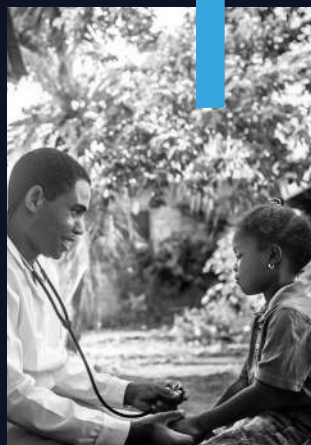


BRIDGING



GAP

Where Cooperation is the Key to Inclusive Prosperity



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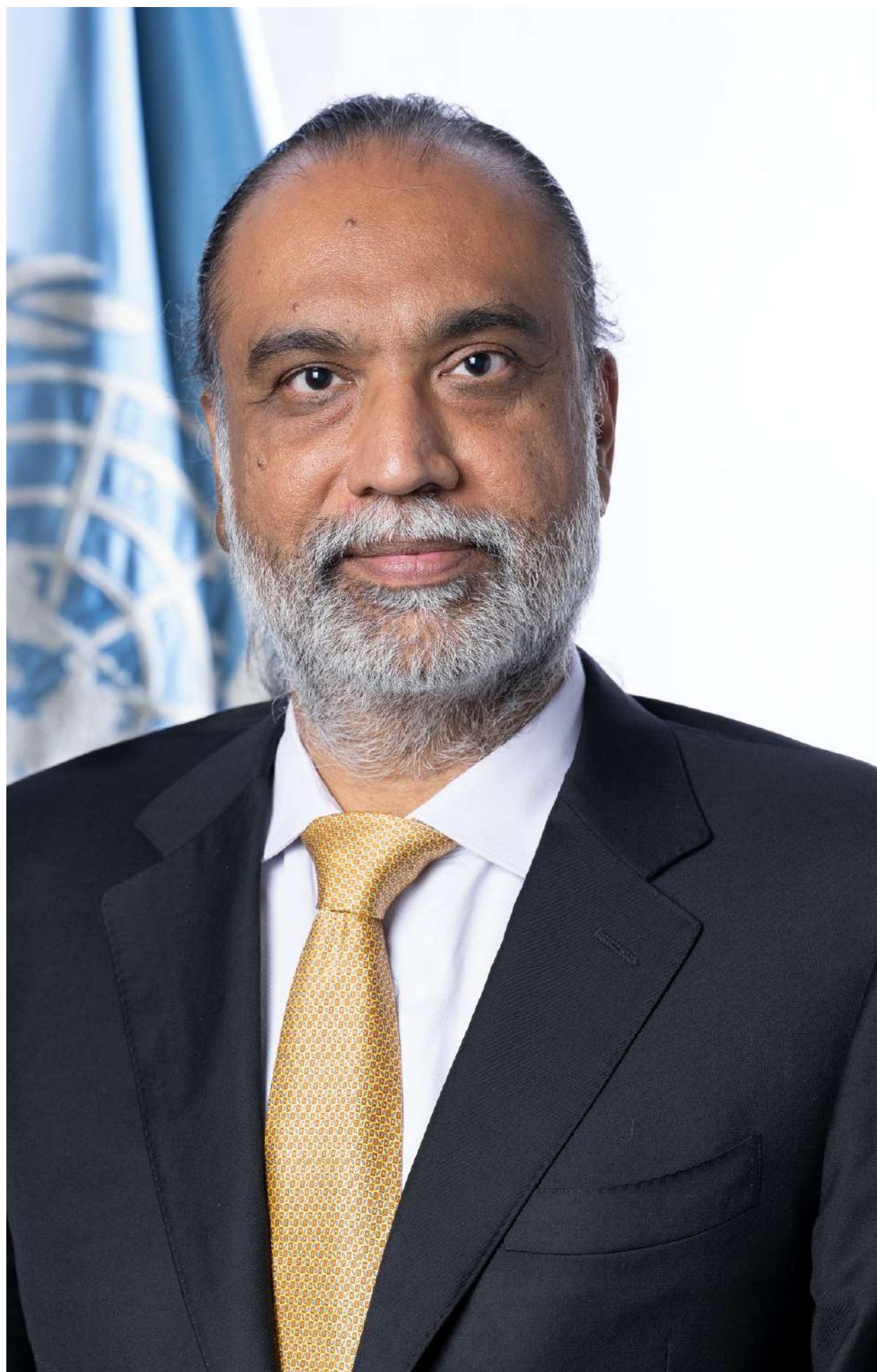
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01

FOREWORD



Foreword from Mr Amandeep Singh Gill, UN Secretary-General's Envoy on Technology

I commend the Digital Cooperation Organization (DCO) for the successful completion of its global consultations on creating a more inclusive digital economy. A series of multistakeholder roundtables in different regions nourished these consultations and were supplemented by expert interviews and field surveys. The report before you narrates important insights from these consultations and highlights specific actions that policymakers can prioritise.

Among the insights is the crucial role governments can play in accelerating digital transformations through national strategies, transitioning public services to digital platforms, and building foundational pieces such as digital IDs. Another essential insight is the need for public-private-people partnerships. For instance, if governments build the foundations and lay out the parameters for success, it is the private sector that would build the technology and the services while it is civil society that would ensure that inclusion, accessibility and protection of the vulnerable are not lost sight of.

The three areas highlighted for action are: affordable connectivity, digital literacy, and helping businesses leverage the digital transformation to tap new growth opportunities. Another key message is that the road to an inclusive and effective digital economy passes through enhanced global cooperation. Digital prosperity for all will not be realized without digital cooperation. Multilateral platforms have a crucial role in this regard.

The Office of the UN Secretary-General's Envoy on Technology (OSET) is pleased to have collaborated with DCO on these multistakeholder consultations, which are timely in view of the Global Digital Compact proposed for adoption at the Summit of the Future in 2024.

Mr. Amandeep Singh Gill,
UN Secretary-General's Envoy on Technology

Foreword from Deemah AlYahya, Digital Cooperation Organization Secretary-General

Over the past two decades, the digital economy has grown at an unprecedented rate, now becoming the backbone of our societies, bringing people together, offering infinite possibilities, and increasing divisions and fractures at every scale. A thriving digital economy is critical to achieving sustainable development.

With the abundance of opportunities, the digital economy brings formidable challenges. It is very critical that the world realizes that these challenges can't be addressed by any one nation or any one private entity. In a world where data, ideas, and services flow between borders, multilateral and multi-stakeholder cooperation is increasingly becoming crucial. Only through enhanced global cooperation models will it be possible to address associated challenges, make the most of the opportunities offered, and create a more inclusive and effective digital economy. Cooperation among all actors (public and private), small and giant companies, civil society, and academia will be critical to overcome today's challenges linked to data flows and privacy, data sovereignty, regulations, markets, innovation, sustainability, and other factors that may hinder the growth of today's economy.

Governments must be at the heart of the digital transformation: The first push for digital transformation needs to come from the governments, who should digitalize their services and create an integrated national strategy for accelerating the digital transformation.

Another vital component in facing challenges is inclusivity. It's increasingly essential for stakeholders in the digital economy to come together and shape a more inclusive vision for our shared digital economic future. There are several cooperation models that governments, companies, and multilateral organizations can adopt to work together to enable digital prosperity:

- Co-designing initiatives that would not only accelerate connectivity but also increase accessibility and affordability
- Providing a universal framework enabling talents to have access to knowledge and new ways of learning as well as remote job opportunities globally
- Breaking down boarder barriers and opening markets for seamless SME expansion to enable economic growth and innovation availability
- Engaging the digital economy ecosystem to co-create universal governance, standards, and norms around cross-border data flows ensuring data sovereignty, empowering the growth of private sector, and enabling innovation
- Continuously working collaboratively to develop innovation friendly policies and facilitate dialogue to share best practices around digital transformation.

DCO is committed to addressing these challenges and building a more inclusive digital economy through effective multilateral cooperation to co-create and co-design impact-driven initiatives. Let's come together and collaborate to create a digital economy that works for everyone, everywhere.

Deemah AlYahya
Secretary-General
Digital Cooperation Organization



02

ABOUT THE DIGITAL COOPERATION ORGANIZATION





The DCO is a global Intergovernmental Organization founded in November 2020 that aims to enable digital prosperity for all by accelerating the inclusive and sustainable growth of the digital economy.

The DCO is focused on empowering youth, women, and entrepreneurs, leveraging the accelerative power of the digital economy and leapfrogging with innovation to drive economic growth and increase social prosperity. Through enhanced cooperation and dialogue, the DCO seeks to establish, a conducive environment for the rapid development of digital economies within which all individuals, businesses and societies can innovate and thrive. In pursuit of its purpose, the DCO fosters multilateral collaborations across sectors to allow governments, private sector, international organizations, and civil society to cocreate, and codesign initiatives that enable more inclusive digital transformation and the growth of digital industries. The DCO's main flagship interventions include programs and initiatives that aim to enhance cross-border data flows, market access for SMEs, digital entrepreneurs' empowerment, digital taxation, and digital inclusion.

1. Strategic Goals

The DCO's vision translates into four overarching strategic goals, which it believes the most impact can be made. Each comprises three specific objectives that guide the work of the DCO.

- Accelerate the growth of digital economy;
- Advance digital transformation including promoting awareness about its benefits;
- Promote social prosperity and inclusion across the DCO digital environment;
- Strengthen the collective efforts of DCO members in the global digital economy.

2. Global and multi stakeholders cooperation

Since its inception, the DCO has realized the critical value of multisectoral collaboration and worked collaboratively with governments, the private sector, international organizations, NGOs, academia and civil society to enable a more inclusive and sustainable growth of digital industries. By placing partnerships at the core of its mission, the DCO recognized the significant expertise and financial resources external actors can bring to mobilize and maintain the change DCO seeks to achieve.

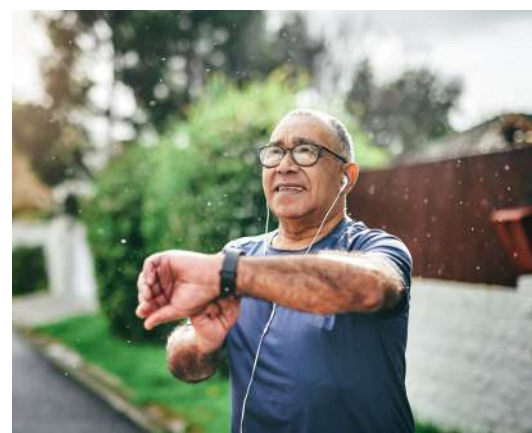
The DCO has integrated in its organizational structure a consultative status that allows strategic engagement with organizations whose mission is aligned with the DCO's mission and willing to contribute to DCO's activities and initiatives (without voting rights). These entities are defined as the DCO's "Observers".



To date, the DCO has developed partnerships with the World Economic Forum to launch in June 2022 the Digital Foreign Direct Investment Initiative, as well as with leading regional organizations such as Smart Africa, the Gulf Cooperation Council of the Arab States of the Gulf (GCC) and the Organization of Islamic Cooperation (OIC).

Recognizing DCO's role in driving digital cooperation, the United Nations adopted the resolution granting to DCO the status of Observer to the United Nations General Assembly. In addition, the DCO has also become a Sector-D member of the International Telecommunication Union (ITU).

As a global socio-economic Intergovernmental Organization, DCO's strategy is designed to contribute to the acceleration and the advancement on the Sustainable Development Goals (SDGs) by:



3. Impact-driven Initiatives

The DCO is designing digital economy initiatives that will have a real-world impact. DCO's key impact-driven initiatives include programs to enhance cross-border data flows, promote market expansion for startups, empower digital entrepreneurs and advance digital inclusion among women, youth and other underserved populations. The following are key initiatives of the DCO launched in the past two years since the inception of the Organization:

- **Digital FDI:** The DCO and the World Economic Forum (WEF) are collaborating on a Digital FDI Initiative, which builds on previous studies, and will involve the identification and implementation of Digital FDI enabling projects that aim to address challenges and facilitate digital FDI flows. It will provide a global perspective on improving the attractiveness of digital FDI, support policymakers in Member States to make more informed decisions and improve the investment climate in the digital economy.
- **Elevate50:** Is a joint Initiative between the DCO and leading Middle Eastern e-commerce builder MekanE, whose platform is used by tens of thousands of businesses across the region, it aims to help position 50,000 SMEs for success by enabling them to sell online through their own customized e-commerce platforms.
- **Startup Passport:** It aims to make it quicker, easier and less expensive for startups to do business across borders. The passport will reduce administrative and financial burdens and accelerates corporate registration and other processes for entrepreneurs in one DCO Member State to enter the markets of other DCO Member States.
- **Stride Platform:** A platform that provides a favorable environment (expansion guides, training, competitions, mentorship, coaching, and funding) for entrepreneurs, startups and (M)SMEs to launch, grow, and internationalize their businesses. The platform aims to strengthen the startup ecosystem in DCO Member States by enabling integrated market access and accelerating the growth, expansion, and digital transformation of startups and (M)SMEs.
- **DEMI:** Is an index consolidating relevant indicators and measuring the maturity of the digital economy across countries. The index will improve insights about the digital economy developments worldwide and help the DCO Member States identify digital economy gaps.
- **Digital Taxation:** DCO will provide a comprehensive tax assistance to its Member States to ensure that they receive their fair share of taxes on the income sourced by big Tech Companies from their markets. DCO will also build human and technology capacity in the Tax Authorities of its Member States.

More information about DCO can be found at:

www.dco.org | twitter.com/dcorg | www.linkedin.com/company/dcorg/



03

EXECUTIVE SUMMARY

Participating in the digital economy is critical for overall economic growth. No nation can afford to ignore this thriving sector of the economy connects billions of people, businesses, devices and data across the world, cutting costs, improving communications, opening previously unreachable markets and creating new jobs. An estimated 70% of new value created in the economy over the next decade will be based on digitally enabled platform business models.¹



¹ WEF, Shaping the Future of Digital Economy and New Value Creation, 2022 <https://www.weforum.org/platforms/shaping-the-future-of-digital-economy-and-new-value-creation>



The digital economy also has the power to generate employment for the people who need them most: the World Bank estimates that **raising internet penetration to 75% in the developing world would increase global GDP by \$2 trillion and create 140 million jobs around the world.**²

Indeed, over half of the respondents in our proprietary survey of 750 people in 12 countries around the world believed access to better digital technologies would help them find higher-paying jobs or start their own business.³

But those without access to the internet, or who are unable to get online for other reasons, will be left out of this digital revolution. It's increasingly crucial for governments, the private sector, and multilateral organizations to come together to shape a shared vision of digital cooperation and ensure this digital revolution brings prosperity to all.

The "Bridging the Gap: Where Cooperation is the Key to Inclusive Prosperity" report examines the barriers to more equitable digital transformation around the world – and how better cooperation can overcome them and ensure more societies can take advantage of the burgeoning digital economy.

The findings are based on a review of more than 50 online publications related to the digital economy; interviews with 37 digital experts conducted between April and October 2022; a proprietary survey of 750 consumers and 250 businesses from 12 countries (Jordan, Egypt, Nigeria, Ghana, Rwanda, Uruguay, Mexico, Estonia, France, India, Cambodia, and South Korea) conducted in May 2022; and 5 roundtable discussions that occurred around the world between June and November 2022.

² World Bank, Connecting for Inclusion <https://www.worldbank.org/en/topic/digitaldevelopment/brief/connecting-for-inclusion-broadband-access-for-all>

³ DCO survey of 750 consumers and 250 businesses from 12 countries (Egypt, Jordan, Nigeria, Ghana, Rwanda, Uruguay, Mexico, Estonia, France, India, Cambodia, and South Korea) conducted in May 2022



BARRIERS TO ENTRY IN THE DIGITAL ECONOMY

The challenges that prevent parts of the world and segments of society from accessing the digital economy are numerous. Without reliable Internet, students can't complete their education and learn new skills. If the cost of digital devices is too high, vulnerable populations are unable to access services and are left out of digital economic opportunities. Without digitally savvy staff or affordable connectivity, businesses struggle to improve their operations and compete globally. Inconsistent and fragmented regulations between markets means that companies have to navigate through multiple different data policies as they expand from country to country. The list goes on and on.

Our interviews, roundtable discussions and survey reveal seven key barriers that prevent people and companies from taking full advantage of the digital economy. The barriers are:

01. Cost-prohibitive digital access:

Our survey revealed that businesses and consumers believe the high cost of digital technologies is the main barrier to participation in the digital economy - 48% of consumers cited cost as the principal reason.⁴

02. Insufficient digital skills and training:

A lack of digital skills is a huge impediment to digital economic transformation around the world. 60% of people in lower- and middle-income countries lack basic computer skills.⁵ Without digitally savvy staff, businesses are unable to take full advantage of the technology available.

03. Inadequate support for SMEs and entrepreneurs:

Small and medium-sized enterprises struggle much more than larger companies to keep up with the digital transition and to harness its benefits. Most importantly, they need access to funding and training in order to compete with larger companies in the digital sphere.

04. Ineffective policymaking:

The lack of effective digital policymaking is another fundamental challenge in many countries. While digital transformation strategies may exist, there is often a lack of will and knowledge on the part of government to successfully implement the strategies. Moreover, policymakers can struggle to think beyond the short-term horizon to create long-lasting and impactful digital policies.



⁴ DCO survey on digital economy barriers and opportunities, May 2022

⁵ The Boston Consulting Group, A \$2 Trillion Down Payment to Close the Digital Divide (2020) <https://web-assets.bcg.com/5f/6b/0e4a89ba4b3ab751cba5134935bc/bcg-a-2-trillion-plan-to-bring-two-billion-more-people-into-the-digital-age-sep-2020.pdf>

05. Outdated digital policies:

Ineffective digital public policy and regulation can hinder the development of a country's digital economy and the indispensable participation of the private sector. Policies and regulations are often outdated and fail to keep pace with developments in the digital sphere.

06. Limited global or regional data standards:

The lack of harmonized standards around data flows and data privacy makes it hard for companies to conduct business across borders. One nation may advocate for the free flow of data, while others may have erected barriers to cross-border data flows.

07. Few robust and ambitious cooperation mechanisms:

The current state of digital cooperation is inadequate, with conversations about digital transformation often dominated by the developed world and Big Tech, excluding poorer countries, small and medium- sized enterprises, marginalized groups and other stakeholders with limited budgets and expertise.



HOW COOPERATION IS BRIDGING THE GAP

Data, ideas, and people need to be able to flow in a thriving digital economy. This requires especially tight collaboration between governments and the private sector, and civil society more broadly, as well as multilateral organizations. Yet, cooperation mechanisms haven't kept pace with the growth of digital transformation and the increasingly prominent role it plays in the global economy.

Our research and conversations found a few ways cooperation can support a more inclusive digital economy:

More partnerships are needed between developed and emerging economies:

Successful cooperation between developed and emerging economies can help countries leapfrog otherwise time-consuming development challenges. Developing countries can learn a great deal from countries that have had early successes in rolling out the digital economy. Cooperation mechanisms between countries willing to share their experiences in order to stimulate the exchange of ideas and knowledge will be greatly beneficial.

Enhanced regional cooperation is crucial:

Stakeholders reiterated that regional cooperation mechanisms were lacking. In Africa, for instance, building faster internet infrastructure and data governance systems requires navigating 54 different national policies. This lack of cohesion seriously hinders the region's ability to reap the full benefits of the global digital economy, according to many of the roundtable participants. Regions can look to some of Europe's initiatives – such as the single digital market and Europass – for lessons on how to enhance regional digital cooperation.



The public and private sectors need to learn to leverage one another’s strengths:

When it comes to public-private-civil society partnerships, stakeholders bring different skills and qualities to the table. Learning how to capitalize on a sector’s strengths is an essential element of a successful collaboration, said one participant. The government sets the ground rules through regulation; NGOs allow projects to reach areas that are sometimes inaccessible to governments; the private sector provides innovation and scale; foundations can take the risk out of these projects and protect investments by acting as a guarantor.

Multilateral organizations are numerous, yet sometimes lacking in efficacy:

Multilateral organizations addressing the digital economy – such as UNCTAD, the World Bank, ITU, and the G20 – play a crucial role in building bridges between countries, political groups, and the public and private sectors. They must also help to build up digital ecosystems and act as mediators so that the private sector and governments become partners rather than competitors. They are also seeking ways to create a more inclusive digital economy at the global level. Sometimes, though, discussions revolve around one-size-fits-all policies which fail to address local problems.

KEY RECOMMENDATIONS TO CREATE A MORE INCLUSIVE DIGITAL ECONOMY

It’s increasingly important for stakeholders in the digital economy to come together and shape a more inclusive vision for our shared digital future. Our report found eight key ways governments, companies, and multilateral organizations can work together to bring digital prosperity to all.



01. Align for more affordable connectivity:

Governments—especially those in emerging markets— should develop incentives to lower the cost of digital access for the consumer. This could take the form of tax cuts on digital goods, subsidies for internet access, or enhanced public-private partnerships.



02. Build digital skills through formal education programs and initiatives for people already in the workforce:

These digital training programs should focus on practical real-world skills, with the aim of boosting employment prospects for citizens and helping businesses find the right talent. To create these programs, there needs to be collaboration between academia (to develop the curriculum), the private sector (to ensure the applicable skills are being taught), NGOs (to ensure the right populations are reached), and government (to support and fund).



03. Help more SMEs and startups capitalize on the growing digital economy by breaking down country barriers:

More small businesses and entrepreneurs around the world need access to the digital economy. To make this happen, there need to be more initiatives that help small businesses set up e-commerce sites, navigate local data regulations, and learn digital skills. Organizations can follow the example of the DCO’s Elevate50 Initiative, which brings businesses in DCO Member States online and helps them develop business plans and expand into new markets.



04. Establish clear and overarching digital policy principles:

Stakeholders in the digital economy need to come together to co-create principles that will form the basis of a harmonized digital policy framework. The UN's Global Digital Compact is currently leading the charge to form co-created principles.



05. Create common standards and norms around data flows:

To ensure interoperability from country to country, nations need to come together to create common data standards. This could include an agreement over privacy protection for cross-border data flows and protection against hackers and cybercrime.



06. Facilitate dialogue to share best practices around digital transformation:

The pace of digital transformation is so rapid that real-time best practice sharing is critical. There is a need for an organization to take the lead to arrange in-person and virtual events where ICT ministers, high-level decision-makers from the private sector, and representatives from civil society gather to discuss national digital strategies and share their own experiences.



07. Better coordinate regional policies:

The number of multilateral organizations in each region is dizzying. More coordination between regional institutions is needed to guide digital policies and improve the continuity of policies in a context of rapid technological change.



