmit those values and knowledge to your children."*

As more schools develop the use of online platforms to communicate with students and their families and to share educational content, the risk of social exclusion increases. And in a crisis where schools close and move to remote learning, children in households without access to the internet or a device will fall behind even more. Helen Milner, chief executive

from the UK-based Good Things Foundation, a social change charity focused on designing and delivering digital inclusion programs, adds: *"Being online and getting the necessary skills increases connectivity with other people, family and communities. It reduces loneliness and isolation and it helps people to engage with other people. This leads to digitally included people being happier, healthier and better off."*

Being offline limits career mobility

The offline population risks losing out in terms of career mobility as it makes applying for jobs online more difficult and they have less access to online learning and education. In the words of a 58-year-old offline male from the United Kingdom: *"If I had to use the internet for anything, I would like to learn how to keep up-to-date with job opportunities in the construction and security industry that I work in."*

Moreover, their lack of digital skills development impacts the potential for career mobility. Forty-four percent of offline respondents believe that they would be able to find better paying jobs and educate themselves if they had access to the internet. Dominic Orr, research lead at Kiron Open Higher Education, a Berlin-based online learning platform for refugees and underserved communities, says: *"In Germany, we know there are under-represented groups in the general population that are being digitally excluded. These people are being failed because they often have low initial education, are not going on to further their education, and therefore are missing out on certain career opportunities. Then, if we look at the whole discussion on digital literacy in Germany, at the moment it's just focused on the digital literacy of young people. There are two key groups of the population that are missing out: people who have left school and have lower education and, generally speaking, anyone who is old. This lack of education, and low digital literacy, is creating greater exclusion."*

Offline populations are also left out of the many jobs that information and communication technologies have created. Research conducted by the Internet Association, an American lobbying group, estimates that the internet sector created six million jobs in the US in 2018, representing about 4% of total US employment.¹⁰ The Good Things Foundation's Helen Milner says: *"Our evidence also shows that digital inclusion leads*

to people wanting to do more learning, and that progresses into career and employment opportunities.”

Cindi Hamm, director of corporate engagement at Year Up – a US-based non-profit that seeks to close the “opportunity divide” through its work with young adults on education and skills development – outlines how offline affects career mobility *“A key challenge for offline people is being able to really compete for jobs in the corporate world. One must be adept at a wide spectrum of skills today, from personal and emotional skills to technical aptitude. And young adults without access to digital do not have the opportunity to compete in the professional world in a meaningful way.”* As we heard from one offline respondent: *“If I had to use the internet, I would feel excited ... My job is repetitive and unexciting, so using the internet might open new doors for me.”*

Being offline hinders access to public services

The offline population could find themselves excluded from basic rights and citizen-facing services. Helen Milner, from the Goods Things Foundation says: *“In the UK, a lot of government services are going online. Therefore, it’s becoming a basic human need that people will need both access and skills to be able to use online government services.”* Separate studies show that the claim rate for public benefits is already low among disadvantaged populations.¹¹ In our survey, only 19% of offline

people living in poverty said they had claimed a public benefit in the past 12 months due to their income, age, disability or any other factor. Some offline populations might struggle more with the administrative hurdles of requesting benefits be they online or offline. Lack of internet access and the skills needed to use digital services could emphasize societal divides as public services move online, with one respondent telling us: *“I feel that all this [public benefits] takes too much time and even after, we poor people don’t get anything. In the end, we just keep standing in the line and don’t get anything.”*

The impact of the public sector digitizing services can be particularly acute in developed economies, where it is a major push for governments. For example, since 2015, the French government has been providing public service users with a login system that is recognized by every authority offering online services.¹² While the aim for programs such as these is to simplify processes for the majority, it raises the question of what happens to those who are offline. Simplon’s Frédéric Bardeau says: *“Being able to connect digitally is very important because many states, governments, and local agencies have moved online. The only way you have to access your rights is digital now. So, if you are not connected – or if you have no basic digital literacy – you cannot access your social services, benefits and transfers. In other words, what is rightfully yours. It’s also difficult to access information to be able to pay your bills and to connect to other social services. It’s impacting your basic needs.”*



Online-only public benefits will create more exclusion

e-Government and online public services are increasingly prevalent. According to the United Nations, 140 out of its 193 member states provide at least one transactional service online and the number of services is only expected to rise.¹³ Public benefits that are only available online are a particular risk for the offline. By this we mean services where, for example, only online applications are accepted, or an online account must be created. Only 35% of offline people living in poverty said they would be comfortable with online-only public benefits compared to 57% of their online counterparts. In addition, 43% of this offline group said they would need help to apply for/claim their public benefit. In the words of one offline respondent, *“I do not have the skills required to access the websites.”*

According to Simplon’s Frédéric Bardeau: *“It’s been strongly documented in France that the dematerialization of public services has resulted in the exclusion of many people. The divide has widened even for basic public services, such as a driving license or getting a job through Pôle emploi [the French governmental agency that registers unemployed people].”*

Being offline causes financial hardship

As an offline female in the United States said: *“We barely earn enough money for bread and butter, never mind the internet.”* The offline population face financial hardship if they are forced to pay more for essential goods or experience financial exclusion:

- According to the Good Things Foundation, engaged internet users saved £744 a year by being online by finding cheaper products and using cashback and discount sites.¹⁴
- As the banking industry moves more services online and reduces physical branches and staff, services become more expensive for the offline population, including higher charges for transferring money and cashing checks or the inability to pay bills by direct debit, which in turn can lead to penalties.¹⁵

Being offline creates health inequalities

The internet allows for a wealth of health-related information to be readily accessible and the lack of access creates information asymmetries that leads to poorer physical and mental health outcomes. A study conducted among a sample of women of reproductive age in Nigeria found that women perceived information and communication technologies to have a positive impact on their access to maternal and child health information, especially on platforms such as Facebook,

YouTube, Twitter, and blogs. It was also found that poor internet access was a key factor that acted against effective access to maternal and child health information using communication technologies.¹⁶ Similarly, a study conducted by the Phoenix Center, a public policy think tank in Washington DC, found that internet use contributes to positive mental health, with a 20% reduction in depression among a large sample of retired Americans (aged 55 or older).¹⁷ The Goods Things Foundation’s Helen Milner believes that the long-term health of the digitally excluded is even compromised. She says: *“Excluded low-income groups are much more likely to suffer health inequalities; they are more likely to get a life-threatening disease at a younger age. Getting the skills they need could actually help them to manage these conditions better or to consider more preventative health measures.”*



Being able to connect digitally is very important because many states, governments, and local agencies have moved online. The only way you have to access your rights is digital now. So, if you are not connected – or if you have no basic digital literacy – you cannot access your social services, benefits and transfers. In other words, what is rightfully yours.

Frédéric Bardeau, founder, Simplon.

COVID-19 and the digital divide

Throughout the COVID-19 pandemic, we have seen myriad ways in which internet connectivity has enabled the transition from physical to virtual, such as the shift from mass-commuting to mass-homeworking. As well as remote work, it has made possible online learning, purchase and delivery of groceries and other essentials, and the ability to disseminate public health information and even telemedicine. In a world of social distancing and stay-at-home orders, it also plays a critical role in allowing families and friends to stay socially connected, albeit virtually.

