



How can digital government connect citizens without leaving the disconnected behind?

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The experience from the COVID-19 pandemic has made citizens more aware of the government's role in their lives. This creates an opportunity to strengthen the relationship between governments and the people they serve, and renew the levels of trust that are vital to effective governance. Innovative policy design, inclusive digitalization, better use of data and more participatory engagement with citizens will be important components of governments' response. But, it will also be vital to make sure that the most vulnerable and digitally excluded groups are not left behind.

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Today's citizens have more complex needs than ever before. It is vital that governments understand those needs, and people's differing relationships with technology, or they risk disconnecting as many citizens as they connect.



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Introduction

Driven by advances in communications technology and a growing appreciation of our interdependence, the world has become far more connected. At the same time, technological changes, demographic shifts, the climate emergency, rising inequality, rapidly changing values and now, the shock of the COVID-19 pandemic have contributed to a much more complex and uncertain environment for governments. And just as they were adapting to these challenges, COVID-19 delivered a huge shock to individuals, communities and economies.

The pandemic has disrupted lives and highlighted the vulnerabilities we all face as citizens, albeit in different forms and with different levels of intensity. And people have looked to government to play an even more critical role in their lives, whether it is dealing with the short-term consequences of COVID-19 or the long-term impact of other global challenges. This has left public policy and service delivery under unprecedented pressure.

As governments think about how to respond, the need to understand people's lived experiences has never been greater. Just as many businesses use their vast marketing resources to research their customer base, we believe the starting point for any government is to understand how citizens are changing in the connected world. How do they view their lives? What do they think of the services they receive from governments? Are they ready for governments to use more data and technology in the delivery of public services? How do the responses differ across socio-economic groups?

To answer these questions, EY teams have embarked on a major new research program – “Connected Citizens” (see “About the research” for the methodology). The study explores what people value, what concerns them most and how they feel about the technological advances that are shaping our lives. A key goal is to examine their expectations for the role of government and public services, and the nature of the relationship between those who govern and those who are governed.

We hope this research starts a discussion about how governments can meet the needs of an increasingly diverse citizenry; and that highlighting some of the complexities adds to the dialog around improving the design of public policies, advancing digital government, unlocking the potential of data, and engaging the public in efforts to improve public value.

About the research

Ipsos MORI conducted online interviews with 12,100 participants of working age, across 12 countries globally, between July 2020 and September 2020. Quotas were set by age, gender, region and working status in order to achieve a representative sample in each country. Data was weighted by age, gender, region, work status and education. Ipsos MORI created a segmentation model based on the data, which led to the development of seven distinct citizen personas: Diligent Strivers, Capable Achievers, Privacy Defenders, Aspirational Technophiles, Tech Skeptics, Struggling Providers and Passive Outsiders. Each persona reflects several dimensions, including demographic profile; personal values; life satisfaction and priorities; attitudes towards technology and innovation; engagement with government and public services; and future outlook.



1

A more complex 21st century citizen

The Connected Citizens survey has highlighted the complexity of people's lives in terms of their needs and concerns, their relationship with technology, and their expectations of the government and public sector.

COVID-19 has heightened citizens' vulnerabilities

The COVID-19 pandemic has affected everyone's lives differently, with varying degrees of stress and insecurity. There's the graduating student with a huge debt burden, facing an uncertain job market. There is the middle-aged worker, who fears his skills are outdated and is anxious about job security and the entrepreneur who is trying to keep a start-up afloat during an economic downturn. Also, there is the essential worker who is helping maintain vital services, but with poor pay and work conditions and the older worker, who is worried her pension savings are insufficient to provide a comfortable retirement. There are also the parents, whose child is falling behind at school because they lack the connectivity at home for online learning, and the elderly person in poor health, isolated from her community and unable to find the support she needs. A whole new cohort of citizens has emerged, which has never had to rely on government before, but now has to look to them for support.

While we didn't set out to examine the impact of COVID-19 on people's lives, the timing influenced citizens' satisfaction with their quality of life – particularly those on lower incomes – across all the countries surveyed.

Citizens are reporting lower life satisfaction

71%
of respondents were satisfied with their quality of life before the pandemic.

48%
of respondents say they are satisfied with their quality of life at present.

People are most concerned about their basic needs being met, such as access to high-quality health care and feeling safe in their community. But, unsurprisingly, in the current environment, the state of the economy and job security features

prominently on their list of worries. Almost half are concerned about financial security (ranging from 37% in India to 60% in Malaysia), while 37% cite "having a secure and well-paid job" and "living in a country with a strong economy" as important.

Figure 1:

Citizens are most concerned about their financial security, safety and access to health care

Question: Looking ahead to the future, which of the following concerns you the most?



Despite the lower life satisfaction at present, globally, almost two thirds of citizens (62%) remain optimistic about the future for themselves and their families. But there is less optimism about the future for their countries (42%) and the world in general (33%).

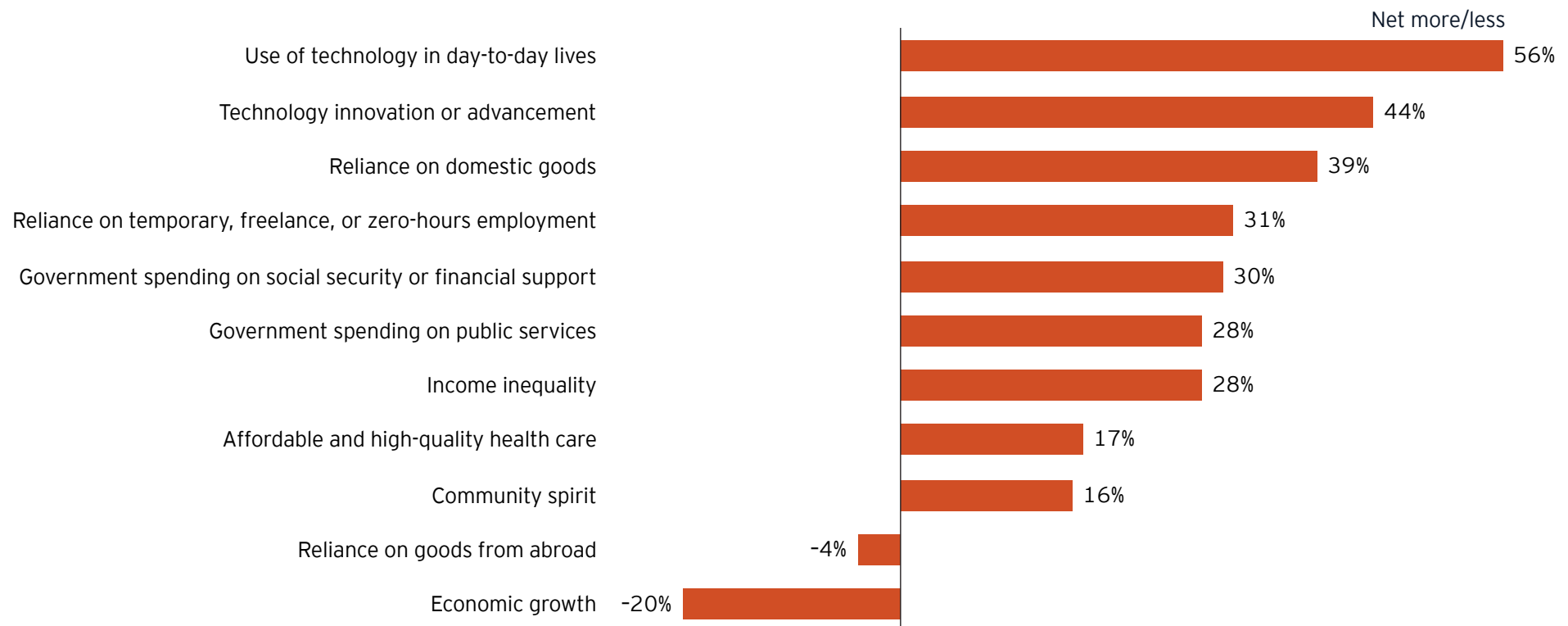
While citizens expect some silver linings to the pandemic – such as more technological innovation and advancement, and more community spirit – many also expect that it will lead to more income inequality and more reliance on temporary, freelance, or zero-hours employment, with lower

workforce protection. Globally, around half of the citizens surveyed expect more government spending on social security and financial support for people and businesses, and more spending on public services (though, in both cases 20% expect there to be less spending).

Figure 2:

The pandemic is expected to have some negative impacts for governments, society and individuals

Question: Do you think the COVID-19 pandemic will mean there will be more, less, or about the same of each of the following in the future than there would have been had the pandemic never happened?



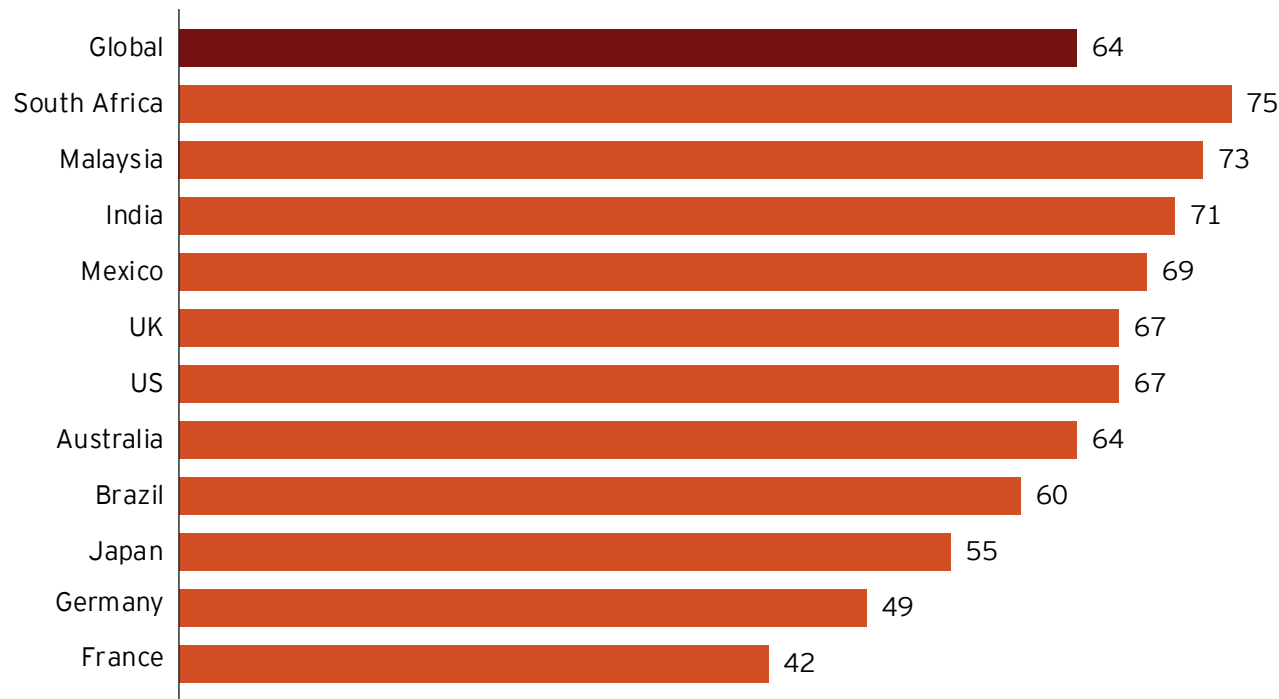
Technology is playing a more pervasive role in people's lives ... but governments lag behind

One of the most striking consequences of the pandemic has been the increasing reliance on technology for almost all aspects of our daily lives. In the space of just a few months, we've seen how it has transformed the way people work, play, shop, learn and socialize. And the survey reveals that in future, most people expect to make even more use of technology than if the pandemic had not happened (Figure 3).

Figure 3:

People expect that the COVID-19 pandemic will lead to more use of technology in their daily lives

Question: Do you think the COVID-19 pandemic will mean there will be more, less, or about the same use of technology in our day-to-day lives in the future than there would have been had the pandemic never happened?



Percentage expecting an increase in the use of technology

64%

of citizens surveyed believe that the COVID-19 pandemic will increase the use of technology in our daily lives, with some of the developing countries showing the most widespread expectation of increased technology use.

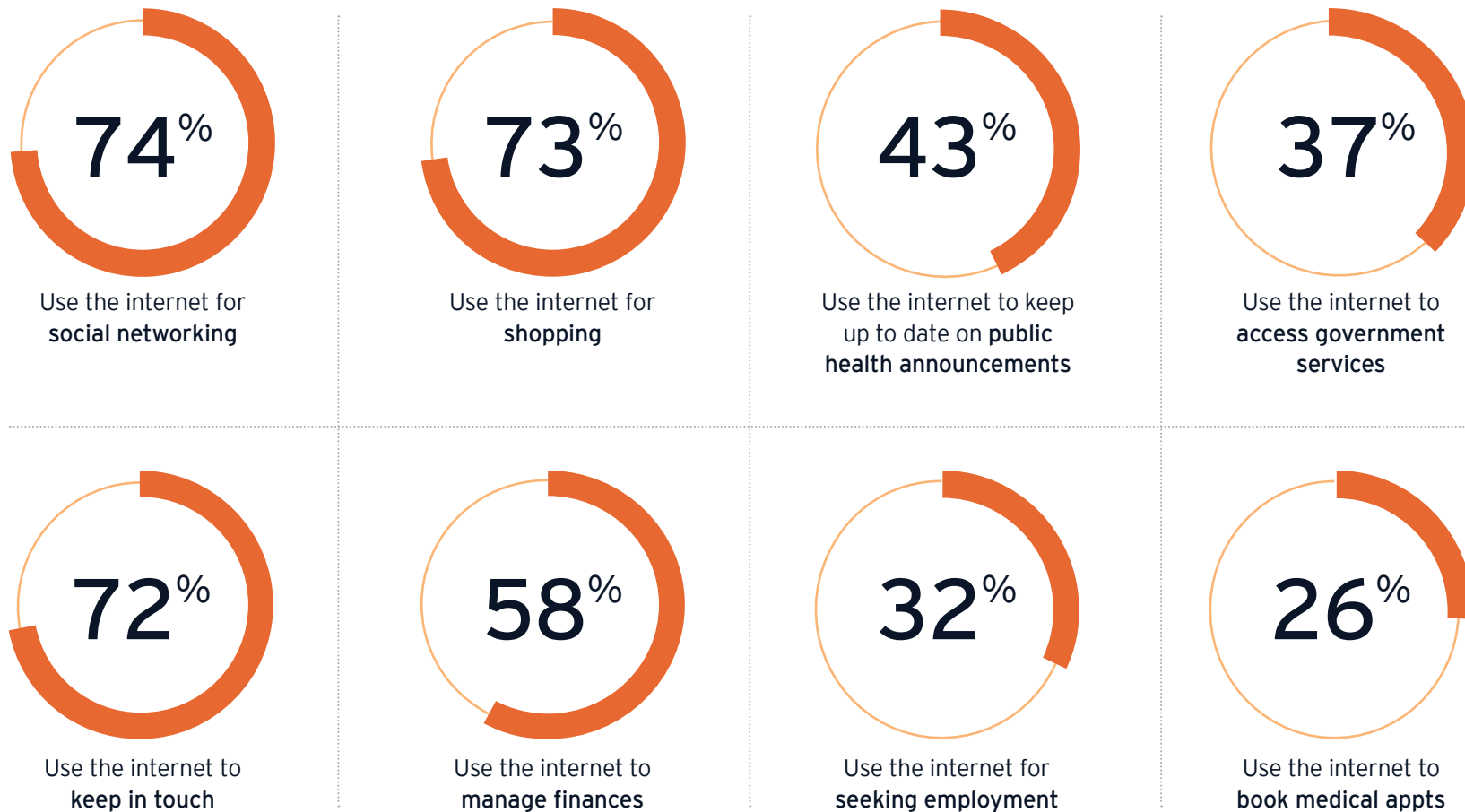


But, while governments have accelerated the shift toward the digitalization of many public services, they continue to lag behind many services provided by the private sector. For example, 73% of citizens globally say they use the internet for shopping and 58% for managing their finances, but only 37% use it for accessing government services.

Figure 4:

Citizens are using online channels to access private services to a greater extent than government services

Question: Which of the following activities, if any, do you use the internet for nowadays?



Looking ahead, government services also lag behind in banking and shopping in terms of people's expectations of service improvements through greater use of technology (Figure 5).

Figure 5:

Technology is expected to improve how people manage many different aspects of their lives ... but public services lag behind other sectors

Question: Looking ahead to the future, to what extent, if at all, do you think technology will change the way you do each of the following? Is that for better or for worse?

The way I bank



The way I shop



The way I work or study



The health care services I use from doctors or hospitals



The way children are educated



The services I use from government or other public services



The way I socialize with friends and family



■ Better ■ Same ■ Worse ■ Don't know

These findings may indicate a preference to use other channels to access government services. But people's lower expectations of government may also reflect their recent experience. Globally, only around half of the citizens surveyed (52%) think governments and public services have effectively used digital technology to respond to the pandemic,

while 40% believe they have been ineffective. However, perceptions differ markedly across countries: 88% of citizens in Malaysia and 80% of citizens in India said governments had leveraged technology effectively, compared with just 36% in France and 29% in Japan (Figure 6).

