

KEY POLICY RECOMMENDATIONS FOR THE G20

The ongoing digitalisation of our economies and societies will only expand and deepen. Digitalisation does not only contribute to productivity and efficiency, but also to broader socio-economic development. It is an accelerator of development and the G20 must be ready to make the most of it. This report provides the basis for constructing an innovative, ambitious, and pro-active G20 digital agenda. Among all the policy recommendations identified in the report, the following set of 11 recommendations represents the core actions that should be considered. Working together to take these actions forward, the G20 could build a brighter common future, using the multi-stakeholder model that has served the international community so well, and progressing towards the attainment of the SDGs. Only by taking a pro-active, 21st-century approach to the digital economy will the G20 maximise the enormous potential the digital economy holds for our economies and well-being.

1. Call for national digital strategies to close the access and usage gaps and ensure that the Internet is for all

Adoption and use of digital technologies vary among G20 economies by demographic categories, industries and firm size, raising concerns about the inclusiveness of the digital transformation. Barriers typically include some combination of a lack of high-quality and affordable infrastructure; a lack of trust in digital technologies and activities; a shortage of the skills needed to succeed in the digital economy; a more reactive than proactive approach to the openness of the Internet; services trade barriers; high costs and poor access to financing for smaller firms; barriers to the reallocation of resources across firms and sectors; and a lack of interoperability of standards. The growing number of digital agendas or strategies established by developed and emerging economies shows the relevance of a whole-of-government approach to address these supply and demand issues in a coherent manner. Calling for national digital strategies that are robust, but flexible enough to adapt to the changes in technologies and social norms, is the first step to closing the access and usage gaps and helping improve economic performance and well-being across the G20 economies.

The G20 could start by sharing national experiences and good practices in developing, implementing and evaluating national digital strategies and fix a target date for all economies to establish or update their own, taking into account more specific goals as set out below as well as other international targets such, as the SDGs and the Connect 2020 Agenda.

2. Boost investment in digital infrastructures and their key enablers

It is essential that the G20 continually invest in the development of digital infrastructures to meet existing and future demand and help bridge digital divides. They provide the foundation for many new services, applications and business models. They are also crucial in underpinning and enabling the digital innovations that are transforming production, including in the context of Industrie 4.0, now and in the future. An important area for policy action involves establishing national broadband plans with well-defined targets and reviewing them regularly. These plans should ideally assess and address the key barriers to the deployment of high-speed networks and services, including the nature of the infrastructure market itself (monopolies, duopolies), geography, administrative barriers, regulatory uncertainty, high capital expenditure, access to spectrum, and in some countries, a lack of basic infrastructure (e.g. electricity) particularly in rural areas.

Given that high-quality digital infrastructures benefit all users on the network, the G20 could agree to share experiences and practices in addressing the policy challenges associated with ensuring competition and investment, and establish a set of joint, agreed upon, and measurable targets to raise broadband penetration and ensure that the important technical enablers, such as access to Internet exchange points, spectrum, and take-up of IPv6, are in place, by a certain date.

3. Improve framework policies to foster the financing of digital infrastructures (including data) and innovative new business models

In parallel, G20 economies need to address financing hurdles to further investments in digital infrastructures (including data) and new business models to ensure that the digital transformation is vibrant, innovative and inclusive. Enhancing access to and use of data – itself an important 21st-century infrastructure – is increasingly important to help generate social and economic value. Framework policies are an important lever to affect the financing of digital infrastructures and new business models. Promoting effective and predictable insolvency regimes to ensure creditor rights can strengthen the confidence of a broad range of investors. In addition, taxation, product market regulation, employment protection legislation, and policy-induced barriers to exit (e.g. excessively strict bankruptcy laws) can hinder the financing opportunities for companies, especially SMEs and start-ups. Reducing such barriers boosts competition, encourages inefficient firms to exit, and channels resources to firms that are best able to make use of the resources, ensuring firm dynamism, innovation and productivity growth.

The G20 could agree to map best practices to create a more entrepreneurial culture (e.g. incubators, accelerators, business angel networks and matchmaking services) and facilitate connections among domestic and international initiatives to foster innovative new business models and tap into new sources of financing. To better target policies in support of financing fixed and mobile broadband networks, the G20 could bolster the evidence base by agreeing to collect internationally comparable statistics on the use of digital infrastructures, particularly global data traffic flows.