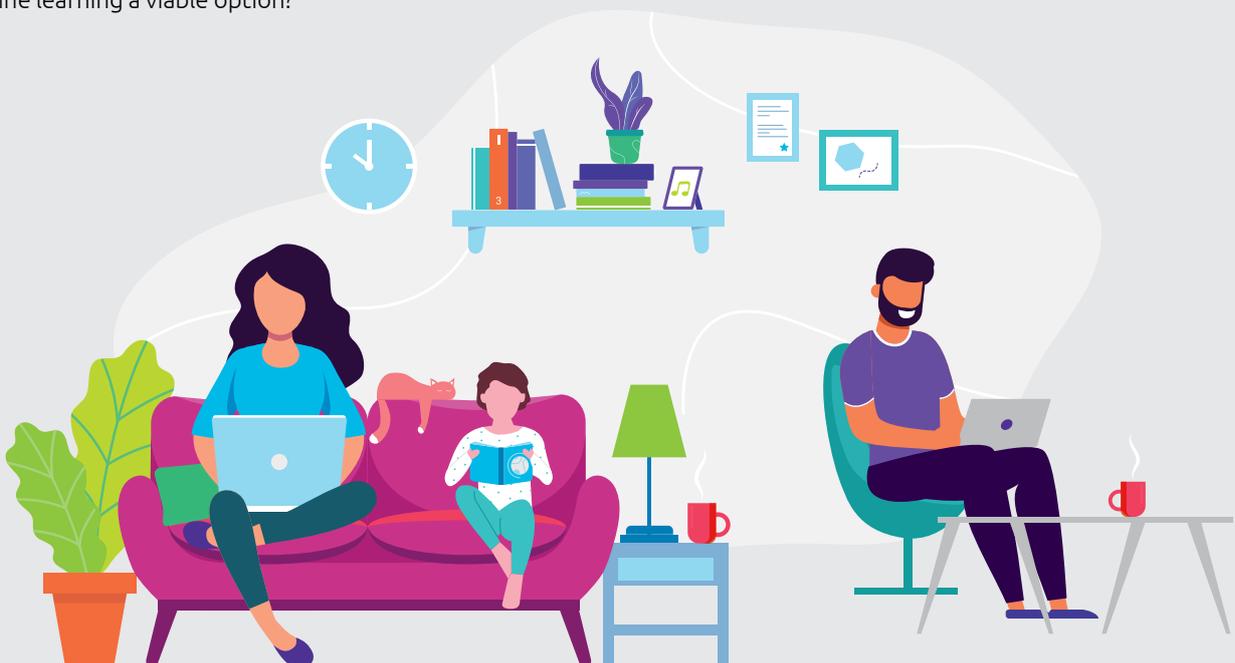
However, this health crisis has also laid bare the challenges of those underserved communities that live on the margins or outside of the digital world. The pandemic, and the overwhelming shift of work and play to online mediums, has raised some critical questions:

1. For those completely offline, how do they access the same benefits and services, from online grocery ordering to family video calls?
2. For those relying on public access to the internet – such as libraries and cafés – how do they continue to remain connected to the economy and society when outlets are shuttered, and confinement is often mandated?
3. For those with slow or constrained internet connectivity (certain rural areas, for example) or mobile-only data, is connecting to essential services such as telemedicine or online learning a viable option?

We already see evidence of the struggles associated with the current pandemic and lack of adequate internet connectivity across education and healthcare. According to a recent New York Times article, there are daunting challenges for students living in certain rural areas in the US to connect to online classes, as many of these areas are unserved by internet providers.¹⁸ For example, one student has a district-issued laptop, but no Wi-Fi access as her parents had trouble paying the monthly bill.¹⁹

The digitally disadvantaged face a similar health deficit. The internet is a critical source of information about the pandemic and for telemedicine. A woman in Cleveland, Ohio – where about one-third of households lack broadband – recently made headlines after her phone service was cut off during a telemedicine visit.²⁰

These troubling examples – and the questions they raise – demonstrate that public and private organizations need to take critical and urgent action to ensure that those already on the margins are not further excluded. There is promising action already. Google, in partnership with the California Department of Education, is providing free Chromebooks and 100,000 mobile hotspots to students in rural areas to facilitate distance learning.²¹ We will explore more steps organizations can take in the last section of this report.



The offline population is keen to take advantage of the internet

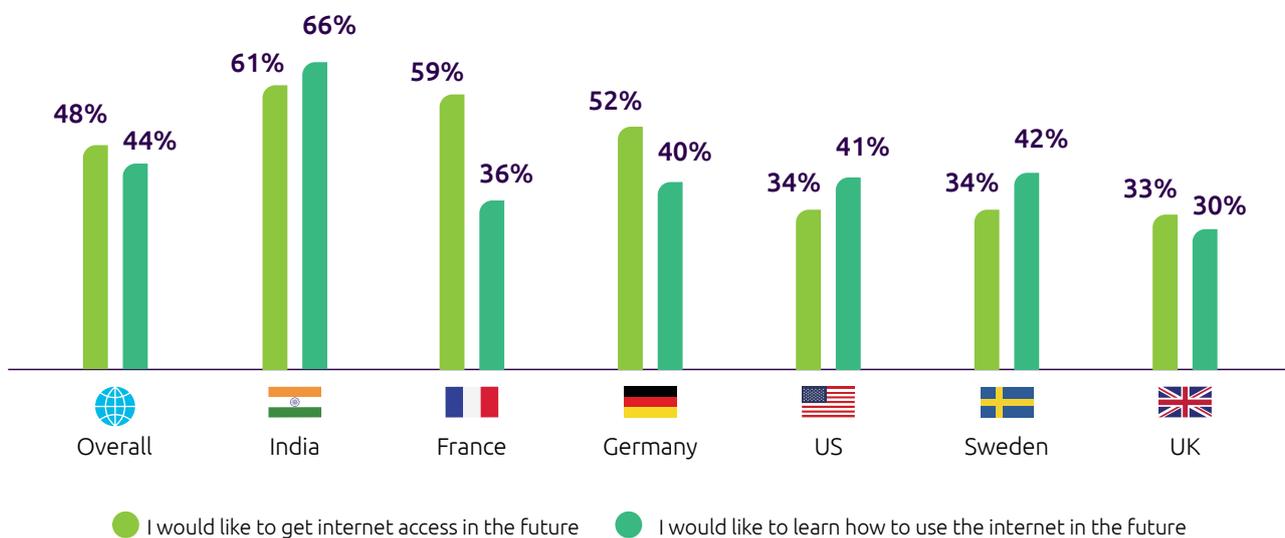
The offline population would like to access and use the internet in the future

Nearly half (48%) of the offline population say that they would like to get internet access in the future and 44% say they would like to learn how to use the internet in the future. As

Figure 5 shows, getting access in the future is a particularly strong sentiment in India, France, and Germany. In addition, this sentiment among the 22 to 36-year-old group is even higher, with 66% saying they would like to have internet access.

Figure 5. Nearly one in two respondents would like to get internet access in the future, globally

Percentage of the offline population overall and by country that agree with the statements



Source: Capgemini Research Institute, Digital Divide Research, Offline Population Survey, December 2019–February 2020, N=1,304 offline respondents

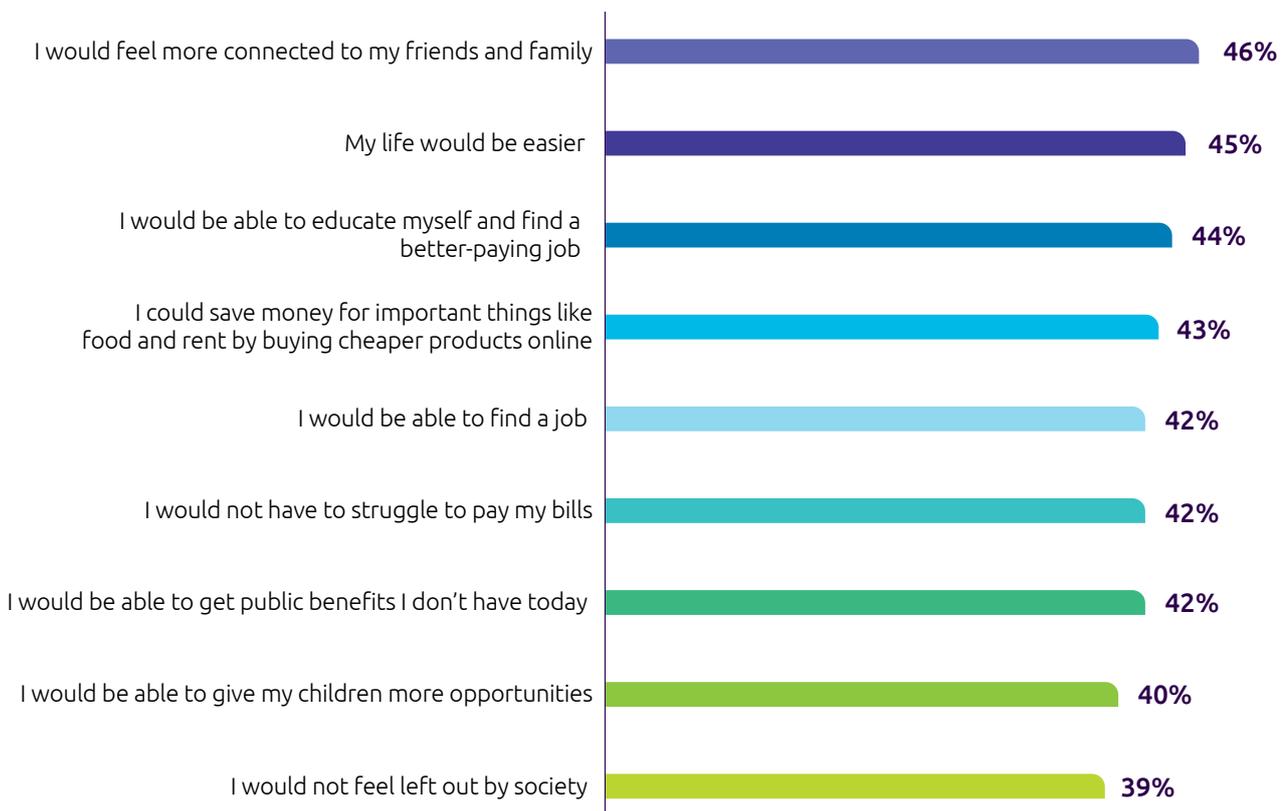
Offline people do recognize the benefits of the internet

The offline population themselves recognizes the benefits

of being connected to the internet. For example, nearly half (46%) believe they would feel more connected to family and friends (see Figure 6).