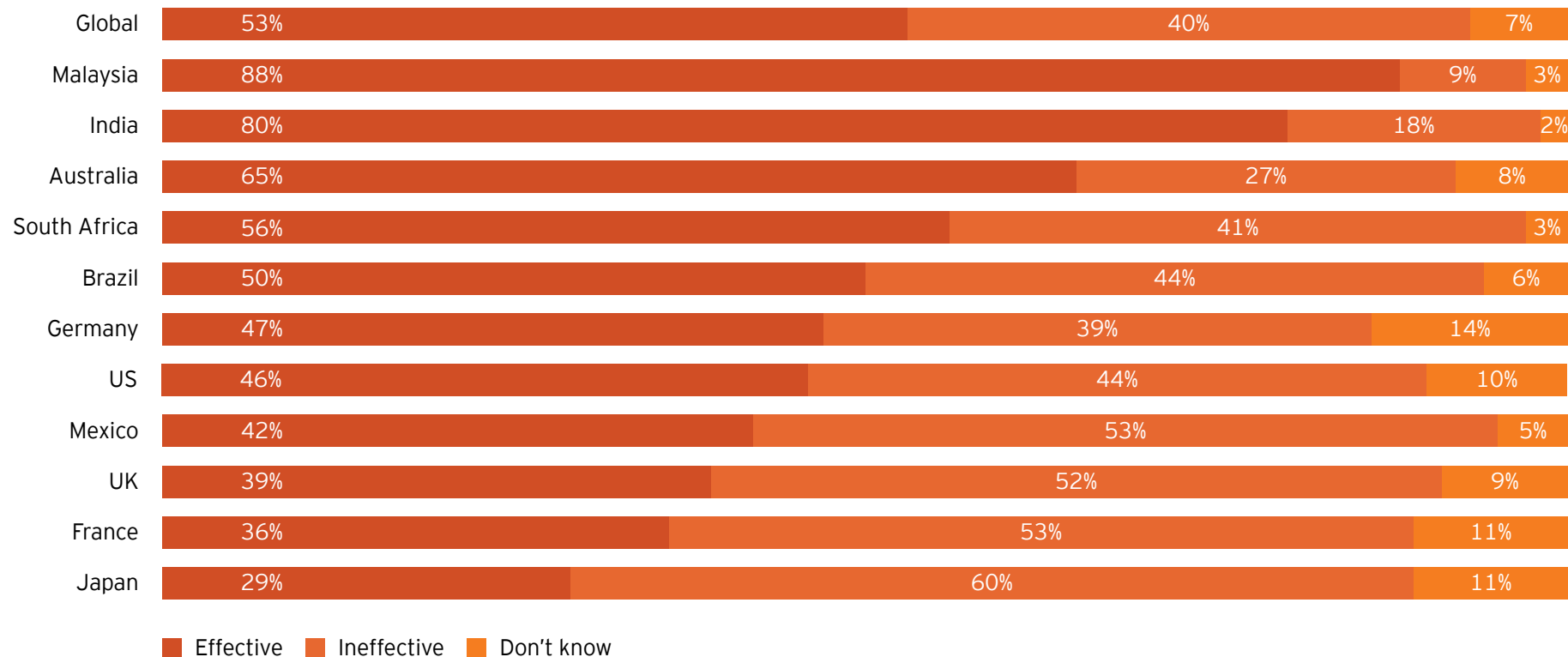
Globally, only around half of the citizens surveyed (52%) think governments and public services have used digital technology effectively to respond to the pandemic

Figure 6:

There are mixed views on governments' use of technology to respond to the COVID-19 pandemic

Question: How effective or ineffective do you think the government and public sector have been in using digital technology to respond to the COVID-19 pandemic?

Note: not asked in the UAE



Citizens in some countries are more optimistic than others about the potential for technology to improve public services in the future. In the UAE, Malaysia, India and Brazil, for example, two thirds or

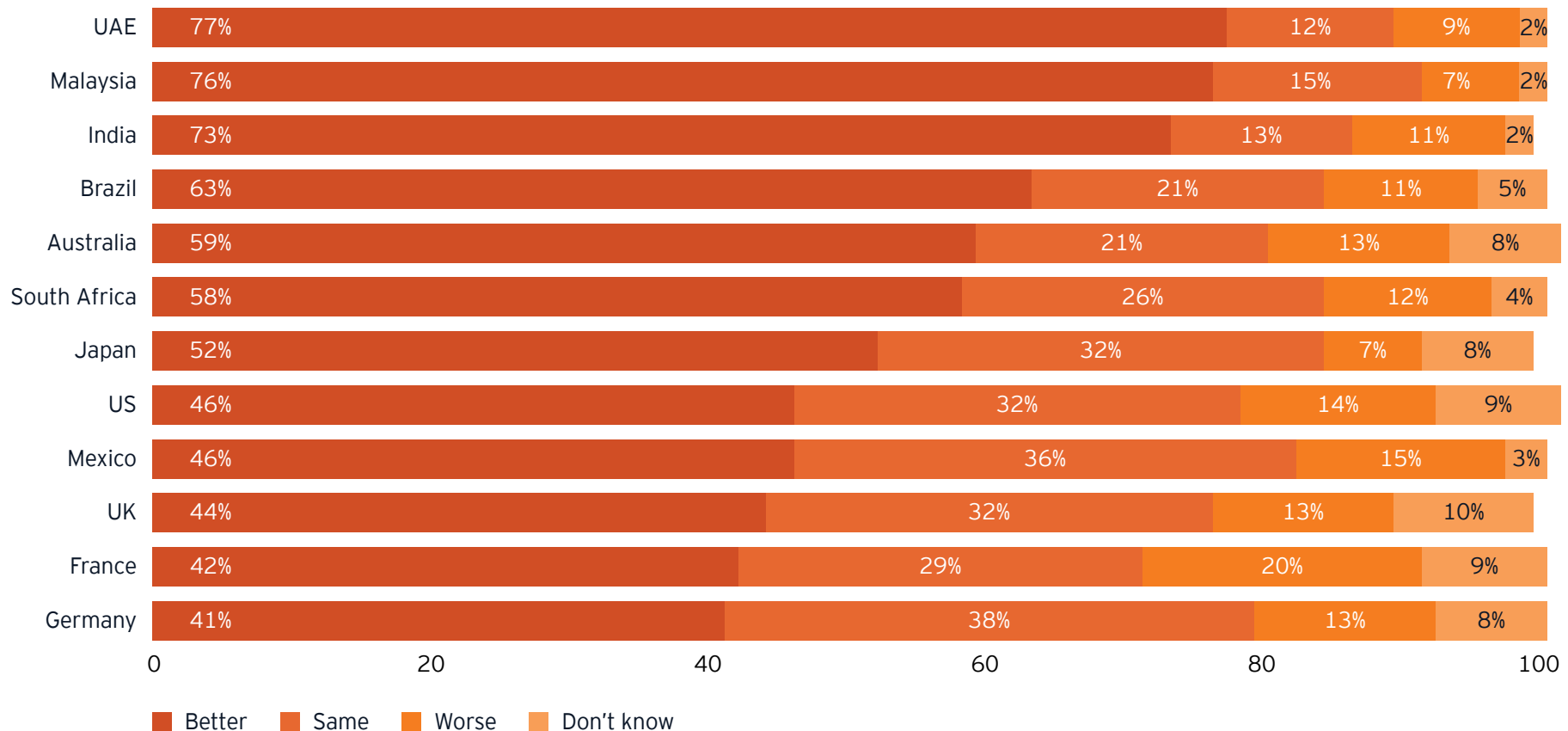
more of the citizens surveyed expect technology to change services for the better. However, the figure falls to only around four in ten people in

France and Germany. Clearly, governments still have some way to go on their digital journey to meet the expectations of the people they serve.

Figure 7:

Levels of optimism about the role technology will play in improving services from governments and other public sector agencies vary widely across countries

Question: Looking ahead to the future, to what extent, if at all, do you think technology will change the services you use from governments or other public services? Is that for better or for worse?



Citizens have broader concerns about the impact of technology

Despite its more pervasive role in people's lives, our survey revealed mixed attitudes toward the role of technology. Most people believe it makes life better, and it will be needed to help solve increasingly complex future problems (both 72% of citizens surveyed globally). But there are concerns about its broader impact. These include, for example:

- ▶ Widening social inequality: Often, it is the most disadvantaged citizens who are unable to afford to access new technology and lack the digital literacy skills to use it. The use of algorithmic decision-making, with potential for inherent bias, is another risk. Almost one third of global citizens (32%)

think the benefits of technology will not be equally spread across different groups in society. And 34% think technology gives more power to those who are already rich and powerful.

- ▶ Loss of human interaction: The increasing reliance on technology, as a means of communication, is causing concerns about the impact on social cohesion. Globally, 32% of citizens think technology will make people feel less connected to their community. In a more virtual world, some of the most vulnerable groups may become more isolated through the loss of physical support networks.

- ▶ The potential encroachment on personal privacy and digital security: As more people and devices are connected, the volume and variety of data created, and the speed at which it is gathered, will increase. This is creating public anxiety around personal privacy and lack of control over how people's data is used. More than four in ten citizens are against the sharing of data, both within government and with private sector companies. More than three quarters (77%) are opposed to government selling their personal data to a private sector company, even if it's to raise money that can fund better public services or tax cuts.

Figure 8:

Almost one third of global citizens have concerns about technology having negative impacts on society and communities

Question: For each of the following pairs of statements, please say which one is closest to your view



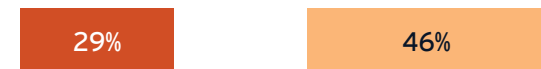
Figure 9:

There is a stronger consensus around the imperative of data privacy

Government should share data with other government department and public services where it will lead to improvement in public services



Government should share data with private sector companies where it will lead to improvements in public services



■ Agree ■ Disagree

Some of these concerns may stem from a perception that the speed of technological development is simply too fast. While some are excited and empowered by technology, others are overwhelmed and anxious. Is technology being shaped by government and society or is technology shaping government and society? In some cases, it is simply too early to understand the benefits and risks of some emerging technologies.

The impetus is on governments to reassure citizens about the application of technology for the public good and the appropriate use of their personal data. Only then will governments be in a position to unleash the full potential of data and technology – leveraging analytics to build and monitor better services, and increasing data-driven decision-making on complex public policies.



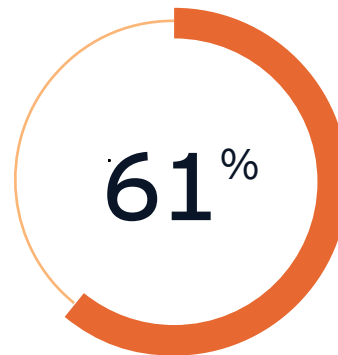
Digitalization remains an imperative for governments

Governments will need to get ahead of these concerns if they are to harness the potential of data and technology. Low technology adoption rates can weaken countries' economies, their ability to compete internationally, and hence their future prosperity. Data-driven approaches within government are also needed to understand citizens' needs, target services proactively, evaluate complex public policies, and deliver better outcomes for citizens in a more cost-effective way.

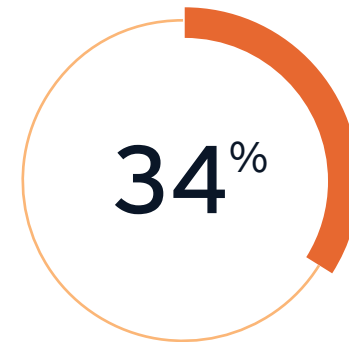
Globally, almost one third of citizens (32%) rank making more use of online and digital technologies, in the provision of public services as one of the

top three priorities for governments to improve the quality of services. But, improving access to technology and supporting people to become more comfortable and competent with it will be critical. The survey revealed widespread support among citizens for government skills programs aimed at helping people use and understand new technologies: 61% of all survey respondents said they would be likely to use government training schemes to improve their digital skills, if available. And 34% think governments should provide better access to the internet or computers for people who don't have them.

Figure 10:
Support for digital inclusion



of global citizens said they would be likely to use government training schemes to improve their digital skills if available.



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Governments can also do more to clarify the benefits of sharing data and show citizens that it will be used in responsible ways. The survey shows that there is more support for using data when people are clear

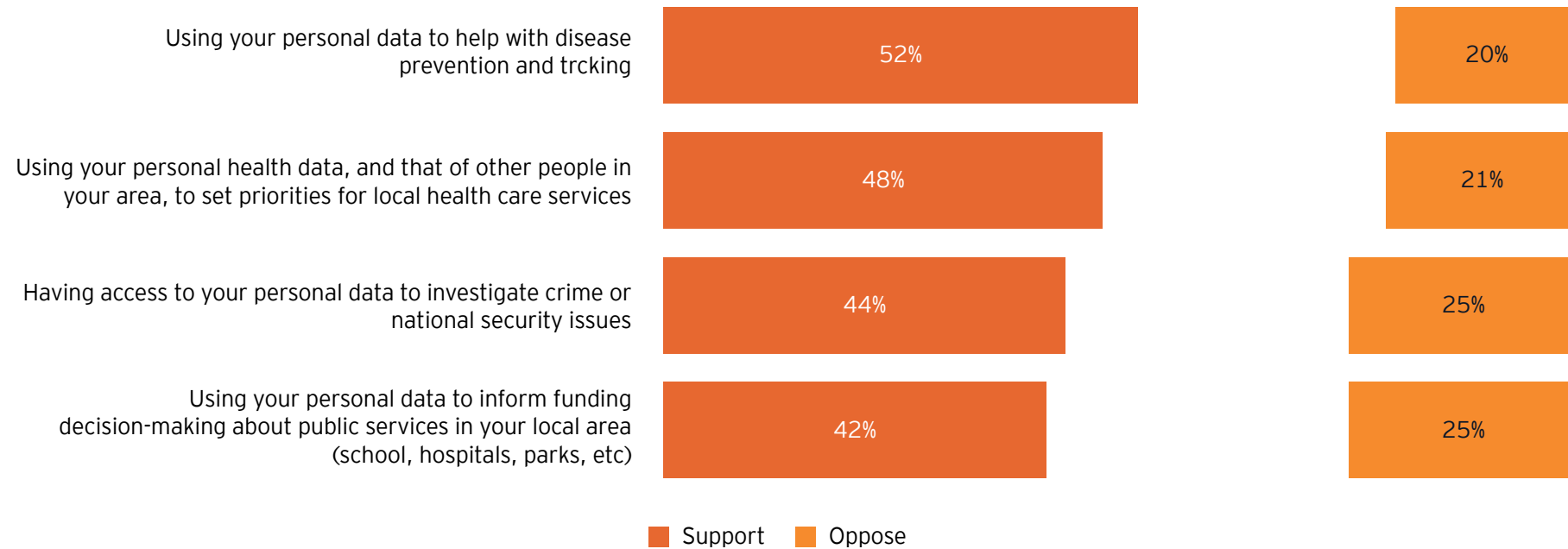
about the use case and when sharing it offers some benefits in return, to themselves or society. This is particularly the case when it relates to public health. For example, using personal data to help track

and prevent disease (supported by 52% of citizens globally) or to set priorities for local health services (supported by 48%).

Figure 11:

Citizens are more likely to be open to government data collection and sharing when there is a clear benefit

Question: To what extent do you support or oppose government organizations, such as public services and government departments, doing the following...?





Governments face a troubling trust deficit

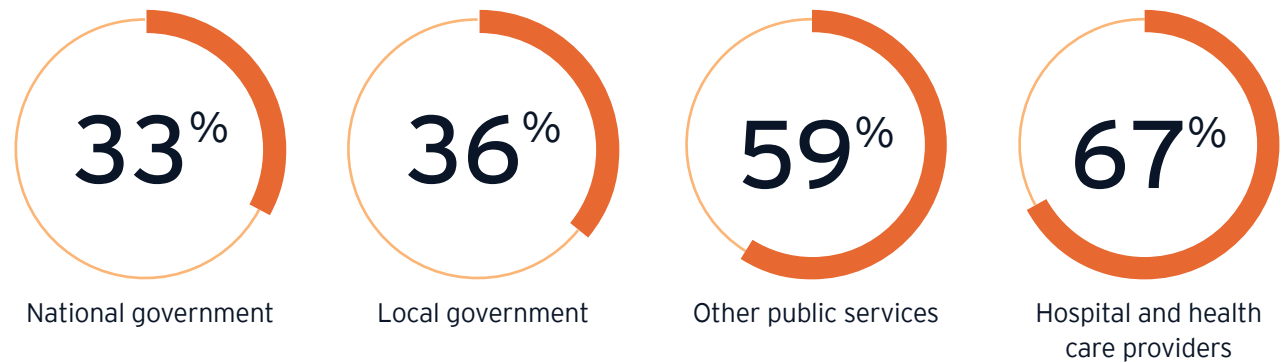
Another challenge for governments is the trust deficit with citizens. Many citizens make judgements based on their own experience of service provision. The relatively high levels of trust in hospitals and health care providers, and other public services (67% and 59% of citizens respectively), reflects the fact that they are the main touchpoints for many people's interactions with governments, and that satisfaction with these services is generally high.