08. Improve digital policy consistency:

While countries must strengthen their own local digital institutions, the international community, both at a regional and global level, should also help to raise awareness and provide support to countries that are lagging. A dedicated international body focused on digital transformation should be discussed in international forums.



04 INTRODUCTION



The digital economy connects billions of people, businesses, devices and data across the world, cutting costs, improving communications, opening previously unreachable markets and creating new jobs. The benefits of participating in the digital economy are unmistakable and encouraging. Small businesses can use e-commerce to reach customers in new markets. Students can access new learning opportunities beyond their classroom walls. Employees can connect with virtual opportunities that originate beyond their country's borders. Corporations can scale with efficiency and ease.

The digital economy also has the power to generate jobs for the people who need them most: the World Bank estimates that raising internet penetration to 75% in the developing world would increase global GDP by \$2 trillion and create 140 million jobs around the world.⁷

The Covid-19 pandemic has only served to accelerate the importance of the digital economy as commerce and services moved online. Schools have gone virtual, doctors have leaned into telehealth appointments, and retailers switched to online sales. The corresponding uptick in internet usage around the world has been profound. In 2019, 54% of the global population used the internet.⁸ Since then, an estimated 1.1 billion people have come online and 66% of the global population now uses the internet.⁹



⁷ World Bank, Connecting for Inclusion <https://www.worldbank.org/en/topic/digitaldevelopment/brief/connecting-for-inclusion-broadband-access-for-all>

⁸ ITU, Internet uptake has accelerated during the pandemic (2021) <https://www.itu.int/itu-d/reports/statistics/2021/11/15/internet-use/>

Digital Economy:

The economic activity that results from billions of everyday online connections among people, businesses, devices, data, and processes.

Despite this progress, a significant portion of the global population has yet to see the benefits of the digital economy. 3.2 billion people are unable to access the internet and 94% of this unconnected population lives in the developing world, nearly half of them in Sub-Saharan Africa.¹⁰



Digital Divide:

The gap between those who have affordable access, skills, and support to effectively engage online and those who do not. The digital divide doesn't exist solely because of a lack of infrastructure but also because of constraints of speed, affordability and skills.

Even when there is available internet, it doesn't necessarily mean everyone is using it. 95% of the world is covered by a mobile broadband network, yet 40% of the world's population still doesn't use the internet.¹¹ This "usage gap" can occur because of reasons such as the unreliable high cost Internet, unreliable connectivity, and lack of digital skills.

⁹ ITU, Individuals using the internet (2022) <https://www.itu.int/en/ITU-D/Statistics/Pages/stat/default.aspx#:~:text=%E2%80%8BITU%20estimates%20that%20approximately,come%20online%20during%20that%20period.>

¹⁰ ITU, Facts and Figures (2021) <https://www.itu.int/en/ITU-D/Statistics/Documents/facts/FactsFigures2021.pdf#page=7>

¹¹ GSMA, State of Mobile Internet Connectivity Report 2022 <https://www.gsma.com/r/somic/>

Digital Cooperation:

Enhancing global collaboration in multiple forms to address the societal, ethical, legal, and economic impacts of digital technologies, aiming to maximize the benefits to society and minimize harms.



Bridging the digital divide will ensure that everyone gets the chance to prosper in the digital economy. Getting there will require the creation of progressive policies and clear plans for investment, legislation that builds trust that data is secure, and incentives to leverage opportunities and encourage foreign investment.

Most of all, it will require 'digital cooperation', which can help to harmonize digital policies around the world, exchange best practices, enhance digital skills, build trust, facilitate business expansion across borders and boost investment where it is most needed.

Following the launch of the UN Strategy on Digital Cooperation, a number of international organizations such as the G20, ITU, UNCTAD or the IGF have been exploring how to strengthen collaboration to translate rhetoric into action. Yet, given the complexity of the current environment, the absence of an institution supporting enhanced cooperation has hampered progress.

That's why the Digital Cooperation Organization convened a series of roundtable discussions held under Chatham House Rules between June and November 2022 across five continents: Kigali in Africa, Santiago in South America, New York in North America, Brussels in Europe, and Bangkok in Asia. Diverse groups of digital leaders discussed how to promote digital cooperation and ultimately help accelerate the inclusive growth of the digital economy, improving the lives of millions of people around the world.

The results of the roundtable discussions combined with a literature review, interviews with 37 digital economy experts, and a proprietary survey of 250 businesses and 750 consumers in 12 countries (Egypt, Jordan, Nigeria, Ghana, Rwanda, Uruguay, Mexico, Estonia, France, India, Cambodia, and South Korea) form the backbone of this report.

The report is broken into three sections that cover:

- The growing importance of the digital economy to the global economy
- The barriers that countries and their citizens face when trying to participate in the digital economy
- How enhanced international cooperation can bring more people into the digital economy.

The report concludes with recommendations for how cooperation can create a more inclusive digital economy. The better we can understand these complex issues, the better equipped we will be to tackle one of the great challenges of our time.

Bridging the Gap: Where Cooperation is the Key to Inclusive Prosperity.

The findings are based on:

Review of **50+ Online publications** related to the digital economy

Interviews with **37 Digital economy experts** conducted between April and October 2022

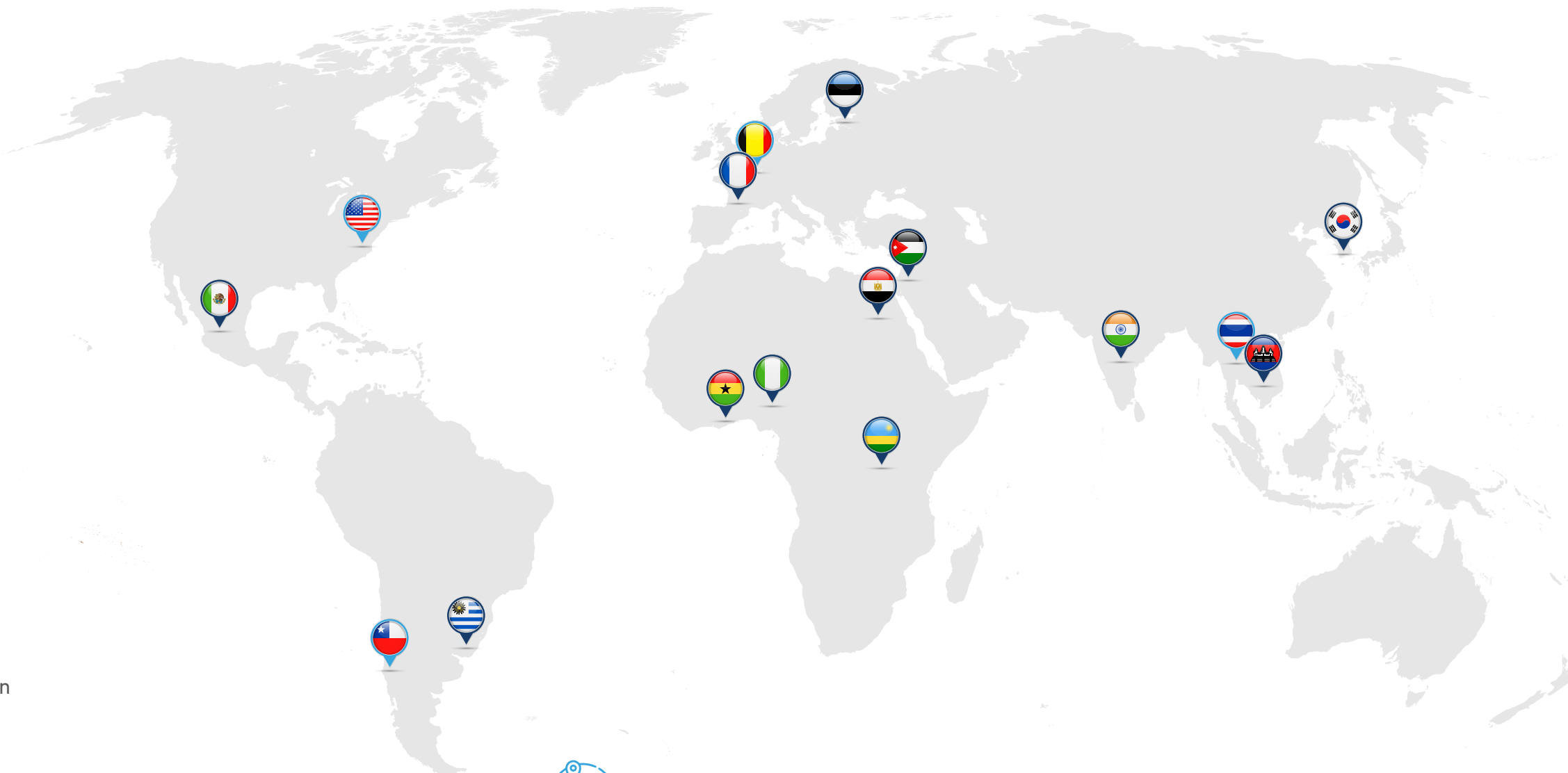
A proprietary survey conducted in **May 2022**, and consisted of: **750 Consumers**


250 Businesses


5 Roundtable discussions occurred around the world between **June and November 2022**:

-  Kigali, Rwanda
-  Brussels, Belgium
-  Santiago, Chile
-  Bangkok, Thailand
-  New York, USA

Each roundtable brought together around **50 Stakeholders**



 Survey from **12 Countries:**

 Jordan

 Rwanda

 France

 Egypt

 Uruguay

 India


 Nigeria

 Mexico

 Cambodia

 Ghana

 Estonia

 South Korea

Roundtable

Survey

Disclaimer: The designations employed and the presentation of the material on any map do not imply the expression of any opinion whatsoever on the part of the Secretariat of the Digital Cooperation Organization concerning the legal status of any country, territory, city, or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.



05

WHY THE DIGITAL ECONOMY MATTERS

All economic activities – from manufacturing to the service sectors – are increasingly becoming digital, says Shamika Sirimanne, director of the Division on Technology and Logistics of the United Nations Conference on Trade and Development (UNCTAD). In the future, she says we won't need to differentiate between the digital economy and the rest of the economy because they will be one and the same thing.





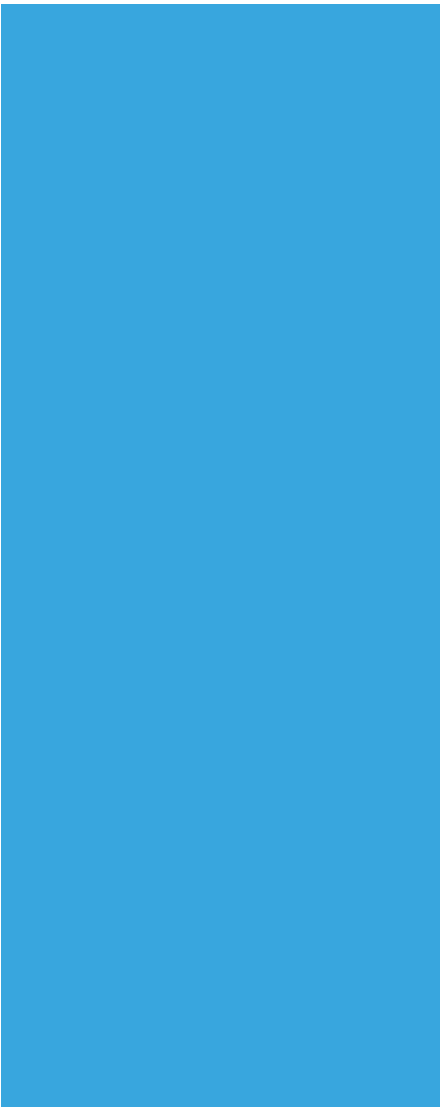
When we talk about the economy, we will be talking about the digital economy a few years down the road. Technology will have a bearing on every activity. It doesn't matter if it's agriculture, manufacturing or services, digital technologies are going to infuse every one of these sectors.

Shamika Sirimanne
Director of Technology and Logistics at UNCTAD

"Captured as part of the roundtable preparatory interviews"

Crucially, the digital economy matters because it creates jobs and stimulates growth. Studies consistently show that providing broadband access can achieve this, with an increase of 10% in mobile broadband penetration in Africa alone driving an increase of 2.5% in GDP per capita, for example.¹²

12 ITU, Economic contribution of broadband, digitization and ICT regulation: Econometric modelling for Africa (2019)
https://www.itu.int/hub/publication/d-pref-ef-bdt_afr-2019/





Esoko, a Ghana-based non-governmental organization (NGO), was created in 2008 to harness mobile phone technology to provide market prices via SMS to smallholder farmers in Africa. The NGO now connects over one million farmers in Ghana, Tanzania, Malawi, Burkina Faso and Mexico to essential information services including weather forecasts and agronomic advice, and helps to link them with buyers of their products. Esoko cites research that has found such services can improve farmers' income by about 10%.

Respondents in our survey of 750 people from around the world echoed these sentiments. Indeed, the survey results found that 58% of respondents believed access to better digital technologies would help them find higher-paying jobs. About the same proportion of people (57%) said it would mean they could start their own business.¹³



13 DCO survey on digital economy barriers and opportunities, May 2022

ACCESS TO TECHNOLOGY WILL HELP MORE PEOPLE FIND JOBS

What do you think your community could achieve if it had better access to digital technologies?



Source: Digital Cooperation Organization Survey, 2022

Malik Khan, the co-founder of Innovate Gambia, agrees the digital economy is key to reducing unemployment in emerging economies such as The Gambia, where the unemployment rate has been rising steadily this century and is currently at 11%, according to the World Bank.¹⁴

Khan was born in The Gambia but moved at the age of 14 to the US, where he later founded Pointclick Technologies, a cloud services company. His organization is helping digitize The Gambia by providing alternative, affordable cloud services based in the country, and training, mentoring and support for aspiring digital entrepreneurs. He wants to reverse a trend that has seen thousands of Africans attempt to emigrate to Europe in search of jobs.



The indications are that the digital economy creates jobs but also that those without digital skills will be left behind. A joint study by the International Finance Corporation and the World Bank’s Digital Development Partnership concluded that 50-55% of all jobs in Kenya, 35-45% in Ivory Coast, Nigeria, and Rwanda, and 20-25% in Mozambique will require some level of digital skills by 2030.¹⁵

The returns on investing in better digital access can be striking. An initial capital outlay of \$11 million plus \$5 million a year in operating expenses to connect 1,796 schools in Rwanda to the internet would boost the country’s GDP by \$400 million by 2030, according to calculations by Giga, a joint venture between UNICEF and ITU to bring every school online by 2030.¹⁶



I left the country 25 years ago and things are still not working the way they should. The digital economy is important primarily because it creates jobs.

Malik Khan
Co-founder of Innovate Gambia

“Captured as part of the roundtable preparatory interviews”

14 World Bank, Unemployment in The Gambia (2021) <https://data.worldbank.org/indicator/SL.UEM.TOTL.ZS?locations=GM>
15 World Bank and IFC, Demand for Digital Skills in Africa (2021) <https://www.digitaldevelopmentpartnership.org/knowledge.html?mvp=29%5&ddp=kn-pb-21-t01-6>

16 Giga, Rwanda: Country Analyses and Plans (2020) <https://gigaconnect.org/wp-content/uploads/03/2021/Rwanda-Opportunity-Brief.pdf#page=8>

FOCUS ON THE DIGITAL ECONOMY AND BUSINESS



The digital economy is increasingly crucial to businesses around the world. Access to the digital economy can help businesses:

- Find new customers and enter new markets including across borders.
- Complete administrative tasks more easily.
- Increase efficiency by automating mundane tasks, freeing up time and resources for humans to spend on more important assignments.
- Access financing, for example through peer-to-peer lending.
- Gain insights into customer behavior and needs that can inform business strategy.

In Brazil, 55% of businesses that had increased their digital capacities during the pandemic found that it improved their customer relations as well as process agility and customer sales, according to a survey by software firm Intuit.¹⁷

In our survey of 250 businesses worldwide, the benefits of digital transformation were clear. Around 67% of respondents reported that access to better technologies would help their companies find new customers; about 66% say it would help improve their employees' efficiency, and 65% say it would help them enter new global markets.¹⁸



17 ZDNet, Brazilian SMBs accelerate tech adoption amid pandemic (2020) <https://www.zdnet.com/article/brazilian-smbs-accelerate-tech-adoption-amid-pandemic/>

ACCESS TO DIGITAL TECHNOLOGIES WILL HELP BUSINESSES REACH MORE CUSTOMERS

How do you think using more or better digital technologies could improve your business?



Source: Digital Cooperation Organization Survey, 2022

The have-nots of the digital economy demand urgent attention. Before this challenge can be addressed, we must first examine what the barriers are to participation in the digital economy and identify the most effective ways to overcome those barriers.

18 DCO survey on digital economy barriers and opportunities, May 2022

06

BARRIERS TO ENTRY IN THE DIGITAL ECONOMY



From reliable access to affordable internet to training a workforce with the right skills or developing the right policies to exploit it, many countries face hurdles preventing them from digitizing their economies effectively.

This section examines these and other barriers to fully engaging with the digital economy and ideas for how the government and private sector could better remove the barriers and enable digital prosperity for all.

KEY BARRIERS

- 01 Cost-prohibitive digital access
- 02 Insufficient digital skills and training
- 03 Inadequate support for SMEs and entrepreneurs
- 04 Ineffective policy making
- 05 Outdated digital policies
- 06 Limited global or regional data standards
- 07 Few robust and ambitious cooperation mechanisms



Barrier 01:
Cost-prohibitive digital access

With 3 billion people around the world currently without internet access, coverage remains a key concern.¹⁹ Yet our survey and the roundtable discussions reinforced the notion that the usage gap (the people who technically could use the internet but don't) is of utmost importance.

Our survey revealed that businesses and consumers believe the high cost of digital technologies (such as smartphones or computers) is the main barrier to participation in the digital economy. Indeed, some 48% of consumers cited cost as the principal reason. The majority of these respondents believed it was the government's job to help bring down the cost of access to the internet and secure affordability of digital devices, and around 35% of respondents said their government had failed to provide incentives for them to use digital technologies.²⁰

Similarly, about 48% of businesses also said that the cost of internet-enabled services was the main challenge to participating more extensively in the digital sphere.²¹

The numbers on the ground back up the survey results. **Sub-Saharan Africa is the region with the most expensive internet in the world. The average cost of 1GB of data is \$6.44 compared to \$1.53 in Northern Africa**, according to broadband comparison site Cable.co.uk.²²

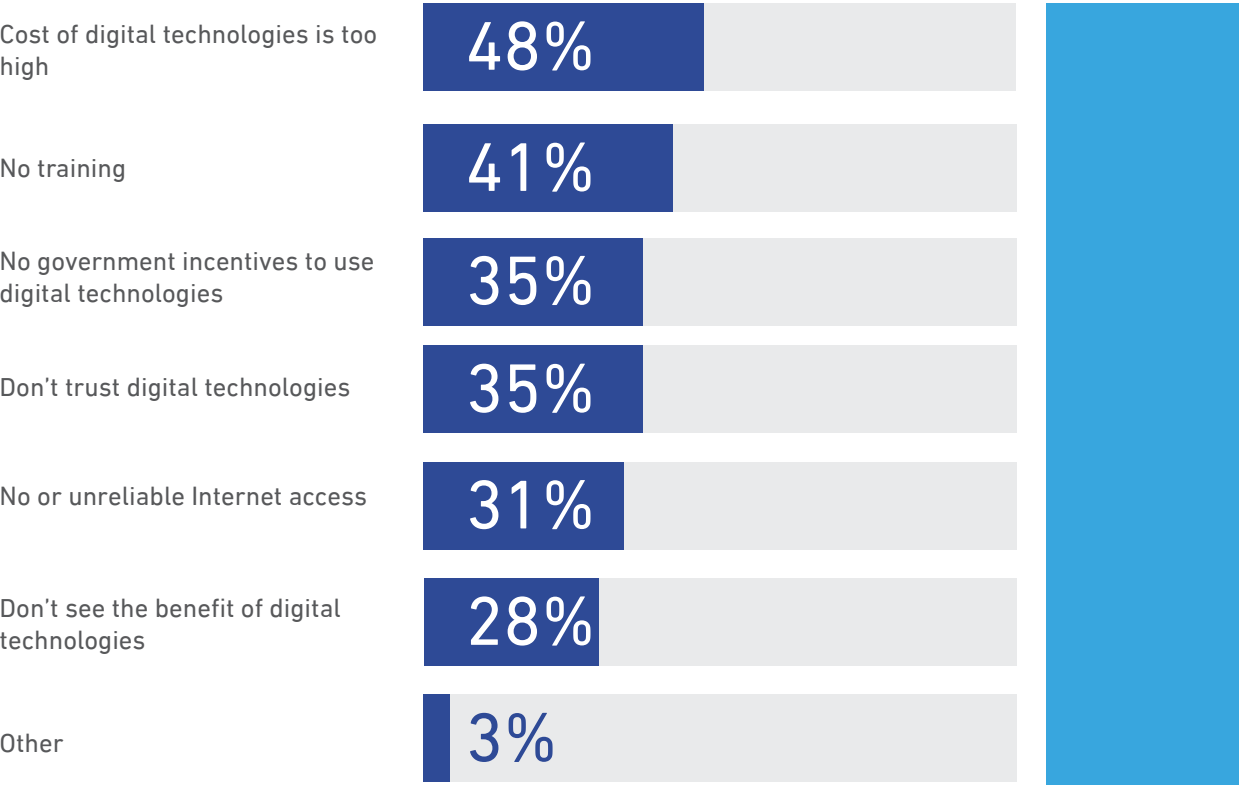
What's more, in many emerging economies, people and businesses have to spend a significantly larger proportion of their budget on accessing digital tools. In Latin America, for instance, only 11 out of 21 Latin American countries surveyed by the Alliance for Affordable Internet had what's internationally recognized as affordable internet (1GB for under 2% of monthly income).²³

"In Africa, access to 3G and 4G mobile broadband has expanded fast in the last two decades, but usage of internet for productive purposes is still very low because of affordability," says Taffere Tesfachew, acting director of the UN Technology Bank for Least Developed Countries. "So having access and using it are two different things."

19 ITU, Facts and Figures (2021) <https://www.itu.int/en/ITU-D/Statistics/Documents/facts/FactsFigures2021.pdf#page=7>
20 DCO survey on digital economy barriers and opportunities, May 2022
21 DCO survey on digital economy barriers and opportunities, May 2022
22 Cable.co.uk, Worldwide Mobile Data Pricing (2021) <https://www.cable.co.uk/mobiles/worldwide-data-pricing/#regions>
23 Americas Affordability Report, Alliance for Affordable Internet (2020): https://1e8q3q16vyc81g8l3h3md6q5f5e-wpengine.netdna-ssl.com/wpcontent/uploads/3522/04/2021_RegionalReport_Americas.pdf

THE MAIN CHALLENGE TO PARTICIPATING IN THE DIGITAL ECONOMY IS THE COST OF TECHNOLOGY

What do you think are the barriers to your community becoming more digitally savvy?