Figure 6. Many offline respondents recognize opportunities internet access could support

Percentage of the offline population agreeing to the statement, *"If I had access to the internet..."*



Source: Capgemini Research Institute, Digital Divide Research, Offline Population Survey, December 2019–February 2020, N=1,304 offline respondents.

Offline populations would use the internet to improve their personal and family life

If I had to use the internet, it would be to use applications that allow me to manage my finances better.



If I had to use the internet, it would be to use applications that allow me to find more volunteering opportunities that I can participate in to stay active during retirement.



I am not a huge fan of the internet, but if I had to choose one thing I could do online it would be to communicate with family and friends who don't get to visit me as often as they want to.



Find cheap things, try to educate myself, and learn things online.



If I had to do anything online, I would probably use the internet to stay connected to family and friends.



I would use it to help my children's education.

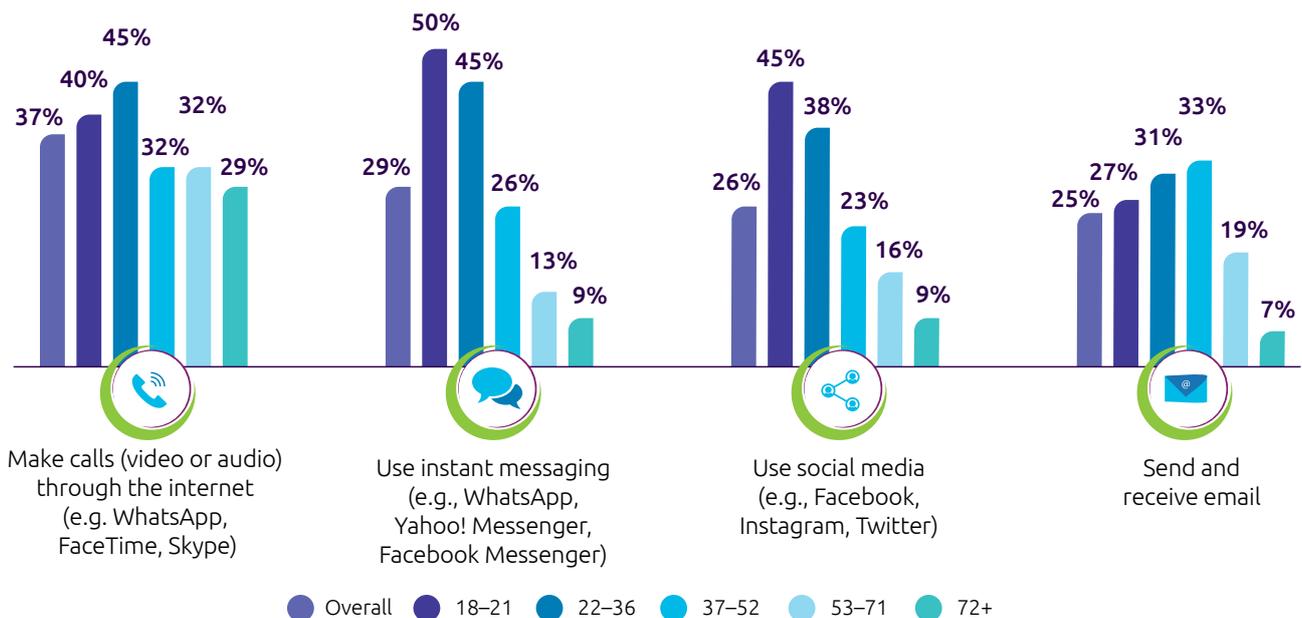


• **Younger offline people are keener to use communication platforms online.** Overall, over a third of offline respondents would like to make video or audio calls

through the internet. For the 22 to 36 age group, this jumps to closer to half, at 45% (see Figure 7).

Figure 7. Nearly two in five offline respondents wish they could make video or audio calls through the internet

Percentage of the offline population who are keen to use communication platforms online by age group



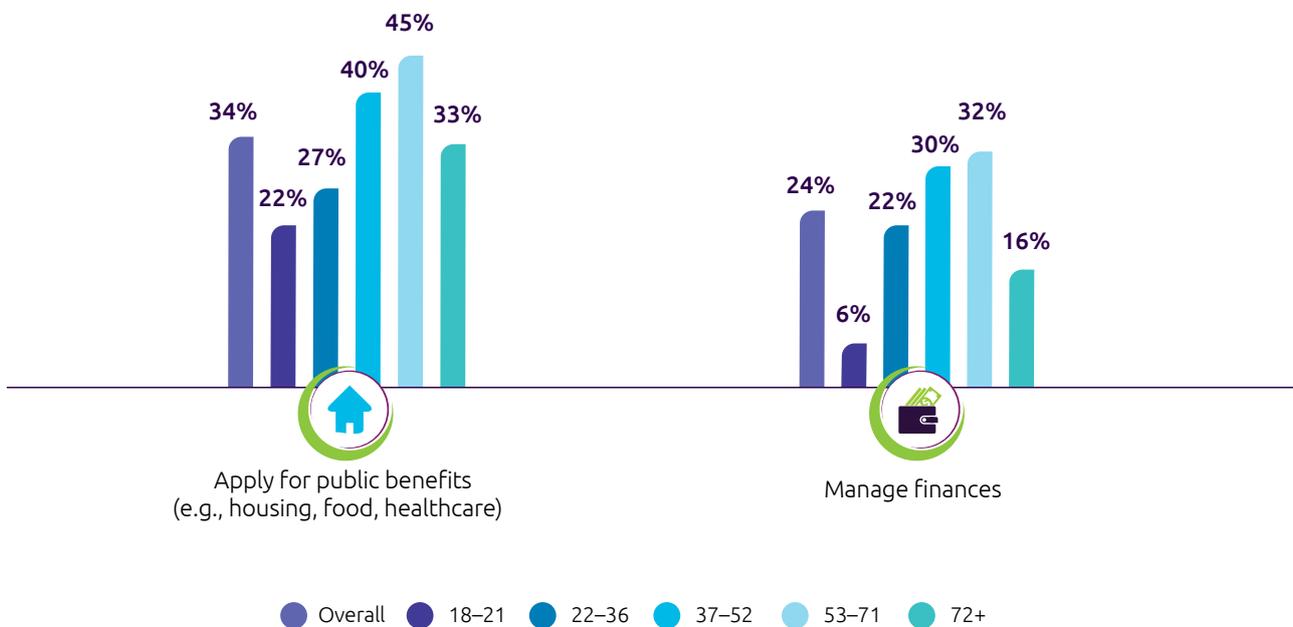
Source: Capgemini Research Institute, Digital Divide Research, Offline Population Survey, December 2019–February 2020, N=1,304 offline respondents.

- **Younger offline people also want to be online to help advance their careers.** Overall, 29% of offline respondents wish they could search and apply for jobs online. But this jumps to 41% for those aged 22 to 36.
- **Older offline people are more interested in getting online for financial reasons.** Approximately one third

of all offline respondents wish they could apply for public benefits online and 24% wish they could manage their finances online. The interest in using the internet for these reasons increases with age up to 71 years old (see Figure 8).

Figure 8. Interest in using the internet to apply for public benefits/manage finances increases up to the age of 71

Percentage of the offline population who are keen to use the internet to manage finances and apply for benefits by age group



Source: Cappgemini Research Institute, Digital Divide Research, Offline Population Survey, December 2019–February 2020, N=1,304 offline respondents.