But although health providers and other public services are relatively trusted, trust in national and local governments is significantly lower (33% and 36% respectively). These global figures mask significant differences across countries. Trust in national government ranges from 63% in India and 46% in Australia; 29% in France, 27% in the UK, and 26% in the US; to just 19% in South Africa and 18% in Mexico.

Figure 12:

Governments continue to face a troubling trust deficit

Question: How trustworthy or untrustworthy are these different institutions and organizations?



Percentage of citizens reporting that they trust each entity

Building trust more broadly in government institutions will be vital to the task of increasing the efficiency and effectiveness of government operations and harnessing the efforts of citizens to help design and deliver better services. The survey findings indicate two specific areas where government action could help to shift perceptions of trust.

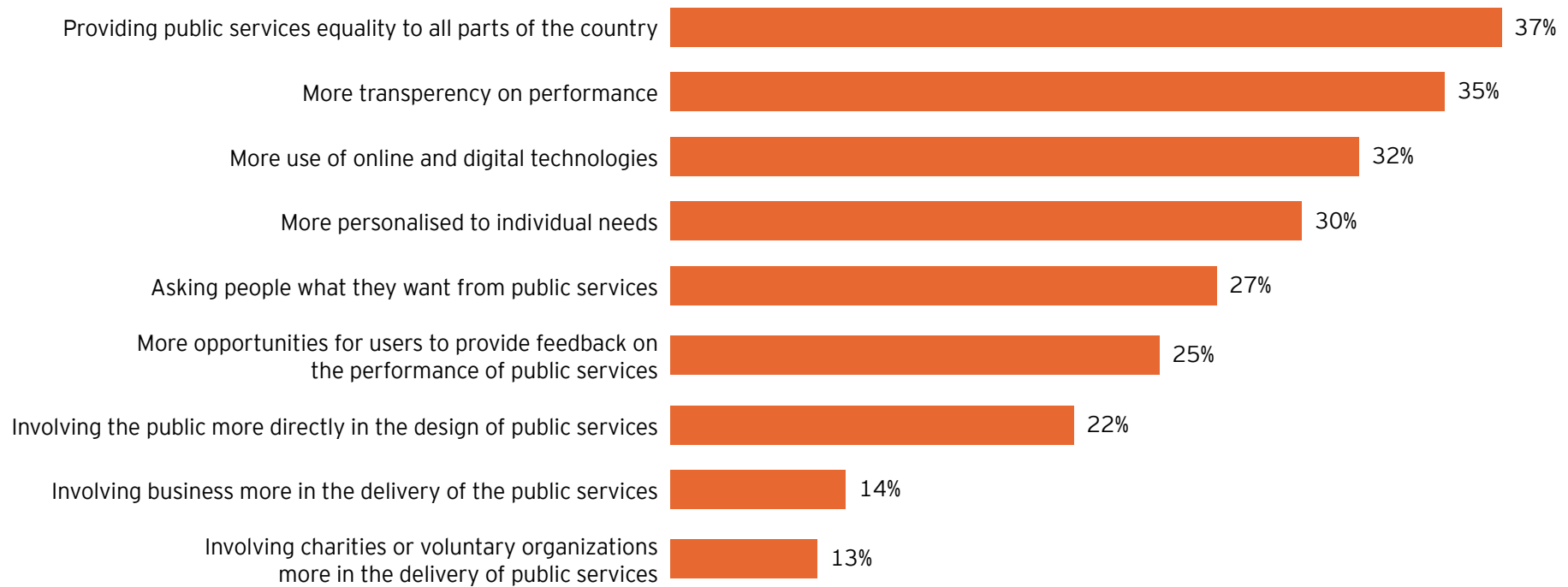
First, citizens care about the quality and convenience of services that governments provide. Globally, 37% of citizens want government to prioritize more equal service provision across the country to improve quality of services. Thirty-five percent cite better transparency of government performance so they can hold governments to

account as a top priority. More use of digital technologies and more personalized services that meet individual needs are also key requirements for citizens, along with opportunities for citizens to tell governments what they want from services. Improvements in these areas would help engender deeper trust.

Figure 13:

Top priorities for improving quality of public services

Question: Which of the following, if any, do you think would make the biggest difference to the quality of public services you receive?



Note: Respondents could select up to three responses

While many citizens favor more use of digital technologies, the survey findings show that people still want to have a choice of different channels through which to access services. Globally, 51% would prefer to get in touch through a government

website (with citizens in the UK, Australia and Japan most favorable). But 43% of global citizens would still like to have the option of using the phone and email. And more than one quarter (27%) continue to favor in person visits to a government office

(particularly those in Mexico, Malaysia and Brazil). To meet the needs of all citizens, governments will have to consider a multichannel approach for the next few years.

Figure 14:

Global citizens expect a multichannel approach to service delivery

Question: In which of the following ways would you prefer to get in touch with government agencies? (select up to three)?

	Global	Australia	Brazil	France	Germany	India	Japan	Malaysia	Mexico	South Africa	UAE	UK	US
Using a website	51%	58%	49%	51%	37%	48%	57%	54%	45%	49%	50%	60%	54%
By phone	43%	41%	33%	36%	38%	46%	36%	46%	49%	43%	48%	45%	50%
By email	43%	42%	30%	47%	57%	47%	39%	41%	30%	58%	38%	45%	40%
In person	27%	22%	32%	23%	29%	25%	25%	32%	38%	28%	29%	16%	28%
Using online chat	2%	25%	16%	9%	16%	22%	22%	28%	32%	26%	22%	27%	22%
Using social media	14%	8%	13%	3%	5%	31%	12%	23%	17%	18%	18%	4%	7%
In writing	9%	7%	6%	7%	18%	14%	16%	6%	7%	5%	7%	7%	7%

Second, there is a willingness and appetite for citizens to get more involved in public service delivery in the future. Sixty two percent of global citizens say they would be likely to get involved in community forums to discuss and contribute new ideas for delivering public services, if they were available, (including more than three quarters of

those surveyed in India, UAE, South Africa and Malaysia). And 42% would like to have a bigger say or be more actively involved in public service delivery in their local area.

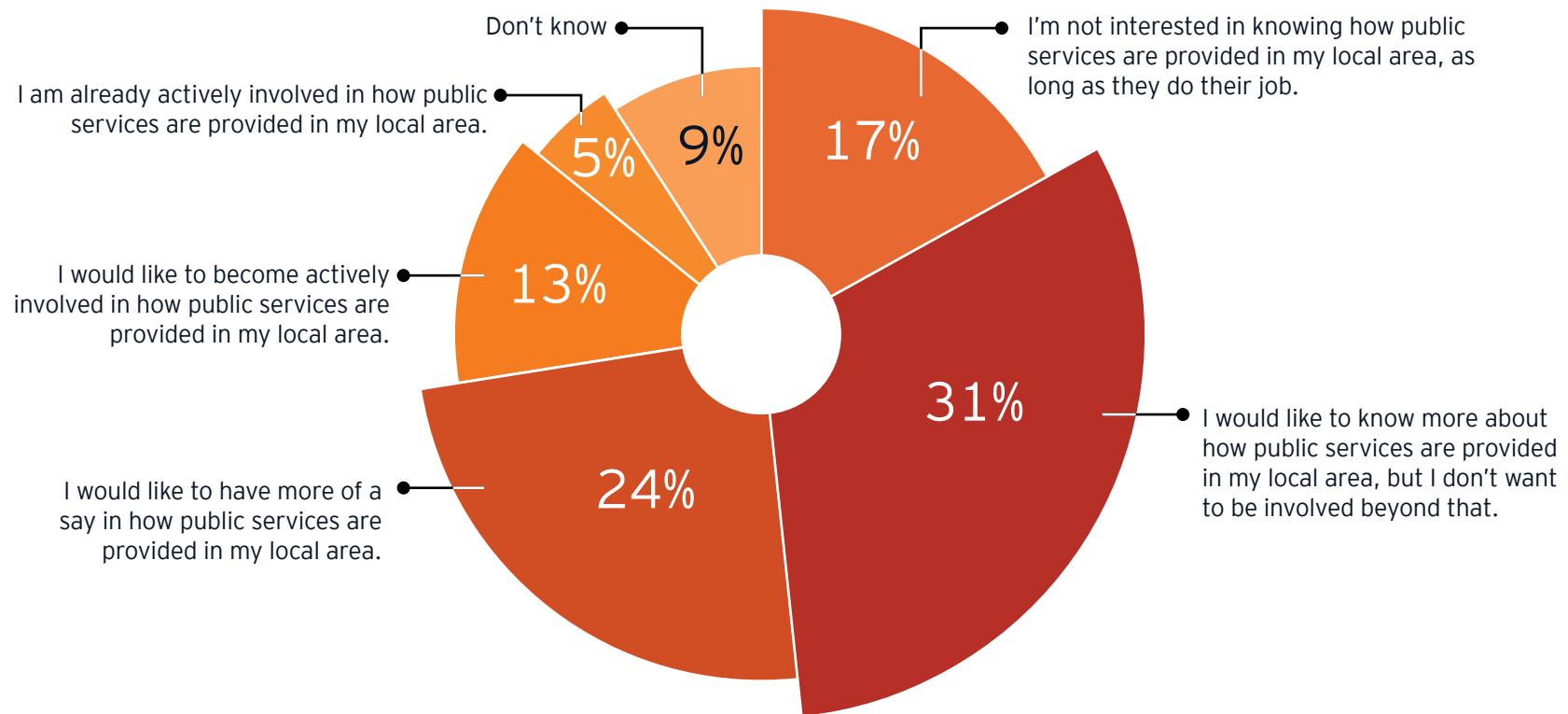
Many citizens would grasp the opportunity to use technology to access information about governments

and to have a bigger say. Sixty-nine percent would be likely to access government performance measures online, if available; 68% would use an app to give their opinions to governments about their local area; and 72% would use online voting to make decisions about local services.

Figure 15:

A desire to have a bigger say or be more involved in public service delivery

Question: Which of these statements comes closest to your own attitude toward how local public services work in your area?

















2

Seven citizen personas illustrate the diversity of people's lives

The survey results reveal the complexity of attitudes, values, needs and behaviors of citizens across the world. The data has helped uncover seven different citizen "personas" that governments will need to engage in the future. Each segment reflects people's priorities and concerns, their attitudes towards technology and use of data, and their expectations of public services. They share many characteristics – but there are also key differences between them. And their presence varies significantly across countries.

Figure 16:

Geographic breakdown of citizen personas

	 Australia	 Brazil	 France	 Germany	 India	 Japan	 Malaysia	 Mexico	 South Africa	 UAE	 USA	 UK	Global
Diligent Strivers	15%	24%	11%	13%	25%	9%	17%	28%	27%	26%	13%	18%	19%
Privacy Defenders	15%	16%	16%	17%	14%	15%	20%	22%	21%	13%	19%	15%	17%
Capable Achievers	23%	11%	26%	21%	8%	20%	19%	9%	16%	5%	20%	26%	17%
Aspirational Technophiles	16%	15%	10%	12%	25%	14%	18%	13%	16%	25%	15%	9%	16%
Tech Skeptics	14%	13%	17%	16%	10%	18%	11%	16%	12%	10%	17%	17%	14%
Struggling Providers	8%	14%	6%	7%	14%	10%	10%	8%	6%	14%	6%	7%	9%
Passive Outsiders	10%	7%	12%	13%	3%	14%	4%	3%	2%	6%	10%	9%	8%

■ Highest prevalence ■ Lowest prevalence

Seven Connected Citizen personas

Diligent Strivers are young proactive self-improvers keen to get on in life. They expect seamless digital government services to help them achieve their aims and are comfortable sharing their data with governments. They believe strongly in equal opportunities for all.

Capable Achievers have an older age profile and are independent, successful and satisfied with their life. They are pragmatic technophiles who embrace digital innovation. They trust governments to use their data appropriately, but worry about it getting into the wrong hands.

Privacy Defenders tend to be older, independent and comfortably off. They value technology and the

benefits it provides them, but are extremely cautious when it comes to sharing their personal data with governments or private companies.

Aspirational Technophiles are younger well-educated city-dwellers. Motivated by success and new opportunities, they incorporate technology and data into every facet of their lives. They are excited by the potential for new digital innovations to empower people and improve society.

Tech Skeptics are older, on lower incomes and relatively dissatisfied with their lives. They are distrustful of governments and skeptical about the benefits of technology. They tend to be opposed to data sharing, even if there is a clear purpose.

Struggling Providers are younger and tend to be in low-paid, less secure work. They are above-average users of welfare services. They are ambivalent toward technology, lacking the access and skills for it to make a big difference to their lives.

Passive Outsiders have lower levels of income and education. They are detached from the connected world around them and generally reluctant to embrace change. They are relatively ambivalent on data sharing but tend to feel the risks outweigh the benefits.

For a full description of each of these, see “The seven citizen personas at the end of this report.”

Each of the personas interacts differently with technology and digital services, and each holds different lessons for how governments can embrace the opportunity to better engage with citizens.

One of the most striking differentiators between the personas is their attitude to technology and digital service delivery. Although our survey respondents represent the online population, they have varying

degrees of confidence in using new technology on their own. Seventy percent or more of Generation Z, Millennials and Generation X respondents say they are confident users, compared with 61% of older baby boomers. Yet, when we look across the seven segments, the difference is stark. Eighty-seven percent of Aspirational Technophiles are confident users, but the equivalent figure for Passive Outsiders and Struggling Providers is just 46% and 40% respectively.

Similarly, there are significant differences across the segments in people’s attitudes toward sharing data. Aspirational Technophiles, Capable Achievers and Diligent Strivers are significantly more comfortable with sharing their data to access a service or perform a transaction online, and with their data being shared across governments and with private companies. But there are real concerns among Passive Outsiders, Tech Skeptics and Privacy Defenders about the risks involved.

Figure 17:

Some of our citizen segments lack confidence in using new technology

Question: To what extent do you agree or disagree with the statement: I feel confident using new technology on my own, by segment?

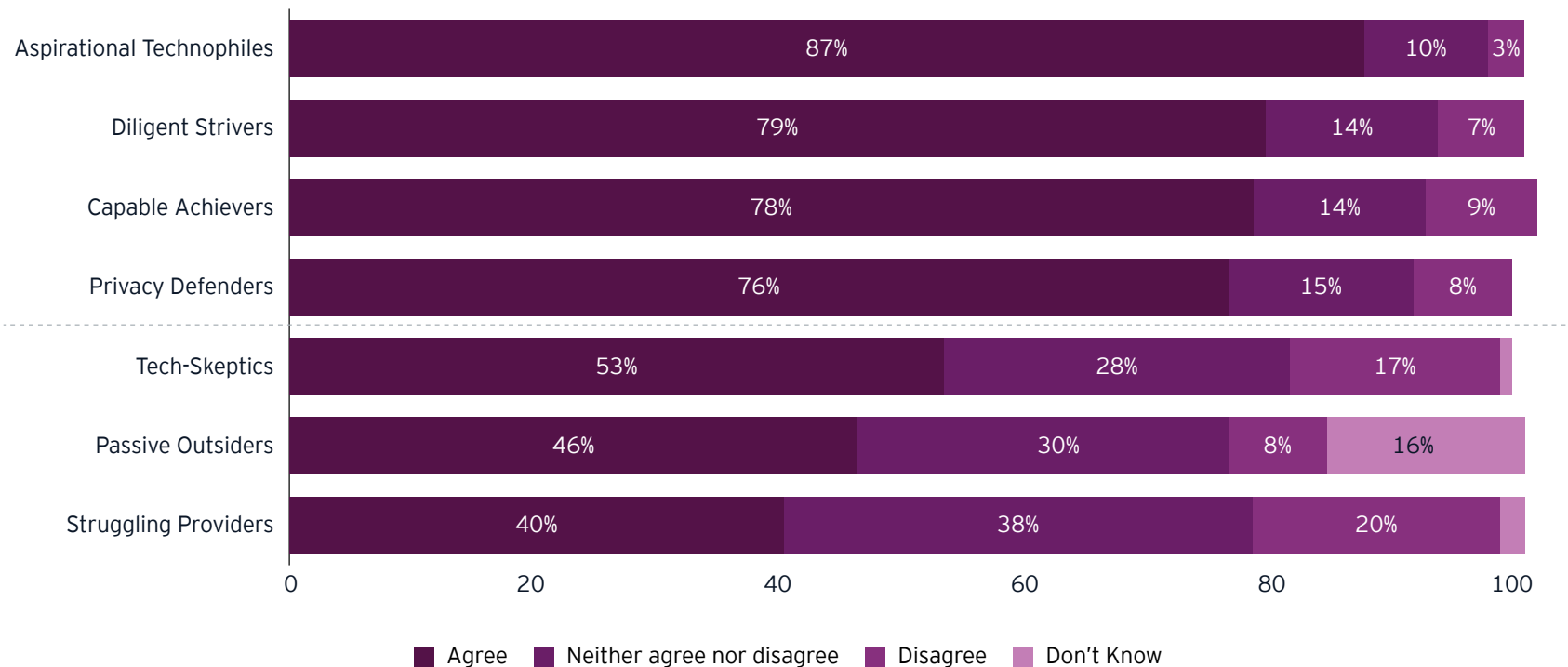
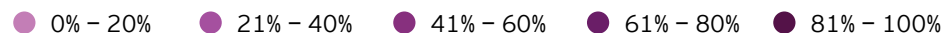