4. Encourage the development of standards and standards-based interoperability to support the IoT and Industrie 4.0

Open, voluntary standards, grounded in bottom-up and market-led approaches, are an important tool especially when dealing with fast-developing technologies and shifts in markets. Appropriate standards and guidelines are also needed to maintain current levels of safety, ensure trust based on enhanced levels of digital security and privacy, improve energy and resource efficiency, and address emerging social and organisational challenges brought on by the digital transformation. Standards-based interoperability is critical for the development of Industrie 4.0 and the IoT. Inclusive standards development can benefit from collaboration and co-operation among the many players that make up the standards ecosystem. Advanced international governance frameworks – building upon both existing public- and private-sector-led processes – and new multi-stakeholder initiatives for the benefit of all, as well as improved or new policy and implementation tools, are necessary to effectively address the complexity of today's interlinked issues in successful Industrie 4.0 development and deployment.

G20 leaders could support the adoption of best practices and policies that enable all relevant actors, including SMEs, to more effectively work together to help foster an interoperable environment in support of the IoT and Industrie 4.0. Given the breadth of standards related to Industrie 4.0 and the IoT, it may be useful to start such a dialogue in a few focused areas (e.g. smart cities and smart mobility).

5. Ensure competition in the ICT sector and across the economy

Digitalisation is raising important questions about competition in all G20 economies. The convergence of fixed-line communications, wireless communications and broadcasting over the Internet has created a need for countries to review their regulatory frameworks and public policy objectives to ensure that all market participants have incentives to continue to innovate, compete and invest in the ICT sector. Competition policy may also need to undergo some adjustments, such as a shift towards recognising data and its analysis as a competitive asset in some markets, exploring different approaches to market definition and market power, and undertaking greater international co-operation and co-ordination among competition authorities.

Developing tools for assessing the particular complexities of competition in the digital era would be very valuable.

To promote competition in the ICT sector and the broader economy, the G20 could consider developing a set of high-level principles to guide G20 economies in the development, review and implementation of competition policy, including in a converged environment. Alternatively, the G20 could consider calling on the OECD to supplement the OECD Competition Assessment Toolkit in light of digitalisation. G20 input to augmenting the toolkit would foster mutually-reinforcing competition policy regimes across the G20, which would maximise the potential for growth and innovation.

6. Call for national privacy and security risk management strategies and improve interoperability among frameworks

Trust is fundamental to the functioning of the digital economy; without it, individuals, firms and governments won't use digital technologies, and an important source of potential growth and social progress will be left unexploited. However, the current patchwork approach to privacy and data protection and to digital security across the G20 creates frictions in a data-driven global economy. Greater co-operation in developing coherent strategies for digital security and privacy, and implementing privacy and security risk management frameworks for prosperity, are essential. Issues around access to, use and ownership of data, including personal data, as well as safety, are particularly relevant as artificial intelligence and the IoT, and with it billions of interconnected devices, become a reality. The development of national privacy strategies responds to the specific need to adopt a whole-of-society approach to ensuring privacy and data protection while providing the flexibility needed to take advantage of digital technologies for the benefit of all.

The G20 is uniquely placed to highlight the need to consider digital privacy and security risk from an economic and social perspective and to initiate action to enhance coherence and interoperability among varying approaches and frameworks. Targets could include fostering international arrangements that promote effective privacy and data protection across jurisdictions, including through the development of model privacy strategies. Likewise, they could include fostering digital security risk management strategies. Such strategies should take advantage of the open digital environment by reducing security risk to an acceptable level without unnecessarily restricting the flow of technologies, communications and data. Given the implications for free flows of data and open markets, dialogue with a range of stakeholders, including the trade community, would be important.

7. Craft more effective strategies that enable all people to adapt to and excel in the digital economy

The development of strategies that enable all people – including women and girls – to adapt to and excel in the digital economy, including through the use of ICTs and other technologies to upgrade skills, is essential. This implies identifying the mix of skills needed to boost quality employment and active participation in a digitalised economy as well as promoting policies and targets to promote their development and use. These skills include ICT generic skills, ICT specialist skills, and ICT-complementary skills, including foundational skills, digital literacy, higher-order critical thinking skills as well as social and emotional skills, among others. It also means facilitating continuous adaptation as changing task requirements on-the-job put pressure on formal education and training systems to remain up-to-date. At the same time, given that the skills gap tends to be larger for people in low-skilled occupations than for those in middle- and high-skill occupations, it is important to ensure that the opportunities of ICTs and other technologies benefit all of society. Life-long learning skills and new forms of delivering training will be essential for navigating the digital transformation and the structural changes it will induce.

The G20 has a range of tools to help foster the development of the skills needed to succeed in the digital economy, including the high-level principles in the *G20 Skills Strategy*, which builds on the *OECD Skills*

Strategy, as well as the *G20 Initiative to Promote Quality Apprenticeships*. G20 economies can usefully take stock of these tools and agree to co-operate on a range of capacity-building programmes to better address the skills challenges brought about by digitalisation.