41%
Share of respondents aged 22 to 36 who wish they could search and apply for jobs online

A view on the online population: Older segments, and those with less education, lack digital skills

The digital divide is not just about access. It is also a skills and learning divide. Angela Siefer of the National Digital Inclusion Alliance, believes the skills divide is a perpetual issue because of the constant pace of technology change: *"I've been doing digital inclusion work for over 20 years. As technology keeps changing, and how we use that technology changes, more divides are created. When I started this work, we were concerned with access to computers themselves. But today it is about access to the internet and the devices and the skills. The skills divide will forever be changing and will always be a constant struggle. Even for*

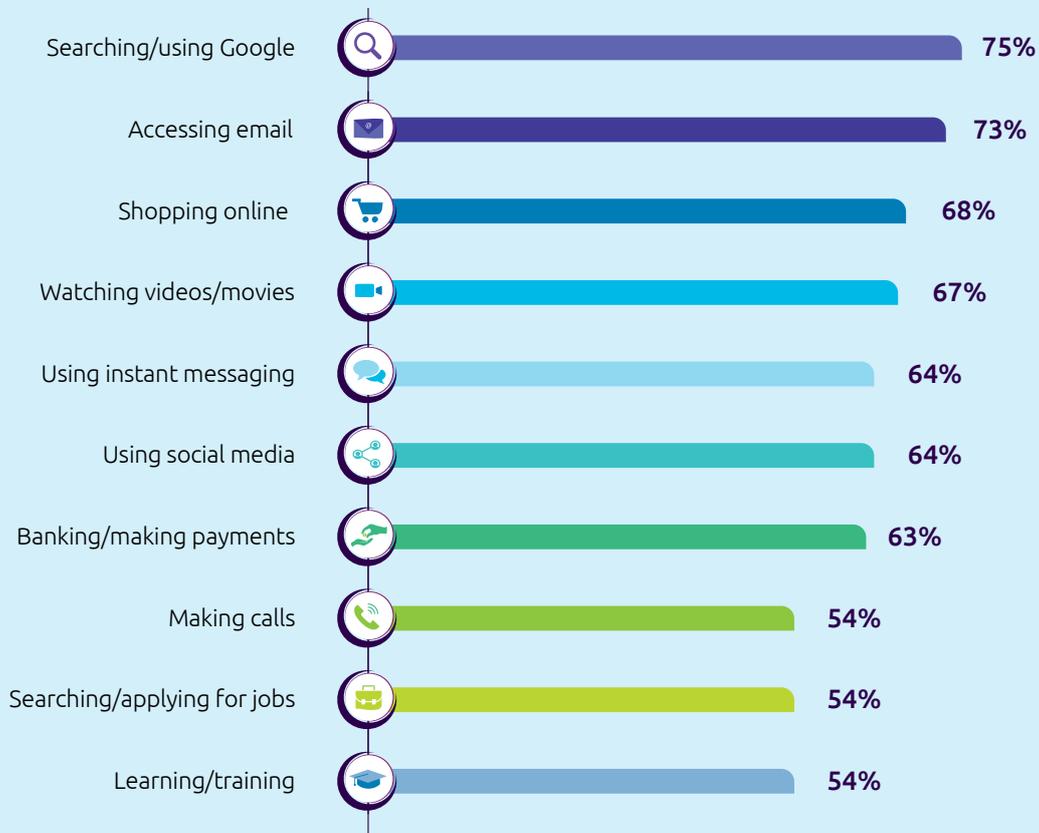
people with resources, many struggle to keep up with the technical skills that are needed to survive today. And then those who don't have resources just get further and further behind."

Not all internet users are comfortable doing activities online

Many internet users are not comfortable going online for certain activities. For example, 54% say they are comfortable using the internet to make calls and 64% for social media (see Figure 9).

Figure 9. Many online people are not comfortable using the internet

Percentage of the online population that say they are comfortable doing the activity online*



Source: Capgemini Research Institute, Digital Divide Research, Online Population Survey, December 2019–February 2020, N=3,750 online respondents.

*Respondents rated their comfort on a scale of 1 to 7, where 1=not at all comfortable and 7=very comfortable.

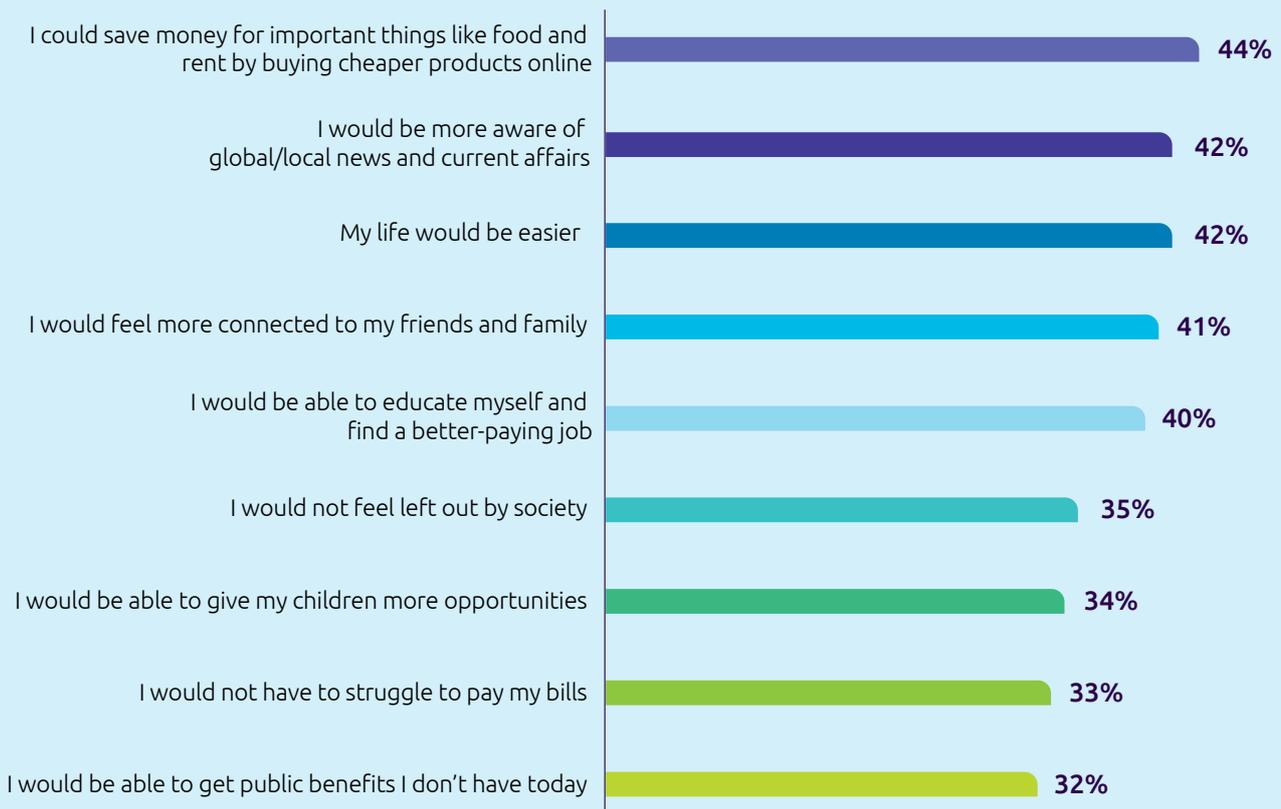
Internet users see benefits to improving their skills

The online population was asked directly about their view of the benefits they could realize if they were able to improve their command of the internet. Roughly a third or more of

internet users agreed they would realize all the benefits listed. For example, 44% agreed that they could save money by buying cheaper products online if they could improve their internet skills (see Figure 10).

Figure 10. A large share of online people could benefit from improving their internet skills

Percentage of the online population that agree with the statement, *"If I could improve my command of the internet ..."*



Source: Caggemini Research Institute, Digital Divide Research, Online Population Survey, December 2019–February 2020, N=3,750 online respondents.

How to support greater digital inclusion and bridge the digital divide

Responsibility for digital inclusion and universal access to the internet cannot fall to one group – it requires the contribution of a variety of stakeholders. Private organizations, policy makers, and governments – in collaboration with NGOs, think tanks, and educational institutions – are well-positioned to help reduce the digital divide. In this section, we examine the role that three groups can play: private organizations, policy makers and governments, and collaboration between policy makers and private organizations.