Figure 18:

Attitudes to data sharing vary significantly across the different groups

	Average (all segments)	Struggling Providers	Aspirational Technophiles	Capable Achievers	Passive Outsiders	Tech Skeptics	Diligent Strivers	Privacy Defenders
I am comfortable sharing my personal data with government online in order to access a service	50%	48%	78%	74%	31%	24%	65%	17%
I am comfortable sharing my personal data online with a company in order to perform a transaction	50%	51%	78%	68%	31%	26%	52%	30%
I am comfortable sharing my personal data online through social networking services	29%	48%	71%	23%	21%	11%	25%	11%
I am comfortable sharing my personal data with government to create a “citizenship score” that rewards good behaviours or penalizes bad behavior	43%	49%	84%	42%	15%	18%	61%	18%
I am comfortable with government selling my personal data to a private sector company in order to raise money to fund better services or tax cuts	22%	48%	80%	7%	9%	8%	8%	5%
I agree governments should share data with other government agencies where it will lead to improvements or efficiencies in public services	33%	35%	43%	51%	21%	17%	41%	17%
I agree government should share data with the private sector companies where it will lead to improvements or efficiencies in public services	29%	32%	47%	32%	20%	17%	35%	15%

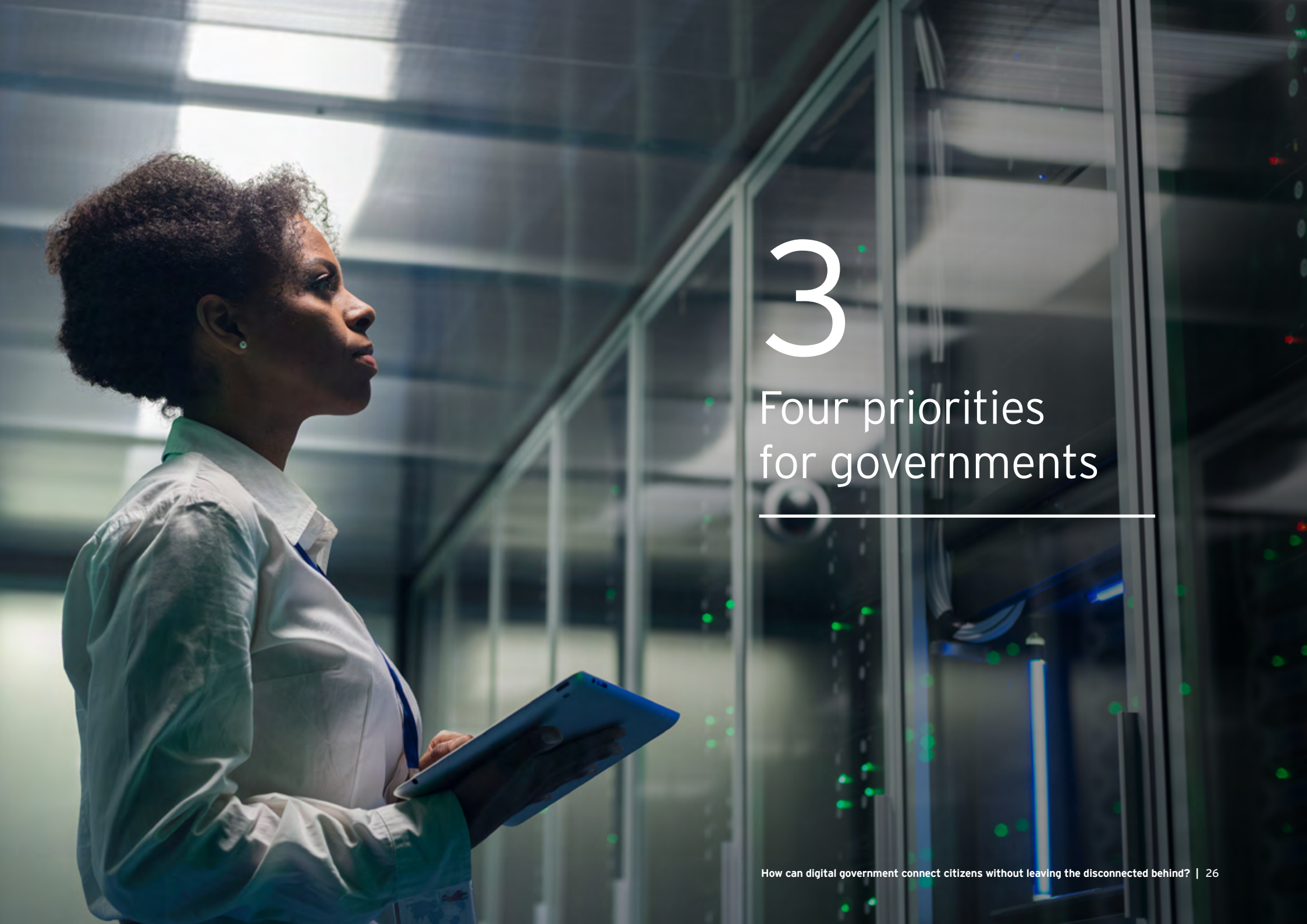


Why does this matter? Moving from a one-size-fits all approach to service delivery toward greater personalization is crucial to improving public policy design, delivering more efficient and effective public services, and strengthening the relationship between governments and citizens. It may work for private sector companies to address the needs of 80% of their customer base. But it is unacceptable in the public sector, particularly, if the 20%, whose needs are not being met, are from underserved minority groups who need the most support. What happens to the Struggling Providers if digital channels are the only way to access some services? Could they miss out on services and opportunities, and see the structural inequality they suffer from get worse?

This is a critical consideration for governments as they move towards “digital by design” and “digital by default” approaches to service delivery. The segmentation can help them ensure that digital services and data policies are properly designed for all the different groups. For example, it helps us to identify Aspirational Technophiles as the most likely to adopt certain new digital services and accept technological substitutes (e.g., a video call instead of a face-to-face appointment with a doctor). On the other hand, we know that Tech-Sceptics and Passive Outsiders are at the opposite extreme: they will be the least satisfied – and will need the most support – when new digital solutions are introduced or even made mandatory. The personas can help governments to better engage and communicate with these different groups to address their concerns and issues.

Full descriptions of each of the seven personas can be found at the end of this report.





3

Four priorities for governments

Governments can take a multi-pronged approach to addressing people's needs, with a focus on four areas:

1. Agile and innovative policymaking

More agile and innovative policies are needed to respond quickly to people's immediate needs and to address the long-term impacts of other challenges on overall wellbeing. These will be most effective if they target the concerns of different groups.

A sustainable social protection system is needed now, more than ever, to address economic insecurities of the most vulnerable. Governments are experimenting with new policies to provide a safety net for those "left behind" (for instance, social schemes such as the guaranteed minimum income or universal basic income). Income from these social schemes could also be spent on productive assets or directed toward funding education and training for every citizen, and providing a springboard for progression and personal development. Targeted interventions can also help the most vulnerable individuals and families. The social investment approach, for example, first adopted by the New Zealand Government, can help governments save money in the long term by using data to project ahead the needs of the population, and taking preventative action before crises occur.

New policies are also needed to tackle income insecurity for those in precarious work, including the self-employed, gig economy workers and others who are following less traditional life and career paths than in the past (including intermittent,

part-time and informal working, and frequent career changes). These include, for example, clearer rules around employment status and rights, as well as more effective enforcement; and portable health and pension plans that maintain coverage as workers move geographically, between employers, or through periods of unemployment or self-employment. And governments will need bold new measures that value the contribution of key workers – such as health and social care staff, teachers and refuse workers – in maintaining vital services. Job quality and status should be center stage, along with stronger employment rights and new reward structures. A greater focus on organizational ESG (environmental, social and governance) factors will be important in improving employment conditions and employee well-being.

In future, governments – working closely with employers – will need to adapt quickly to changing labor market needs by creating a more agile, and lifelong, education and retraining programs that help workers remain relevant and competitive. "Skills road maps" for each major sector can help governments understand the skills and jobs that are needed in the future, as well as those, which are most at risk of automation. Personal Learning Accounts have been piloted in France and Singapore, giving every worker the funds to reskill. And active labor market policies (ALMPs) can help unemployed and low-income workers find jobs or retrain. In Denmark, decentralizing responsibility for delivering ALMPs to municipalities has proved very successful in enabling better tailoring of employment support services to local needs.¹

As more people reach retirement age, pensions systems are stretched to the limit. Governments will look at several options to improve pension systems, including encouraging people to take active ownership of their retirement planning (for example, a unique digital ID could link pension contributions from different sources over a working lifetime); providing simpler and more flexible plans linked to better advice and guidance (with robo-advice likely to become the norm); and increasing incentives or even passing laws that encourage greater private sector contributions to pension costs. But governments can also support ongoing employment opportunities for older workers with a desire to continue working.

Given the significant debt burdens they face, governments will look to strengthen alternative financing strategies to fund new social policies. Innovative financing models such as payment by outcomes (PbOs), pay-for-results contracts and social impact bonds (SIBs) can effectively improve the delivery of outcomes, while transferring risks to private investors and to nonprofits and civil society organizations. Social impact investing is rising in popularity against a backdrop of shifting values and growing calls for corporate social responsibility and sustainable finance. Funds are flowing to a diverse set of services. Addressing upskilling, combatting homelessness and enhancing public health constitute more than half of the 138 social impact bonds currently implemented across 26 countries.² In Croatia, for example, the Feelsgood Social Impact Investment Fund is investing €30 million in startups, addressing financial inclusion, agriculture

¹ "Social innovation: inspirational practices supporting people throughout their lives," *European Commission website*, KE-03-20-672-EN-N.pdf, accessed 2 February 2021.

² "Impact Bond Global Database," *Social finance website*, <https://sibdatabase.socialfinance.org.uk>, accessed 2 February 2021.

and farming, the circular economy, education and health care.

2. Inclusive digitalization

Digitization is needed to deliver the rapid transformation of public services that will provide citizens the same level of service they get from the private sector. But governments must do this in a way that levels up society and ensures that no groups are left behind.

The sudden progression to remote service delivery, learning and working during the pandemic has accentuated the digital divide and accelerated the need to enable more equal access to technology. For example, the closure of schools affected 90% of the world's student population. Globally, this meant that at least a third of the world's schoolchildren – 463 million children globally – were unable to access remote learning during the shutdown.³ However, even in high-income countries, internet access is not universal. Vulnerable children and workers are particularly at risk at being left behind through lack of digital access.

A more inclusive approach to digital transformation is needed. Investment in high-speed digital infrastructure, including broadband and 5G networks must provide connectivity in all parts of a country. Governments can also help provide devices (like laptops and tablets) to get people online and run programs to improve people's digital literacy so that they have the skills and confidence to interact with digital services. Governments should tailor their

digital inclusion initiatives to target socially excluded and hard-to-reach groups. But they will also need to ensure that those who are not digitally connected have alternative ways of accessing services, for example, by using the phone or having assistance to use digital services in public venues, and that those alternatives are properly promoted.

Citizens, already confident with technology, have heightened expectations for service delivery, in terms of quality, speed, convenience and value for money. Governments can provide citizens with the same level of service they get from private sector companies through several measures:

- ▶ Unique digital IDs that allow citizens to identify themselves securely in seconds to gain easier access to a range of services through multiple digital channels. However, there is mixed support for this across countries due to security risks and civil liberty issues.
- ▶ Smart portals and mobile apps that allow citizens to self-serve through one-stop access to multiple government services, as well as pushing timely alerts and reminders (e.g., passport renewal or vaccination reminders, and public health alerts).
- ▶ “Tell us once” services, so people don't have to refill their personal data online for different government transactions.
- ▶ Integrated digital platforms that enable the exchange of data between different service providers, at high speed or even in real time, to provide a complete view of the citizen. This

makes it possible to develop cross-agency services that are organized around people's needs and life events, not government structures. Push notifications to citizens can be sent when citizens reach key milestones, such as getting married, having a child, enrolling in school, entering the workforce, retirement and end-of-life planning.

- ▶ Full, digital end-to-end fulfilment of service requests (sometimes requiring digital authentication and signatures) that allow speedier delivery.
- ▶ Conversational platforms, like virtual personal assistants and artificial intelligence (AI)-powered chat bots to interact with citizens, that rapidly resolve queries and complete transactions. People can undertake tasks such as applying for a business loan, registering a birth and even, in time, filing a tax return, simply by making a voice request.
- ▶ A true omnichannel experience, allowing people to access services on a variety of platforms, using a range of devices.

To capitalize on these opportunities, governments will use design thinking, customer experience labs and data analytics to deepen their understanding of citizens' needs and interactions with government – and they'll use this insight to design their services to make each touchpoint better, faster and more efficient.

Governments will also move toward more proactive and even predictive service delivery, where they are able to trigger a timely service or intervention. “No-stop shops” will be able to anticipate services

³ “COVID-19: At least a third of the world's schoolchildren unable to access remote learning during school closures”, *unicef website*, accessed 3 February 2021.

⁴ “Citizen service centers: pathways toward improved public service delivery,” *World Bank website*. <http://documents.worldbank.org/curated/en/108371498753288065/Recent-developments-and-key-considerations-impacting-the-operations-of-one-stop-shops-for-citizens-a-summary-of-major-trends-and-a-design-guide-for-citizen-service-centers>, accessed 10 February 2021.

based on new events in a person's life.⁴ For example, disability parking permits can be automatically sent to eligible citizens after a doctor's visit rather than requiring the person to apply online. Austria's provision of new family allowances exemplifies the "no-stop-shop" approach by having the hospital inform the civil registry electronically when a new child is born. The Austrian Government then consolidates data across departments and automatically sends benefit payments to the new family.

3. Responsible use of data

We're producing and storing more data than ever before and now have the tools to analyze them for the public good. It offers a powerful way to allocate resources more effectively, optimize operations, reduce operating costs and tailor services to the specific needs of citizens and communities. Perhaps the most exciting development is the ability to use data for collaborative problem-solving on global issues, from pandemics to climate change. Countries will need to establish policies and regulations to support interoperability and data portability in order to maximize the social and economic value of the data.

But the increased use of data is also sparking debate and controversy. New regulatory, legal and governance frameworks are needed that allow countries to capitalize on the opportunities, while at the same time manage the potential risks for citizens. For instance, policymakers will need to take a hard

look at issues such as data privacy, surveillance technology, the inequities embedded in algorithms, and the integrity of the information ecosystem.

To increase trust in data sharing, governments should take steps to educate citizens about new digital tools and the benefits they can bring. But education on the rules for responsible data sharing are also essential to increase people's confidence that their data is being shared in a safe, responsible and meaningful way.

Governments are already strengthening regulations governing the use of people's personal data. The EU has taken the lead with the introduction of the General Data Protection Regulation (GDPR) and other jurisdictions are following suit with similar regulations. Some governments are going further with legal frameworks that give people a level of active control over their data and the right to know what is being done with it. In Estonia, for example, citizens can choose how to share information with government bodies and see exactly which public servants are using their data and for what purpose, through citizens' data dashboards.⁵

The South Korean government is introducing MyData, which enables citizens to directly manage their personal information held by government agencies. This will allow citizens to choose essential data to be shared when applying for and receiving government services, giving them control over their own data. And at the city level, Amsterdam and

Barcelona have been trialling a new model – DECODE (DEcentralised Citizen-owned Data Ecosystems) – which will allow people to decide which applications, platforms and tools can access their information, and allow governments and the private sector to use it for the common good.⁶

Regulators must also consider how organizations are using data in their AI systems. There's a new awareness amongst the wider population about the problems with algorithmic decision-making, where it has led to poor decision-making or discrimination against certain groups, based on mathematical calculations.

Most of us don't know how our data is being used, let alone how AI systems work or arrive at decisions. The algorithms that make decisions using data may include inherent biases - or reflect the biases of the people that develop them. And combining anonymized data from different sources may make it possible to identify individuals or organizations. The regulatory environment must build trust in these evolving new technologies. The New Zealand government, for example, has developed an 'algorithm charter' to protect against discrimination and biases, and give citizens confidence that data is being used safely, responsibly and effectively across government.⁷

At the institutional level, governments, public service providers, businesses and other organizations will also need transparent governance structures

⁵ "Data tracker- tool that builds trust in institutions", e-estonia website <https://e-estonia.com/data-tracker-build-citizen-trust/>, accessed 4 February 2021.

⁶ "DECODE: Amsterdam and Barcelona share takeaways from data commons pilots", *Smart Cities World website*, <https://www.smartcitiesworld.net/>, accessed 4 February 2021.