Source: Digital Cooperation Organization survey, 2022

But cost isn't just an issue in emerging economies. At our roundtable discussion in Brussels, roundtable participants still highlighted cost as a top concern during their discussion of Europe's barriers to participating in the digital economy. As one roundtable participant in Brussels put it: "Thinking that 10 euros is affordable for everyone is a fallacy."

From the private sector perspective, one participant said: "In Europe, we're lagging behind in terms of 5G coverage, and we're split between the pressure to invest in 5G, and even in 6G, IoT, and the pressure on vertical investment in the industry characterized by great competition... Our challenge is to see how we get quality connectivity at an affordable price."

24 Telegeography, Submarine Cable Map (2022) <https://www.submarinecablemap.com/>
25 RTI, Analysis of the Economic Impact of Subsea Internet Cables in Sub-Saharan Africa (2020) <https://www.rti.org/impact/analysis-economic-impact-subsea-internet-cables-sub-saharan-africa>

Indeed, there is growing support for universal internet access that is affordable and available to all. Herve Ludovic de Lys, principal regional advisor for South Asia on digital transformation at UNICEF, argues that internet access should be enshrined as a basic human right for children and that being able to connect to educational websites should be free for the world's poorest communities.

There is no doubt that much remains to be done in terms of expanding and improving connectivity infrastructure, especially in developing countries. But that infrastructure is of no use if there are large groups of people who can't afford to use it.



If you go to Wikipedia, that should cost you nothing if you access any site that finishes with .edu, that should be free of charge.

Ludovic de Lys
Principal Regional Advisor for South Asia on Digital Transformation at UNICEF

"Captured as part of the roundtable preparatory interviews"

Barrier 02:
Insufficient digital skills and training

Providing affordable internet is just one part of the puzzle. People need to be taught how to use it. 60% of people in lower- and middle-income countries lack basic computer skills such as knowing how to use the copy-and-paste function, sending an email with an attachment, or transferring files between a computer and other devices.²⁶

Our survey revealed just how critical training programs are to digital prosperity. 40% of respondents said they had participated in training programs aimed at enhancing their digital skills, of which 92% said they found them helpful, especially when they covered specific technologies and involved practical exercises. Participants in the survey called on governments to provide more opportunities for training; 47% of those surveyed said they were unaware of the existence of training programs in their community.²⁷

What’s more, 47% of businesses surveyed reported that a lack of trained staff was a key barrier to participating more fully in the digital economy.²⁸ Without digitally savvy staff, businesses are unable to take full advantage of the technology available to them.

One participant at the roundtable in New York said that education systems are failing to deliver the skills required to thrive in the digital economy. “Our education system is not delivering,” the participant said. “Very few schools are delivering [the type of skilled graduates] for the new digital world. In Jordan, we’re focusing on that - fixing the gap between supply and demand. Different skills are required to participate in the digital economy.”



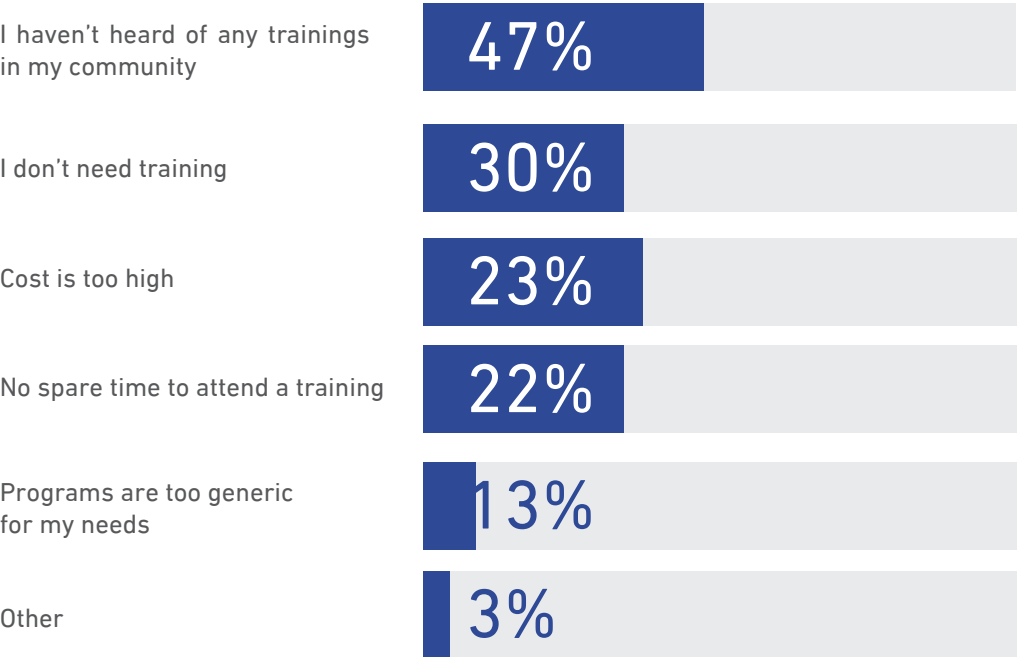
26 The Boston Consulting Group, A \$2 Trillion Down Payment to Close the Digital Divide (2020) <https://web-assets.bcg.com/5f/6b/0e4a89ba4b3ab751cba5134935bc/bcg-a-2-trillion-plan-to-bring-two-billion-more-people-into-the-digital-age-sep-2020.pdf>
27,28 CO survey on digital economy barriers and opportunities, May 2022

In Europe, although 87% of the population aged 16-74 used the internet regularly in 2021, only 54% had at least basic digital skills, a level the EU wants to raise to 80% by 2030.²⁹ This skills shortage is reflected in the European labor market, with a severe undersupply of ICT specialists becoming more acute as new jobs are created. During 2020, 55% of companies attempting to recruit ICT specialists reported difficulties.³⁰

The EU aims to more than double the number of employed ICT specialists from 8.9 million in 2021 (4.5% of the labor force) to at least 20 million by 2030 (10% of the labor force). There has been steady growth since 2013, but at present, it is insufficient to reach the 20 million target.³¹

MOST PEOPLE HAVEN'T TAKEN DIGITAL TRAINING PROGRAMS
BECAUSE OF LACK OF AWARENESS

Why haven't you participated in a training program on how to use digital



Source: Digital Cooperation Organization survey, 2022

29 The Digital Economy and Society Index (DESI), pg 16 <https://digital-strategy.ec.europa.eu/en/policies/desi>
30,31 The Digital Economy and Society Index (DESI), pg 14 <https://digital-strategy.ec.europa.eu/en/policies/desi>

In Latin America, the problem is even more acute. Many adults have little or no computer experience. In Peru, for instance, the OECD estimates that 47% of adults have little or no computer skills.³² As one roundtable participant in Santiago put it: “The digital gap is way more than just access to technology – it’s how we use technology, how do we empower women to use technology?”

Attendees at the roundtable in Bangkok agreed. “The issue is not only about affordability and cost, it goes deeper – especially for women,” said one participant, explaining that social norms have much to do with this barrier. “We need to be more technology-thoughtful by developing nuanced approaches, especially for women,” said another.

In addition, higher education institutions like universities struggle to teach students in line with the rapid pace of technological progress. Another challenge, according to one participant, is “a talent drain where our digital workers leave or go to work for companies in other countries outside the region because those companies pay better.”

There is also a digital skills gap by gender. Women are significantly underrepresented in jobs involving science, technology, engineering, and mathematics (STEM). Globally, they hold only two in every ten STEM jobs and represent just 33% of the workforce at the top 20 largest technology companies, according to the UN.³³ Excluding women from the digital world has shaved \$1 trillion from the gross domestic product of low- and middle-income countries in the last decade, a figure that will rise to \$1.5 trillion by 2025, unless action is taken.³⁴ “A lot of bias is built into the science curriculum. Why are women not going into tech? It’s men! That’s why,” said a participant in New York.



So once again, just having the infrastructure will not fix the problem posed by the digital divide. Not only do people have to be able to afford the internet, they also have to know how to use it – and that means more and better digital training.

In Peru, almost 47% of adults have little or no computer skills. The digital gap is way more than just access to technology, technology, it’s how do we empower women to use technology?



³² Latin American Economic Outlook 2020, OECD <https://www.oecd-ilibrary.org/sites/e7a00fd6-en/index.html?itemId=/content/component/e7a00fd6-en#sect->

³³ UN Women, Progress on the Sustainable Development Goals: Gender Snapshot (2022), https://www.unwomen.org/sites/default/files/2022-09/Progress-on-the-sustainable-development-goals-the-gender-snapshot-2022-en_0.pdf#page=14

³⁴ UN Women, Progress on the Sustainable Development Goals: Gender Snapshot (2022), https://www.unwomen.org/sites/default/files/2022-09/Progress-on-the-sustainable-development-goals-the-gender-snapshot-2022-en_0.pdf#page=14

Barrier 03: Limited support for SMEs and entrepreneurs

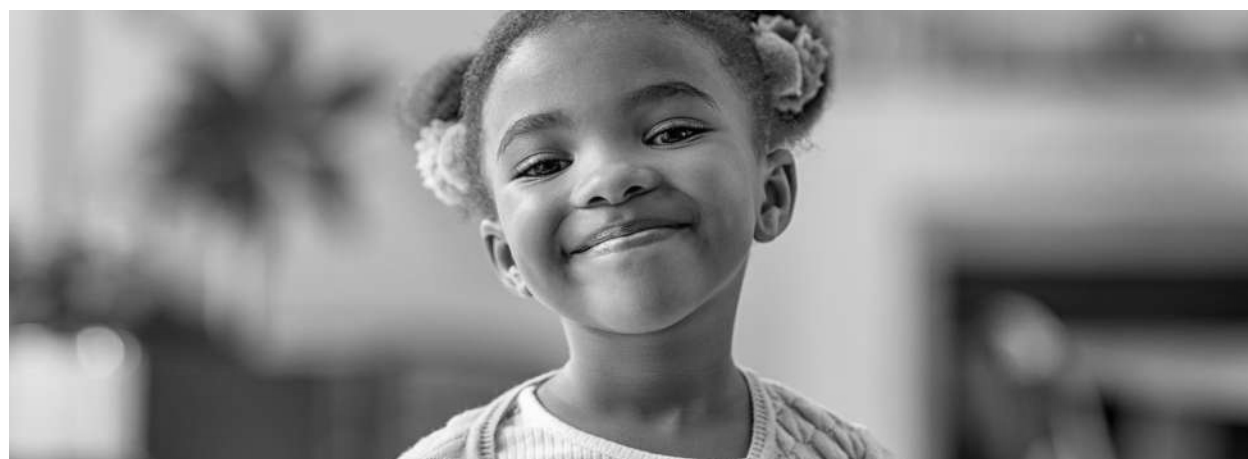
Small and medium-sized enterprises (SMEs) struggle much more than larger companies to keep up with the digital transition, and to harness its benefits. Our interviews and research specifically highlight three types of support they need access to: funding, affordable digital tools, and better training.

Firstly, entrepreneurs need access to financing, which is often difficult for startups that represent a greater risk for lenders. One participant in New York lamented the lack of seed funding for companies outside of the Silicon Valley bubble. Young firms, especially those in emerging markets, don't have access to venture capital and often don't have the physical assets to act as collateral for securing loans. Without access to capital, start-ups can't fully leverage the opportunities provided to them by exposure to international markets.

Secondly, SMEs also struggle to keep up with the rapid pace and high costs of digital transformation. According to the European Investment Bank, less than 20% of European SMEs are highly digitized, compared to nearly 50% of large corporations. The problem is even more acute in traditional sectors such as construction and basic goods manufacturing.³⁵

"The challenge is to find affordable solutions to support their digitization," said one participant in Brussels, pointing to Odoo in Belgium as a successful example.

This software tool is now the leader in open-source business management applications, supporting SMEs in their digital transformation by streamlining operations with accessible, affordable solutions in areas like accounting, inventory, manufacturing, project management, HR, and marketing.



³⁵ Digitalisation in Europe 2021-2022, EIB, <https://www.eib.org/en/publications/digitalisation-in-europe-2021-2022.htm>



According to EU data, only 55% of SMEs in the region have at least a basic level of adoption of digital technologies, such as having an enterprise resource planning (ERP) software package and engaging in e-commerce. The bloc aims to boost that level to at least 90% by 2030.³⁶

Lastly, SMEs – especially those in emerging markets – are in need of training and mentorship. One roundtable participant in New York made a plea for more mentorship of university students in Pakistan: "Our students have huge potential, but what is missing is mentorship from industry experts. We're trying to train people, but the tech industry here isn't big. **We need industry leaders from other countries to provide mentorship and help transform ideas to reality.**"

Unless the digital transition extends to SMEs - the more the better - as well as big companies, it will not be inclusive enough, nor will it benefit as many people as it could. The key to this is unlocking financing to enable SMEs to fully embrace the changes underway.

³⁶ The Digital Economy and Society Index (DESI), pg 16 <https://digital-strategy.ec.europa.eu/en/policies/desi>

Barrier 04:
Ineffective policymaking

Roundtable participants around the world highlighted ineffective policymaking as another fundamental challenge to participating in the digital economy. This could take the form of disinterest in creating digital transformation strategies, a lack of knowledge of the field, and a general lack of political continuity in regions where governments change frequently.

“Decision makers suffer from a digital gap. The people who make public policy don’t really understand technicalities and the importance of the digital economy,” said one roundtable participant in Santiago.

An interview with José Otero, Vice President for Latin America and the Caribbean at 5G Americas, revealed broad agreement with our roundtable participants. He claimed that many governments talk about digital transformation, but don’t actually implement digital transformation policies.

This lack of knowledge and leadership also affects the development of appropriate regulations, with one participant highlighting that governments often regulate something new with the vision of the old. Limited flexibility towards new ideas has affected everything from open banking to rideshare services, said the participant.

Secondly, some policymakers aren’t interested in digital transformation to begin with. In a discussion about the barriers to participating in the digital economy at our roundtable in Kigali, a participant specifically brought up the lack of e-government platforms in Africa: “This means that the largest employer in most of these economies isn’t leading the way.”

Participants in Santiago agreed. “One of the most important problems is the lack of will from high-level policymakers, and directly from the presidents of each country. There is no interest in developing digital technologies. A long-term vision is needed that would take 20-30 years to implement.”

There is also the issue of heightened political volatility, which hinders the digital transition because many new governments adopt different approaches from their predecessors. This was of particular concern in our roundtable in Latin America. “Each new government begins from zero and creates regulations. Every time the government changes, it creates a lack of consistency,” said one participant.



“Constant political turnover is hindering digital economic growth. It’s a huge challenge,” said another. Increased political instability has impacted the continuity of public policy. Even in the case of Chile, a relatively advanced and stable country, one participant complained that there was no long-lasting digital infrastructure development strategy. This sentiment was shared by many of the participants.

Even roundtable participants in Brussels expressed concern over the impact of a lack of continuity in Europe’s policymaking environment. “Overall, we face a fast rotation of policymakers and the absence of continuous knowledge when it comes to the digital economy,” said one participant.

This is a particularly complex challenge to solve, since each country has different modes of government that may or may not change frequently. In regions that experience high political turnover, it’s especially important that there are more cooperation mechanisms that can provide digital policy stability during times of transition.



Everyone is talking about it, but there is a complete lack of understanding of what it means or implies for the region - often they just think that giving internet access is enough.

José Otero
Vice President for Latin America and the Caribbean at 5G Americas
Transformation at UNICEF

“Captured as part of the roundtable preparatory interviews”

Barrier 05:
Outdated digital policies

Ineffective policy and regulation can hinder the development of a country’s digital economy and hamper participation from the private sector. There are a few key aspects within this barrier: a lack of policy, the slow pace of government action, and the need for tax revenue.

Firstly, some countries have no data policies in place at all. According to UNCTAD, 15% of countries have yet to draw up laws to protect data and privacy, while 9% are in the process of drafting legislation.³⁷ The lack of adoption of data and consumer protection laws is mainly concentrated in less developed countries where about half lack any kind of progressive legislation.

Secondly, governments often find themselves playing catch-up as innovation forges ahead, creating new regulatory debates. As one participant in New York warned in a discussion of the barriers to participating in the digital economy: “The public sector has been complicating processes for too long to maintain power. We need to simplify processes. If we don’t make it easy for others, they’ll do it without us. They already are. Innovation today has its own way around regulations.” Governments must build regulatory environments that are accommodating, welcoming and technology neutral, participants in New York concluded.

Moreover, digitization creates new tax challenges for governments, which can be torn between different strategic objectives. Typically, many lower-income countries have traditionally relied on international telephone call income as a tax revenue stream, says Christopher S. Yoo of the University of Pennsylvania. As the use of analog telephone calls dies out, some countries are choosing to take their revenue from smartphones through import duties or value-added taxes to compensate, which seems like “cutting off your nose to spite your face,” Yoo says.

It’s the same for laptop imports, which many countries classify as luxury items, stifling the potential for growth in the digital sector, says Tesfachew of the UN Technology Bank for Least Developed Countries. “The policy has to be coherent,” Tesfachew says. “It doesn’t make sense to consider a computer a luxury when trying to encourage digital transformation.”

Both executive and legislative branches must keep up with the fast-paced changes of the digital world, ensuring that policies, rules and regulations do not become outdated, while new ones are introduced in a timely fashion. If they do not do this, their countries will be at risk of falling behind.



The policy has to be coherent. It doesn’t make sense to consider a computer a luxury when trying to encourage digital transformation.

Taffere Tesfachew
Acting Director of the UN Technology Bank for Least Developed Countries

“Captured as part of the roundtable preparatory interviews”

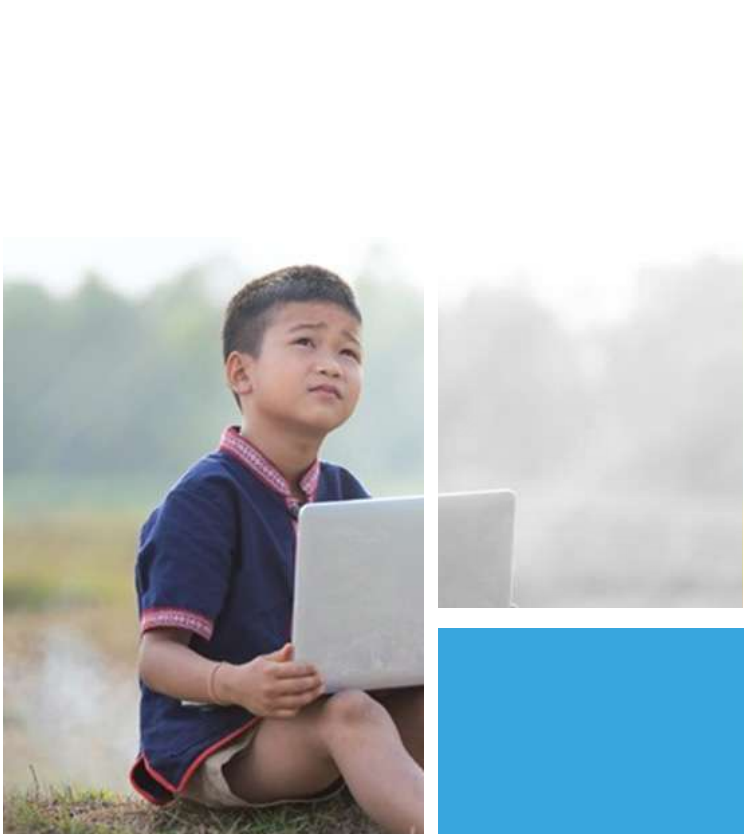
37 UNCTAD, Data Protection and Privacy Legislation Worldwide (2021)
<https://unctad.org/page/data-protection-and-privacy-legislation-worldwide>
60

Barrier 06:
Limited global or regional data standards

The lack of global standards around data is another hugely complex issue. Companies increasingly rely on data for everything from keeping track of their production systems to managing their global workforces and monitoring their supply chains. Because of their reliance on data, there is a crucial need for “interoperability”, or the quick and easy transfer of data between systems via a common set of data standards.

Yet, many countries have different regulations around data collection, storage, and transfers. This means that businesses often have to navigate different data regulations in each country they operate in, which can be burdensome for small companies that don’t have the resources to manage these requirements.

According to one participant at the New York roundtable, the myriad regulations on data are making it difficult to expand his business across borders. “We’d prefer to have one or a few frameworks versus thousands of local ones,” he said. When pressed to choose one barrier to address to grow the digital economy, he quickly answered: “The lack of interoperability.”



A dearth of harmonized data standards can also impact how countries work with one another. To promote cross-border trade, countries need to collaborate and formulate data privacy policies that are as similar and coherent as possible so that businesses aren’t forced to navigate diverging legislation in each of the economies in which they operate, says Didier Nkurikiyimfura, chief technology and innovation officer at the Smart Africa Secretariat, a multilateral organization which aims to promote Africa’s digital transformation.

Legal fragmentation is also a major obstacle to cross- border trade in Southeast Asia, according to Clarisse Girot, head of the data governance and privacy unit at the OECD. “Sometimes the legal risks at stake, whether for the company or the senior leadership, are too high to go into some countries when you have, for example, criminal sanctions.”



The challenge with Africa is that we have 54 countries. When everyone does their data governance framework without collaborating with others, the risk is that these legal frameworks are going to be divided geographically

Didier Nkurikiyimfura
Chief Technology and Innovation Officer at the Smart Africa Secretariat

“Captured as part of the roundtable preparatory interviews”

FOCUS ON DATA STANDARDS

Well-known data standards that governments or regions can adopt or extend include open data standards - documented, reusable agreements that make it easier for people and organizations to publish, access, share and use better quality data. The European Commission's Horizon 2020 program includes guidelines on data management, so that data is findable, accessible, interoperable and reusable (FAIR).

Other important data standards are master data management (MDM) standards, which aim to ensure that an organization's master data is captured, maintained and referenced in a consistent, uniform and accurate state, and available across all processes and systems where it is needed. A business should have a single identified owner, for example.

Agreeing on how to allow data to flow freely across borders is one of the thorniest issues facing the digital economy. "Data is the new air," one roundtable participant said. "If data doesn't flow freely, if data isn't safe and private, we cannot hope to reap the benefits of the digital transformation."

On the other hand, while data must be open to allow for cross-border flows, governments must also take care that data is used ethically. Governments must create ecosystems that ensure that data isn't used to discriminate. For example, systems must be put in place to guarantee that a small business isn't denied a loan because of an algorithm, participants said.