Jean Deydier of Emmaus Connect says: *“Everyone is responsible for bridging the divide. Private enterprises and digital companies – as well as public services and government – all have a role to play. Governments have responsibility for designing services that are simpler, and training people that are not online, but it’s not their responsibility alone. Private organizations that digitalize key services have their own responsibility. Part of the profit they obtain from the digitalization of these services should be dedicated to assist people that are not online – helping find a way to be able to use the internet to obtain these services.”*

For private organizations



For policy makers and governments



For private organizations and policy makers



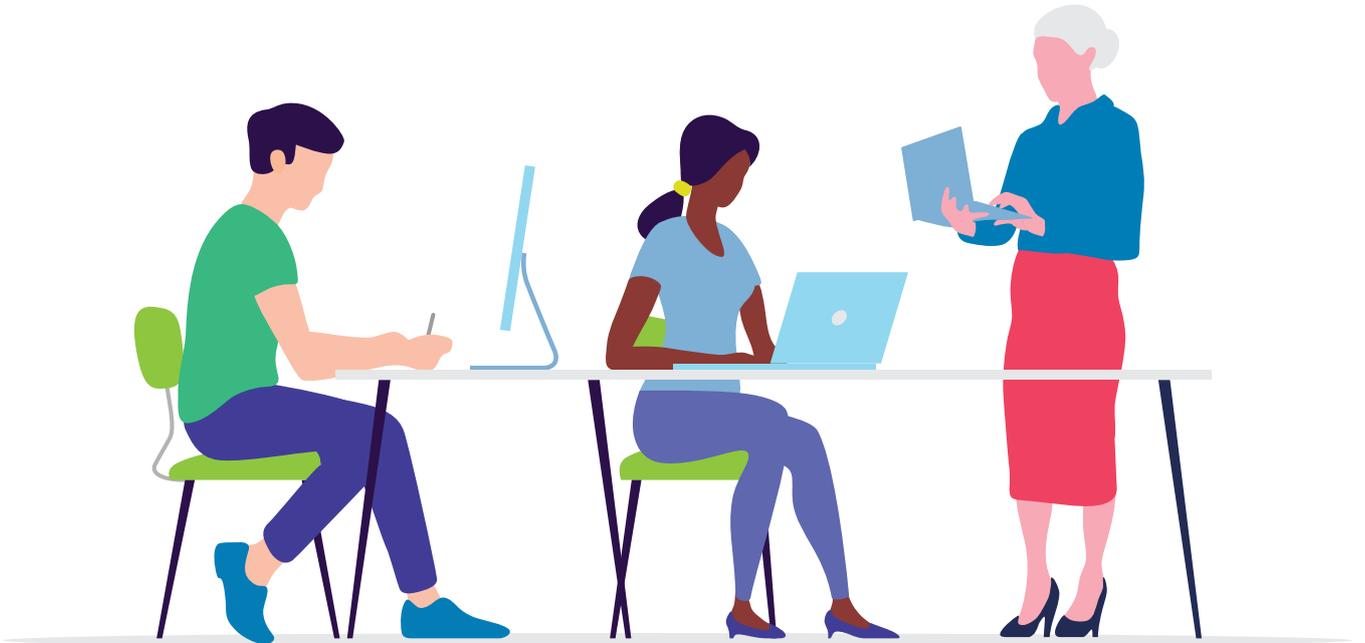
For private organizations

Invest in digital inclusion as part of your corporate social responsibility agenda

There is a fundamental shift taking place in the way organizations consider their role in today’s world. Increasingly, organizations are beholden not only to the shareholder, but also to a wider group of stakeholders: customers, employees, and communities. As part of a shift to a purpose-driven approach, organizations are looking at their broader impact and how they can benefit society.

A number of organizations are incorporating digital inclusion and digital equality into their strategy and purpose. Digital inclusion, for example, has been a vital aspect to Lloyds Banking Group’s approach. To help improve the lives of the 11.5 million people without basic digital skills in the UK, Lloyds set up a Digital Champions Program, which has grown to over 25,000 champions today from its 2015 beginnings. Each Digital Champion pledges to increase the digital skills of at least two individuals, business or charities each year; supporting a number of different digital campaigns through key partnerships and local initiatives.²²

Specifically, there is a heightened role for telecom operators, internet service providers, and technology firms in building digital inclusion for disadvantaged populations



and embedding it in their strategy. Some actions that such organizations could take include, for example:

- Reducing broadband/mobile data cost for certain communities or geographies or providing it for free
- Enabling device access
- Setting up skills initiatives
- Providing access to high-speed internet in remote areas.

In addition, during a time of crisis like the coronavirus pandemic, it is even more important for organizations to prioritize digital inclusion as employees work remotely, schools move to online learning, and access to current news and health information is vital. Many internet service providers in the US are expanding their coverage and easing restrictions (e.g., terminating late fees, opening up Wi-Fi hotspots to non-subscribers) to keep people connected. For example, AT&T is offering unlimited data for limited-income households²³ and Spectrum is offering free broadband and Wi-Fi access for 60 days to households with K-12 or college students who do not already have a subscription.²⁴

Educate people on how to stay safe online

Certain offline populations – particularly the more senior – are already skeptical of the internet and are most susceptible to scams and fraud online. They are also not comfortable sharing personal information online. By educating older offline people on how to stay safe online, their skepticism can be converted to confidence.

Even some populations that are online could benefit from further education. We found that 41% of “partial users” (i.e., online people who use the internet only two hours or less per day) say they are afraid of scams online and do not want to be manipulated. Lindsay Moore, regional director at Family

Promise – a US-based non-profit organization supporting homeless and low-income families achieve independence – explains the need for this type of education: *“Because there is a lot of predatory practices on the internet, I think there needs to be an education component on how to spot scams, especially for financially fragile people who are particularly at risk. It’s a huge deal because one misstep could take away everything that they’ve built. Digital education for spotting that type of trap is as important as how to type a basic Word document or conduct an online search.”*

In 2013, UK retail bank Barclays introduced its “Digital Eagles” program. These were people who delivered digital skills to colleagues, customers, and the wider community and also helped people stay safe online. In 2017, the same organization launched a £10m “DigiSafe” campaign to help fight cybercrime, fraud, and scams. It also created a program of “Digital Safety Tea and Teach” sessions to raise awareness of online risks and dangers.²⁵

Education and training could be offered in skills academies in conjunction with non-profits in the local communities. The Salt Lake City Public Library’s digital inclusion program, the Tech League, includes an Online Financial Safety class. The class covers awareness of ways personal information can be stolen online, how identity thieves operate, strategies for protecting yourself from online identity theft, how to know if your identity is stolen, how to monitor your financial identity, and what to do if you if your identity is stolen.²⁶

Recruit candidates from marginalized communities with digital skills into the workforce

Organizations are well-positioned to create employment opportunities for marginalized communities, allowing people to build up basic digital skills. At the same time

as organizations are driving wider diversity and inclusion programs for groups such as persons with disabilities or LGBTQ+ communities, organizations can focus digital inclusion efforts on disadvantaged groups who would benefit from digital skills training. Cindi Hamm of Year Up says there are a number of areas where private organizations can support greater digital inclusion: *“Organizations can provide work environments where disadvantaged young adults can participate and learn – providing internships that immerse these populations in technology. They can also partner with, and financially support, non-profits who provide technology training.”*

Ada, the National College for Digital Skills in the UK, is an academy that teaches students digital skills, including students from low-income backgrounds. Ada, along with its industry partners also tries to create tech sector employment opportunities for populations at risk of unemployment.²⁷ The India-based Anudip Foundation, a non-profit, helps underserved populations find employment, with a particular focus on technology. Subhra Bandyopadhyay, its vice president of operations, says: *“We are focused on creating livelihood opportunities for the marginalized population and provide training focusing on information technology (IT) and IT-enabled services job roles. We find in our community visits that the main reason for non-use of digital technologies is lack of awareness. In our centers, we help build awareness among students so we can create a career path for them, and follow-up for three months after they are placed to encourage retention.”*

For policy makers and governments

Work towards making devices and the internet more accessible to marginalized communities

As we demonstrated in our research, the cost of internet-enabled devices – and of the internet itself – continues to be a huge barrier to adoption. This is particularly true for the 22 to 36 age group and rural offline populations:

- *“This is not something which is for the homeless and poor. I barely manage to earn my bread and I cannot afford the internet.”*
– 26-year-old male in the US
- *“We are not financially well settled and there are other priorities than using internet.”*
– 25-year-old female in India



It is important for governments and the public sector to play a leading role in internet access and availability. This can be tackled at two levels: public access and private, in-home access. The EU launched the WiFi4EU initiative to supply free public Wi-Fi in public spaces including parks, squares, libraries, health centers, and museums throughout Europe.



Everyone is responsible for bridging the divide. Private enterprises and digital companies – as well as public services and government – all have a role to play.

Jean Deydier, founder and president, Emmaus Connect.