⁷ "Algorithm charter for Aotearoa New Zealand," *data.govt.nz website*, <https://data.govt.nz/use-data/data-ethics/government-algorithm-transparency-and-accountability/algorithm-charter>, accessed 4 August 2020.

to demonstrate how people's data rights are safeguarded. For example, protocols can be created to define the purpose and basis for data sharing and to provide details about storage, security, retention and deletion. Organizations could also commit to disclosing the automated decision systems they use, for what purpose and with what safeguards

As more organizations embrace these good practices in ethical design and governance, governments will be better equipped to mitigate risks, safeguard against harmful outcomes and build the trust that is needed to maximize the potential benefits of data. Once this trust is established, citizens may in turn be more accepting of the use of AI in various government services.

4. Public participation and engagement

In the future, top-down models of governance will no longer be seen as legitimate or efficient. Many citizens expect more transparency from governments and for decision-making to be shared, open and participatory.

While greater citizen participation would have been difficult just a few years ago, social media offers opportunities for people to give voice to their views on a range of issues and to mobilize behind social causes.

But governments have an opportunity to engage citizens more directly on the issues they care about. New digital e-participation tools, such as

mobile apps and online digital platforms, allow them to collect input from citizens on a large scale, providing insights to enrich government policy and decision-making. For example, the Grand Débat online consultation launched by the French President in reaction to the gilets jaunes movement resulted in over two million online contributions from citizens. And during the COVID-19 pandemic, many governments deployed smartphone apps to connect with their citizens, using surveys to understand what was on citizens' minds and how they were coping, in order to inform their responses.

Governments can ensure people are not just consulted but empowered to shape the decisions that affect them. This means creating appropriate means for them to share ideas and actively contribute to problem-solving and decision-making. Many governments are experimenting with different models for participatory engagement. Deliberative citizens' juries, for example, have been used in Australia, Ireland and other countries to address complex social and economic challenges. They go beyond shallow public opinion surveys to a much deeper form of engagement which helps people understand the legitimate trade-offs that decision-makers need to make when priorities compete.

There is also growing interest in participatory budgeting initiatives that allow citizens to decide how to allocate public budgets. In Portugal, for example, the Youth Participatory Budgeting (YPB)

program engages citizens aged 14-30 in an initiative to foster their active and informed participation in decision-making. Young people are recruited across the country and guided through the process of identifying and presenting project proposals which are pre-selected by relevant public administrations and submitted to a public vote online or through a free SMS system. Winning projects receive up to EUR 100,000 for implementation.⁸

Governments are creating other new venues through which to involve citizens in policy making and foster innovation. More than 180 policy labs have been set up globally to incubate ideas and provide a testing bed for policies in areas such as education, health and justice. Through these labs, providers work with citizens and community partners in the co-creation of policies and services. The labs are also leading the way in launching open challenges and hackathons to find solutions to increase the efficiency and effectiveness of public services.

Most governments and public authorities across the world are launching Open Data initiatives and setting up data exchange platforms. The focus is on making data widely available to third parties, including citizens, to help develop new solutions to complex problems and to become more transparent and accountable. Other government agencies are recruiting citizen volunteers to capture real-time data through smart devices to fill data gaps and help them make better predictions on issues like energy use, public health or planning for extreme weather events.⁹

⁸ "Social innovation: inspirational practices supporting people throughout their lives," European Commission, KE-03-20-672-EN-N.pdf, accessed 2 February 2021.

⁹ "Australia relies on volunteers to monitor its endangered species", *theconversation.com*, Australia relies on volunteers to monitor its endangered species, accessed 2 February 2021.

Behavioral insights – the process of deploying tested interventions, or “nudges”, to influence the choices people make – are also being used to improve citizen participation and engagement. For example, the Singapore government has used behavioral insights to reframe their messaging strategy to increase participation in foster care.¹⁰ Others are using it to improve individuals’ engagement in pro-environmental behaviors. BI teams are also embedding interventions within computer and digital games to increase the appeal of participation. Gamification strategies have helped to promote policy co-creation by vulnerable groups, which are normally excluded from the policy design process. For example, UN-Habitat, Microsoft and Mojang developed a computer game, Block-by-Block, to encourage the involvement of disadvantaged communities in urban planning decisions.¹¹

All these efforts mean governments can harness the wisdom of the crowd to help with budget prioritization, problem solving and service design. Going forward, they will be vital initiatives to help rebuild public trust in government.

¹⁰ “Behavioral Science Around the World: Profiles of 10 Countries,” *World Bank website*, <http://documents.worldbank.org/curated/en/710771543609067500/Behavioral-Science-Around-the-World-Profiles-of-10-Countries>, accessed 24 June 2020.

¹¹ “The digital building blocks of better communities,” *UN website*, <https://news.un.org/en/story/2020/01/1056432>, accessed 24 June 2020.



Conclusion

Advances in data and technology afford governments a unique opportunity to better serve their citizens. But as with any transformative opportunity, there is an inherent risk: that an ambition to digitalize as much and as quickly as possible results in a one-size-fits all approach that actually fits only a few audiences, leaving many further disconnected from government – physically and attitudinally. Studying the seven Connected Citizens personas will help governments plan digital service delivery mechanisms that cater for each of their different needs. By doing so, governments can become more effective and more efficient, address digital exclusion to help reduce social inequality – and help build a more equitable, better, working world for all.



The seven citizen personas

These profiles are a representation of what a typical member of each segment might look like, based on the data from the EY Connected Citizens survey, constructed to illustrate some of the key characteristics of the segment. The Connected Citizens survey was carried out by Ipsos MORI for EY between July 2020 and September 2020. Interviews took place online with 12,100 participants of working age across 12 countries. Quotas were set by age, gender, region and working status in order to achieve a representative sample in each country. Data was weighted by age, gender, region, working status and education to correct for imbalances in the national samples. As the survey was carried out online, samples in emerging markets are likely to be more urban, educated and connected than the overall population. All surveys are subject to a wide range of potential sources of error.

Meet the Diligent Strivers



Diligent Strivers are young self-improvers keen to get on in life. They expect seamless digital government services to help them achieve their aims and are comfortable sharing their data with governments to get that level of service. Diligent Strivers have a social conscience. They believe strongly in the importance of local community and that there should be more equality of opportunity for all. They would like to see more

government investment in job creation and skill development. And they would like to have a bigger say over, or even active involvement in, public service delivery.

Diligent Strivers are among the three largest segments (19% of the total population), and are prevalent in Mexico, South Africa, the UAE, India and Brazil.

Compared with others

61% ▲

like to make their own decisions are not depend on others.

57% ▲

are looking to learn new skill

51% ▲

are looking for new and meaningful experience.

35% ▲

think it's important to follow traditions and customs.

23% ▼

think it's important to be rich and own nice things.

20% ▼

want people to think they are successful and important.

▲ Significantly above average

▼ Significantly below average

Meet Mbali, a Diligent Striver

Mbali is a representative of our Diligent Strivers persona. She is a 31-year-old business analyst who lives in a Cape Town suburb with her husband and their two-year-old daughter. She is resourceful and self-reliant, having studied hard for her university degree so she could build a rewarding career. She and

her husband have been saving money for a couple of years for a deposit on their first apartment.


Before the pandemic, Mbali felt secure in her job. Now, however, she worries that she or her husband might be made redundant or have their pay cut,


which could affect their ability to pay off their student loans while also saving money each month. She would like to see more government investment in digital resources for skills, job-seeking and starting a business, to help people find new opportunities when their circumstances change.

What is most important for quality of life?




Concerns for job and financial security ...

56% 
say it's important to save money for the future, even it is means giving up luxuries today.

39% 
of those who work say lack of job security is the biggest concern for their future working life.

... and a desire to keep learning

62% 
think government should prioritize provision of online resources for people to learn new skills or look for a new job.

85% 
would be likely to use government training schemes to improve digital skills.

 Significantly above average  Significantly below average

Motivated less by status, wealth and material possessions than by personal development, Mbali continually seeks out new experiences for herself and her family. She needs to feel that she is giving something back to her community, which she does by organizing fundraising events for a local homelessness charity and by recycling to help

the environment. She is appalled by the levels of poverty, crime and unemployment in some areas of the country and believes strongly in making sure everyone has equal access to services. She thinks the country will have a better future if the government would tackle the large differences in income and wealth, and encourage social mobility.

Technology plays a central role in Mbali's life, both at work and at home. Her apartment is equipped with a range of connected devices that help her manage everything from paying for her daughter's daycare to taking online exercise classes – staying fit and healthy is important to her. As a busy working parent, Mbali sees how technology is making life

Diligent Strivers live responsibly and think about others

58% ▲

think it's important to maintain a healthy lifestyle.

48% ▲

think taking personal action to help the environment is important.

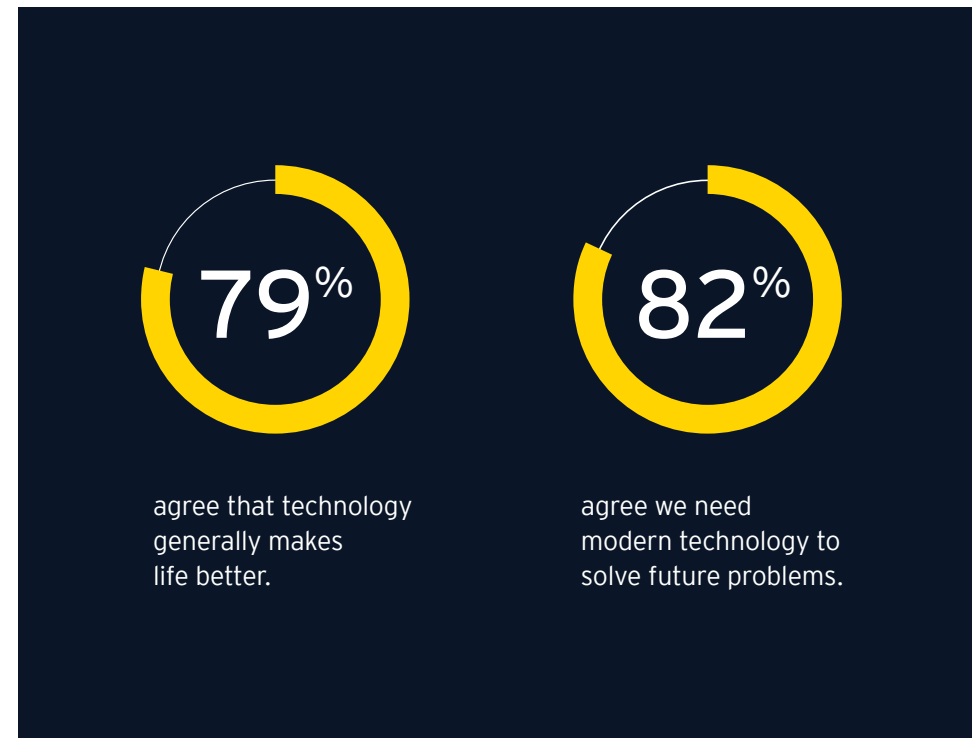
24% ▲

say they like to spend their time taking part in activities that benefit the local community.

72% ▲

think large differences in income and wealth is bad for society, overall.

▲ Significantly above average ▼ Significantly below average



better and easier. She also believes it has the potential to solve wider societal problems.

Mbali is relatively trusting of government but would like to see more services moving online. She would

welcome a single government website that provides seamless access to all the services she needs, and notifications or reminders about upcoming appointments or disruptions to services. Because she is a frequent user of health and education services,

she would like more of a say in how they are run. Mbali is keen to try out a new instant messaging service, which will allow her to give feedback directly to local councilors. She hopes it will make government more accountable and transparent.

What would make the biggest difference to the quality of public services?

54% ▲

public services provided equally to all parts of the country.

45% ▲

more transparency about how public services are performing.

34% ▲

more use of online and digital technologies.

33% ▲

services that are personalized to individuals' needs.

32% ▲

asking people what they want from public services.

▲ Significantly above average ▼ Significantly below average

Engagement on public services is a priority

More than 50% would like to have more of a say or be actively involved in how public services are provided in their local area.

84% ▲

would use an app to give opinions on government plans in their local area.

83% ▲

would use online voting to make decisions about local services.

▲ Significantly above average ▼ Significantly below average



Mbali is comfortable sharing her data in order to access services and perform transactions online. She is broadly supportive of government using that data to improve public services – with the caveat

that it should not be shared with private companies or social networking sites. She worries about too much data being in the hands of technology firms and thinks they should be more tightly regulated.

A favorable attitude toward data sharing with government

65% ▲

would share their personal data with the government online to access a service.

Government should share data with other government departments and public services where it will lead to improvements in public services.

▲ 41%

Government should share data with private sector companies where it will lead to improvements in public services.

▲ 35%

▲ Significantly above average

52% ▲

would share their personal data online with a company in order to perform a transaction.

Government should not share data as the risks to people's privacy and security outweigh the benefits.

▼ 35%

Government should not share data as the risks to people's privacy and security outweigh the benefits.

▼ 41%

▼ Significantly below average

25% ▼

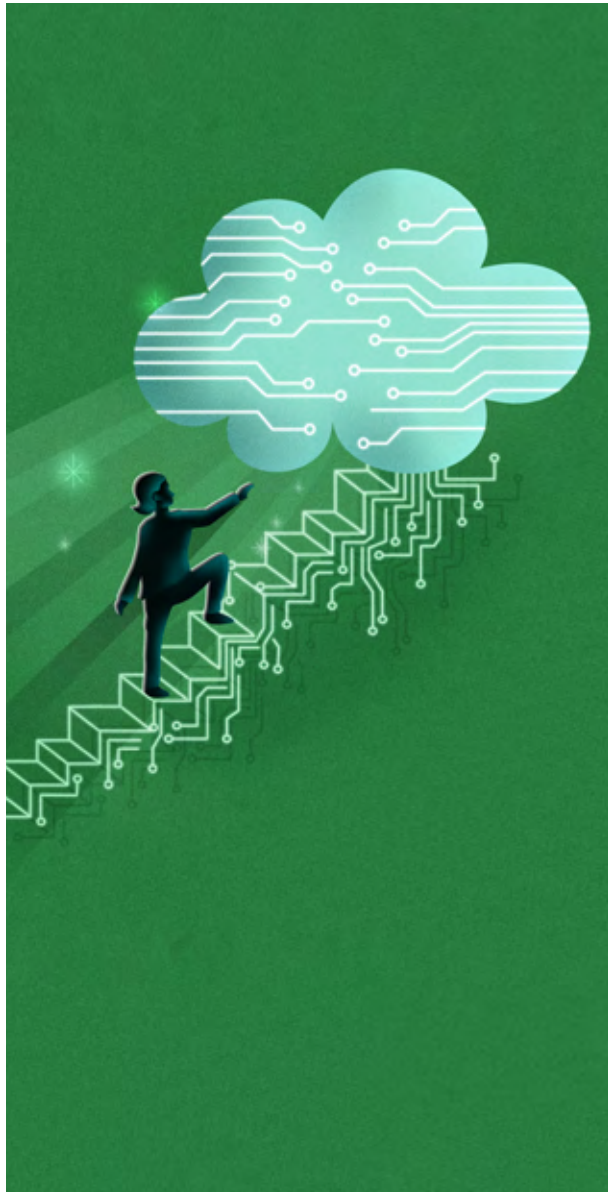
would share their personal data online through social networking services.

Question for government:

How can government harness the dynamism and engagement of Diligent Strivers, and use their fresh ideas to help reinvigorate the public sector?



Meet the Capable Achievers



Capable Achievers are independent, successful and satisfied with their life. They are pragmatic technophiles, using technology to improve speed and ease of access to services. They are self-reliant and happy to embrace digital innovation that offers them direct benefits. While this group comprises mainly high and medium-high income groups, many still have financial concerns – including about retirement

income. Capable Achievers trust governments to use their data appropriately, but they worry about it getting into the wrong hands and support greater regulation of big technology firms.

Capable Achievers are one of our largest groups, at 17% of the total population, and they are strongly represented in the UK, France and Australia.

Compared with others

60% ▲
like to make their own decisions and not depend on others.

54% ▲
are satisfied with their life at present.

47% ▲
think it's important to save for the future.

47% ▲
think it's important to maintain a healthy lifestyle.

15% ▼
like people to think they are successful and important.

19% ▼
think it's important to feel part of the local community.

15% ▼
like to give up their time to help the local community.