One participant in New York highlighted the success of some initiatives that combat data discrimination, such as the Inclusive Growth Score, which uses data to ensure businesses seeking loans don't lose out just because of their location.

"We want to create a digital ecosystem that works for everyone," said one participant. "If you're a small business that applies for a loan, how do you know that the algorithm isn't going to discriminate against you?"

Data is at the heart of the digital transformation - and the digital transformation is taking place, to a greater or lesser extent, in every country around the world. Some degree of consensus over how to confront the challenges posed by data, taking care to listen to all concerns, would be a milestone development.



Barrier 07:
Lack of robust and ambitious cooperation mechanisms

The current state of digital cooperation is inadequate. Conversations about navigating the often-complex issues thrown up by a constantly evolving technology sector are often dominated by the developed world, marginalizing poorer countries.

“The existing digital cooperation architecture has become highly complex and diffused but not necessarily effective, and global discussions and processes are often not inclusive enough,” the UN said in its Roadmap for Digital Cooperation. “This situation is exacerbated by the lack of a common entry point into the global digital architecture, which makes it especially hard for developing countries, small and medium-sized enterprises, marginalized groups and other stakeholders with limited budgets and expertise to make their voices heard.”³⁸

Marjorie Buchser, executive director of the Digital Society Initiative at Chatham House in London, highlights the challenges of involving all levels of society in a highly technical debate that remains impenetrable for many. Even so, important decisions that will affect everyone cannot be left to big tech and a handful of rich countries. “It is imperative that this is not just a western or tech conversation, but much broader than that... so far, it has been an extremely elitist debate,” she says.

One roundtable participant in Santiago said that conversations about the digital economy require the participation of officials from many ministries and agencies, which is uncommon in Latin America. The expert noted, “The digital economy is not something that can be handled in one institution. It’s not one ministry. It’s all sectors. We have health, education, and transport – every ministry has to be at the table. It isn’t easy to make that happen. They’re not willing to sit at the table with one another. It’s not part of my mandate.”

Similarly, regional integration and cooperation mechanisms in Latin America are sometimes weak. Participants agreed that cooperation between countries needs to be improved. UN-ECLAC, for example, coordinates eLAC – a forum in which many regional governments agree to cooperate to promote the digital economy through a common agenda.³⁹

“If we don’t share best practices within the region, we will look for solutions worldwide. That is stupid because you can find best practices next door, where they speak the same language and share the same history and demographics [etc],” said one participant.

Without effective and all-inclusive cooperation, the digital transformation will be seriously hampered. The following section discusses gaps in cooperation mechanisms in greater detail, examining ways to address the gaps and create a more inclusive digital economy.



The conversation about digital transformation has not been an inclusive one.

Marjorie Buchser
Executive Director of the Digital Society Initiative at
Chatham House in London

“Captured as part of the roundtable preparatory interviews”

38 UN, Roadmap for Digital Cooperation (2020) https://www.un.org/en/content/digital-cooperation-roadmap/assets/pdf/Roadmap_for_Digital_Cooperation_EN.pdf

39 The Digital Agenda for Latin America and the Caribbean (eLAC) is a strategy to promote the use of digital technologies as instruments for sustainable development. Its mission is to encourage the development of the digital ecosystem in Latin America and the Caribbean through a process of integration and regional cooperation, strengthening digital policies that drive knowledge, inclusion and equality, innovation and environmental sustainability. For more information, see <https://www.cepal.org/en/projects/digital-agenda-latin-america-and-caribbean-elac2022>



07

HOW COOPERATION IS BRIDGING THE GAP



The barriers to participating in the digital economy can only be addressed through enhanced international cooperation, whether the issue is the high cost of technologies or the need for better data governance. Data, ideas, technology, and people need to be able to flow in a thriving digital economy. That requires cooperation between states, the country’s government and its private sector, and civil society more broadly.

This section will examine the current state of digital cooperation, where the gaps are, and what types of cooperation can be built to truly scale the digital economy.

A national digital transformation strategy helps governments rally their disparate agencies behind a singular agenda and can help re-invest funds into digital initiatives.



Governments are central to the future of digital transformation

Governments must be at the heart of the digital transformation, ultimately leading the charge to close the digital gap, with the help of other stakeholders including the private sector, civil society and multilateral organizations.

Participants at the DCO global roundtable in Kigali, Rwanda, stressed the importance of countries having a national digital transformation strategy. A clear and up-to-date strategy helps governments rally their disparate agencies behind a singular agenda and can help re-invest funds into digital initiatives.

To start, governments can lead the way by enhancing their own e-government services and highlighting to their citizens the possibilities that digital transformation can bring. Experiences on successful digital transformation should be shared with other governments through effective cooperation mechanisms.

Fully transitioning public services into the digital economy would facilitate a whole range of activities— such as paying taxes, using digital signatures, setting up businesses, and improving health systems— ultimately making economies and service provision more efficient. Emerging markets, in particular, are behind in developing e-government platforms and processes.



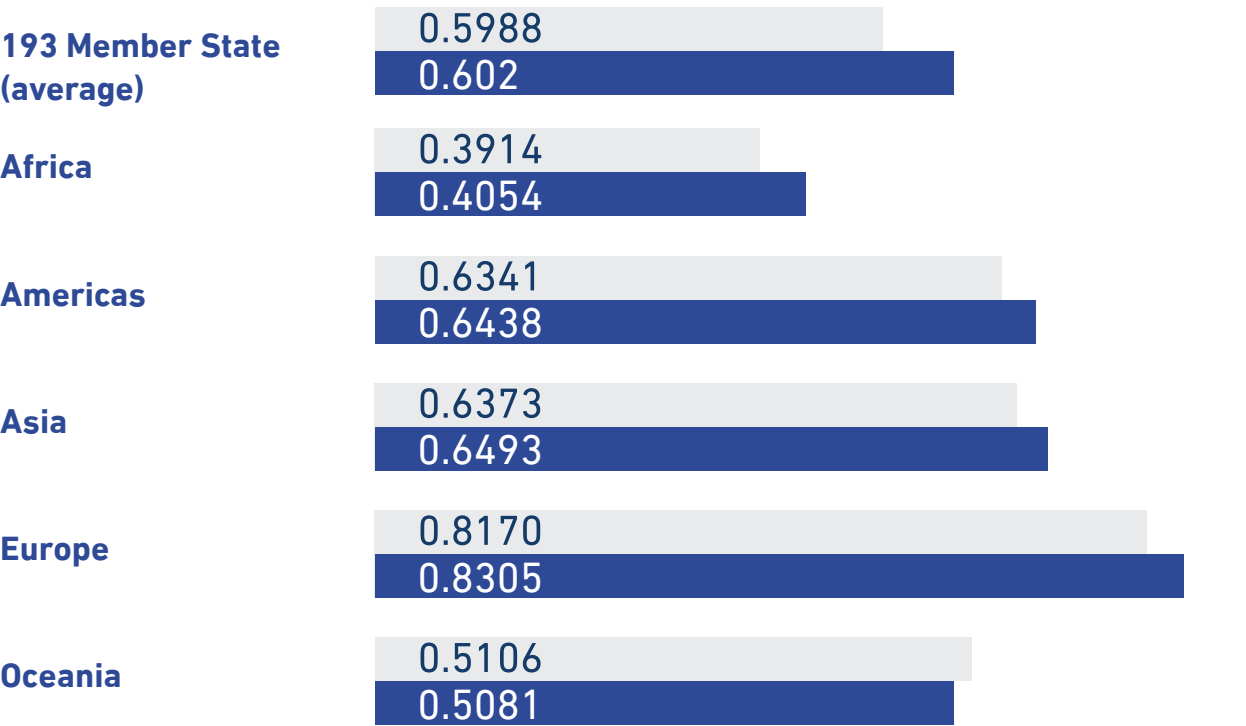
SPOTLIGHT ON BAHRAIN'S CLOUD-FIRST POLICY

Aiming at modernizing government ICT, Bahrain adopted in 2022 a Cloud-First policy, successfully migrating the operations and systems of 72 government entities to the cloud, while creating four entirely cloud-based government entities.

Amazon Web Services, which set up the region’s first hyper-scale data center in 2019, is actively supporting public and private sector entities in their transition to a cloud-enabled resilient infrastructure, in line with this Cloud-First policy, including Gulf Air, Bahrain’s national carrier.

DIGITAL GOVERNMENT RANKINGS HIGHLIGHT COOPERATION GAP

Europe’s 20-point lead shows governments have much to learn from each other



Source: UN E-Government survey, 2022 2020 EGDI average value 2022 EGDI average value

SPOTLIGHT ON THE SMART ZAMBIA INSTITUTE

Participants at the Kigali roundtable cited Smart Zambia as an effective and inspiring e-government initiative. Smart Zambia Institute promotes cooperation across different government departments and encourages them to provide digital services. Epayslips, for example, allow citizens to access payslips from their mobile phones or any computer.

Another effective service is ZamPass, a national authentication and access control service designed for governmental electronic services, ultimately providing citizens with enhanced trust and security to their newly developed e-government.



“We need to connect people, but no government [in Latin America] is going fully digital. If they want people to start using the internet, the first push should come from governments. They need to digitize everything, like Estonia, with everything online. When a country is starting from scratch it costs much less,” said Karim Lesina, executive vice president and chief external affairs officer at Millicom, a regional telecommunications company, highlighting the importance of an integrated national strategy for accelerating the digital transition.

Indeed, Estonia was a pioneer in e-government. Erika Piirmets, digital transformation advisor at e-Estonia, explained that the country had to start rebuilding the country virtually from scratch in order to modernize after leaving the former Soviet Union. Three decades on, almost all public services are now digitalized.

“It’s not wise to just make a massive dump of services and then directly launch them to citizens. It’s going to be too much, so you need to gradually just step by step build up different services,” said Piirmets, adding that for Estonia, the first step was to introduce electronic IDs and integrate them with the banking system. “Once you see that your government can be trusted, that they are keeping your data safe, that you’re actually winning something, you’re benefiting from all of these systems being brought to you electronically, people are willing to use them.”



FOCUS ON THE IMPORTANCE OF DEVELOPED TO EMERGING MARKET COOPERATION

Successful cooperation can help developing countries leapfrog otherwise time-consuming development challenges. Developing countries can learn a great deal from countries that have had early successes in rolling out the digital economy. Cooperation mechanisms between countries willing to share their experiences in order to stimulate the exchange of ideas and knowledge will be greatly beneficial.

Some successful examples of developed to emerging market cooperation include:

01 The Digital Economy Partnership Agreement (DEPA): On 12 June 2020, Singapore, Chile and New Zealand signed the Digital Economy Partnership Agreement (DEPA), the world's first digital-only trade agreement. The non-binding agreement addresses digitally specific issues such as digital identities, e-payments, paperless trade as well as enabling trusted data flows through personal data protection, open government data and providing safe conditions for cross-border data flows.

02 The Republic of Korea's Digital New Deal: Korea's new national development strategy has been extended to its international cooperation. Latin America has been the first partner. Through the Digital New Deal, Korea has helped roll out programs such as e CORPYME, which helped improve public support programs for the digitalization and internationalization of SMEs.

03 Distance Learning in Uganda: During the Covid-19 pandemic, the Belgian Development Agency ENABEL sponsored and developed a training project for teachers enhancing connectivity for all, together with the Ministry of Education of Uganda. The telecommunications provider MTN zero-rated the one-stop learning portal for aspiring teachers, so that students subscribed to the MTN network can access the platform for free, while Uganda has benefited from better connectivity.

04 The EU's D4D (Digital for Development) Hub: This strategic multi-stakeholder platform launched in December 2020 and serves as an entry point for partner countries in the developing world to meet European counterparts. The D4D Hub has initially focused on Africa, as Europe's closest neighbor that is most in need of digital assistance, with projects around connectivity, backbone infrastructure, digital skills, digital entrepreneurship, and digital services. The ultimate goal is to help to create an African single digital market.



Regional cooperation

There is also great value in enhancing cooperation at the regional level and between emerging markets.

At DCO's roundtable discussion in Kigali, Rwanda, the need for better regional collaboration was discussed at length. [Building faster internet infrastructure and data governance systems in Africa requires navigating 54 different national policies](#). This lack of cohesion seriously hinders the region's ability to reap the full benefits of the global economy, according to the majority of the roundtable participants.

In large and diverse continents like Asia, regional cooperation is often broken down into subregional bodies, such as ASEAN in Southeast Asia. But even here the disparity of economic developments is vast. Singapore is near the top of the list of wealthiest countries by GDP per capita but the region also includes economies that fall into the classification of least developed countries such as Laos and Myanmar. ASEAN countries in 2003 pledged to deliver a single digital market by 2015 but it has yet to become a reality. The ASEAN Digital Masterplan 2025 is a continuation of this effort and aims to guide the group's digital cooperation.

Disparity requires a degree of pragmatism, especially from more advanced economies, said Giulia Ajmone Marsan, director of strategy and partnerships at the Economic Research Institute for ASEAN and East Asia. "Sometimes they need to adopt what they call the common denominator," said Ajmone Marsan. "They need to slow down a little bit because not everybody is ready to jump on the same initiative at the same speed."

It also makes sense to connect countries with a region and bridge the gap. More advanced developing countries can help neighboring countries stimulate the digital economy's growth within regions.

First, it is essential to identify good practices and the gaps that exist, argues Ubaldi of the OECD.

There have been significant advances with open data across Latin America, where countries like Uruguay have shown a willingness to use open data to solve policy issues. For example, a 2020 report carried out by the Latin America Open Data Initiative - which promotes inclusive development, public and social innovation and open knowledge, through openness, the use of public data and active community participation - found that most countries in the region showed improvement in their data openness scores, except for Mexico. Uruguay leads the region with a score of 63.55 (up from 33 in 2012), followed by Argentina and Colombia.⁴⁰

Uruguay has been particularly successful in providing open data on health through initiatives such as 'A Tu Servicio', where metrics on health providers have been made available so that the public can make informed decisions about who to trust with their health. The government has also made real-time data on public transport in Montevideo available.



We must start creating a plan and roadmap to promote collaboration. Some countries are often inclined to lend their expertise and transfer knowledge or build up skills to create a sense of pride across regions, and grow as regions.

Giulia Ajmone Marsan
Director of Strategy and Partnerships at the Economic Research Institute for ASEAN and East Asia

"Captured as part of the roundtable preparatory interviews"

⁴⁰ ILDA, Open Data Barometer (2020) <https://barometerlac.org/ilda-edition/report/#findings>



SPOTLIGHT ON SUCCESSFUL EXAMPLES OF REGIONAL COOPERATION



01 The Digital Single Market in Europe: The success of the Digital Single Market in Europe, which was launched in 2015, was mentioned by participants in Kigali as a useful example for Africa to follow from the developed world, given its goal to convert Europe’s 28 national digital markets into a single, unified market. It has created new opportunities by removing key differences between online and offline worlds, breaking down barriers to cross- border online activity. It is composed of three policy pillars: improving access to digital goods and services, creating an environment where digital networks and services can prosper, and maximizing the growth potential of Europe’s digital economy, so that all of the region’s population can fully enjoy its benefits, especially by enhancing digital skills.

02 Regional Alliance for the Digitalization of Women in Latin America and Caribbean - #TodasConectadas: UN-ECLAC, UN Women, the Chilean Ministry of Women and Gender Equity, in collaboration with Mastercard, Microsoft and Eidos Global, have started this ground-breaking initiative. It has helped 3.8 million women in Latin America and the Caribbean to develop digital skills and competencies, acquire tools that allow them to digitize their enterprises, and expand their employment and economic opportunities. In addition, the Alliance will allow them to access communities where they can increase their possibilities for entrepreneurship, innovation and development. “You needed the vision of the government. The private sector wouldn’t have done it without the public sector. You also need the trust provided by a third-party multilateral organization like ECLAC,” explained one participant.

03 ASEAN Digital Masterplan 2025: This initiative aims to make ASEAN a leading digital community and economic bloc, powered by secure and transformative digital services, technologies and ecosystem. It intends to create a society where all use digital services for social interaction, entertainment, commerce, banking, education and health; and a digital economy where businesses use digital services to improve productivity, optimize value chains, and innovate, as well as to make trade with other Member States fast and frictionless, allowing businesses to expand more easily across the region to offer more and better products to the region’s consumers.





“We can invite stronger countries to play the role of champions and to create incentives for others. We can create a constructive mechanism in which developed countries are not just funding for the sake of it but join up in a regional effort to solve a shared issue,” she says, explaining that funding going into the digital economy often doesn’t go to the right government department.

Countries that are more advanced and using data can address economic problems in others with the same problem but not using the same methodology. First, a common goal must be identified. One good example is a common digital identity system, says Ubaldi: “We’re not there yet but it’s a great example of a regional project.” The experience with roaming services in Latin America is a valuable practical example, significantly diminishing the cost of international operations of businesses and the communication cost of consumers. The region’s two telecom giants—Spain’s Telefonica and Mexico’s America Movil—successfully started offering roaming before governments had reached agreements with other countries. New regulations are also contributing to this process. That model could be brought to other sectors, Santiago participants suggested.



41 World Economic Forum, Data Free Flow with Trust (DFFT): Paths towards Free and Trusted Data Flows (2020) <https://www.weforum.org/whitepapers/data-free-fiow-with-trust-dfft-paths-towards-free-and-trusted-data-fiows/>

42 Office of the United States Trade Representative, U.S.-Japan Digital Trade Agreement Text (2019) <https://ustr.gov/countries-regions/japan-korea-apec/japan/us-japan-trade-agreement-negotiations/us-japan-digital-trade-agreement-text>

Asian countries have led the way in promoting cross- regional cooperation. The Data Free Flow with Trust (DFFT) concept was first broached by Japan as a basic principle for rule-making in the field of cross-border data transfers.⁴¹ Countries around the world have since been working to establish rules for digital trade that align with the DFFT concept. For example, the Japanese government has agreed to high-standard e-commerce rules in two trade agreements: the Japan-US Digital Trade Agreement⁴² and the Japan- UK Economic Partnership Agreement.⁴³ In addition, preliminary discussions on data-related rules are underway between Japan and the EU.⁴⁴



43 UK government, UK-Japan Comprehensive Economic Partnership Agreement (2020) <https://www.gov.uk/government/collections/uk-japan-comprehensive-economic-partnership-agreement>

44 Ministry of Foreign Affairs, Japan, Joint Minutes of the Second Meeting of the Committee on Trade in Services, Investment Liberalisation and Electronic Commerce under the Agreement between Japan and the European Union for an Economic Partnership (2021) <https://www.mofa.go.jp/mofaj/files/100198116.pdf>



There is no region in the world that engages in digital cooperation to the extent that Europe does, partly because of the very nature of the European Union. A deeply ingrained ethos of cooperation has enabled it to become a pioneer in this field.

- **Cooperation between digitally advanced nations:** Participants highlighted the level of cooperation as one of Europe's greatest successes. For example, through establishing a so called 'Data Embassy', the government of Estonia has made an agreement with Luxembourg to host the backup of all government data in the case of serious instability, a risk that has become reality in the case of Ukraine.
- **Creating strong regulations:** It was widely agreed that EU regulations are a good example of how cooperation can work at the regulatory level. "The provision of common standards translates into greater trust and offers different countries the possibility to then work together," said one participant. The General Data Protection Regulation (GDPR) has set the global standard for data protection, and has been copied in many countries around the world. The long-awaited Digital Services Act (DSA) and Digital Markets Act (DMA) came into force on 1st November 2022.
- **Digital ID:** Participants commended an EU law in place requiring that digital ID in one country should be accepted by all other EU member states. "Concretely, it means that you can have a medical prescription transferred from one country to another thanks to digital cooperation," observed one participant.

- **Encouraging public-private partnerships:** Participants pointed to public-private partnerships (PPPs) as a useful tool for creating the right system for innovation promotion, offering an ecosystem that can allow like-minded businesses to work together. "The state can create an ecosystem allowing innovation and businesses to grow, and to cooperate and learn from each other. It goes beyond taxation and other incentives," said one participant.
- **SEMPER:** The 2019-2020 EU-funded Cross-border Semantic Interoperability of Powers and Mandates (SEMPER) project provides solutions for cross-border powers of representation and e-mandates. In a major step forward for Europe's digital identity system, it enables the identification of a natural or legal person as the representative of another, thereby allowing them to act on their behalf and streamlining e-business and e-government processes.
- **Europass:** This set of online tools and information developed by the European Commission helps citizens to succeed in their educational and professional careers through communicating skills, qualifications and experiences clearly and consistently across Europe.

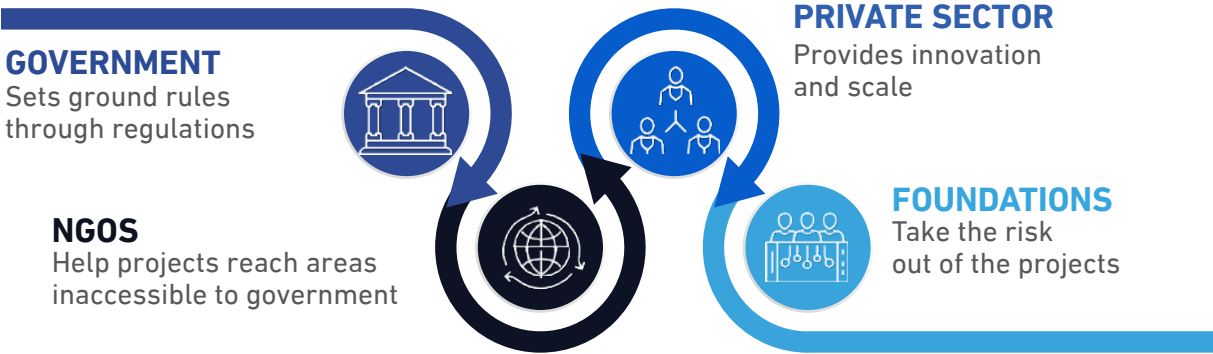


Cooperation between the government, private sector, and civil society

Investment in the digital economy cannot be limited to the public sector. Governments need the private sector, from the largest companies to the smallest. In Estonia, an early digital pioneer, the government made a strategic decision to encourage public-private collaboration. The government lays out the parameters for success; private companies build the technology.