Municipalities apply for vouchers valued at EUR 15,000 and use them to install free Wi-Fi hotspots in their public spaces.²⁸

UK officials have promised to bring high-quality fiber broadband to 15 million households by 2025 and every home in the country by 2033.²⁹ In the US, the Department of Housing and Urban Development (HUD) created ConnectHome in 2015 designed to narrow the digital divide for residents living in HUD-assisted housing. Through the program, internet service providers, non-profits, and the private sector offer broadband service, devices, and digital literacy and technical training. Since its inception, 37% of HUD-assisted households have internet connections that can be attributed to ConnectHome.³⁰

In addition, governments can play a role in helping to make devices more affordable. According to the Alliance for Affordable Internet, a large portion of the total cost of a smartphone results from import and sales taxes. Governments in some countries – Africa, for example, where device costs have decreased the least since 2008 – have recognized that reducing such taxes can lead to higher future tax revenues by boosting economic growth. In July 2015, the government of Côte d’Ivoire, for example, reduced taxation on smartphones from 27% to 6.5%.³¹

Create greater accessibility for online public services

Our research found that only 35% of offline people living in poverty said they would be comfortable with online-only public benefits compared to 57% of their online counterparts. As e-government and online public services gains ground, the digital divide will only widen unless action is taken to ensure public services remain available to the populations

that rely on them the most. Online public services provided by the government should also be designed in a manner to be accessible to people with any visual or audio disabilities. It is the government's responsibility to ensure digital accessibility of public services by all populations and it should deploy policy to encourage private organizations to do the same. There is a particular need for governments to work with local leaders in smaller towns and rural communities to increase penetration in these areas. Private organizations, non-profits, and local governments can work together to prepare their communities for this change.

Julia Winkler, co-founder and COO of Volunteer Vision, a software-as-a-service solution for digital mentoring in Germany – emphasizes the importance of platform accessibility for public services: *“Accessibility to the tools and devices that disadvantaged people will use for public services is really important. For example, most of the refugees that we work with do not have regular access to a computer. So, if there's a website that's only accessible on a desktop with no mobile equivalent, then absolutely I think it would lead to further exclusion. But if a mobile version is designed well, is very easy to understand and with multiple languages, it might encourage uptake.”*

Created in 2018, the national digital strategy of the German government called for all of its services to be offered online by the end of 2022. For example, parents would be sent the birth certificate for their new baby without having to make an application, and child allowance (i.e., a monthly child benefit paid to all parents) would likewise be paid automatically.³² Citizens would save 84 million hours per year if they could interact digitally with German public authorities and services.³³ However, this would also require parents to 1) have access to the internet, and 2) have the skills required to use the above benefit and other such benefits.

In some countries, steps are being taken to ensure people have what they need to access digital citizen services. The government of India launched NREGAssoft, which aims to implement e-Governance across states and districts. India put in place capacity-building measures including face-to-face trainings and e-learning technologies to build the skills of its people in order to use the services.³⁴

For private organizations and policy makers

Focus on public-private partnerships

Organizations and policy makers need to work to build a global community of action on digital inclusion. They can mobilize peers, NGOs, academics, and governments to foster



evidence-based policies on digital inclusion. They can also work with partners to promote digital inclusion through pro-bono projects that leverage their expertise. In 2018, the French government launched its digital inclusion strategy to improve access to digital skills and infrastructure to the 6.7 million citizens that were still not using the internet at that time.³⁵ Jean Deydier, commenting on the French government's strategy, says: *“It's very important for every French citizen to be able to access social welfare. If people are not connected to the internet, they lose their rights. Under our national digital inclusion plan, today, social workers are working to connect the very disadvantaged and excluded people to our public welfare services. In France, there is no stakeholder who is not aware of how important digital inclusion is. It's becoming a huge political priority.”*

Crédit Agricole acts as a partner to the aforementioned French government program. In 2017, more than 13,000 isolated or vulnerable populations excluded from digital and in financial difficulty received personal coaching under this partnership.³⁶ And Astrid Aupperle, head of corporate social responsibility at Microsoft Germany, emphasizes the importance of fruitful partnerships: *“I've learned two major lessons working in digital inclusion. First, you always need to think in the long term. You cannot see success in a quarterly or fiscal year business rhythm. It takes longer. You must set up two or three-year digital inclusion programs in order to see impactful outcomes. Second, you absolutely need good NGO partners and it must be the right partner for your organization.”*

Educate and bring awareness to disadvantaged offline populations on the value that the internet can bring

"I would be nervous using the internet. I would be okay doing basic searches on Google, but if I had to apply for a job online, I'd need help to make sure that I didn't lose the work. Back in my day, you just handed in your CV but now things have changed."

– 58-year old offline male in the UK

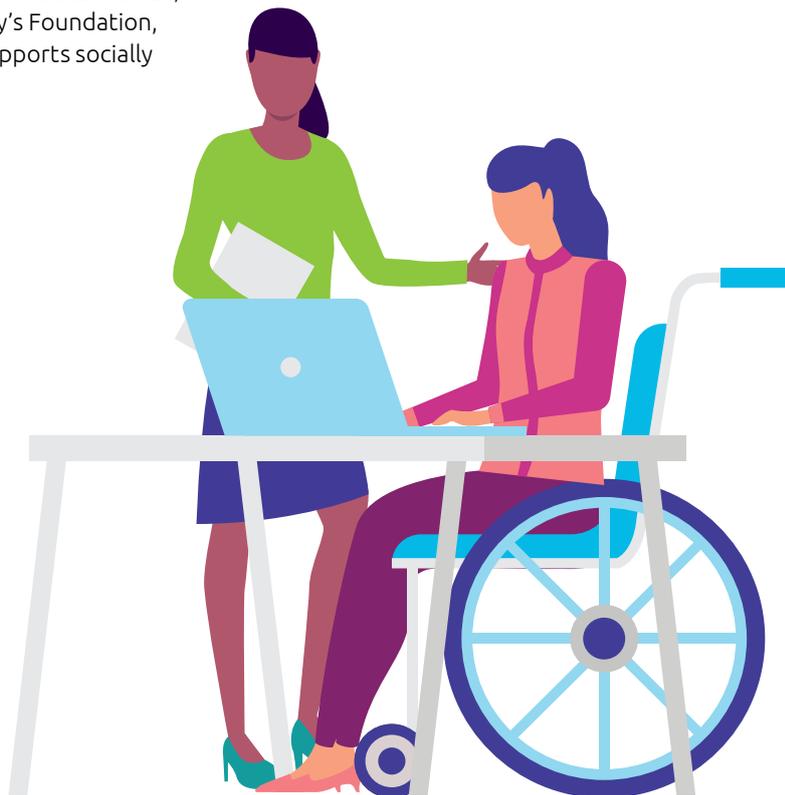


While many offline respondents see the advantages of being online, certain segments of this population need to be informed of how the internet could benefit them. In addition, a large part of the offline population needs to be educated on both basic and advanced digital skills. Some private organizations as well as governments are making commitments to enabling digital skills among disadvantaged communities. For example, in 2018, the French authorities committed to investing in five million euros over a period of 18 months to create a series of ICT training centers called "Hubs France connectée."³⁷ Similarly, J.P. Morgan, in collaboration with the Good Things Foundation, launched Power Up in 2019 to help people in underserved communities build digital skills, motivation and confidence.³⁸

Moreover, different segments of the offline population have different motivations and fears when it comes to being online. Digital inclusion initiatives can be targeted to the different needs of these segments. Srilakshmi Bellamkonda, associate director of operations at Dr Reddy's Foundation, a not-for-profit organization in India that supports socially

and economically vulnerable groups to take control of their lives, says: *"We have a skills initiative for youth, for people with disabilities, and also people without disabilities. We are helping people with basic digital skills, and also piloting digital delivery mediums for greater outreach to rural areas and people with disabilities."*

- We found that **people with a health condition** are primarily offline because they fear the internet is too difficult or complex for them to use. Organizations and governments can work to mitigate these fears by educating this population on both the benefits the internet brings and also the digital skills needed to use the internet effectively. A study conducted in the UK of people living with chronic pain found that the respondents benefited from using the internet in many ways, including by "finding information, support and practical advice for self-management, and also for reassurance, encouragement, and to compare treatment experiences and to offer advice and support" to other people with chronic pain.³⁹ Forty-three percent of offline people with a health condition say that their life would be easier if they had access to the internet.
- In addition, providing accessible options for the internet, web content, and devices to **people with disabilities** will diminish their fear and nervousness and encourage them to move online. The World Wide Web Consortium's Web Accessibility Initiative develops guidelines –regarded as



the international standard – to make web content more accessible for people with disabilities. These guidelines are increasingly being mandated by governments and being used by organizations to make websites more accessible.⁴⁰ For Microsoft, digital inclusion and supporting people with accessibility issues is a key part of its overall strategy. The company’s free “Seeing AI” app, for example, is designed for the blind and low vision community. It is available in six languages and 70 countries and uses people’s phone’s camera to describe nearby people, text, and objects.⁴¹ The Swedish Post and Telecom Authority (PTS) has been assigned by its government to ensure that crucial services within telephony, the internet and postal services are available for all citizens, including people with different kinds of disabilities.⁴²