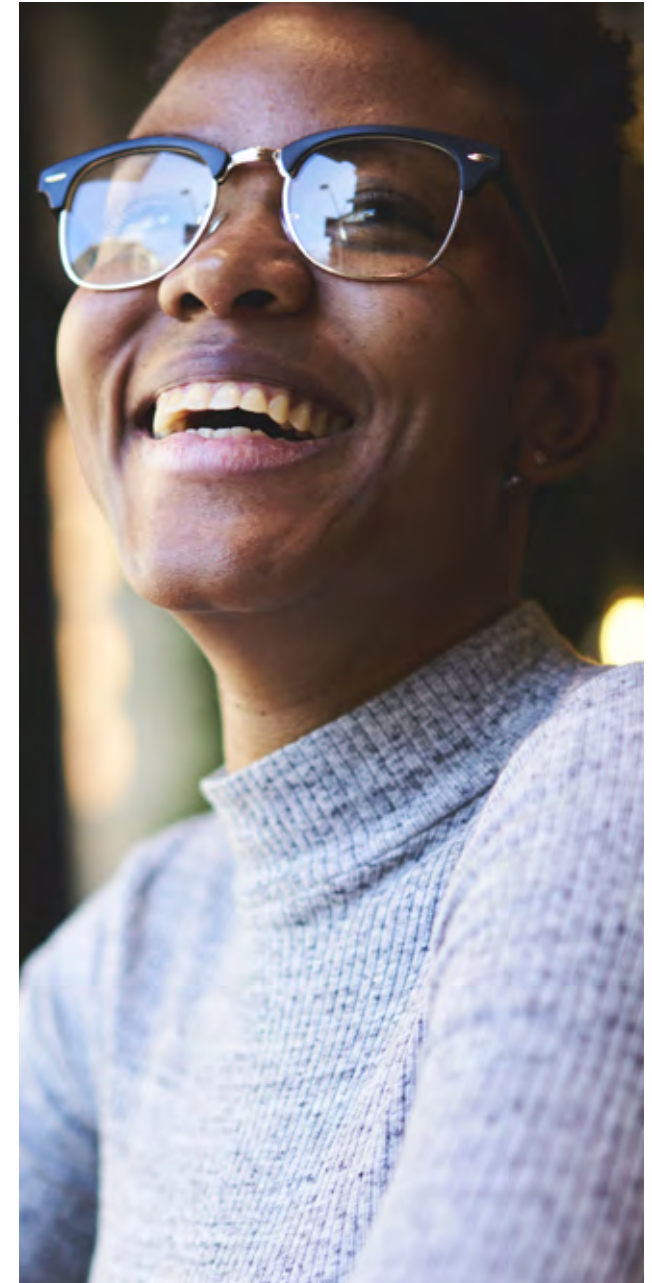
▲ Significantly above average

▼ Significantly below average

Meet Connie – a Capable Achiever

Connie represents the Capable Achievers segment. She is 54, and lives with her husband in the house they own, in the suburbs of Sydney. With two children at university, she enjoys a comfortable lifestyle, thanks to her well-paid job as an executive in a global media company. Connie has a good work-life balance, feels satisfied with what she has achieved and is optimistic about her future. Her salary has cushioned her from the worst economic and social effects of the

COVID-19 pandemic, but she is concerned about her long-term financial security and whether her pension will be enough to afford the activities she enjoys, once she reaches retirement age. To safeguard her lifestyle in retirement, she is worried that she might have to go on working longer than she would like. She has a global outlook and likes to keep abreast of world affairs. She's concerned that too little is being done to tackle global issues, such as climate change.



A global outlook

27% ▼

say they are optimistic about the future for the world in general.

86% ▲

say more international cooperation is needed to solve global challenges such as climate change.

50%

think globalization is good.

41% ▲

believe immigration has had a positive impact on their country.

▲ Significantly above average

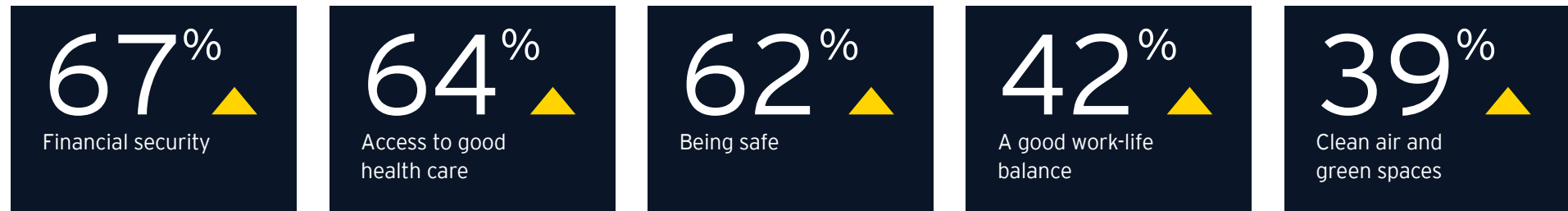
▼ Significantly below average

As well as financial security, Connie prizes personal safety and access to world-class health care. She also values the open space and clean

air available at her doorstep and would like to see government doing more to protect her local environment. She thinks it will be critical for the

government to focus on rebuilding the local economy and creating new jobs to recover from the pandemic.

What is most important for quality of life?



▲ Significantly above average ▼ Significantly below average

When it comes to technology, Connie is pragmatic and confident. She owns a smartphone and laptop and uses them daily for work, keeping in touch with friends and family, following the news, streaming her favorite TV shows, shopping online and managing her finances. She views technology as a positive force that has made everyday tasks easier. But it hasn't infiltrated all aspects of her life – she has yet to buy any smart appliances or wearables, such as a fitness tracker.

86%
believe technology generally makes life better.

78%
feel confident using new technology on their own.

▲ Significantly above average ▼ Significantly below average

Looking ahead, Connie appreciates that technology is likely to further change the way she manages her daily life. As a busy professional, she is cash-rich and time-poor. Hence, she prioritizes speed and convenience when she interacts with public services - which she does primarily for health matters (such as routine

checkups) and administrative tasks (such as dealing with taxes and renewing her passport). She feels frustrated when she has to submit her personal details, every time she accesses a government website, and would far prefer having a single portal, and a unique digital citizen ID and log-in to cut down the hassle.

Connie would welcome other innovations too: having video consultations with her doctor, for example, or getting her DNA analyzed for personalized medical treatment. But she wouldn't be comfortable with human interactions being replaced altogether, for instance, having surgery performed by

More – and better – digital delivery of services

51% ▲

think more use of online and digital technologies would make the biggest difference to the quality of service delivery.

66% ▲

would prefer to get in touch with government via a website.

44% ▲

say a single government website or service center would improve their experience.

86% ▲

would like to have a single digital ID for every time they use a government service.

▲ Significantly above average ▼ Significantly below average





a robot or having to communicate with government through a chatbot.

Overall, Connie is relatively positive about the public services she uses. These high levels of

satisfaction and trust mean she has little personal interest in getting actively involved in how such services are designed and run. She trusts public bodies to use her personal data appropriately

Embracing innovation in technology and data use

76% ▲
are comfortable with having their DNA analyzed to give them information about their health.

65% ▲
would replace a routine in-person visit to their doctor with a video call.

91% ▲
would use online voting to make decisions about local services.

77% ▲
would use an app to give their opinions on government plans for their local area.

44%
want to communicate with government using an artificial intelligence-powered chatbot.

25% ▼
would undergo major surgery performed by a robot without human supervision.

▲ Significantly above average

▼ Significantly below average

in order to inform decision-making on services, investigate crime and national security issues, and

help with disease prevention and tracking. But she does worry about her data being shared with the

private sector and supports strong regulation of technology companies.

Positive attitudes toward data-sharing to access services but not on social media

74% ▲ would share their personal data with government online in order to access a service.

68% ▲ would share their personal data online with a company in order to perform a transaction.

23% ▼ would share their personal data online through social networking services.

Government should share data with other government departments and public services where it will lead to improvements in public services.

▲ **51%**

Government should not share data as the risks to people's privacy and security outweigh the benefits.

▼ **28%**

Government should share data with private sector companies where it will lead to improvements in public services.

▲ **32%**

Government should not share data as the risks to people's privacy and security outweigh the benefits.

▼ **47%**

▲ Significantly above average ▼ Significantly below average



Question:

Which of the following is closest to your views about whether this data should be shared with private sector companies, and other government departments and public services?

Meet the Privacy Defenders



Privacy Defenders tend to be older, value their independence and have spent most of their life financially secure. However, they're concerned about their future job and financial security, and want the government to prioritize economic growth and job creation. Privacy Defenders value technology and the benefits it provides to them. But they are very concerned about the risks of sharing their personal

data. They have low levels of trust in government and politicians. As a result, they would like more transparency in government performance, and many would like a bigger say in how public services are delivered.

Privacy Defenders are one of our midsize segments, at 17% of the total, and are prominent in Mexico, South Africa, Malaysia and the US.

Compared with others

63% ▲
like to make their own decisions and not depend on others.

53% ▲
think it is important to maintain a healthy lifestyle.

52% ▲
think it is important to save money for the future, even if it means giving up some luxuries now.

50% ▲
say they are always looking to learn new skills.

46% ▲
say they are looking for new and meaningful experiences in life.

42% ▲
think taking personal actions to help the environment is important.

▲ Significantly above average

▼ Significantly below average

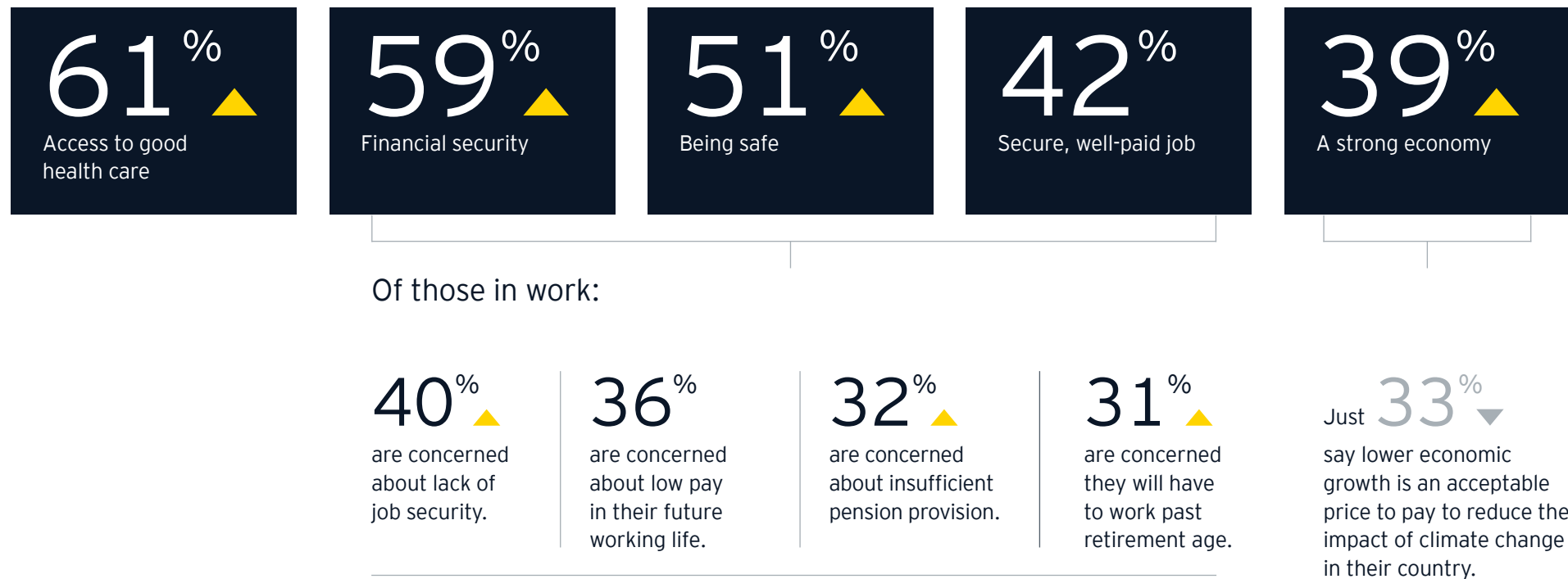
Meet Bill – a Privacy Defender

Bill is a representative of our Privacy Defenders segment. He is 48 and lives with his wife in Akron, Ohio, US. Bill was happy with his life before the

pandemic, earning a good salary in his role as an operations manager for an auto parts company, but he now feels less secure. He has seen the impact of

the pandemic on jobs in his local area, and now feels aware of the need to keep his skills up-to-date in case he finds himself having to look for a new job.

What is most important for quality of life?



▲ Significantly above average ▼ Significantly below average

Bill is concerned that the COVID-19 crisis will cause serious and lasting damage to the global economy and fears young people will have a worse life than his own generation. He thinks government should prioritize health care, a strong economy and job creation, as well as put a greater focus on reducing crime levels, creating affordable housing and tackling poverty in the city.

When Bill interacts with government services, he is rarely satisfied with the experience. He often feels frustrated with the inefficiency of these services and would like to see better value for money, faster and easier interactions, and more knowledgeable staff who treat him with respect.

Bill has a general distrust of government and political parties, which he thinks are failing to tackle the most pressing challenges for the country. He would like to see greater transparency in how services are performing and more equal service provisions. He thinks the quality of services would be improved if government involved citizens more, from asking what they want from public services, to involving them in the design, and providing opportunities to give regular feedback.

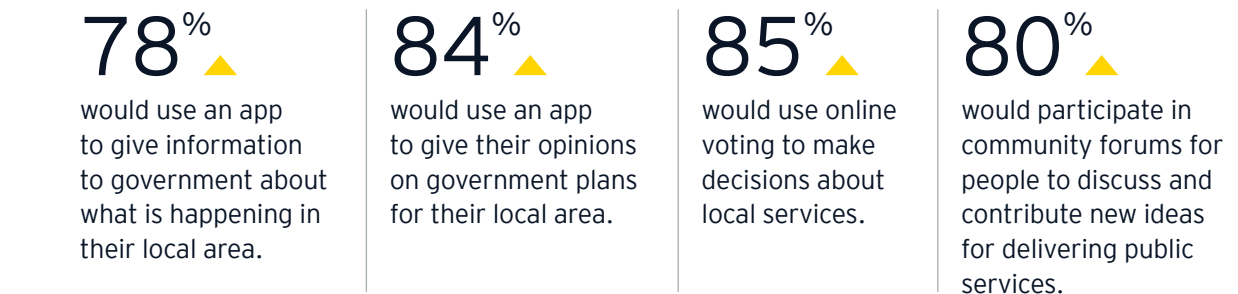
Financially prudent by nature, Bill is, now, even more careful with money, and would prefer to save for his and his wife's future than indulge in luxuries today. In particular, he wants to make sure they have good pension provision so they can retire when they want to.

Living a healthy lifestyle is also important to Bill, and he visits the gym several times a week. He likes to keep up with the latest advances

Priorities for improving the quality of public services



Citizen participation in local services



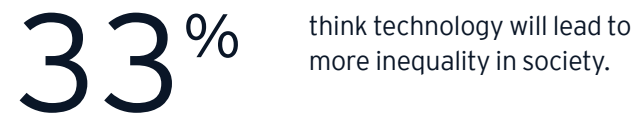
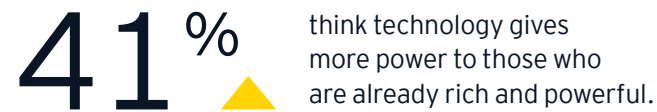
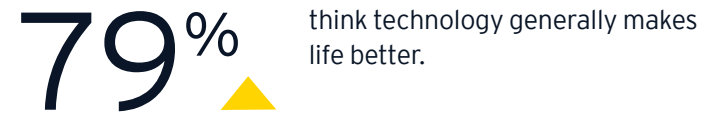
▲ Significantly above average ▼ Significantly below average

in technology and owns a range of devices: a smartphone, laptop, smart TV, tablet and games console. He uses technology in most aspects of his life, from monitoring his investments to doing the weekly grocery shopping, and thinks this is only going to increase in the future.

Despite his progressive attitude to technology, Bill has a strong awareness of his digital footprint, and is more cautious than most when it comes to sharing his personal data. Privacy and anonymity are core priorities. He distrusts social media companies and shares a minimal amount of personal information on

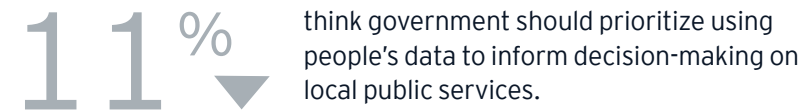
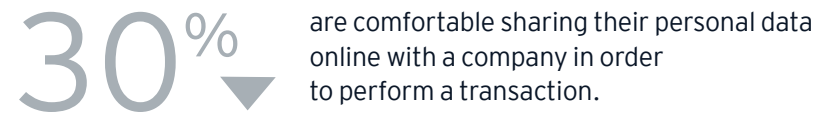
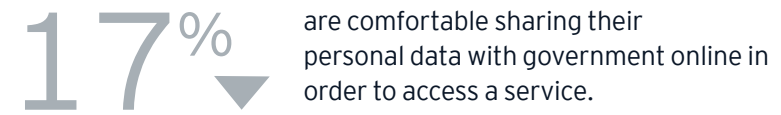
networking sites. Although he would like services to be more personalized to meet his individual needs, he goes to great lengths to limit how much data he shares with government agencies and the companies from whom he buys products and services.

Mixed attitudes toward the role and impact of technology ...



 Significantly above average  Significantly below average

... and serious concerns about data sharing



Government should not share data within the public sector as the risks outweigh the benefits.



Should share data where it will lead to improvements.



Government should not share data with private sector companies as the risks outweigh the benefits.



Should share data where it will lead to improvements.



Bill is uncomfortable at the prospect of government sharing his data within or outside of the public sector, even when this would help planning and decision-making that would directly benefit citizens.

And although he gets impatient at having to repeat his personal details when interacting with different government agencies, he still prefers this to having a digital citizen ID that would allow different

organizations access to his personal data. Until he has been reassured that his data is completely safe, he doesn't want to see any advanced digital solutions in public services.