8. Support SMEs in reaping the benefits of digitalisation and addressing the challenges

The digital economy presents opportunities for SMEs, but also challenges. For example, SMEs lag in their adoption of cloud computing and other sophisticated digital technologies, despite the cost advantages that they may offer. It is essential to help promote adoption of these digital technologies among SMEs because they can help overcome some of the traditional barriers to investing in digital technologies, including the often high, upfront sunk costs of these investments, and allow them to switch more rapidly from one technology to another to avoid being locked in. Access to finance is another particularly important barrier for SMEs, who may not always have access to the necessary financing to make investments in digital technologies and the necessary complementary investments in skills, process innovation and digital services, although new sources of finance, including Internet-based financing such as crowdsourcing, can help mitigate this problem.

Building on the *G20/OECD High-level Principles on SME Financing*, G20 economies can facilitate access to finance and help boost business dynamism and young, innovative start-ups. To do so, the development of a joint G20 action plan that identifies the policies that can support SMEs in adopting digital technologies and their effective use could be helpful.

9. Promote consumer protection in the digital era

Consumer choices in this information-intensive environment are impaired by challenges relating to complexity and uncertainty, sometimes compounded by misleading or fraudulent business practices. The expanding reach of platforms – including peer platforms – poses special challenges to consumer trust, while at the same time opening up new opportunities. Well-tailored consumer protections and competitive markets are essential to build the trust needed to further develop e-commerce markets for the benefit of consumers and businesses alike. More effective implementation of consumer rights is essential for e-commerce to reach its full potential. Policy frameworks in the OECD and UN offer an excellent starting place, but likewise require a greater implementation commitment by governments. Cross-border and cross-sectoral enforcement co-operation is but one area for further work. In an increasingly data-centric environment, approaches like data portability offer promise but require further study to ensure that they work for both consumers and businesses.

The G20 can help promote consumer protection across borders by sharing international experiences and good practices with data portability measures and this, in turn, could be useful in determining good practices in this new area. At the same time, G20 economies could usefully explore the issue of platforms and consumer trust with a view to assessing if concerted G20 action could help strengthen consumer trust. To the extent that G20 members have not adhered to the *OECD Recommendation on Consumer Protection in E-commerce*, they could consider doing so.

10. Adapt legal frameworks to the realities of an increasingly digital and data-driven global economy and improve measurement

Digitalisation affects all corners of the economy and society, and it requires governments to reach across traditional policy silos and across different levels of government and develop a whole-of-government approach to policy making. This means more co-ordination when making decisions and conducting actions across government ministries and levels of government as well as actively involving all key stakeholders, including the business community, trade unions, civil society and Internet technical community, in the policy making process. To do so, comprehensive information about how the rapid rise of the digital economy has affected various legal and regulatory frameworks and policy areas such as competition, taxation, trade, the transfer of

data across borders, transportation, investment, labour markets, institutions, etc. is essential. For example, digitalisation is significantly impacting labour markets as well as tax policies, while other policy areas are just beginning to be affected.

The G20 can help elaborate a whole-of-economy approach to the policy implications of the digitalisation of the economy. A common framework for analysing digitalisation at the country level, building and expanding on a quantitative assessment of digitalisation, could be useful in this regard. Insights from a range of policy communities and from all stakeholders could help provide a whole-of-government view of digitalisation and how legal frameworks and other policies may need to adapt. Another specific action G20 economies could take is to agree to make a “digital impact assessment” a requirement for any new policy changes.

11. Co-ordinate and co-operate to better measure digitalisation across G20 economies

Sound measurement is the foundation on which good, evidence-based policy advice is based. Designing better policies for a digital economy and society requires further efforts to improve measurement and evidence, including on the spread of digital technologies themselves. Digitalisation also raises challenges for the measurement of growth and productivity. G20 economies can usefully work together to further develop cross-country comparable metrics in areas such as e-commerce and business use of sophisticated digital technologies (e.g. cloud computing and big data analytics, among others). New areas, such as trust and the IoT, are the next frontier. All countries need to work together to fill the data gaps and in doing so enabling better benchmarking, evidence building, policy development, and the identification and prioritisation of reforms, taking into account each G20 economy’s level of development.

G20 economies can help build on the *G20 Data Gaps Initiative* by developing and agreeing to a set of specific actions to take to develop better cross-country comparable metrics on the digital economy. Priority areas could include e-commerce and more robust metrics on firm use of digital technologies, which can be accomplished by further implementing model surveys, among other means. Emerging areas, such as trust and the IoT, could also be explored.

Full report available at www.oecd.org/G20/key-issues-for-digital-transformation-in-the-G20.pdf