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## OECD Going Digital Summit - Issues Note

### Session 4B: Digital Transformation for Development

The world is in the midst of a digital transformation, with more than 50% of the world population now connected to networks, up from 4% in 1995. In developing countries, 80% of individuals own a mobile phone. The diffusion of mobile broadband, in particular, is enabling more people to connect to digital networks and services, although this is occurring unevenly across the different regions of the world. Despite an increase in access to the internet among people living in low-income and lower-middle-income countries, an estimated 3.7 billion people are still offline, unable to participate in the digital economy meaningfully. –The gaps are most stark in developing countries, with less than one in three people in Africa using the internet. Digital transformation can spur innovation and productivity growth across many activities, transform public services, and improve well-being as information, knowledge and data become more widely available. In developing countries, it may enable countries to increase productivity and move up the value chain. Moreover, it can help in addressing policy challenges such as the meeting of future energy, food and water needs, or improving the delivery of health, financial and education services.

These potential benefits go hand-in-hand with challenges to jobs and skills, to privacy and security, to markets and taxation, and to public institutions and social interactions. In many developing countries there are concerns, for example, about the possible reshoring of manufacturing activities to advanced economies, enabled by automation, and about premature deindustrialisation more generally.

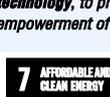
Countries differ substantially in their starting conditions for the digital transformation, such as the level of economic development, the structural make-up and trade specialisation of the economy, and geography, but also in their institutional characteristics and approaches to policy, e.g. in regard to the role of government and different private and public actors in the economy. As a result, they face different constraints under which policy responses to their challenges and opportunities need to be developed and different barriers that provide a rationale for policy action.

To ensure that policies harness the benefits while mitigating the challenges, policy makers in developing countries need to be pro-active and act now. Making the digital transformation work will require inclusive, coherent and well-coordinated policies, reflecting a multi-stakeholder and whole-of-government approach to policy making, that proactively consider those who will benefit and those who risk being left behind.

The implications for emerging and developing economies are potentially important. Following the rapid spread of digital networks across the world, a large body of evidence is now emerging that shows that digitalisation does not only contribute to productivity and efficiency, but also to broader socio-economic development. It can give rise to a more inclusive society and better governance arrangements; enhance access to key services such as health, education and banking; improve the quality and coverage of public services and political participation; expand the way that individuals collaborate and create content; and enable them to benefit from a greater choice in products and from lower prices. Developing countries are, however, also vulnerable to some of the risks associated with digital platforms, and the challenge of protecting consumers and citizens, especially in the context of the use of social media in weak governance contexts.

The role of digital networks as an accelerator of development has been recognised globally, and due to its critical importance to the three pillars of development – economic development, social inclusion and environmental protection – the task of making the Internet universal and affordable was approved as a target (Target 9.c) of the Sustainable Development Goals (SDGs). Policies that explore the full potential of ICTs can therefore accelerate progress towards the attainment of the SDGs.