Lack of comfort in advanced technology and data applications

44% ▼

are comfortable with having a single digital ID for every time they use a government service.

30% ▼

are comfortable with traveling in a fully autonomous vehicle.

19% ▼

are comfortable sharing their DNA with public health authorities to support research and development into drugs and vaccines.

5% ▼

are comfortable with government selling people's personal data to a private sector company in order to raise money.

▲ Significantly above average ▼ Significantly below average



Meet the Aspirational Technophiles



Aspirational Technophiles are young, well-educated city dwellers. They use technology to facilitate many aspects of their lives. While Aspirational Technophiles are satisfied with the public services they receive and positive about how government is using technology, they want government to go further. For example, they would like more services available online, and more opportunities to use technology to provide feedback on services and have a say on how

they are designed. Aspirational Technophiles are entrepreneurial, but they also have a social conscience. They see that a technology-enabled state can not only help them fulfil their future ambitions, but also drive societal improvements.

Aspirational Technophiles are a midsize segment, at 16% of the total, and figure prominently in the UAE and India.

Compared with others

51% ▲

are looking for new and meaningful experiences in life.

45% ▲

are excited by the prospect of setting up their own business.

42% ▲

think it is important to follow traditions and customs.

39% ▲

like to give up their time for activities that benefit the local community.

39% ▲

like people to think they are successful and important.

39% ▲

think it is important to be rich and to own nice things.

▲ Significantly above average

▼ Significantly below average

Meet Arjun – an Aspiration Technophiler

Arjun represents our Aspirational Technophiles segment. He is 27 years old, a university graduate, and has a well-paid job as an AI engineer in the city of Bengaluru, southern India. He lives in an apartment with his partner, whom he met

on a dating app, and their four-year-old twin boys.

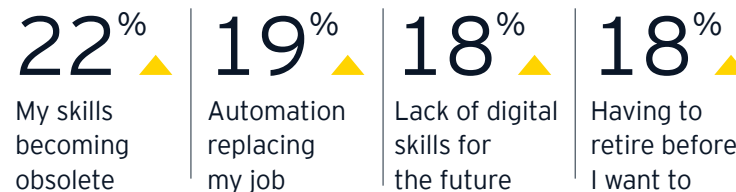
His can-do attitude makes Arjun optimistic about the future for his family, his country and

the world in general. He expects to see more economic growth, more spending on public services and more technological innovation in the aftermath of the COVID-19 crisis.

What is most important for quality of life?



Concerns of those in work about their working life:



▲ Significantly above average ▼ Significantly below average

Arjun earns a good income, but his longer-term goal is to start his own business, perhaps as part of a government scheme. He is conscious that technological advances are changing the workplace rapidly and that he needs to keep his skills updated. Although he is driven by financial and social success, he is far from self-centered. He cares about traditions and is an active

member of his community, mentoring people who lack digital skills. He would like to see the government put more resources into skills and education, social and mental health services, and internet connectivity in his local area. He also thinks government should explore the idea of a universal basic income for those affected by growing automation in the workplace.

Having seen the fall in air pollution across cities in India, when parts of the economy were in lockdown, Arjun has become much more conscious of the environment. He takes steps to reduce his family's carbon footprint, for example, by cycling rather than driving. But he thinks governments need to do more to reduce the impact of emissions before it's too late.

A focus on the environment

47% ▲

say taking personal action to help the environment is important to them.

60% ▲

believe lower economic growth in their country is an acceptable price to pay to reduce the impact of climate change.

75% ▲

think more international cooperation is needed to solve global challenges such as climate change.

▲ Significantly above average

▼ Significantly below average

As a digital native, Arjun believes in the power of innovation and automation to solve problems, improve society and empower people. However, he believes this can only happen if the government does more to provide the right infrastructure and support. Arjun himself owns the full range of

connected devices, including a fitness tracker, smart watch and smart household appliances, which he uses constantly to manage almost every aspect of his life. He is vocal on social media, regularly weighing in on a whole range of topics. He embraces innovations as soon as they launch and can't wait to

own a fully autonomous electric car. He also expects his sons to benefit from a blend of online home-based learning and in-person classroom time when they start school.

Arjun is a frequent user of public services and is well satisfied with the services he receives. However, he

believes they could be even better if government made more use of digital technologies, particularly to improve value for money and provide easier access

through different channels. He was among the first to sign up to the country's digital ID system and is now eager to see faster, automated responses and

more services being built around his specific needs. This would bring his experience as a citizen up to the standard of his experience as a customer.



Priorities for governments to improve the quality of public services

37% ▲
want government to make more use of online and digital technologies in public service delivery.

32% ▼
want government to be more transparent about the performance of public services.

31% ▲
want government to make public services more personalized to people's individual needs.

30% ▼
want government to ensure public services are provided equally to all parts of their country.

29%
want government to ask people what they want from public services.

28% ▲
want more opportunities to provide feedback on government performance.

28% ▲
want government to involve the public directly in the design of public services.

▲ Significantly above average ▼ Significantly below average

As an aspiring entrepreneur, Arjun believes valuable solutions can come from outside government and wants to see more involvement from businesses, the

third sector and citizens in the design and delivery of public services. He's also keen to have more opportunity to provide feedback, such as using an app

to give his opinions on development plans for his local area and would like to be more actively involved in local decision-making.

Broader involvement in public service delivery

62% ▲

want to have more of a say or be more actively involved in local public service provision.

90% ▲

would use an app to give their opinion on government plans for their local area.

87% ▲

would use online voting to make decisions about local services.

24% ▼

want more involvement from charities or voluntary organizations in the delivery of public services.

▲ Significantly above average

▼ Significantly below average





Convenience and efficiency take precedence over data privacy for Arjun. He is happy for government organizations to share his data with other public

sector agencies and with the private sector when there is a clear benefit, such as helping to investigate crime or security issues, or informing decision-making about

local services. And he is happy for the government to sell his anonymized personal data to third parties if it helps fund better public services.

Relaxed attitude to data sharing ...

78%  are comfortable sharing their personal data online with a company in order to perform a transaction.

78%  are comfortable sharing their personal data with government online in order to access a service.

70%  are comfortable sharing their personal data online through social networking.

Government should share data with other government departments and public services where it will lead to improvements.



Government should share data with private sector companies where it will lead to improvements in public services.



Government should not share data as the risks to people's privacy and security outweigh the benefits.




Government should not share data as the risks to people's privacy and security outweigh the benefits.





 Significantly above average


 Significantly below average


... and innovation

88%  are comfortable with government linking information about their income to a unique digital ID.

85%  would be likely to use an AI-powered chatbot to communicate with government.

83%  are comfortable with schools increasing the amount of online, home-based learning and reducing the amount of time in the classroom.

82%  are likely to replace an in-person visit to a doctor with a video consultation.

79%  would be happy to travel in a fully autonomous vehicle.

Meet the Tech Skeptics



Tech Skeptics are older and on lower incomes. They are relatively dissatisfied with their lives and fear that things will get worse for future generations. Few believe that today's young people will have a better life than their parents. Tech Skeptics are worried about their financial security, distrustful of government and unconvinced about the benefits of technology. They use technology for basic tasks, but do not believe it will solve society's problems.

So, while they have basic digital skills, few see the point of developing them further. Tech Skeptics tend to be opposed to data sharing, even if there is a clear purpose.

Tech Skeptics are our fourth largest segment, at 14% of the total population, and are most widely represented in Germany, France, the UK, the US, Mexico and Japan.

Compared with others

54%

feel the world is changing too fast.

48% ▼

like to make their own decisions and not depend on others.

41% ▼

think it is important to save money for the future, even if this means giving up some luxuries now.

30% ▼

say they are always looking to learn new skills.

15% ▼

say it is important to feel part of the local community.

13% ▼

say it is important to be rich and own nice things.

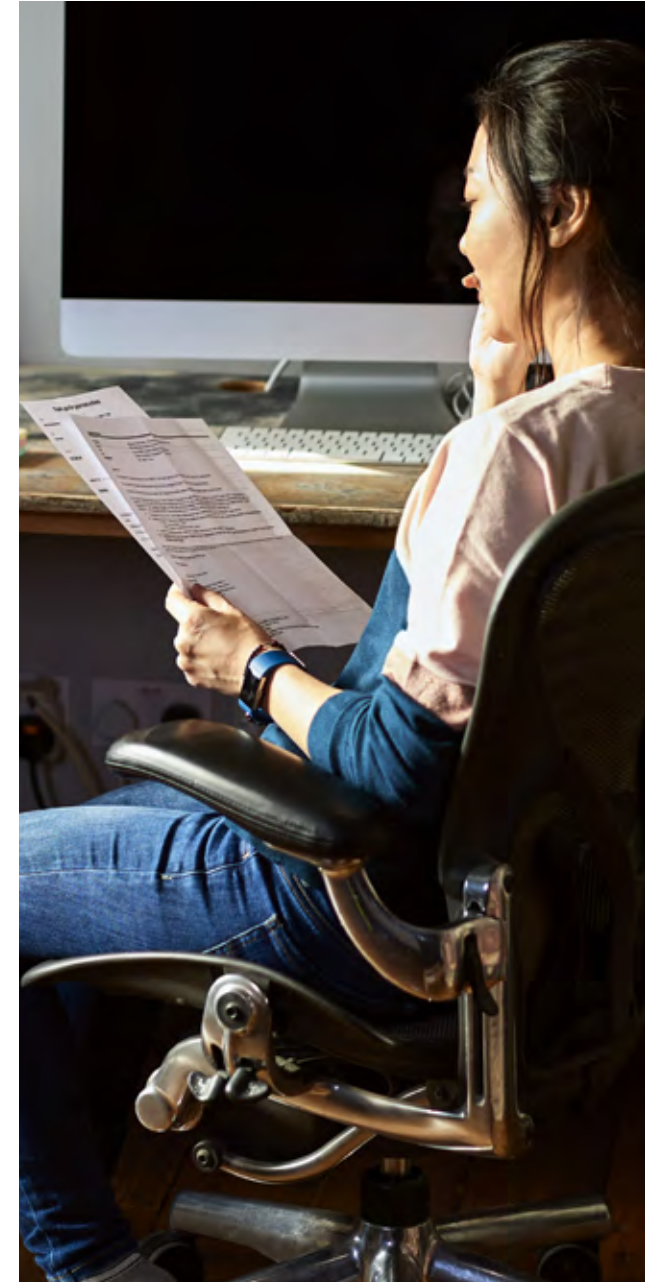
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▼ Significantly below average

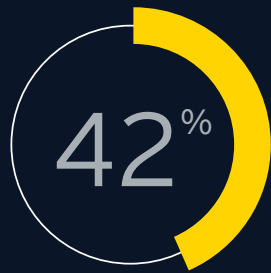
Meet Patricia – a Tech Skeptic

Patricia is a representative of our Tech Skeptics segment. She is a widow with grown-up children, who is shortly going to retire from her job in the human resources department of a logistics company in Manchester, England.

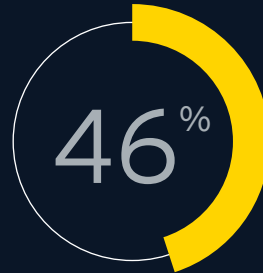
Patricia worries about the state of the world and her own place within it. This is partly because of the COVID-19 pandemic, which she fears will cause long-term damage to the economy, public services and social support.



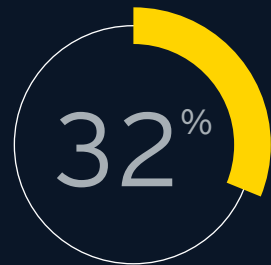
Low satisfaction with quality of life



are satisfied with their quality of life at present.



think they will have a better quality of life than their parents' generation.



think today's youth will have a better quality of life than their parents' generation.



▲ Significantly above average ▼ Significantly below average

She is particularly concerned about her own financial security. Her pension plans were damaged by the financial crisis over a decade ago and her retirement finances are yet to fully recover. Because of these concerns, Patricia has been saving as much as she can each month,

preferring to forgo non-essentials so she can supplement her pension for the future and not have to rely on her children.

Patricia also worries about whether she will continue to have access to high-quality, affordable health

care as she gets older and starts to need more services. But safety and security are paramount, and she would like the government to take steps to tackle crime and prepare for any future crises, whatever form they might take.

What is most important for quality of life?

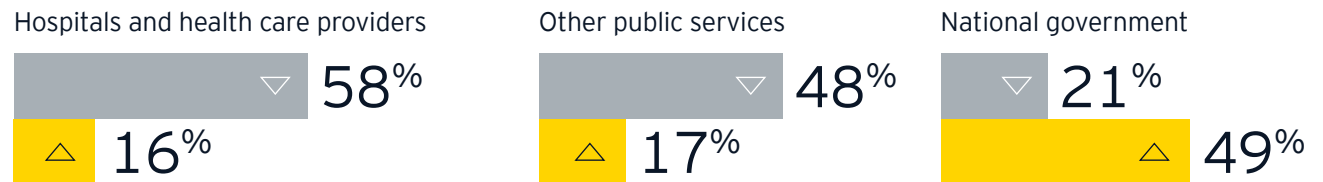


▲ Significantly above average ▼ Significantly below average

When it comes to technology, she is skeptical about the benefits, viewing it as something that mainly works to the advantage of the rich and powerful, rather than ordinary citizens like her. Despite this, she owns a smartphone, laptop and TV, which she uses for a limited range of tasks such as keeping in touch with friends and family, and online shopping. But Patricia sees little point in improving her digital skills. She's not convinced that technological innovation is the key to meeting the economic and social challenges that the world faces.

This skepticism is partly borne out in Patricia's dealings with public services. She is currently a relatively low user of such services, but does

Perceptions of trust in government, health care and public service providers



Question: Do you think the institution or organization is trustworthy?

■ Trust ■ Distrust

sometimes access transport and health facilities. While she is satisfied with the health care services she receives, she is cynical about other public services, generally mistrustful of government and wants to see more value for money in public service provision. Whenever she does have to contact a government department or agency, she prefers

to call and talk to a human being, rather than try to communicate online.

Although Patricia would like it to be easier to access services, she is against the government using single digital citizen IDs, especially if these were to be linked with personal details relating to income. She is also a strong opponent of government

sharing her personal data - either internally or with private companies - even where there is a clear purpose, such as combatting criminal activity or terrorism. She thinks any benefits of data sharing would be canceled out by the threat to her privacy and security. She is, similarly, wary of sharing her personal information with businesses when she performs transactions.

A cynical view of the role and impact of technology ...

59% ▼

believe technology generally makes life better.

42% ▲

believe technology will lead to greater inequality in society.

42% ▲

think technology will make people feel less connected to their local community.

41% ▲

think technology gives more power to those who are already rich and powerful.

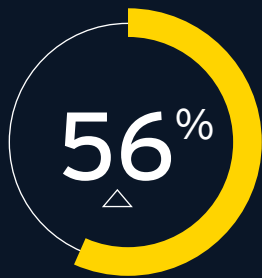
41% ▲

think technology companies should be subject to strong government regulation.

▲ Significantly above average

▼ Significantly below average

... concerns over data privacy and security ...



believe that government should not share the personal data of citizens within government as the risks to people's privacy and security outweigh the benefits.



believe that government should not share the personal data of citizens with private sector companies as the risks to people's privacy and security outweigh the benefits.

Question: Which of the following is closest to your views?

... and governments using their personal data



Question:

To what extent do you support or oppose government organizations, such as public services and government departments, doing the following?



Unsurprisingly, Patricia is unlikely to welcome new technology solutions in her interactions with public services. She would avoid having video calls with her doctor and does not want to use apps or chatbots to offer her views or make a complaint.

Lack of comfort in advanced technology and data applications

27%
are likely to replace an in-person routine visit to their doctor with a video call.

26%
are likely to use government training schemes to improve their digital skills.

20%
are likely to use an app to give feedback on government plans for their local area.

16%
are likely to communicate with government using an artificial-intelligence-powered chat bot.

31%
are comfortable with having a single digital ID for every time they use a government service.

20%
are comfortable sharing their DNA with public health authorities to support research and development into drugs and vaccines.

▲ Significantly above average

▼ Significantly below average

Meet the Struggling Providers



Struggling Providers tend to be in low-paid, less secure work. Daily life is a struggle as they try to balance long working hours with caring for old or vulnerable relatives. They recognize that learning new skills is a way to gain a better job, but many lack the time, confidence and opportunity to do so. They lack access to technology, so have few technology skills. Struggling Providers are above-average users

of state benefits and welfare services. They think the government could do more to tailor services to meet their individual needs. They would welcome more engagement with government to improve services.

Struggling Providers are one of our two smallest segments, at 9%, and feature ,particularly, in the UAE, Brazil and India.

Compared with others

40% ▼

are satisfied with their quality of life now.

35% ▼

like to make their own decisions and not depend on others.

29% ▼

are always looking to learn new skills.

27% ▼

are always looking for new and meaningful experiences in life.

24%

like to give up their time to take part in activities that benefit the local community.

19%

of those in work are concerned about lack of opportunity for people like them.