How public-private-civil society collaboration works



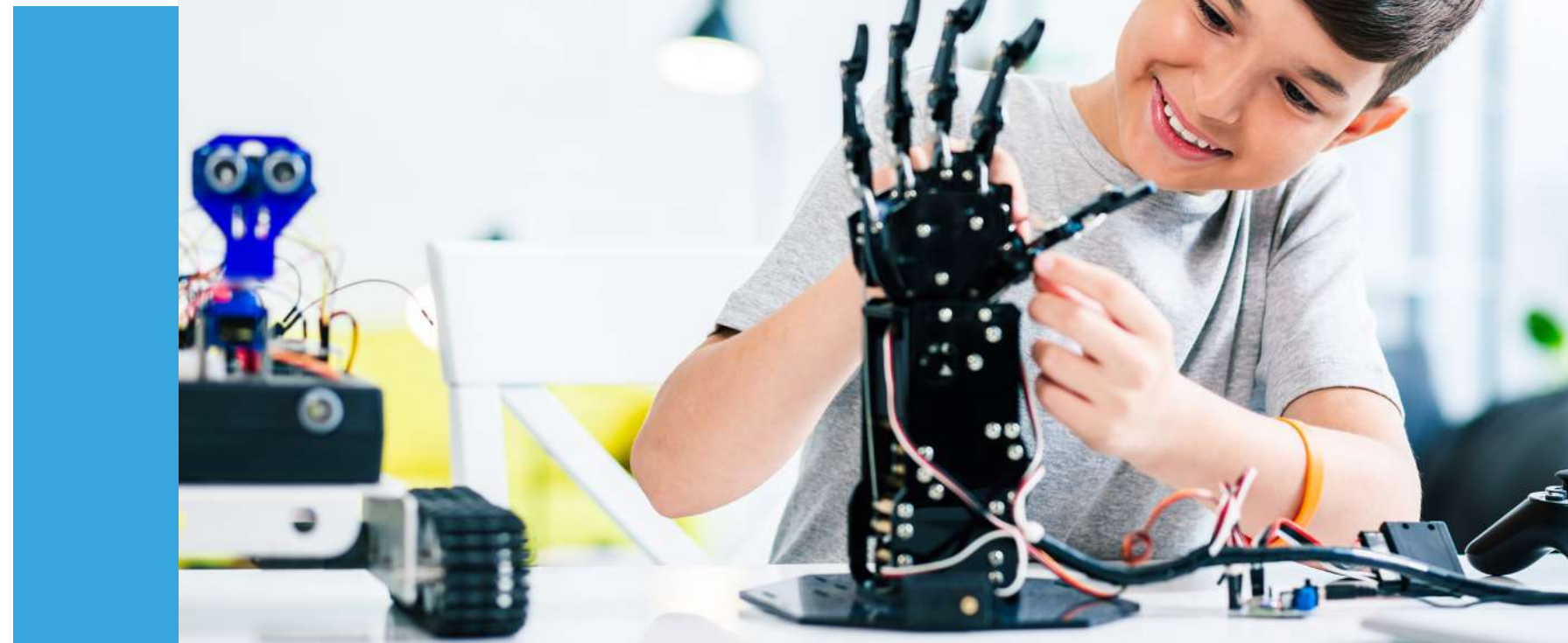
According to Ubaldo of the OECD, “what is of vast importance now is to start building up models and examples of ecosystems that support a digital economy that works, and try to connect them or replicate them elsewhere... For the digital economy to grow, it is necessary to have good and solid relations between governments and the private sector.”



For instance, during the global lockdown, large telecommunications companies effectively helped the world to keep on turning, thanks to more than \$5 trillion of investments in infrastructure to increase global connectivity over the past two decades. Telcos ensured that networks performed at maximum capacity, reallocating capital to free up infrastructure, launching emergency rollouts, and sharing infrastructure; they also launched new offerings, such as free data packages, and offered payment extensions to suppliers and distributors.

Some regulators helped by facilitating free temporary access to the spectrum needed to enhance capacity, providing consumer subsidies, and granting telcos some tax relief. For example, Saudi Arabia quadrupled available 5G frequencies from 260 megahertz to 1100 megahertz in early 2020 ahead of lockdowns in anticipation of a spike in wider mobile broadband use, while close coordination with telecom operators increased international bandwidth capacity by 32% by late 2021; New Zealand enabled the early release of the 3.5 GHz range for 5G via a direct offer rather than a competitive award; and Ghana granted Vodafone and others temporary access to more spectrum for free to deal with traffic increases.

Telcos also worked closely with governments to enable contact tracing and to broadcast public health information.



SPOTLIGHT ON SUCCESSFUL EXAMPLES OF PUBLIC-PRIVATE-CIVIL SOCIETY COLLABORATION



01 The Giga Project:

The Giga Project, an initiative launched by UNICEF and ITU in 2019 with 14 corporate and non-profit partners, was cited at our roundtable discussion in Kigali, Rwanda, as an example of an effective initiative. It aims to connect every school to the internet by 2030, giving young people access to information, opportunity, and choice. So far, the initiative has connected more than 3,715 schools and more than 1.35 million teachers and pupils in Kenya, Sierra Leone, Rwanda, Botswana, Kazakhstan, Kyrgyzstan and Honduras.

02 Learning Passport:

This mobile education platform–public-private partnership between UNICEF, Microsoft, and the governments of 27 countries–provides education for children who are on the move or who have limited or sporadic access to the internet, enabling continuous education. The different qualities that the partners brought to the project was the reason why it has been successful, said one participant at our New York roundtable. Microsoft would never have built a solution that works offline but UNICEF was able to make sure it works when there is intermittent connectivity. Microsoft has made a commitment to providing digital skills for 30 million people by 2030. “We can’t do that just by ourselves,” said a participant. “We have to partner with governments and NGOs to really scale that.”

03 Africa Vaccine Management in the Cloud:

Oracle teamed up with the Tony Blair Institute for Global Change (TBI) to harness cloud technology to manage the continent’s public health programs. The technology has allowed countries such as Rwanda and Ghana to create digital vaccination passports for Covid-19 vaccines, as well as other diseases such as polio, yellow fever and measles. Oracle donated the technology to TBI which in turn distributed it to African countries. Many of the recipients of the vaccines, who don’t even have physical identification papers, now have digital vaccine passports.

04 Mastercard Labs for Financial Inclusion:

Mastercard partnered with the Bill and Melinda Gates Foundation to set up an innovation lab based in Nairobi to bring banking services to 100 million Africans previously excluded from the financial system. The lab provides limited scale banking and community-managed microfinance to the underserved. A participant involved in the initiative said the financial backing provided by the Gates Foundation allowed Mastercard to reach a segment of the population it wouldn’t otherwise have had access to.

05 Internet Para Todos (Internet For All):

A partnership between Telefonica, Facebook, IDB, and CAF developed the backbone infrastructure initiative in Peru. This helped to connect 1.5 million Peruvians in isolated areas of the Peruvian Amazon to the internet using open technology and shared infrastructure.

06 The New gTLD Program:

Coordinated by the Internet Corporation for Assigned Names and Numbers (ICANN), this initiative is enabling the largest expansion of the domain name system to date. The introduction of new top-level domains (TLDs) aims to enhance innovation, competition and consumer choice, and includes new safeguards to foster a secure, stable and resilient internet.



In our discussion of public-private partnerships at our roundtable in Kigali, participants noted the importance of private sector partners receiving official authorization to connect rural areas and build services and applications on top of this connectivity. In particular, they highlighted Universal Service Funds as one effective way of facilitating this dynamic. The details of Universal Service Funds vary by country, but they are typically a system of subsidies, fees and funding from telcos that are used to ensure citizens have universal access to telecommunication services.

One participant cited the example of the Ghana Investment Fund for Electronic Communications (GIFEC), an agency of the Ministry of Communications established in 2004, as a leader in the space. The Fund focuses on promoting research and reading culture through ICT use and empowering people in isolated communities by involving them in development and decision-making processes at local and national levels.

Despite these examples of positive collaboration, challenges remain.

At our roundtables across the world, participants from the public sector argued that the private sector fails to fully appreciate the importance of accountability for governments. Governments need to have impeccable processes and record keeping, which can lead to longer timelines and decision-making than what the private sector would like. Additionally, executive branches are subject to checks and balances from legislatures and judiciaries, and are accountable to citizens who demand that taxes are spent in a transparent and effective way.



FOCUS ON DIGITAL TAXATION



Digital taxation is one area that could benefit greatly from increased international cooperation. Existing international corporate tax rules have not yet adapted to business models that profit from digital services in countries where they are not physically present, creating a mismatch between where value is created - and where taxes are paid.

The OECD and the UN have both drawn up proposals to try and solve the issue. The Digital Cooperation Organization has called for further debate by all stakeholders on the two proposals to reach consensus on a taxation model that can promote prosperity for all nations.

Although developed countries are still grappling with this challenge, it is just as-or more- important for emerging markets. In a bid to boost revenues and diversify the economy, Nigeria introduced measures this year to set value- added tax at 6% of total transactions for digital non-resident companies that sell products to local customers, such as apps, high frequency trading, electronic data storage and online advertising.

Nigeria's Federal Inland Revenue Service has deployed a digital interface to facilitate this implementation and also determine companies that generate relevant turnover from Nigeria. Google, Meta and YouTube ranked as the first, third, and thirteenth most visited sites in Nigeria last year, according to social media management platform Hootsuite, but until now their online advertisements seen by tens of millions of Nigerians have generated no tax revenues for the government.





Meanwhile, the public sector does not understand that, for the private sector, “time is money”, as one participant put it. Too often state bureaucracies move too slowly, complained some private sector representatives. As one participant in New York warned: “The public sector has been complicating processes for too long. We need to simplify processes. If we don’t make it easy for others, they’ll do it without us. They already are. **Innovation today has its own way around regulations.**”

The challenge is how to reconcile these conflicting approaches, given the huge mismatch between their respective timelines - participants estimated that the public sector tends to have a longer-term vision of about 5-10 years, while the private sector rarely looks beyond 1-2 years.

Some participants in Kigali suggested that the **public and private sectors could work together more effectively if a more precise role was defined for both parties.** Others recommended simplifying procurement procedures to encourage more partnerships with the private sector.

One roundtable participant in Santiago highlighted Connect America, which is coordinated by the IDB and sponsored by the private sector, for SMEs to connect amongst each other and with larger firms throughout Latin America and the Caribbean. This is something that could be replicated, said participants.

Since June 2020, the Asia Foundation has been working with Google’s philanthropic arm and governments in Southeast Asia to provide digital training for more than 200,000 people in rural regions and underserved communities. The project has enabled 77% of MSME owners who participated to take their business online, while 27% reported an increase in sales or revenue thanks to the training.⁴⁵

“That’s also true for big companies like Google that have certain aspirations to have a social impact. Working through local community partners that the Asia Foundation traditionally works with, they’re able to get that access.”

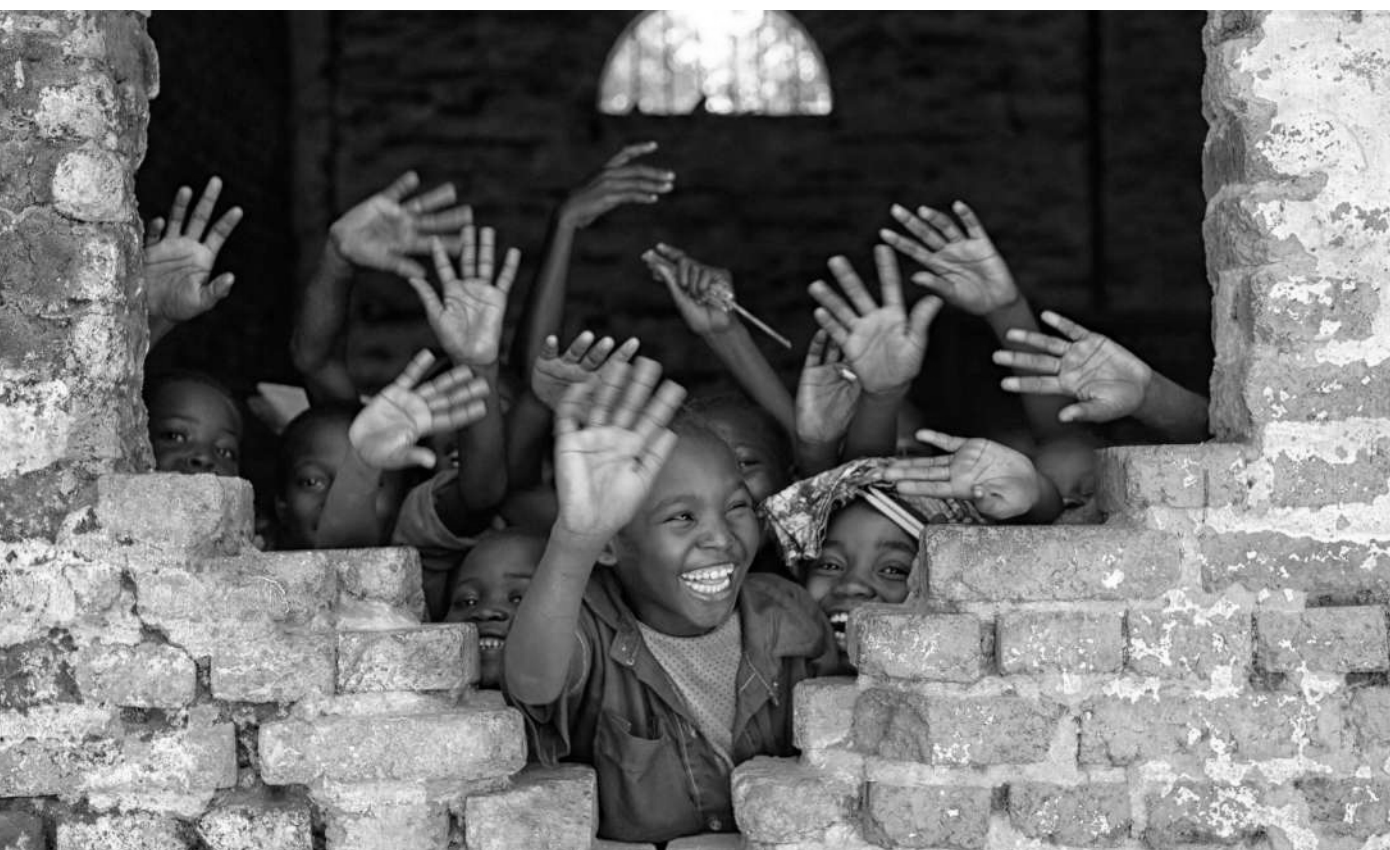


What we found is that a lot of the governments that we work with have initiatives - they want to reach the people that we are working with, but they don’t have access to the most marginalized communities.

Robin Bush
Country representative for Malaysia at the Asia Foundation

“Captured as part of the roundtable preparatory interviews”

⁴⁵ Asia Foundation, Regional Impact Research (2021) <https://asiafoundation.org/wp-content/uploads/2022/06/Go-Digital-ASEAN-Regional-Impact-Summary-2021.pdf>



Cooperation between governments and small to mid-size businesses

Small and medium enterprises play an essential role in the digital ecosystem too. They are necessary to ensure healthy competition, feed diversity, and deepen innovation. The biggest challenge here is access to capital. Digital enterprises tend to have relatively high-risk business models and are often run by young people. In many countries, commercial banks refuse to finance digital startups, generally preferring to back what they deem to be more familiar business models. The generalized failure to fund digital startups has to change.

The challenge of moving from a start-up to a scaleup is one that remains to be solved. [The US and China have deep venture capital systems to invest in startups, but most developing countries lack such ecosystems of financial players.](#) This is even the case in Europe. The example of Spotify is instructive: although it originated in Europe, it had to move to the US to scale up.

The economies of scale that can benefit companies operating in the tech sector imply that dominant firms often win ever more power. While this is the case in many other sectors, the tech sector is more of a winner-takes-all model than most, argues Shamel Azmeh, lecturer in international development at the University of Manchester.

He continues: “I don’t want to exaggerate that there are no local advantages. There are always some advantages for local firms in e-commerce, for example, where they can develop models that are more suited to the local or national context. But across the sector, we see barriers around scale and data capture, which is an important resource. Big firms have developed tools to capture data, which makes it difficult to challenge their dominant position.”



SPOTLIGHT ON DCO STARTUP PASSPORT

One initiative that makes it cheaper and more efficient for startups to do business across borders is the DCO Startup Passport launched in 2022. The Startup Passport opens up the markets of the member countries of the DCO, which together represent a market of more than half a billion people with combined GDP in excess of \$2 trillion.

Through more integrated digital regulations, the passport aims to make it easier for small businesses to expand abroad by slashing administrative and financial costs, as well as accelerating corporate registration and other bureaucratic processes for entrepreneurs from one DCO member state that want to do business in another.

Rolled out first in Saudi Arabia, Nigeria and Bahrain, the passport will help to create the borderless environment of a common market that entrepreneurs need to prosper across the DCO countries, although its reach is expected to grow even more as more members join the organization.

As well as improving cross-border expansion opportunities for startups, the passport will strengthen the startup ecosystem more broadly across DCO Member States, which have a combined GDP of nearly \$2 trillion.



International cooperation has to be directed to the digital transformation of small companies. This is important because otherwise, everything will be concentrated in the big platforms.

Leonardi Loureiro

President of Uruguay's Chamber for IT Companies

"Captured as part of the roundtable preparatory interviews"

Many governments are looking at policies that can make it easier for domestic firms to compete. "There is a certain range of policies to encourage those firms, but it is not clear yet how successful these policies are," says Azmeh.

Uruguay, one of the most advanced digital economies in Latin America, has implemented the tools that allowed the creation of an ecosystem adequate for a complete and inclusive digital economy, with the necessary laws, regulations and funding. Although Uruguay now has good connectivity and a strong e-payment system - even before the pandemic hit, e-payments outstripped traditional payments, while e-payments tripled during the pandemic - it remains behind in the capacity building of the business community and the digital transformation of small companies.⁴⁶

Therefore, the National Development Agency launched a project financed by the Inter-American Development Bank and business chambers, which will enable the digital economy to reach all corners of the country.

Multilateral cooperation

Just as governments and the private sector need each other, they also require support from multilateral institutions. Multilateral organizations can play a crucial role in building bridges between countries, political groups, and the public and private sectors.

Participants in Santiago lamented the lack of a single multilateral organization dedicated to the digital economy's future in the Latin America region. "We need to have international organizations to provide viability. They need to be the ones to bring people from the left and the right together at one table," said one participant.



At the roundtable in Kigali, another participant explained how it could be harder for private telecommunications companies to make a profit or just reach commercial breakeven in developing nations since there is less revenue produced from any one country. **That makes it important for countries to club together—with the help of multilateral organization—so businesses can build up economies of scale to become profitable**, in turn enabling them to build key digital infrastructure that will boost economic growth.

Multilaterals can also play an essential role in building up digital ecosystems. They can act as mediators so that the private sector and governments become co-creators and partners in ecosystems rather than competitors.

Many of these multilateral organizations are navigating how to create a more inclusive digital economy at the global level. Several large organizations are playing in this space, including the UNCTAD, the International Telecommunication Union (ITU), the OECD, WTO, and the G20.

⁴⁶ OECD, Latin American Economic Outlook 2020 : Digital Transformation for Building Back Better (2020) <https://www.oecd-ilibrary.org/sites/e7a00fd6-en/index.html?itemId=/content/component/e7a00fd6-en>

FOCUS ON THE KEY MULTILATERAL ORGANIZATIONS SUPPORTING DIGITAL COOPERATION



United Nations Conference on Trade and Development (UNCTAD): This UN agency is tasked with developing countries to access the benefits of a globalized economy more fairly and effectively. UNCTAD has proposed the creation of a Bretton Woods-style institution that reins in the negative aspects of the digital revolution while promoting a new era of shared prosperity. It has also floated the idea of a Digital Stability Board, similar to the Financial Stability Board, which was set up by the G20 in the wake of the 2008 global financial crisis to tighten regulation over banks and insurers.

A Digital Stability Board could coordinate the development of standards, regulations, and policies across areas including data and AI governance, social media content, competition policy, and electoral integrity.

The International Telecommunication Union (ITU): The UN's specialized agency for information and communication technologies has a specific sector dedicated to closing the digital divide. Its Standardization Sector works with all stakeholders to develop universal standards on network connectivity while its Council Working Group (CWG) identifies, studies, and develops internet-related public policy issues. The ITU's Digital Regulation Platform and REG4COVID initiatives have been especially successful.

The Internet Governance Forum (IGF): Another branch of the UN, the IGF serves to bring people together from various stakeholder groups as equals in discussions on public policy issues relating to the internet. While there is no negotiated outcome, the IGF informs those with policy-making power in the public and private sectors so that they can maximize internet opportunities and be aware of risks and challenges.

The G20 and OECD: Often working together, the OECD and the G20 have made important contributions too - notably helping countries to harness the benefits of digital transformation through the G20's Going Digital project. These organizations have understood the need for a coordinated global approach and the importance of digital technologies for economic growth and societal well-being. The G20 and the OECD have also worked together to produce important reports on smart mobility, a common measurement framework for the digital economy, national AI strategies and policies, data and data flows, policies to support digitalisation of business models during COVID-19, and trustworthy AI in health and education.

The World Trade Organization (WTO): As a trade organization, the WTO focuses primarily on governing global e-commerce and digital trade. A subset of 86 countries is currently negotiating the Joint Statement Initiative on E-Commerce through the World Trade Organization (WTO). The accord addresses traditional trade issues such as facilitation and digital policy, cross-border data flows, data localization and consumer protection.

The Internet Corporation for Assigned Names and Numbers (ICANN): ICANN is a multistakeholder group and nonprofit organization responsible for coordinating the maintenance and administration of the internet's underlying address book, ensuring that every address on the internet is unique and guaranteeing the network's stability and security. In the recent past, ICANN launched new Generic Top-Level Domains (gTLDs) programs that created new job opportunities and had a positive economic impact across the globe. ICANN is working on public policies regarding the domain name system.





Despite the proliferation of these multilateral organizations, some argue that a new dedicated body may be needed to deal with issues like data and AI governance.

The UN Secretary-General, in particular, has proposed the Global Digital Compact, a new initiative that's expected to be agreed upon at the Summit of the Future in September 2023. The Compact, which will include all stakeholders, will help to shape a vision of digital cooperation, and address thorny issues such as data privacy, how to avoid fragmentation of the internet, AI governance, online human rights and how to connect the unconnected.



47 Tony Blair Institute for Global Change, International Cooperation for a Better Digital Future (2022) <https://institute.global/policy/international-cooperation-better-digital-future>



SPOTLIGHT ON THE GLOBAL DIGITAL COMPACT

The United Nations is working on bringing together government, civil society, and the private sector to agree on basic principles for an open, free and secure digital future for all. This Global Digital Compact aims to establish key principles, such as addressing inequalities around internet access, establishing ground rules on how people's data is used, implementing human rights in the digital sphere, and introducing accountability for discriminatory and misleading content.