- Our research found that the **60+ age group** is primarily offline because of “lack of interest.” This population needs help in using the internet and education about how it could help them in their everyday life, especially its ability to support community-building and connecting with family and friends, which is especially important to older individuals. For example, showing them recipes in cuisines they enjoy, how to access communities related to their favorite pastime (e.g., gardening, reading), or showing them their place of birth on Google Maps could be good starting points to solicit interest among the 60+ population. Over a third (34%) of offline people aged 60 or over say they

would use the internet today if personal help to access the internet was provided to them. The “Silver Geek Project,” co-driven by Orange and Solidatech, and begun in 2014, addresses aging and digital inclusion. It seeks to evaluate the benefits of digital tools for the welfare of the elderly – both in their physical autonomy and their mental well-being. For example, one of the project’s partners, Unis-Cité, mobilizes youth volunteers who spend time alongside seniors. They teach them how to use digital tools, such as tablets, so they can communicate via video technology with their family.⁴³

- Our research also found that a “lack of interest” is the primary reason why **females** are offline. Forty-four percent of females in our survey say they would use the internet today if they knew how it could help improve their life. This lack of interest, as we explored earlier, could stem from a variety of reasons, including lack of access to an internet-enabled device and the internet itself to broader societal disadvantages such as unequal access to education systems, jobs, and limiting attitudes towards women accessing technology. Some organizations like the US-based non-profit Girls Who Code are working towards bridging the gender gap in technology by offering opportunities for females from elementary school through college to learn computer science skills.⁴⁴ Intel launched a program called “She Will Connect” aimed at providing digital literacy skills to young women in developing countries.⁴⁵



I’ve learned two major lessons working in digital inclusion. First, you always need to think in the long term... Second, you absolutely need good NGO partners and it must be the right partner for your organization.

Astrid Aupperle, head of corporate social responsibility, Microsoft Germany.

Conclusion

If the private and public sectors do not work effectively together, the digital divide will continue to create inequalities across the world. Bridging the divide requires strong collaboration and leadership from multiple stakeholders: private organizations, governments, NGOs, non-profits, and academia. This extensive research is also intended to play a part in building understanding of the offline population: who they are, the key barriers that stand between them and the internet, the disadvantages they face from being offline, and their appetite for moving online. Offline populations would benefit hugely from digital access – it is a global imperative that public and private sectors work together to make a reality.





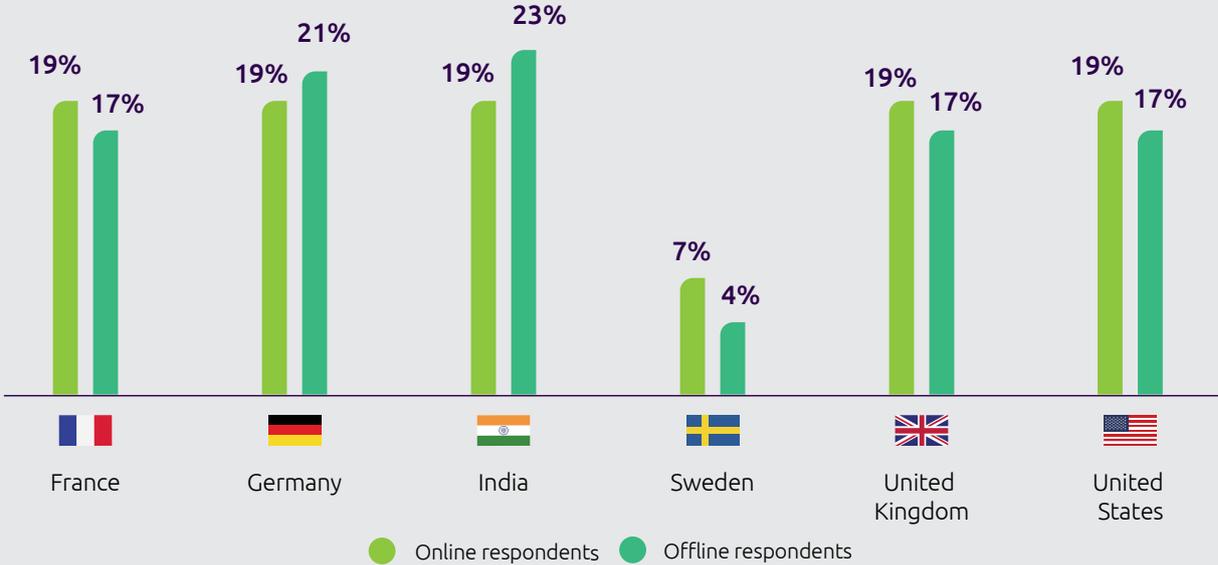
Research Methodology

Quantitative research

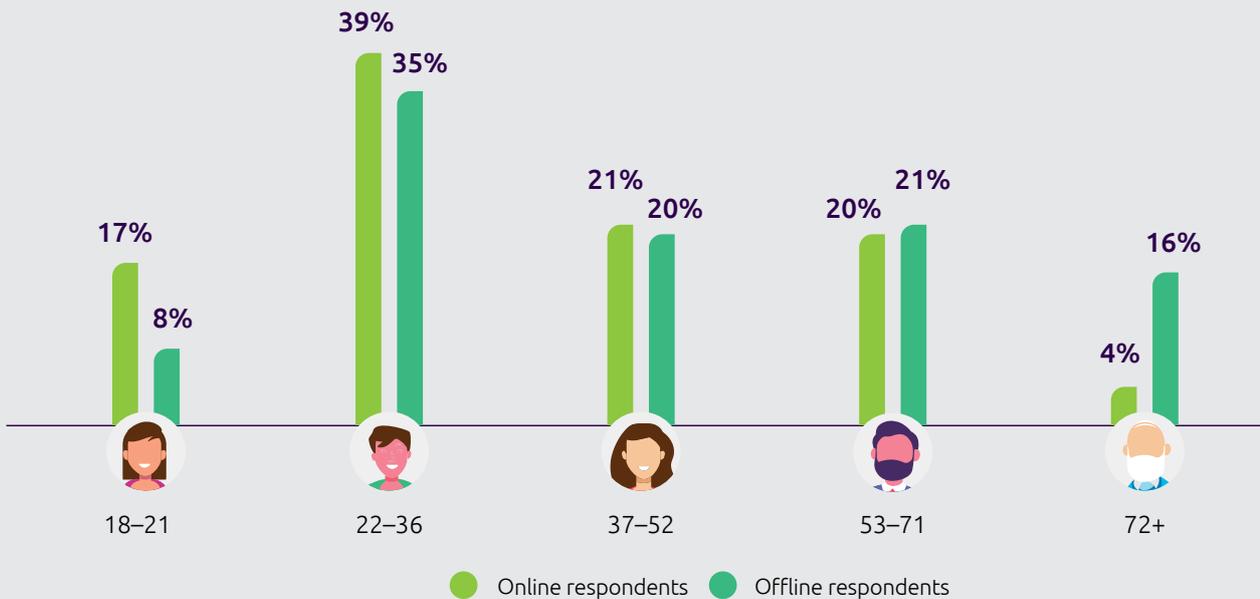
For this research, we undertook a two-pronged approach to survey over 5,000 respondents across France, Germany, India, Sweden, the United Kingdom, and the United States. The research took place from December 2019 to February 2020.

- 1. To understand the online population, we conducted an online survey of 3,750 individuals with 56% living in poverty and 44% not in poverty
- 2. To understand the offline population, we conducted a telephone survey of 1,000 individuals not online and a face-to-face survey of 304 individuals not online. Sixty-nine percent of the offline population is living in poverty and 31% is not in poverty.

Share of online and offline respondents by country



Percentage of the offline population by age group



Source: Capgemini Research Institute, Digital Divide Research, Online Population Survey, December 2019–February 2019, N=3,705 online respondents; Offline Population Survey, December 2019–February 2020, N=1,304 offline respondents.