▲ Significantly above average

▼ Significantly below average

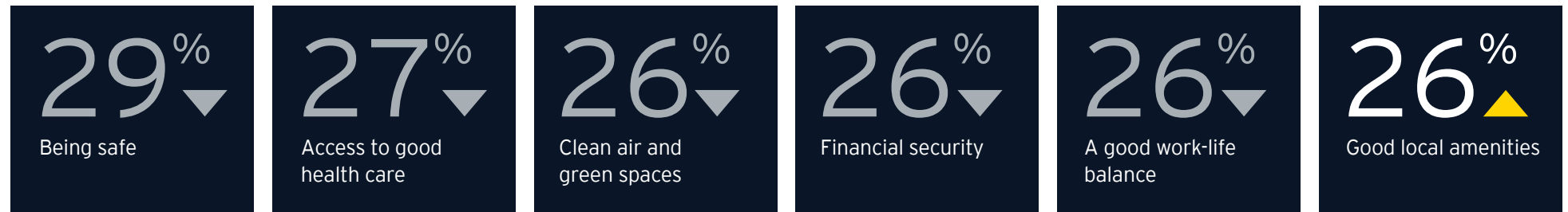
Meet Adalberto – a Struggling Provider

Adalberto is a representative of our Struggling Providers segment. Aged 34, with a wife and two

young daughters, he lives in the city of Limeira, Brazil, where he has casual work with a courier

company. He has a long-term health condition that restricts his ability to take on different kinds of work.

What is most important for quality of life?



▲ Significantly above average ▼ Significantly below average

Every day, life is a struggle for Adalberto to make ends meet. His wife stays at home to look after the children and her elderly father, who also lives with them. The whole family relies solely on Adalberto's income. With no sick pay, pension or other benefits from his company, and no guarantee of regular work, he feels anxious about the future and what will happen if he is unable to earn money.

Adalberto would like a better job but knows that he lacks the right skills for the future job market. He did not go on to further education but is now keen to gain a qualification. He could be interested in the training schemes the government is running to improve digital skills. But he works extra hours at the courier firm whenever possible and can't find the time to take courses.



▲ Significantly above average ▼ Significantly below average

The family regularly relies on public services, particularly welfare services, but Adalberto is not very satisfied with them and often gets in touch

to complain. He thinks the government has little understanding of his family's circumstances and the support he gets is not enough to offer a decent

standard of living. He wishes the private or third sector was more involved in public service delivery, thinking they could do a better job.

What would make the biggest difference to the quality of public services you receive?

29% ▲
More opportunities for users to provide feedback.

25%
Asking people what they want from public services.

24% ▼
More transparency in performance of public services.

26% ▼
Making services more personalized to people's needs.

26% ▲
Involving businesses more in the delivery.

24% ▲
Ensuring equal access to public services across the country.

24% ▼
Ensuring equal access to public services across the country.

▲ Significantly above average ▼ Significantly below average



This poor experience of public services means Adalberto has little trust in government and public sector providers. If he had time, he would welcome the chance to have more of a say in how things are run, or even become actively involved, because he cares about his close-knit local community and knows many other families in the same vulnerable

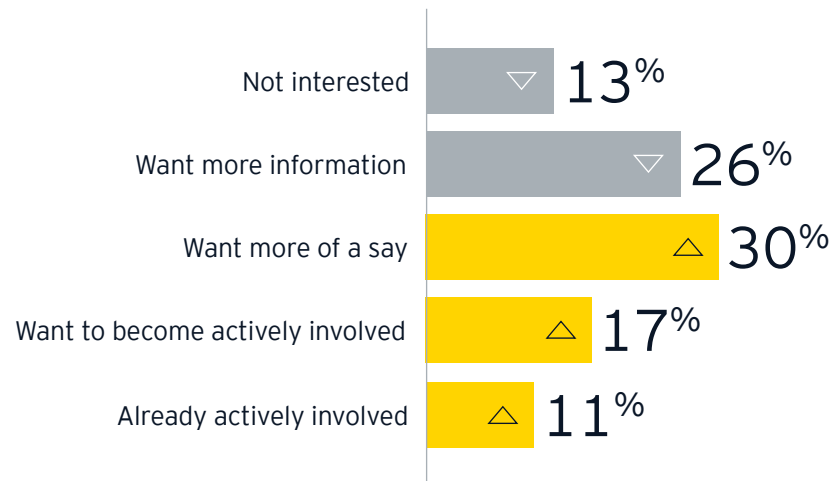
position as his own. He sees many problems that need to be addressed. Improved health care services and a strong economy are priorities. But he would also like to see more done to reduce poverty levels and to improve mental health and social services, leisure facilities and other local amenities.

Adalberto lacks confidence with technology due to his lack of skills. He has a pay-as-you-go smartphone and a pre-used, reconditioned laptop. But he can't afford high-speed broadband services, so cannot easily access online networks, and has to go to the library if he wants to log on. Unsurprisingly, he has

A desire to get involved

58%

of the Struggling Providers segment want more of a say, want to become actively involved, or are already actively involved in how services are provided.



57%

would be likely to use community forums where people discuss and contribute to new ideas for delivering public services.

▲ Significantly above average

▼ Significantly below average

little faith that modern technology will solve future problems or make life better for people like him. And he worries that without the right opportunities to progress, his children could have a worse quality of life than his own generation.

Given his peripheral engagement with technology, Adalberto would prefer to interact with government or public service providers by phone or email rather than through a website – though he is open to using social media. He would welcome a

single government portal through which to access all services – if only he was able to connect with it. He's fairly ambivalent about government sharing his personal data, either internally or with private companies.

Attitudes toward technology ...

38% ▼

think technology makes life better.

40% ▼

feel confident using new technology.

35% ▼

think technology is needed to help solve future problems.

... and data sharing

48% ▲

are comfortable sharing their personal data online through social networking services.

51%

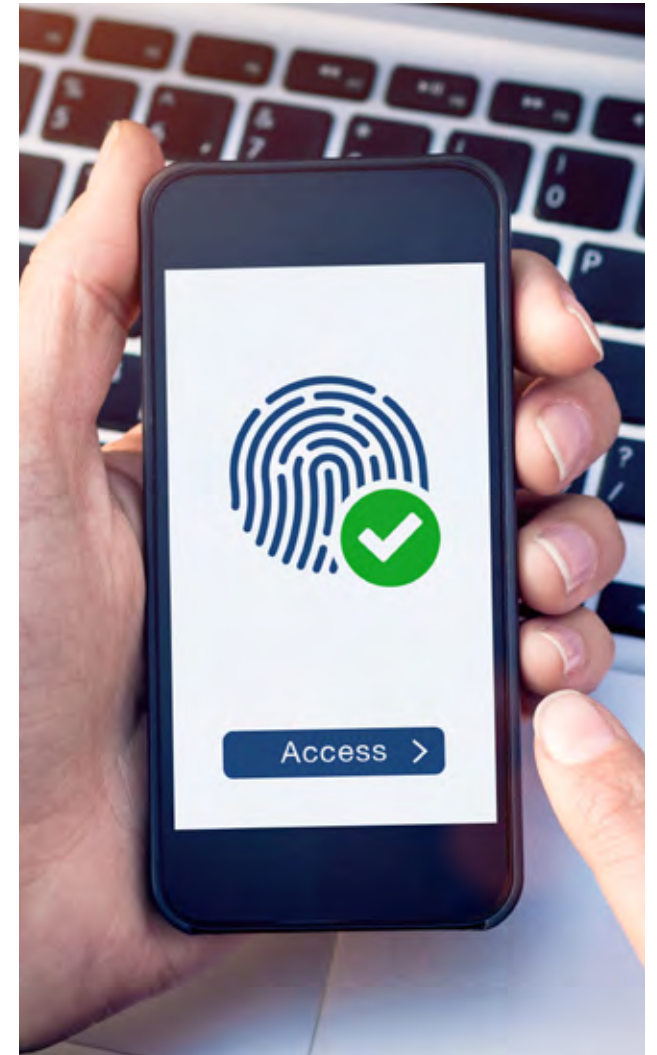
are comfortable sharing their personal data online with a company in order to perform a transaction.

48%

are comfortable sharing their personal data with government online in order to access a service.

▲ Significantly above average

▼ Significantly below average



Meet the Passive Outsiders



Passive Outsiders have low levels of income and education. They are neither satisfied nor dissatisfied with life, but are generally reluctant to embrace change. Financial security and having a steady job are key concerns, along with personal safety. Passive Outsiders are self-contained and engage very little with wider social issues. This remoteness extends to public services, which they use relatively little and are apathetic toward. They

don't think technology has changed their lives much and are unconvinced that it has the power to make their lives better. They are relatively ambivalent about sharing their data but tend to feel that the risks outweigh the benefits.

Passive Outsiders are our smallest segment, at 8% of the total, and are prevalent in Germany, France and Japan.

Compared with others

40% ▼

are optimistic about the future for themselves and their families.

19% ▼

are always looking to learn new skills.

17% ▼

are looking for new and meaningful experiences.

9% ▼

like people to think they are successful and important.

9% ▼

say feeling part of their local community is important to them.

9% ▼

like to spend their time taking part in activities that benefit the local community.

▲ Significantly above average

▼ Significantly below average

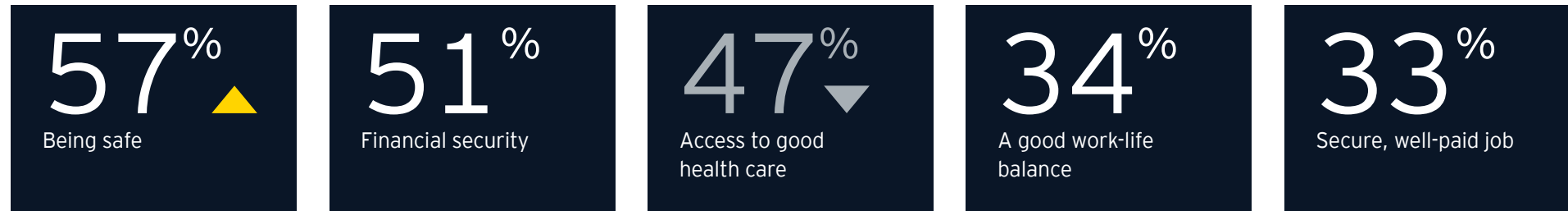
Meet Lina – a Passive Outsider

Lina represents our Passive Outsiders segment. Thirty-five years old and single, she lives in a small town, east of Berlin, near Germany's border with Poland. Lina works on a relatively low income as an administrator at a department store chain. She is worried that her job is becoming less secure due to the risk of retail closures and the economic impact of the COVID-19 pandemic.

Lina spends most of her time by herself or with her small circle of friends. She has few connections with her local community, despite having lived there all her life. She doesn't feel fulfilled in her life and is pessimistic about the future. Having lived through the financial crisis more than a decade ago, she knows how quickly the world can change without warning, often for the worse. But she feels powerless to take charge of her own life and instead accepts the way things are.

Looking to the future, Lina worries about her chances of finding a new, more stable job and achieving better financial security. She is aware that some of the younger employees in her store are able to adapt more quickly to the new technology that is being introduced in the store. But she lacks the confidence to proactively seek out new opportunities and experiences to improve her skills.

What is most important for quality of life?



▲ Significantly above average

▼ Significantly below average

Lina's personal safety is important to her quality of life and she feels concerned about rising levels of crime in her town. She thinks improving local health care services, building more affordable housing and creating better job opportunities are the most important areas for improvement. But she has relatively little trust in the government or public service providers to actually improve the lives of people like her.

Lina rarely uses public services, except for health, transport and routine administrative tasks such as completing tax returns. She may be entitled to more support from government, such as retraining opportunities, but hasn't taken steps to find out. When she does have to make contact with government, she likes to do so by phone or even

in person, but increasingly finds it easier to use a website or send an email. She is relatively satisfied with the public services she receives, but thinks they should provide more value for money. She is generally apathetic toward government, taking little interest in how public services work in her area and lacking any firm opinions on how they could be improved.

Apathy toward public service improvements ...

46% ▲ have no opinion on what would make the biggest difference to improve the quality of public services.

... and engagement

81% ▲ express no opinion about the extent to which they would like to be involved in local public services.

▲ Significantly above average

▼ Significantly below average

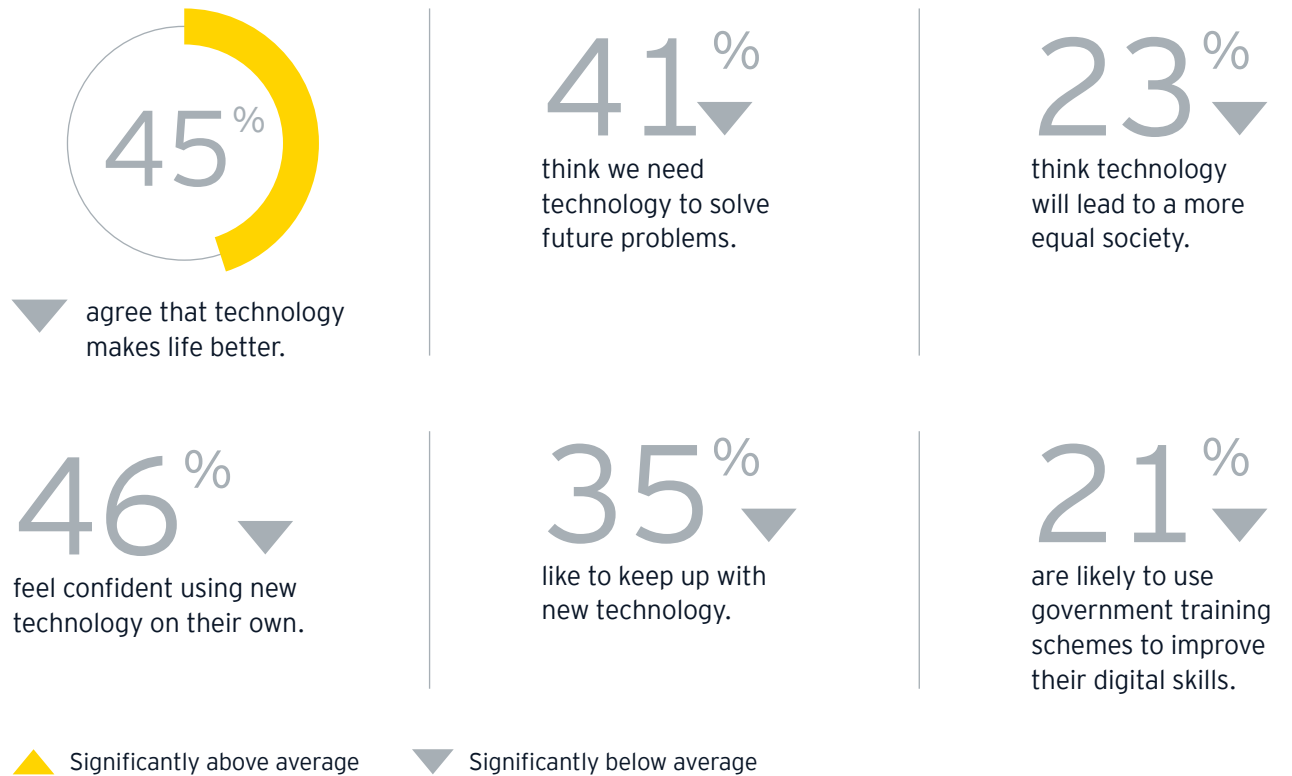




A competent but unenthusiastic user of technology, Lina owns a smartphone and laptop, which she relies on for a variety of activities such as shopping for groceries, listening to music and checking the news and weather. But she doesn't plan to spend her limited resources on new gadgets such as

smart appliances. She is fairly ambivalent about whether technology can do much to improve her own situation or solve society's problems, including providing equal opportunity for the most disadvantaged citizens.

Apathy toward the role of technology




Lina is uncomfortable sharing her personal data to access a service or perform an online transaction, whether that is with government or the private sector. And she is not convinced about the merits of her data being shared by government agencies. She feels she doesn't know


enough about the implications but is inclined to think that the risks outweigh the benefits.

Lina is also unlikely to embrace any newer technologies to access public services, primarily because she does not know enough about them or how they might affect her life.

She's not keen on routine video calls with her doctor or using technology to participate in consultations about local issues. And although she would like to save time by not having to repeat her details in various interactions with government, she is against having a digital citizen ID.

Skepticism about sharing data...

31%  are comfortable sharing their personal data with government online in order to access a service.

31%  are comfortable sharing their personal data online with a company in order to perform a transaction.

Government should share data with other government departments and public services where it will lead to improvements in public services.

 21%

Government should share data with private sector companies where it will lead to improvements in public services.

 20%

Government should not share data as the risks to people's privacy and security outweigh the benefits.


 33%


Government should not share data as the risks to people's privacy and security outweigh the benefits.


 35%

 Significantly above average  Significantly below average

... even when presented with benefits

16%  support government using their personal data to investigate crime or national security issues.

19%  support using their personal health data, and that of other people in their area, to set priorities for local healthcare services.

24%  support use of their personal data to help with disease prevention and tracking.

Contacts



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