Building on the Secretary-General's Roadmap for Digital Cooperation, the UN is currently consulting stakeholders around the world and plans to draw up a draft of the Compact during the Summit of the Future in 2023. The World Wide Web Foundation has described the initiative as "an unprecedented drive to focus the global digital community towards seven key priorities for digital transformation after the pandemic." The Global Digital Compact may provide a way of bringing together a world that's split in opinion over internet governance between those that advocate for more openness and those that are preoccupied by cybersecurity and control.

Working with multilaterals brings with it specific challenges. It can be difficult for multilaterals, which oversee developing the rules of engagement for this new digital world, to keep pace with developments. Often encumbered by bureaucracy and a lack of communication between divisions, sometimes the message fails to get through to those who can implement change.⁴⁷

"These big multilateral organizations remain very vertical," says UNICEF's Herve Ludovic de Lys. "How much [of the discussion at the UN General Assembly] translates into actual planning and implementation on the ground?"

This sentiment was echoed at the roundtable discussion in Kigali, with participants noting that **at the international level, discussions all too often revolve around one-size-fits-all policies**. But this is not an effective solution for countries that are "different", which includes most developing markets. Just a cursory comparison of countries in Africa with others in Southeast Asia or Latin America quickly reveals the flaws of such an approach. One-size-fits-all policies for the developing world fail to address the inconvenient realities of on-the-ground, local problems.

08

RECOMMENDATIONS FOR HOW COOPERATION CAN CREATE A MORE INCLUSIVE DIGITAL ECONOMY



Through the series of interviews and research curated by DCO, the collective of experts engaged identified several measures stakeholders can take to strengthen the digital economy. Among these are:



01. ALIGN FOR MORE AFFORDABLE CONNECTIVITY:

Governments- especially those in emerging markets— should develop incentives to lower the cost of digital access for the consumer. This could take the form of tax cuts on digital goods, subsidies for internet access, or enhanced public-private partnerships. Many governments also need to speed up assignments of 5G spectrum. Satellite connectivity solutions could be leveraged to provide better and cheaper solutions for more remote communities.



02. BUILD DIGITAL SKILLS THROUGH FORMAL EDUCATION PROGRAMS AND INITIATIVES FOR PEOPLE ALREADY IN THE WORKFORCE:

Digital training programs should focus on practical real-world skills, with the aim of boosting employment prospects for citizens and helping businesses find the right talent. To create these programs, there needs to be cooperation between academia, the private sector, and NGOs to develop. Academia can help with curriculum development; the private sector can ensure what's taught is relevant to their business; and NGOs can help ensure vulnerable populations are reached.



03. HELP MORE SMES CAPITALIZE ON THE GROWING DIGITAL ECONOMY:

More small businesses and entrepreneurs around the world need access to the digital economy. Extend programs such as DCO's Elevate50 initiative, which brings businesses in DCO Member States online and helps them develop business plans, into new markets. There's also a need for cross-border mentorship programs that connect entrepreneurs to industry leaders who can transform an idea into a business. Lastly, small businesses need funding to compete digitally with larger companies. Infuse funding options into existing and future programs.

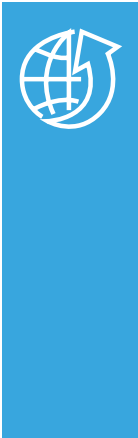


04. ESTABLISH CLEAR, HARMONIZED AND OVERARCHING DIGITAL POLICY PRINCIPLES:

These principles will form the basis of a harmonized digital framework so that stakeholders no longer have to navigate dozens of different national digital frameworks. Some of these principles could be:

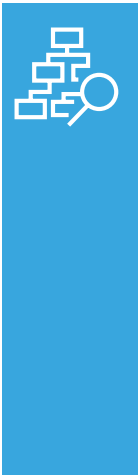
- | | |
|---------------------|--------------------|
| a. Openness | d. Inclusiveness |
| b. Transparency | e. Affordability |
| c. Interoperability | f. Local relevance |

It would also be useful to define principles for international digital cooperation, such as respect and trust. Roundtable participants pointed out that many cooperation efforts do not translate into real change or only enjoy limited success due to a lack of well-defined principles.



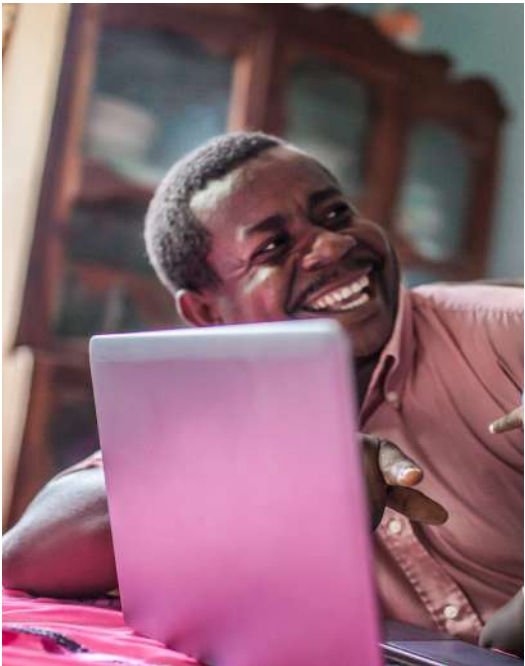
**05. CREATE COMMON STANDARDS
AND NORMS AROUND DATA FLOWS:**

To ensure interoperability from country to country, nations need to come together to create common data standards. This could include an agreement over privacy protection for cross-border data flows and protection against hackers and cybercrime, as well as how to approach digital taxation. Ultimately, this would eliminate policy fragmentation, providing investment certainty for private businesses allowing them to expand into more countries and scale their projects.



**06. FACILITATE DIALOGUE TO SHARE BEST PRACTICES AROUND
DIGITAL TRANSFORMATION:**

The pace of digital transformation is so rapid that real-time best practice sharing is critical. This could take the form of in-person events where ICT ministers, high-level decision-makers from the private sector, and representatives from civil society gather to discuss national digital strategies, providing them with equal footing in the same room. Virtual solutions are also required, such as creating a digital policy website where countries can upload policy briefs that have been effective or policy templates for other countries to use.



07. BETTER COORDINATE REGIONAL POLICIES:

The number of regional multilateral organizations in each region is dizzying. More coordination between regional institutions is needed to guide digital policies and improve the continuity of policies in a context of rapid technological change. DCO could serve as a platform that brings together different actors and organizations involved in the digital economy in each region.



08. STRENGTHEN POLITICAL LEADERSHIP:

While countries must strengthen local digital institutions to ensure continuity and coherence in digital governance, the international community, both at a regional and global level, should also help to raise awareness of the importance of doing so. Through international cooperation, digitally advanced countries should provide support to other countries that are lagging. The creation of a dedicated international body focused on digital transformation should be discussed in international forums.





09

CONCLUSION



The digital economy is set to be one of the most powerful transformational forces of this century. Digital technology reaches into every aspect of our lives, and the potential of technology for enabling positive change is limitless. Every sector is being changed by technology and innovation, and digital transformation has become an essential driver of economic growth and social development for all nations, especially for developing regions that have an opportunity to leapfrog the challenges of the past to become globally competitive leaders of tomorrow.

However, despite how pervasive digital technology has become, there is a long way to go before all nations have equal opportunities in the digital economy. Inequalities are already apparent between nations in areas such as access to technology, access to markets, digital skills and content. Our digital world is not equal, creating a risk that the countries that could benefit the most are already being left behind.

As highlighted in this report, there are multiple bottlenecks to be overcome for the equitable and sustainable development of the digital economy. Existing issues such as lack of investment, access to capital and regulation are now joined by challenges to digital inclusion. Universal access to the internet is the most fundamental of these issues. Addressing lack of access is a complex challenge encompassing physical infrastructure coverage, along with usage barriers such as lack of digital literacy and disparities in gender, age and local content. Technology skills will be crucial to empowering nations to drive their own digital economies, instead of being reliant on other nations.

The digital economy raises its own challenges too, in areas such as ethics, trust and sustainability. We have already seen the problems of misinformation, misuse of personal data, AI bias, anti-competitive behavior, inconsistent taxation of digital revenues, high energy use and e-waste. Addressing these complex challenges above all requires collaboration and cooperation. The UN Secretary General's report last year, Our Common Agenda, identified improving digital cooperation as one of the organization's 12 commitments for accelerating the achievement of its Sustainable Development Goals. The complexity of the issues, and the global nature of the task, requires an international body dedicated to the digital economy, giving equal voice to nations of all sizes and all stages of development, that can find solutions for all nations to engage the benefits of the digital economy.



The DCO as a global organization and an official UNGA Observer is committed to addressing this challenge. The DCO aims to promote a cross-border digital space, as the primary driver of sustainable economic growth and societal transformation. Furthermore, DCO targets to leverage the full potential of data across the DCO ecosystem to foster an inclusive, human-centric, and sustainable Digital Economy. The DCO brings together nations, businesses, civil society, academics, and research & development institutions to promote social prosperity through more inclusive participation in a growing Digital Economy. Together with our Member States, we aim to promote common interests and advocate for advanced cooperation on all aspects of the Digital Economy at local, regional, and global levels.

The DCO understands the complexity of the issues, and that overcoming them requires a multilateral approach with multiple initiatives that address the specific needs of each nation. Our approach includes multiple models of cooperation that encompasses information based, advocacy, advisory and high impact initiatives designed to support our Member States individually and collectively as they create their own digital economies and engage in global opportunities.



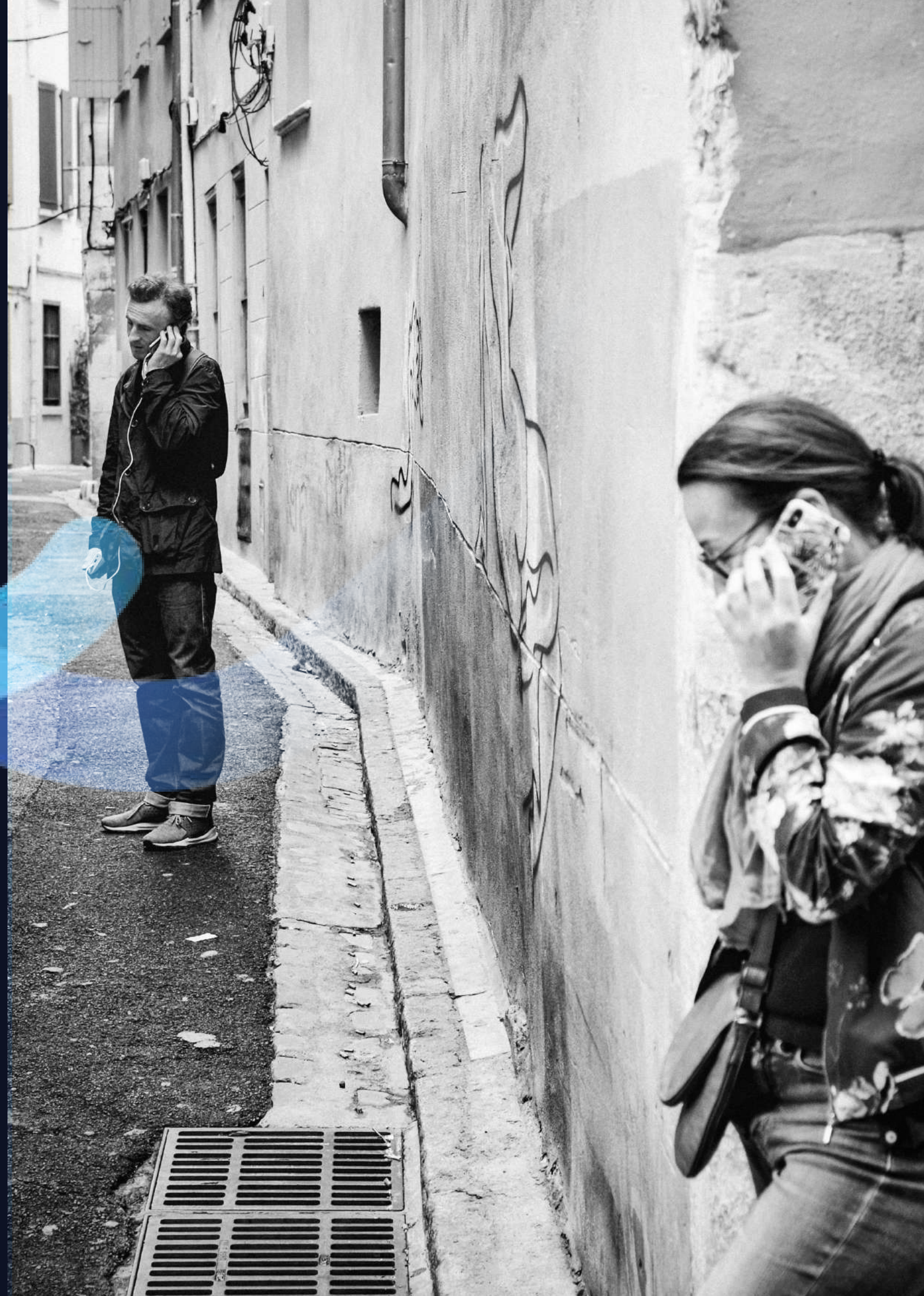
In addition, DCO will act as a unique catalyst for cooperation in the Digital Economy, building on the actions led in this field by other international and non-governmental organizations (NGOs). We will work to bring together the public and private sectors, the small and giant actors, the civil society, and academia, to overcome challenges linked to data, regulations, markets, innovation, sustainability, and more. Our focus is global, but we will target our actions to help in prioritizing the most vulnerable and those left behind.

The DCO is developing comprehensive information resources on the digital economy to guide member nations in their decision making and planning. Our advisory capabilities will include outreach to Member States to consult on particular areas of interest. We are working to advocate for our member nations at an international level, catalyzing discussions and promoting frameworks for inclusive and sustainable development of markets. And in each of these areas, we will be addressing challenges at national, regional and global level, with initiatives to take direct action to empower businesses and government to accelerate their digital transformation and prosper in the digital economy.

Only by working together can we create digital economies that will include all, and to create that collaboration it is essential and critical to establish an organization that can bring together all of the stakeholders, from public and private sector, as well as underserved groups like women and youth with equal voice for smaller and developing nations, to reach a true global consensus.

Today's global economic challenges that have been created with yesterday's mindset, requires tomorrow's mind set to be overcome. It requires that the world innovates new and disruptive models of multi-stakeholder and multilateral cooperation not only to overcome the challenges but to harness the opportunities that come with it. This is why DCO is here today. To provide the platform that will facilitate, advocate, advise, and provide the information required to enable a prosperous future for all mankind. Let's all come to cooperate together to complete and to compete towards a world where no one is left behind with an equal opportunity to prosper.

10 APPENDIX



ACKNOWLEDGEMENTS:

The “Bridging the Gap: How Better Cooperation Can Create Digital Prosperity for All” team would like to thank the following people for their valuable time and insights.

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ACRONYMS

- ASEAN - Association of Southeast Asian Nations
- DCO - Digital Cooperation Organization
- DFFT - Data Free Flow with Trust
- DSA - Digital Services Act
- DSM - Digital Markets Act
- ENABEL - Belgian Development Agency
- EU - European Union
- GDP - Gross Domestic Product
- ICANN - Internet Corporation for Assigned Names and Numbers
- ICT - Information and communications technology
- IGF - Internet Governance Forum
- ITU - International Telecommunication Union
- MSME - Micro, small and medium-sized enterprises
- nGTLD - new Generic Top-Level Domains
- NGO - Non-governmental organization
- OECD - Organisation for Economic Co-operation and Development
- PPP - Public-private partnership
- SME - Small and medium-sized enterprise
- UNCITRAL - United Nations Commission on International Trade Law
- UNCTAD - United Nations Conference on Trade and Development
- UNICEF - United Nations Children's Fund
- UN-ECLAC - United Nations Economic Commission for Latin America and the Caribbean
- VHCN - Very high-capacity networks
- WTO - World Trade Organization

GLOSSARY

Coverage gap:

The lack of internet coverage in one area compared to another, caused by insufficient infrastructure.

Digital cooperation:

Enhancing global collaboration in multiple forms to address the societal, ethical, legal, and economic impacts of digital technologies, aiming to maximize the benefits to society and minimize harms.

Digital divide:

The gap between those who have affordable access, skills, and support to effectively engage online and those who do not. The digital divide doesn't exist solely because of a lack of infrastructure but also because of constraints of speed, affordability and skills.

Digital economy:

The economic activity that results from billions of everyday online connections among people, businesses, devices, data, and processes. The backbone of the digital economy is hyperconnectivity which means growing interconnectedness of people, organizations, and machines that results from the internet, mobile technology and the internet of things (IoT).

Digital goods:

Any goods that are sold, delivered and transferred in digital form.

Digital inclusion:

The activities necessary to ensure that all individuals and communities, including the most disadvantaged, have access to and use of Information and Communication Technologies (ICTs).

Digital transformation:

the process of using digital technologies to create new or modify existing business processes, culture, and customer experiences to meet changing business and market requirements

Digitization:

The move from analog to digital

Intergovernmental Organization (IGO):

Refers to an entity created by an international treaty, involving two or more nations, to work in good faith on issues of common interest.

Interoperability:

The quick and easy transfer of data between systems via a common set of data standards.

Multilateral organizations:

Formed by three or more countries that work together on issues of common interest and of global priority.

Non-governmental organization:

A non-profit organization that furthers some social or humanitarian mission around the globe

Speed gap:

The difference in speed of broadband internet between households, communities, or countries. Slow connections hinder people's participation in virtual activities. The speed gap forces households to make compromises about who gets to use the available bandwidth.

Usage gap:

The difference in usage of the internet between households, communities, or countries. Lower income countries may have sufficient coverage but people will still not be connected because of affordability of broadband and devices or a lack of awareness of its benefits.

DISCUSSION QUESTIONS

Interview Discussion Starter Questions:

Why is the digital economy important?

What are the barriers to access for the digital economy?

How can the world transition towards the digital economy in a more equitable way?

What can governments, multilateral organizations, the private sector and civil society do to drive digital transformation for all?

Please highlight examples of existing successful digital cooperation. What further cooperation would you recommend?

Roundtable Discussion Questions – Kigali, Rwanda:

Topic 1: Barriers to Participating in the Digital Economy

- What barriers to accessing the digital economy have you seen in your country or company?
- The cost of digital transformation in a country can be extraordinarily high. Spain recently announced a 20 billion Euro investment in their own digitization over a 5-year period. It can be difficult for emerging markets to compete with this level of investment. Do you see high cost as an issue? Why or why not?
- If you could only tackle ONE barrier to participating in the digital economy, what would it be? Would you choose increasing digital access over starting digital training programs, for instance? Or would you prioritize creating an e-government platform over developing data governance policies? What is the one barrier you would focus on?
- Policy plays a major role in a country's ability to fully participate in the digital economy. Lower the tax on critical ICT goods, for instance, and usage increases. What examples have you seen in your country of government policies that have hindered or spurred digital transformation? What are the most effective levers governments can pull to make the transition more seamless?

Topic 2: Building better models of public-private-civil society collaboration

- What examples of effective public-private-civil society collaboration have you seen in your country or company?
- What does the private sector not understand about the public sector, and vice versa? Be honest.
- Are there aspects of public-private-civil society collaboration in emerging markets that are different from those in the developed world? How so? What strategies may need to be tweaked for partnerships in emerging markets?
- What role can regional organizations or multilateral organizations play in encouraging public-private-civil society collaboration?

Topic 3: Scaling cooperation to accelerate digital prosperity for all

- What types or examples of international cooperation have you seen to be particularly effective in your country in growing the digital economy? What has or hasn't made them effective? Could these partnerships be replicated in other countries or in other aspects of the digital economy?
- There are a few different types of multi-stakeholder digital cooperation, such as knowledge sharing between developed countries and emerging markets, regional partnerships, and collaboration at the global level with multilateral organizations. To what extent do the conversations happening in these partnerships reflect the realities on the ground? Is the current institutional setup able to address your country's challenges and concerns?
- Is a single, multilateral body that manages the digital economy necessary for a more inclusive landscape? If so, what would that institution look like? What would it be modeled after?
- What role can a group like the Digital Cooperation Organization play in helping to address those issues? How can enhanced collaboration between emerging markets enable the growth of the digital economy?

Roundtable Discussion Questions – Santiago, Chile:

Topic 1: Uncovering Latin America's barriers to participating in the digital economy

- What barriers to accessing the digital economy have you seen in your country or company? Which barriers are specific to Latin America and which are more global? Why are certain barriers unique to Latin America?
- If you could only tackle ONE barrier to participating in the digital economy, what would it be? Would you choose increasing digital access over starting digital training programs, for instance? Or would you prioritize creating an e-government platform over developing data governance policies? What is the one barrier you would focus on?
- Policy plays a major role in a country's ability to fully participate in the digital economy. Lower the tax on critical ICT goods, for instance, and usage increases. What examples have you seen in your country of government policies that have hindered or spurred digital transformation? What are the most effective levers governments can pull to make the transition more seamless?
- A recent IDB study found that more than any other region in the world, Latin Americans lack trust in the competency and honesty of public institutions and businesses. Can you share any examples you've seen of how mistrust in government or businesses has slowed digital transformation down? What's the relationship between trust in government and trust in technology? How can that trust be repaired?

Topic 2: Scaling cooperation to accelerate digital prosperity for all

- What challenges to enhanced digital cooperation are unique to Latin America? How can these be overcome?
- What types or examples of international cooperation have you seen to be particularly effective in your country in growing the digital economy? What has or hasn't made them effective? Could these partnerships be replicated in other countries or in other aspects of the digital economy? What challenges to enhanced digital cooperation are unique to Latin America? How can these be overcome?
- In Brazil, the government has partnered with the private sector to create and launch massive programs in broadband and 5G, making Brazil one of the most digitally connected countries in Latin America according to the GSMA. What other examples of public-private cooperation have you seen in your country to drive digital transformation? How can governments and the private sector work better together in Latin America?

- There are a few different types of multi-stakeholder digital cooperation, such as knowledge sharing between developed countries and emerging markets, regional partnerships, and collaboration at the global level with large multilateral organizations such as the United Nations. To what extent do the conversations happening in these partnerships reflect the realities on the ground? Is the current institutional setup able to address your country's challenges and concerns?
- Is a single, multilateral body that manages the digital economy necessary for a more inclusive landscape? If so, what would that institution look like? What would it be modeled after?
- What role can a group like the Digital Cooperation Organization play in helping to address those issues? How can enhanced collaboration between emerging markets enable the growth of the digital economy?