Focus interviews

We conducted one-on-one interviews with 26 executives at 22 non-profit organizations, charities, and NGOs working in the digital inclusion space as well as private companies with digital inclusion initiatives in France, Germany, India, the United Kingdom, and the United States.

Poverty definitions

For the purpose of this research, we used each country's definition of low income or poverty in Europe and the US:

- For France, Germany, Sweden, and the United Kingdom, Eurostat along with the National Institute of Statistics and Economics Studies (INSEE) in France and the European Statistical System in Europe defines the low-income population as the at-risk-of-poverty rate, which is the share of people with an equivalized disposable income (after social transfers) below the at-risk-of-poverty threshold, which is set at 60% of the national median equivalized disposable income after social transfers.⁴⁶
- For the United States, the Federal Register in the Department of Health and Human Services (HHS) issues poverty guidelines based on household/family size each year. The poverty guidelines are a simplified version of the federal poverty thresholds issued annually by the Census Bureau. The poverty guidelines are used for administrative purposes, for instance, determining financial eligibility for certain federal programs. The 2019 poverty guideline for a family of four in the 48 states (excluding Alaska and Hawaii) is \$25,750.⁴⁷

For India, the low-income population was defined as a monthly household income of less than ₹20,000 per month.

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Digital empowerment for an inclusive future – Capgemini’s commitment to digital inclusion

As a global leader in digital, Capgemini’s ambition is to help make the digital revolution an opportunity for all and to provide a bridge between technology and society. We are focused on four key areas to reduce the digital divide and lead digital inclusion.

Reducing the Digital Divide

Digital Literacy:

- Provide meaningful support in order to empower digitally excluded people to be more autonomous in order to access public and private online services (accessing the internet, information and services, communicating, transacting, filing tax returns, searching and applying for jobs, etc.) and unlock new opportunities
- Inspire young generations and women, who may not otherwise have the opportunity, to consider digital and STEM (science, technology, engineering, and mathematics) careers.

Digital academies

Beyond helping excluded populations with basic skills, we can reduce the digital divide by targeting disadvantaged at-risk populations, or those who are already suffering from unemployment as a result of the digital revolution and enable them to find employment and integrate in the headcount. The targeted beneficiaries are:

- Disadvantaged and excluded youth who are NEET (not in education, employment, or training)
- People struggling with long term unemployment or needing professional retraining
- Populations in transition, such as refugees
- Under-represented or marginalized groups such as women, LGBT+ groups, and people with disabilities.

Leading Digital Inclusion

Technology for Positive Futures:

As a leader in technology, Capgemini recognizes the unique opportunity that cutting-edge technologies present to deliver positive social impact. Through our strategy on Technology for Positive Futures, we aim to bring together technology, business, and society and solve key societal issues.

Technology for Positive Futures

As a leading responsible company, we want to demonstrate our commitment to Digital Inclusion and join forces with our clients, NGO partners, public bodies, and academics to continue to drive impact through our Digital Inclusion portfolio. We have committed to work with key think tanks or intellectual bodies towards that goal.

Looking to the future post the COVID-19 pandemic

We are possibly living through one of the greatest global shifts of our lifetimes. With the spread of COVID-19 across the globe, the world we will find on the other side will be one we have perhaps not even imagined yet. How we organize, what type of work we undertake, and how we identify with one another will be disrupted and developed in the months and years to come, creating both new opportunities and new challenges for the global population.

Given its expertise in transformation, technology, and insight generation, and its positioning on bringing to life “what’s next” across sectors, Capgemini is compelled to help guide businesses and consumers through this tumultuous time. And yet in the meantime, what is Capgemini’s contribution to addressing the ongoing social and economic fallout?

In a new partnership between Capgemini and Purpose, the social impact agency recently acquired by our Group, we came together in the wake of this crisis, to both protect those most affected by the pandemic and to shape the future. Capgemini’s expertise in digital transformation, future of technology, and innovation enable it to be well-placed to provide the services and information that people, and businesses need during the COVID-19 crisis.

In partnership with Purpose, we opened a **Social Response Unit** that plans for how Capgemini’s skill sets and employees are solving the crisis for today and for tomorrow. The aim of this unit is to leverage the skills of Capgemini’s employees and its assets and expertise to address the crisis’ most urgent needs – from building new technology to solving logistical problems to addressing disinformation with data. These interventions can take multiple forms, for example:

- Data and technology agility: Using expertise such as app creation and data analysis for social good
- Solidarity: Fighting against loneliness and maintaining social connectivity
- Generosity: Funding work and pro-bono projects for society.

Please connect with us if you want to learn more.

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Lucie has been leading the Digital Inclusion pillar of Capgemini's CSR strategy – Architects of Positive Futures – since its inception in 2018. She is responsible for driving Capgemini's vision to make digital an opportunity for everyone, especially the disadvantaged population. With extensive experience in empowerment of underserved communities, Lucie's key focus areas are systematic change for inclusive, sustainable development, and integration of digital inclusion within the corporate decision-making process.



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Claudia has more than 15 years of experience in change management and people transformation projects in large organizations in Europe, Asia, and the US. Claudia leads the People and Organization Practice for Capgemini Invent and is responsible for leading thought leadership on the Future of Work. Besides her interest in leadership in the digital age and shaping the future people agenda, her focus lies on how AI is reshaping society and work and how Capgemini can contribute to architecting positive futures. Claudia has been involved in and has co-authored multiple Capgemini publications since 2011.



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About the Capgemini Research Institute

The Capgemini Research Institute is Capgemini's in-house think tank on all things digital. The Institute publishes research on the impact of digital technologies on large traditional businesses. The team draws on the worldwide network of Capgemini experts and works closely with academic and technology partners. The Institute has dedicated research centers in India, Singapore, the United Kingdom, and the United States. It was recently ranked number one in the world for the quality of its research by independent analysts. Visit us at www.capgemini.com/researchinstitute/

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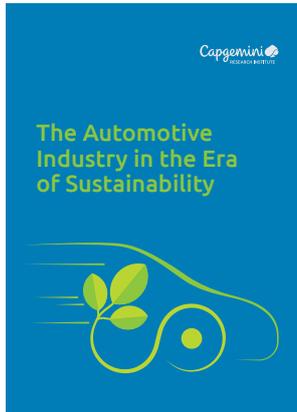
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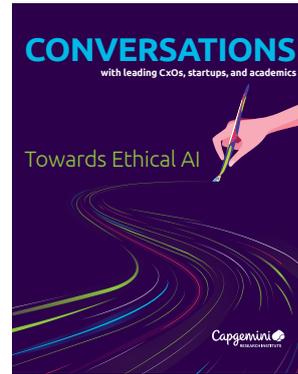
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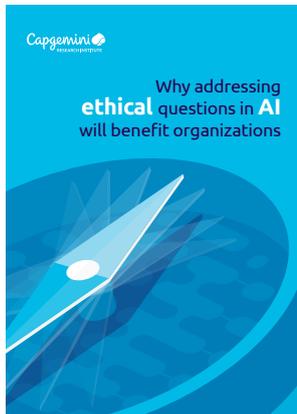
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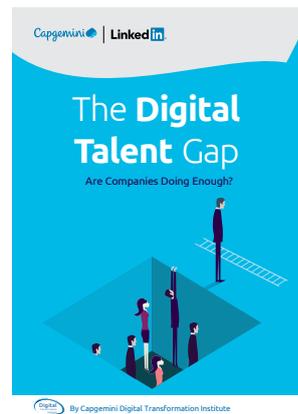
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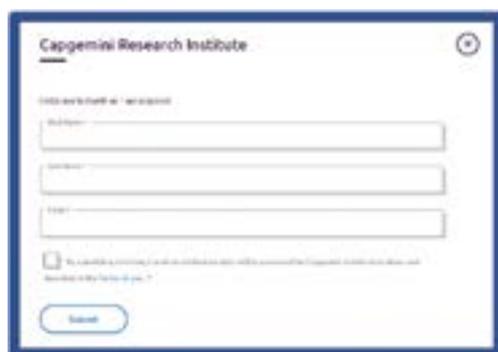
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Cappgemini is a global leader in consulting, digital transformation, technology and engineering services. The Group is at the forefront of innovation to address the entire breadth of clients' opportunities in the evolving world of cloud, digital and platforms. Building on its strong 50-year+ heritage and deep industry-specific expertise, Cappgemini enables organizations to realize their business ambitions through an array of services from strategy to operations. Cappgemini is driven by the conviction that the business value of technology comes from and through people. Today, it is a multicultural company of 270,000 team members in almost 50 countries. With Altran, the Group reported 2019 combined revenues of €17 billion.

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