Table 1. SDGs and ICTs

 <p><b>1 NO POVERTY</b></p>	<p><b>Target 1.4:</b> By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services [...], appropriate <b>new technology</b> and financial services, including microfinance."</p>	 <p><b>9 INDUSTRY, INNOVATION AND INFRASTRUCTURE</b></p>	<p><b>Target 9.c:</b> Significantly increase access to <b>Information and communications technology</b> and strive to provide <b>universal and affordable access to the Internet</b> in the least developed countries by 2020.</p>
 <p><b>2 ZERO HUNGER</b></p>	<p><b>Target 2.a:</b> Increase investment [...] in rural infrastructure, agricultural research and extension services, <b>technology development</b> and plant and livestock gene banks [...]."</p> <p><b>Target 2.c:</b> Adopt measures to ensure the proper functioning of food commodity markets [...] and facilitate timely <b>access to market information</b>, including on food reserves, in order to help limit extreme food price volatility.</p>	 <p><b>10 REDUCED INEQUALITIES</b></p>	<p>ICTs, especially through mobile-based services, can help reduce inequality by drastically <b>expanding access to Information</b>, contributing to individual empowerment and social inclusion of individuals who used to fall outside the reach of traditional services. (*)</p>
 <p><b>3 GOOD HEALTH AND WELL-BEING</b></p>	<p>The use of ICTs in the health sector can result in higher quality health care that is safer and more responsive to patients' needs. <b>E-health</b> can be particularly important in rural and remote areas, facilitating innovative models of care delivery, such as telemedicine and mobile health. (*)</p>	 <p><b>11 SUSTAINABLE CITIES AND COMMUNITIES</b></p>	<p>ICTs can be leveraged to <b>organise cities and communities</b> more efficiently. <b>Smart cities</b> use ICTs and big data to improve public service delivery and to advance broad policy outcomes such as energy savings, safety, urban mobility and sustainable development. (*)</p>
 <p><b>4 QUALITY EDUCATION</b></p>	<p><b>Target 4.b:</b> By 2020, substantially expand globally the number of scholarships available to developing countries [...] for enrolment in higher education, including vocational training and <b>Information and communications technology, technical, engineering and scientific programmes</b>, in developed countries and other developing countries.</p>	 <p><b>12 RESPONSIBLE CONSUMPTION AND PRODUCTION</b></p>	<p>ICTs, and especially broadband, have directly connected consumers and producers and given rise to "<b>on demand</b>" markets of products that can be customised and localised, which can save time, reduce transport costs and contribute to more efficient and sustainable consumption. (*)</p>
 <p><b>5 GENDER EQUALITY</b></p>	<p><b>Target 5.b:</b> Enhance the use of enabling technology, in particular <b>Information and communications technology</b>, to promote the empowerment of women.</p>	 <p><b>13 CLIMATE ACTION</b></p>	<p><b>Target 15.8:</b> Fully operationalise the technology bank and science, technology and innovation capacity-building mechanism for least developed countries by 2017 and enhance the use of enabling technology, in particular <b>Information and communications technology</b>.</p>
 <p><b>6 CLEAN WATER AND SANITATION</b></p>	 <p><b>7 AFFORDABLE AND CLEAN ENERGY</b></p>	 <p><b>14 LIFE BELOW WATER</b></p>	<p>Use of the <b>Internet of Things</b> can help make monitoring the environment cheaper, faster and more convenient. (*)</p>
 <p><b>8 DECENT WORK AND ECONOMIC GROWTH</b></p>	<p>ICTs can contribute to improving water and energy access by using <b>mobile solutions, smart grids and meters</b> to advance efficiency, manage demand and develop new ways to expand access. (*)</p> <p><b>Target 8.2:</b> Achieve higher levels of economic productivity through diversification, <b>technological upgrading and innovation</b>.</p> <p><b>Target 8.3:</b> Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, <b>creativity and innovation</b>, and encourage the formalisation and growth of micro-, small and medium-sized enterprises, including through access to financial services.</p>	 <p><b>16 PEACE AND JUSTICE</b></p>	<p>The use of ICTs in the public sector can improve the range and uptake of <b>digital government services</b>; strengthen the performance of public institutions and enhance transparency and the participation of all citizens. (*)</p>
 <p><b>17 PARTNERSHIPS FOR THE GOALS</b></p>		 <p><b>15 LIFE ON LAND</b></p>	

Source: OECD (2016), *Broadband Policies for Latin America and the Caribbean*, [www.oecd-ilibrary.org/science-and-technology/broadband-policies-for-latin-america-and-the-caribbean\\_9789264251823-en](http://www.oecd-ilibrary.org/science-and-technology/broadband-policies-for-latin-america-and-the-caribbean_9789264251823-en), based on United Nations General Assembly (2015), "Transforming our world: the 2030 Agenda for Sustainable Development", <https://sustainabledevelopment.un.org/post2015/transformingourworld>.

For example, donors are helping to attract private investment that is needed to bridge the digital divide by providing developing countries with technical support and risk-mitigation mechanisms that help to crowd-in private funds. Aid commitments to ICT projects stood at USD 1 billion in 2017, and they are mostly in the form of technical assistance for regulatory reform. Once the regulatory framework is in place, this increases the

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willingness of the private sector to invest in ICT hardware. The 2017 OECD-WTO aid for trade monitoring exercise found that ICT is prioritised in the development strategies of two-thirds of donors, while nearly all developing countries (90%) anticipate the need for future assistance in this area. Donors also report that this area is attracting growing demand.

**Q1:** What are the potential benefits of digital transformation for developing countries?  
What are the main challenges?

**Q2:** How can policy in developing countries benefit from digital transformation?  
What good practices and policy approaches can be identified?

**Q3:** What is the risk of early deindustrialisation as a result of digital transformation?  
What is the scope for leapfrogging?

**Q4:** How can the OECD help in addressing these challenges?