Roundtable Discussion Questions – New York, USA

Topic 1: Cooperation for Building an Inclusive Digital Economy

- What barriers to accessing the digital economy have you seen in your country or company? Please provide specific and concrete examples of barriers that you've seen.
- What would it be if you could only tackle ONE barrier to participating in the digital economy? Would you choose increasing digital access over starting digital training programs, for instance? Or would you prioritize creating an e-government platform over developing data governance policies? What is the one barrier you would focus on? Why?
- The UN is currently in the process of co-creating the Global Digital Compact to form global guidelines for an open, free and secure digital future for all. What policy recommendations would you like to see included in the Compact? How can the Compact address some of the barriers your table has already discussed?
- What types or examples of cooperation have you seen particularly effective (or not effective) in your organization or country in growing the digital economy? These could be examples of public-private sector collaboration, the collaboration between countries, multilateral cooperation, etc. What has or hasn't made them effective?
- What role can a group like the Digital Cooperation Organization play in helping to address those issues? How can enhanced collaboration between emerging markets enable the growth of the digital economy?

Roundtable Discussion Questions – Brussels, Belgium

Topic 1: Uncovering Europe's barriers to participating in the digital economy

- Though Europe is very digitally advanced, barriers to participation in the digital economy remain. Connectivity is not evenly distributed throughout the continent; many citizens lack the digital skills to take advantage of the digital economy even when they're connected; and European small businesses have struggled to keep up with the digital economic transformation. What barriers have you seen in the region? What ONE barrier would you address if you had unlimited resources?
- Although 87% of Europe's population aged 16-74 used the internet regularly in 2021, only 54% had at least basic digital skills, a level the EU wants to raise to 80% by 2030. The Netherlands and Finland are in the lead, while Romania, Bulgaria, Poland and Italy have the least digitally-educated populations. What digital skills gaps have you seen in your country or company? Can you share any examples of programs that have helped address these gaps? Europe is obviously not homogenous and there are stark differences in digital development between
- European countries. What ideas do you have for how more digitally advanced EU nations can assist less developed countries with their digital transformation?
- Small businesses in Europe face their own barriers to participating in the digital economy. A 2019 EIB study found that many SMEs across Europe experience difficulties accessing financing for digital projects. Another study found that only 55% of SMEs have a basic level of digitization. What do you think is holding European SMEs back from entering the digital economy? What can be done to address the challenges? Can you share any initiatives in your country or company that have successfully helped SMEs digitally transform their business?

Topic 2: Scaling cooperation to accelerate digital prosperity for all

- What types or examples of cooperation have you seen particularly effective (or not effective) in your organization or country in growing the digital economy? These could be examples of public-private sector collaboration, the collaboration between countries, multilateral cooperation, etc. What has or hasn't made them effective?
- Multi-country cooperation projects are expected to be crucial for the Digital Decade program's success and the EU plans to cooperate closely in this area both in project design and implementation, while also enabling Member States to come together and pool resources to build digital capacities that they would not be able to develop on their own. What recommendations do you have for the types of projects and investments the Digital Decade should focus on?
- Europe is one of the leading regions in the field of regulation. It has set high standards with pioneering and influential legislation like the General Data Protection Regulation (GDPR). How can countries successfully cooperate to harmonize regulations to facilitate for example cross border data flows? What shape should these collaborative approaches take?
- Several initiatives have been launched in Europe to promote digital development in developing markets. Among them is the Digital Development (D4D) hub, merging the uncoordinated initiatives of European actors into a single European digital development strategy. What are examples you have seen of effective or not-so-effective international digital development projects? How do you tailor your digital development initiatives to different regional contexts?
- What role can an international organization like the Digital Cooperation Organization play in helping to promote a more inclusive digital economy? How can enhanced cooperation between emerging European markets enable the growth of the digital economy?

Roundtable Discussion Questions – Bangkok, Thailand

Topic 1: Uncovering the Barriers to Participating in the Digital Economy in Asia

- What barriers to accessing the digital economy have you seen in your country, sector or company? Which barriers are specific to Asia, and which are more global? Why are certain barriers unique to Asia?
- What concrete recommendations do you have for addressing these barriers to a more inclusive digital economy in Asia? What government policies or programs have you seen to be particularly effective? What more needs to be done to sustain innovation in the region?
- Asia has the largest digital divide – the gap between those who have access to the internet and digital devices and those who don't – of any region in the world. What specific barriers have you seen that hold back digital transformation for more vulnerable communities, such as women or those living in rural areas? What examples of effective policies and programs have you seen that help bring these segments of the population into the digital economy?
- AI has the potential to transform business in Asia, be it through the automation of mundane tasks or the streamlining of complex processes. Yet not every country in the region is primed to embrace its potential. Singapore, for instance, is on the cutting edge of creating policies that drive AI innovation and adoption. While other countries, such as Cambodia and Vietnam, have lower overall internet adoption and stand to lose out on the AI revolution. What more can be done to ensure all countries in the region can leverage the potential of AI?

Topic 2: Enabling Cooperation to Accelerate Digital Prosperity for All

- What types or examples of cooperation have you seen to be particularly effective in your country in growing the digital economy? What has or hasn't made them effective? These could be examples of effective multilateral cooperation, public-private cooperation, cooperation with NGOs, etc.
- What challenges to enhanced digital cooperation are unique to Asia? How can these be overcome?
- One goal of the APEC Digital Economy Steering Committee is to have digital policy harmonization between the APEC countries, including those outside of the Asian region such as the United States, Chile, and Mexico. What have you seen to be the impact of the policy harmonization initiatives? Have they brought Asia in closer contact with the Americas in terms of digital policy? Why or why not?
- How can DCO support the growth of the digital economy in Asia? What specific recommendations do you have for DCO in terms of organizations to partner with, programs to roll out, and cooperation mechanisms to build?

SURVEY METHODOLOGY AND RESPONSES

Methodology:

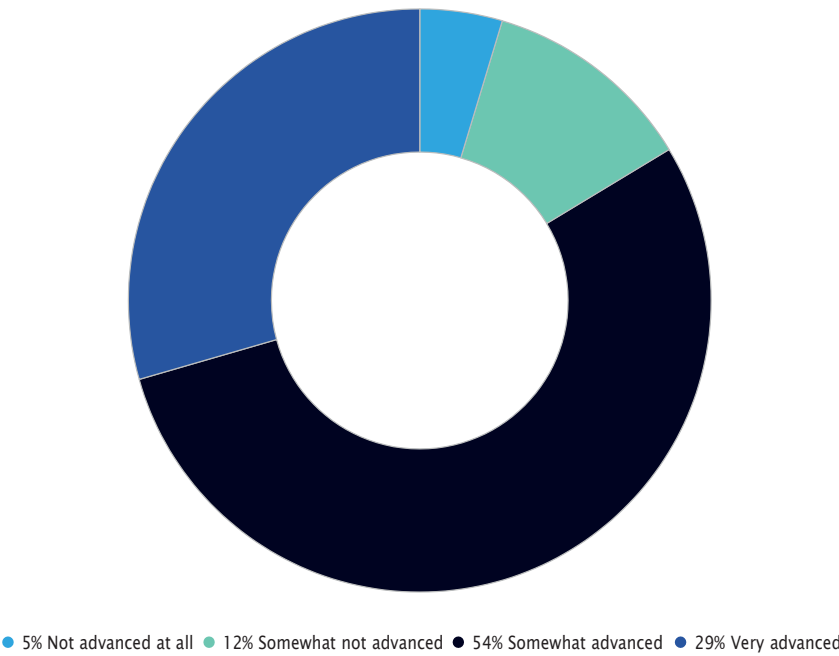
The surveys were conducted online from May through August 2022 by a third-party agency Potluc.

There were 750 consumer respondents from 12 countries: Egypt, Jordan, Nigeria, Ghana, Rwanda, Uruguay, Mexico, South Korea, France, India, Cambodia, Estonia. All respondents were over 18 and had reported being in contact with the digital economy (for example by visiting e-commerce platforms, doing online shopping, engaging in social media platforms, etc.) in the past 12 months.

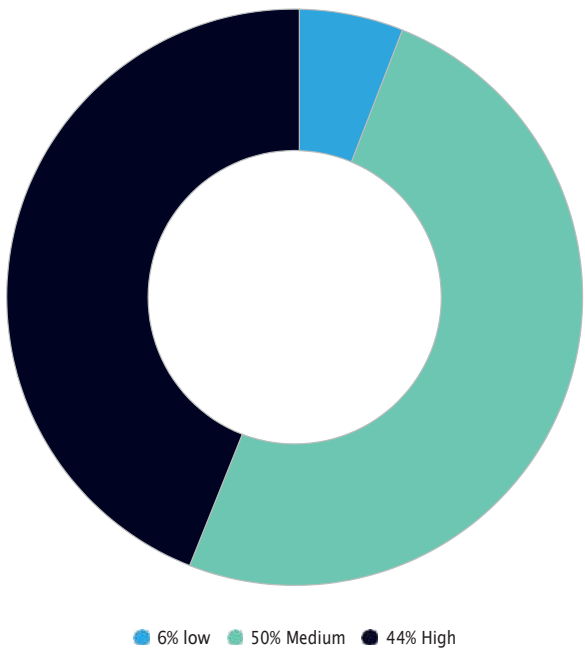
There were 250 business respondents from 12 countries: Egypt, Jordan, Nigeria, Ghana, Rwanda, Uruguay, Mexico, South Korea, France, India, Cambodia, Estonia. All respondents were over 18 and were working in the following functions/departments: marketing & communication, supply chain, accounting & finance, research & development, information technology, sales, executive committee.

Consumer Survey Results:

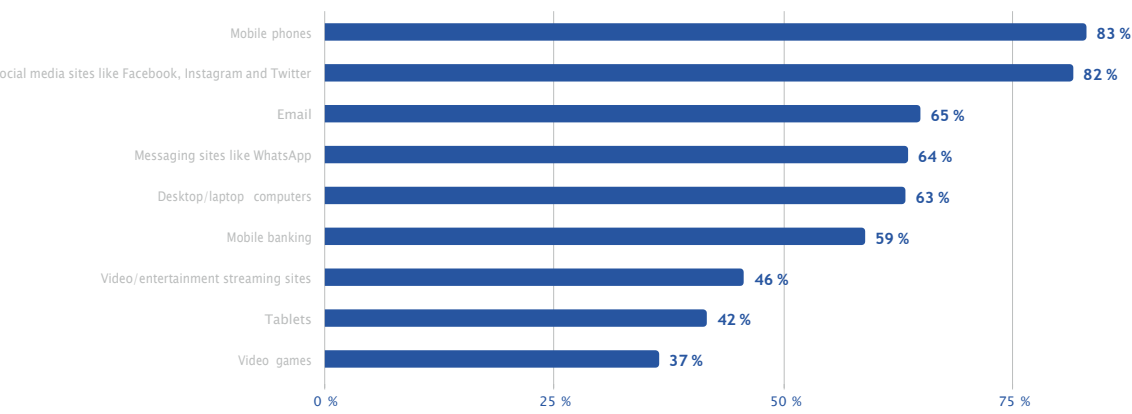
Q1: How digitally advanced do you think your community is?



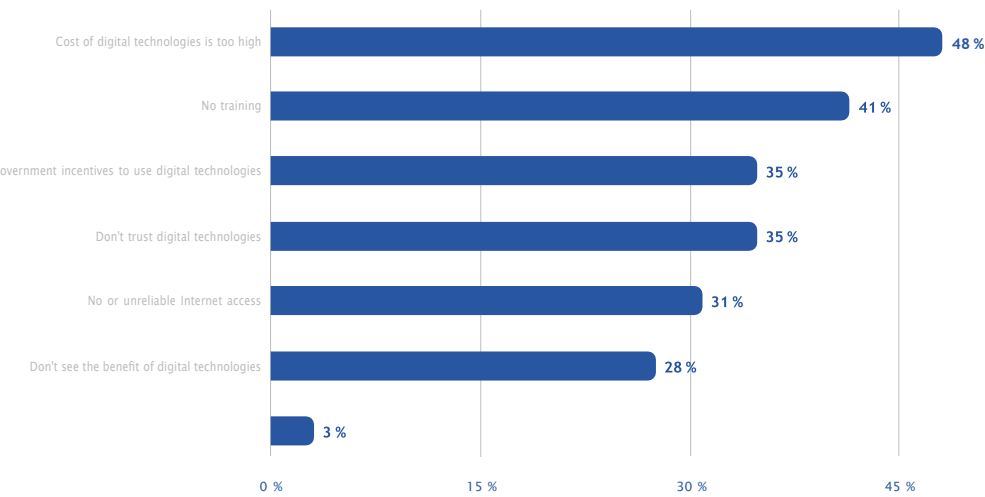
Q2: What is the quality of internet access where you live?



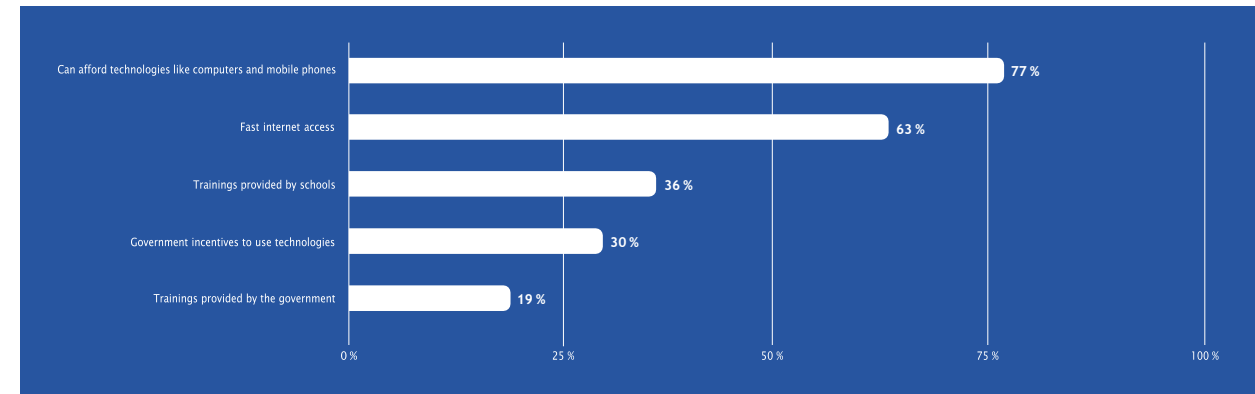
Q3: Which digital technologies are popular in your community?
Select all that apply.



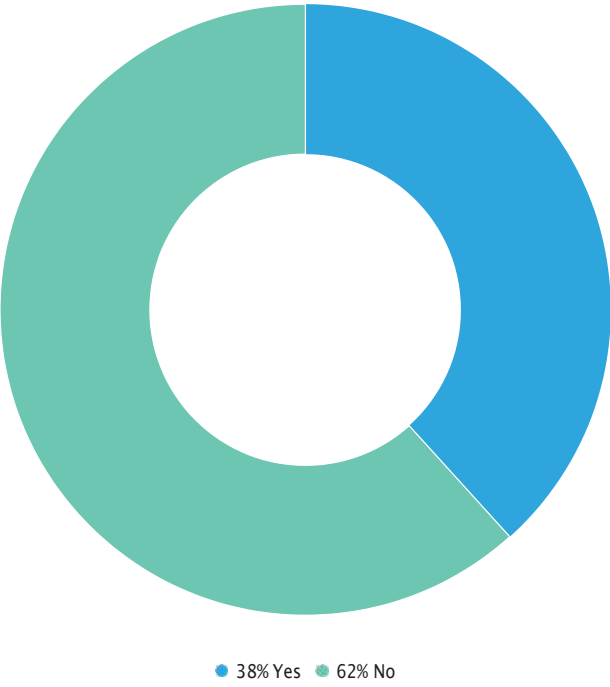
Q4: What do you think are the barriers to your community becoming more digitally advanced? Select all that apply.



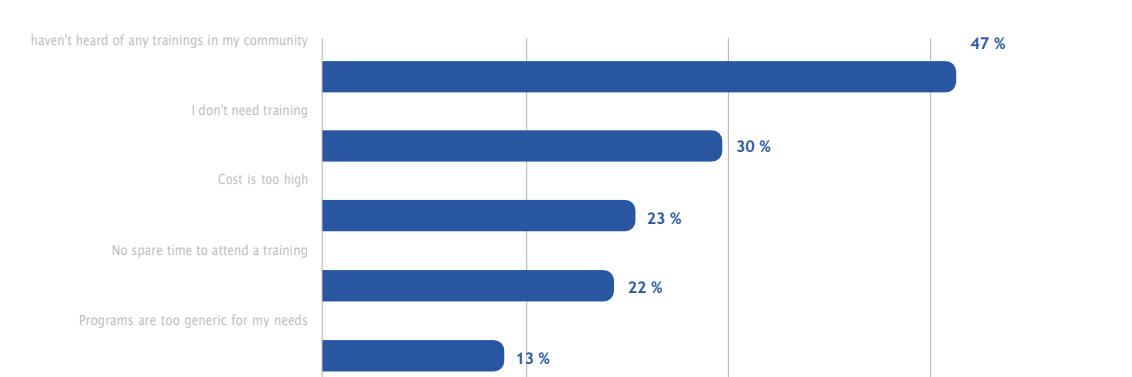
Q5: What do you think has helped your community become digitally savvy? Select all that apply.



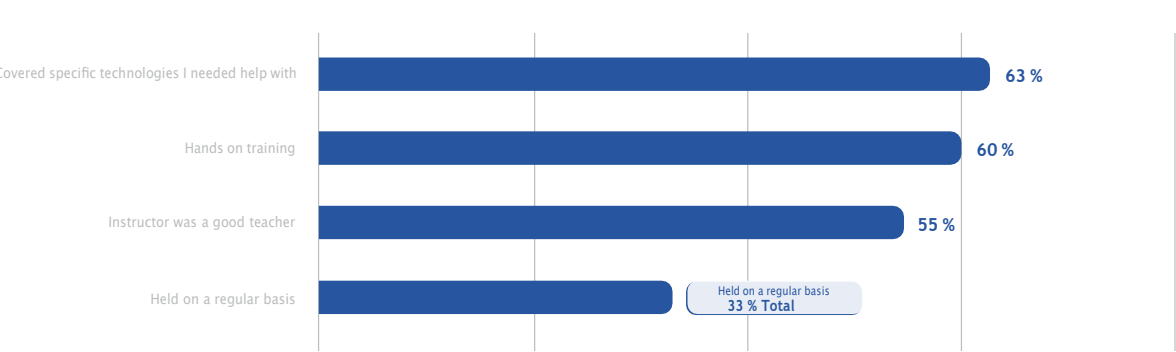
Q6: Have you ever participated in a training program on how to use digital technologies?



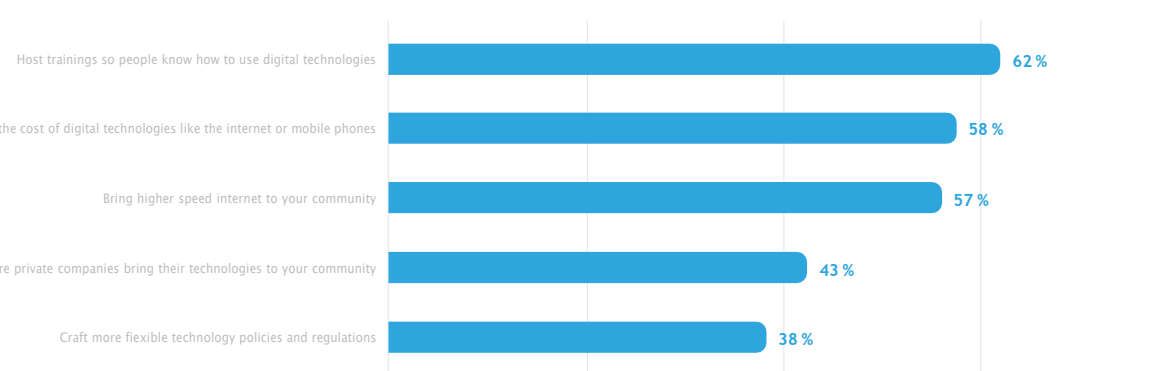
Q7a: [If no], And why did you never participate in such a training program? Select all that apply.



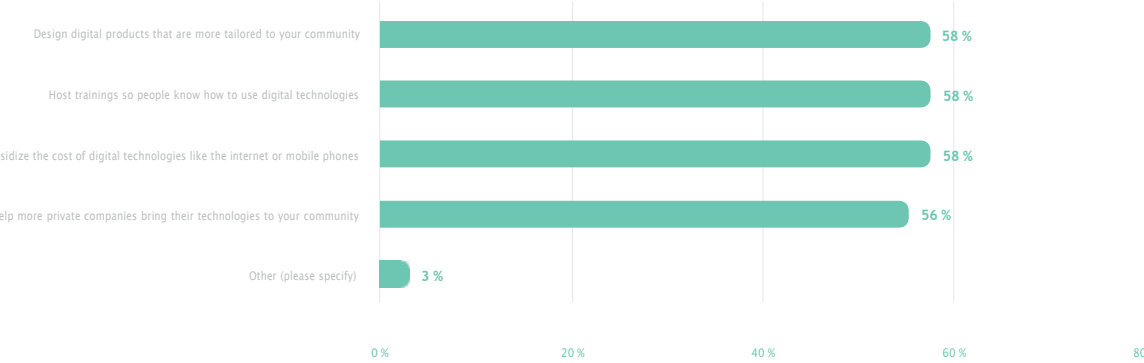
Q7b. [if yes] And what made it helpful? Select all that apply.



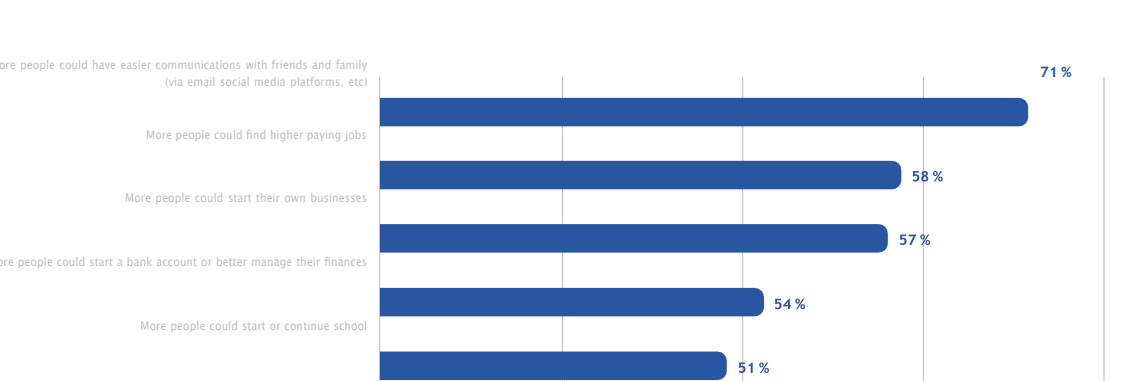
Q8. According to you, how could the government help your community use digital technologies more? Select all that apply.



Q9. According to you, how could private companies help your community use digital technologies more? Select all that apply.

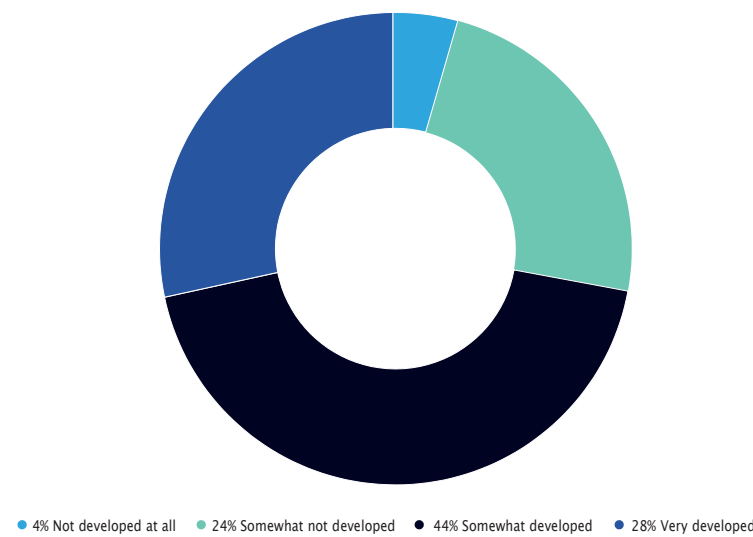


Q10. What do you think your community could achieve if your community had better access to digital technologies? Select all that apply.

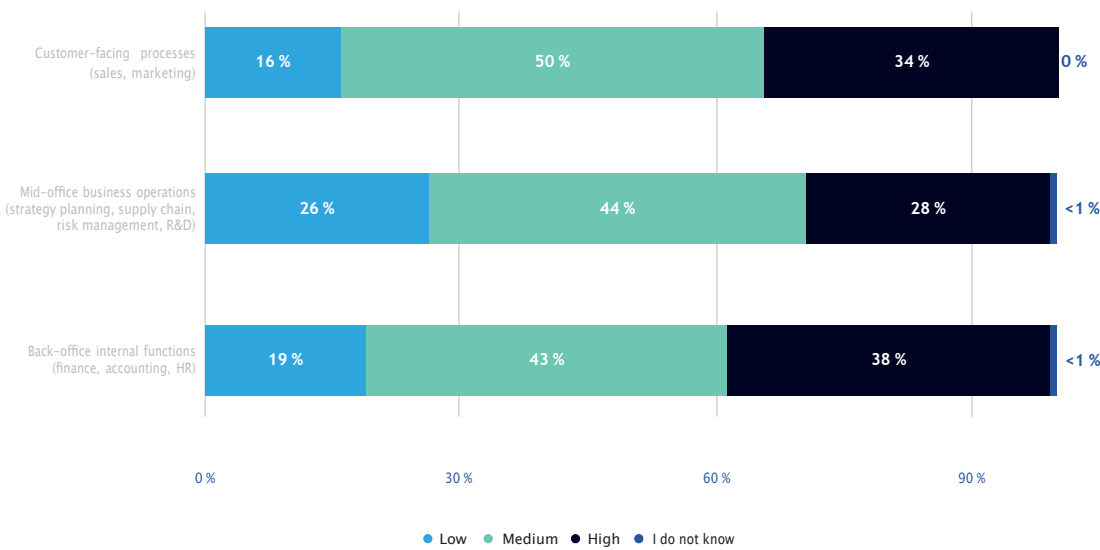


Business Survey Results:

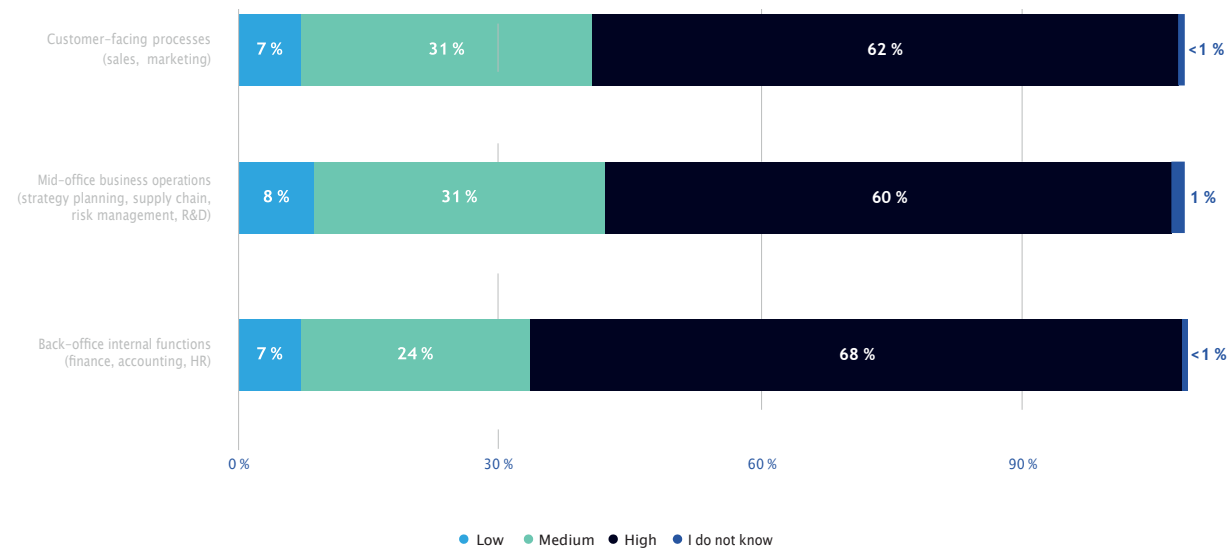
Q1: How developed would you consider the digital economy is in your country? The digital economy is defined as “economic activity reliant on, or significantly enhanced by the use of digital inputs, including digital technologies, digital infrastructure, digital services, and data”.



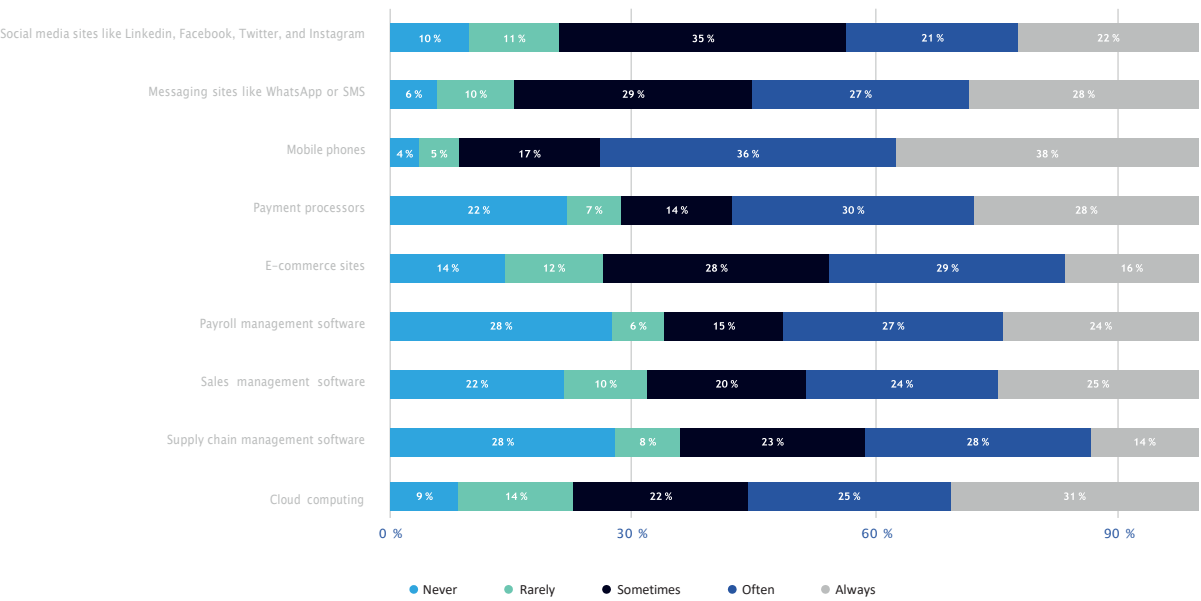
Q2: What is the current level of digitization in your company for each of the following functions?



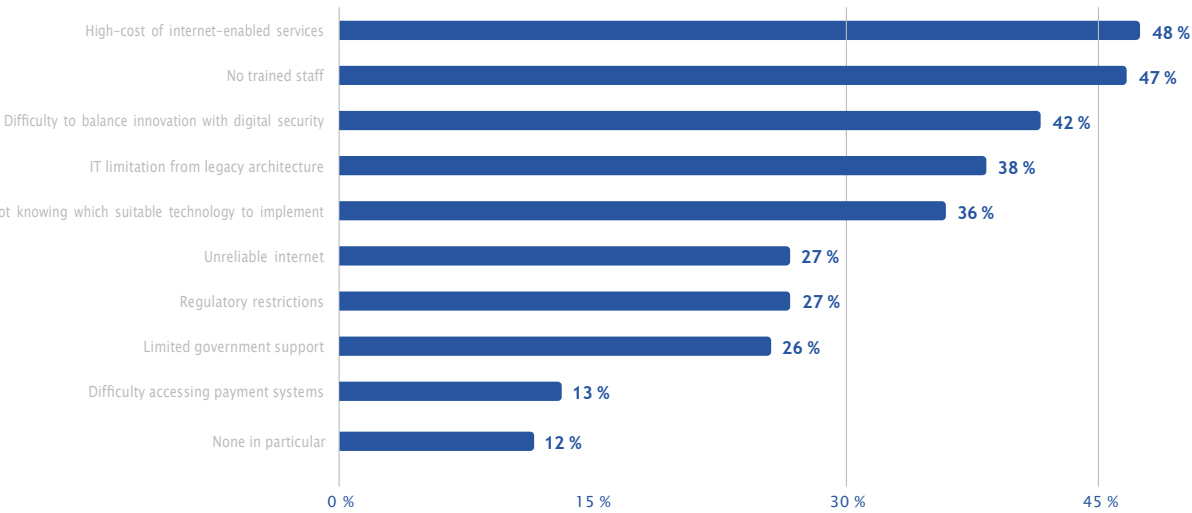
Q3. And what would be the ideal level of digitization in your company for each of the following functions?



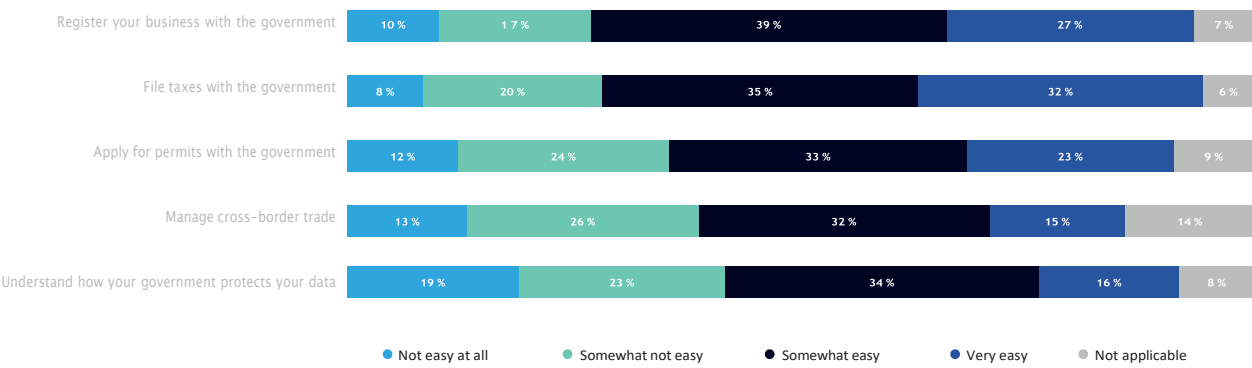
Q4. How often do you use the below digital technologies in your work?



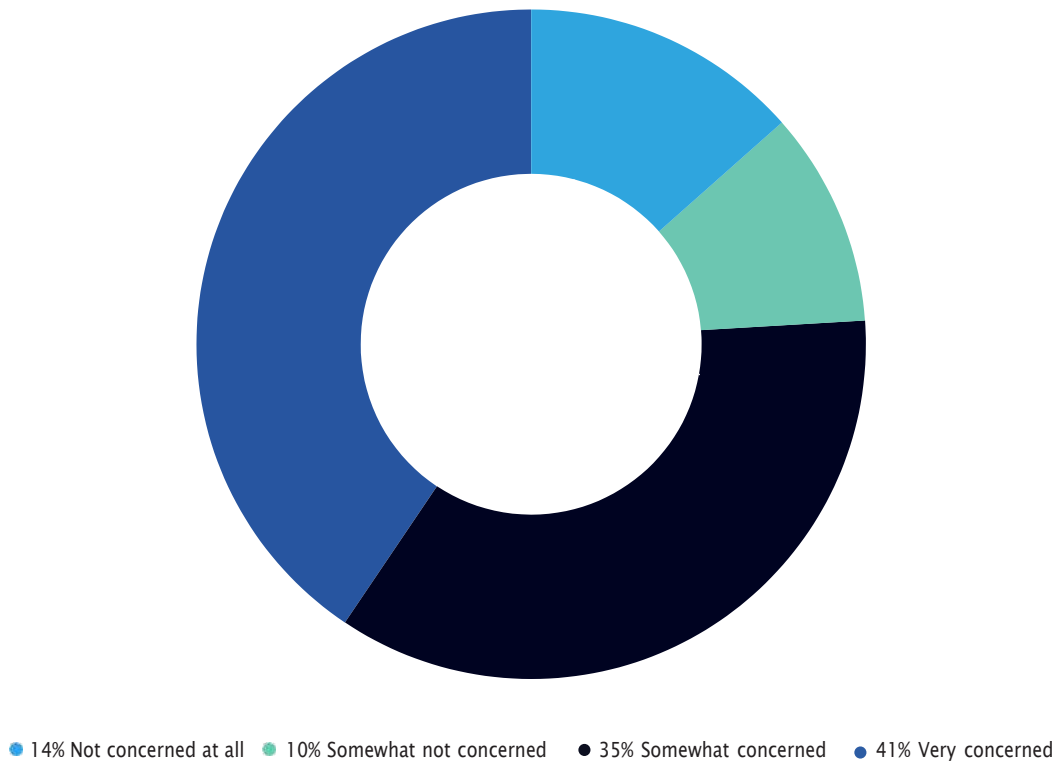
Q5. What are the biggest hurdles to using digital technologies in your work?
Select as many that apply.



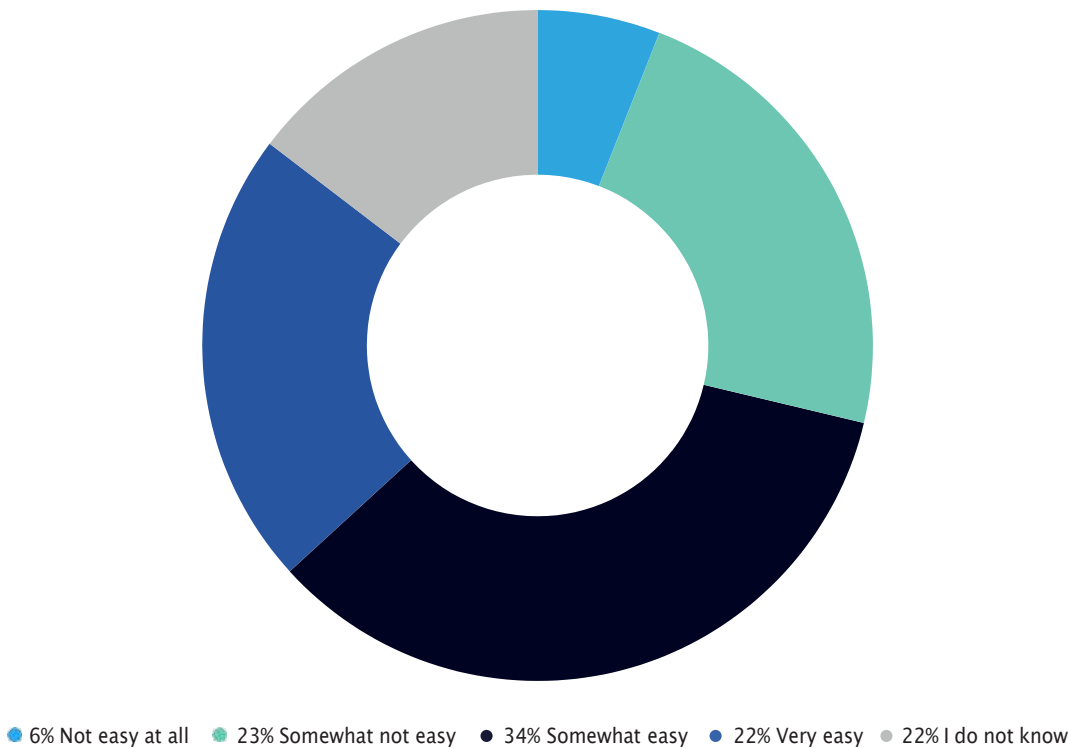
Q6. How easy is it for you to do the following business operations online?



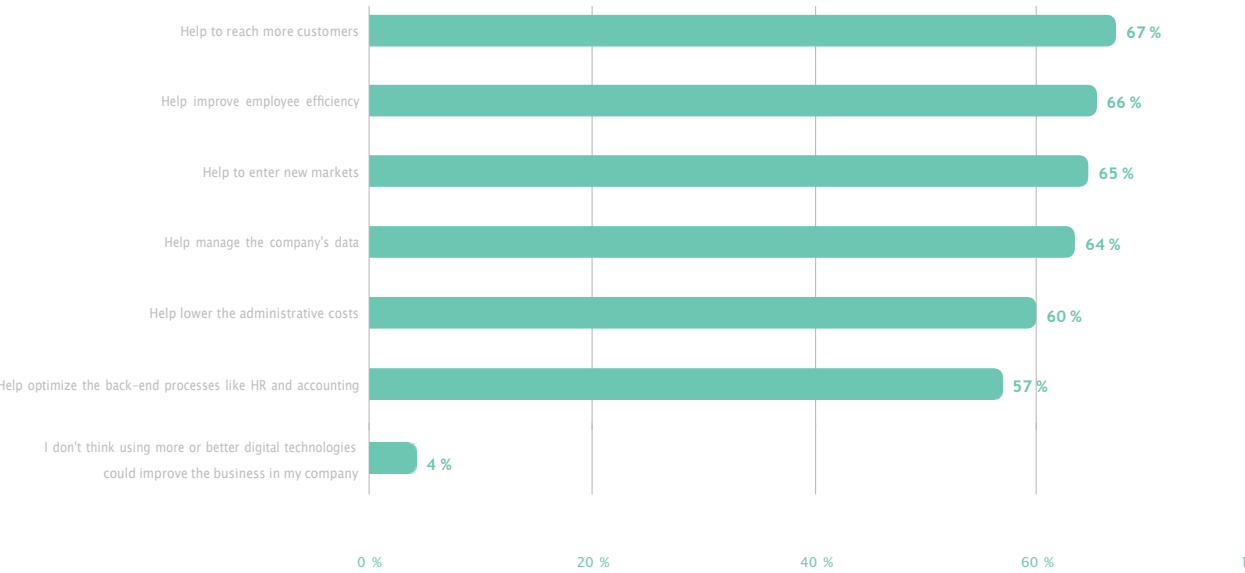
Q7. How concerned are you about the privacy of your company's data?



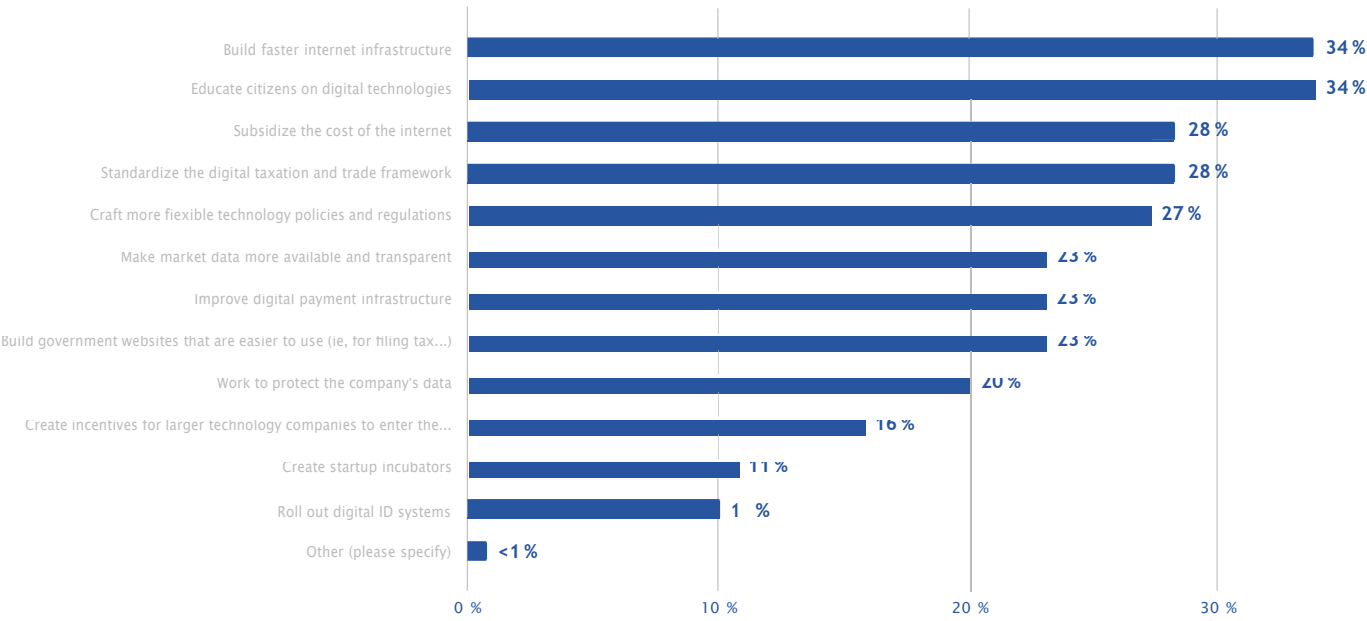
Q8. How easy is it for your company to pay taxes on its digital revenue?



Q9. How do you think using more or better digital technologies could improve your company?Select as many that apply.



Q10. According to you, how could the government help improve how your company does business digitally? You can select up to 3 answers.





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