



Key points

- E-commerce and the digital economy offer opportunities for increased productivity, entrepreneurship, innovation, job creation and access to new markets.
- Potential risks of the digital economy include a widening of existing digital divides, job loss, growing income inequality, loss of privacy and security problems.
- Given the multifaceted character of the digital economy, policymakers should holistically address a wide range of policy areas to maximize potential benefits while also dealing with relevant risks.
- Trade policymakers could benefit from engagement with policymakers in the Internet community.
- There is an urgent need to scale up international support to developing countries to enhance their readiness to engage in and benefit from e-commerce.



DIGITALIZATION AND TRADE: A HOLISTIC POLICY APPROACH IS NEEDED

The world is at the dawn of the next technological revolution, bearing transformational implications for all. Digitalization will create opportunities for entrepreneurs and businesses, and bring benefits to consumers. The global growth of e-commerce is a good example of this. However, many existing practices will be disrupted, and incumbents exposed to competition. Skills requirements of workers will change, and many jobs will be lost and created due to automation. Like previous large-scale economic transformations, the benefits will be immense, but they will not materialize through a smooth, cost-free transition. The net outcome will depend on policies undertaken at the national and international levels to build countries' capabilities – in a wide range of policy areas – to maximize the benefits of these transformations and ensure their equitable distribution. Consistency with international commitments such as the 2030 Agenda for Sustainable Development requires a strong international effort to ensure that no one is left behind in the transition to a digital economy. A holistic policy approach towards digitalization and trade would be a step in the right direction towards recognition of the right of people in developing countries to connect to the new world of technological progress and benefit from the prosperous future they deserve.*

E-commerce continues to grow

Although e-commerce is a prominent feature of the evolving digital economy, it remains hard to measure. The growth of global e-commerce is an illustration of how the increased use of information and communications technology (ICT) is reshaping production and trade, with significant implications for developing countries. Official statistics relating to leading e-commerce markets, including business-to-business and business-toconsumer e-commerce, suggest that global e-commerce reached \$25.3 trillion in 2015. Business-to-consumer sales amounted to just over \$2.9 trillion, about 10 per cent of the overall global estimate. China has become the world's largest business-to-consumer e-commerce market (\$617 billion), followed closely by the United States of America (\$612 billion). The United States, however, reported the largestbusiness-to-businessmarket, worth more than \$6 trillion, well ahead of Japan (\$2.4 trillion). Except for China, no developing or transition economy was among the top 10 e-commerce markets in 2015.

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* This policy brief draws from UNCTAD, 2017a, *Information Economy Report 2017: Digitalization, Trade and Development* (United Nations publication, Sales No. E.17.II.D.8, New York and Geneva).

While the business-to-business segment represents the largest share of the e-commerce market, the business-toconsumer segment appears to be expanding rapidly. The potential for further growth is significant. In fact, in most developing and transition economies, people buying online form a small proportion of all Internet users. Unlike social networking, where activity rates are relatively high among Internet users in developing countries, the share of Internet users engaging in e-commerce is much smaller (see figure). This may reflect limited purchasing power and mitigating factors such as a lack of trust and limited shopping options, including content in local languages and poor delivery and payment services.

Most e-commerce is domestic in nature. Individuals and enterprises ordering or selling goods and services online across borders contribute to international trade and cross-border e-commerce. However, despite arowing interest in this mode of trade, there are virtually no official statistics on its value, as few countries publish official estimates of such transactions. Based on the limited information that does exist - derived from official statistics and market research - UNCTAD estimates that cross-border business-to-consumer e-commerce in 2015 amounted to \$189 billion, with some 380 million making consumers purchases on

overseas websites. Cross-border online business-to-consumer purchases in 2015 accounted for 1.4 per cent of total merchandise imports and were equivalent to about 7 per cent of domestic businessto-consumer e-commerce.

Opportunities and challenges from e-commerce and the digital economy

Digital transformations bring both and opportunities challenges for developing countries. In terms of opportunities, the application of ICTs can reduce transaction costs and enable the remote delivery of more goods and services. For example, the automation of customs declarations has helped shorten clearance and transit times. Access to ICT platforms and devices may enable sellers in developing countries to reach more potential customers in domestic and foreign markets in more targeted ways, often at less cost than through traditional channels. Furthermore, suppliers that rely more on e-commerce may be able to cut delivery costs, especially for digitally provided content. This has an impact on global value chains, as more inputs can be delivered remotely, which in turn facilitates the management of fragmented production networks.



Source: UNCTAD, 2017a. *Note:* Data for Turkey relate to 2016.

Greater ICT use can enhance the productivity of enterprises. The potential for productivity gains remains far from fully exploited in most developing countries. In addition, the digital economy offers opportunities for entrepreneurship, innovation and new job creation. A range of e-commerce players has emerged across developing countries and the least developed countries in recent years, offering new payment solutions, e-commerce platforms and innovative logistics. Digitalization can help businesses, in particular small and medium-sized enterprises. overcome barriers to their expansion. It can enable them to engage in peer-to-peer collaboration in innovation and use alternative funding mechanisms such as crowdfunding. In addition, new cloudbased solutions can reduce the need for investing in information technology equipment and corresponding in-house expertise. E-commerce can facilitate the scaling-up of micro, small and mediumsized enterprises by providing financing opportunities and the means to build verifiable online transaction records that may help attract new customers and business partners.

The roll-out of the digital economy also poses potential challenges, costs and risks. Digital divides and uneven access to affordable ICTs can lead to an inequitable distribution of benefits from e-commerce, which may bypass people with little education and literacy: people in rural areas; people with limited capability or rights to connect; and micro, small and medium-sized enterprises. There is concern that the widespread use of new technologies, automation and online platforms will lead to job loss, growing income inequality and greater concentration of market power and wealth. There is also a risk that it will have negative impacts on the bargaining power of users and consumers and will result in the loss of privacy. Moreover, companies, organizations, Governments and individuals should be prepared to respond to digital forms of undesirable behaviour - some of it criminal - that will move to the digital sphere alongside other social and economic activity.

Policies to unlock the potential for developing countries to benefit from trade and the digital economy

For developing countries to strengthen the development of e-commerce and the digital economy, policies should be geared towards maximizing the potential benefits and opportunities of digital transformations, while addressing relevant costs and risks. The policy challenge is contextual, varying in terms of a country's readiness to engage in and benefit from the digital economy, with the least developed countries generally being the least prepared to do so. The challenge is also multifaceted. A wide spectrum of policy areas would necessitate a holistic approach: ICT infrastructure; education and skills development; the labour market; competition; issues relating to science, technology and innovation, and taxation: and trade and industrial policies. for example. Such an approach requires effective cross-sectoral cooperation within Governments and with other stakeholders.

National and international policies are needed to address the lack of ICT connectivity in many developing countries, which is an obstacle for many enterprises to compete effectively online. Narrowing the digital divides and boosting ICT use would imply securing an open, transparent and fair telecommunications market, attracting investment and facilitating infrastructure imports of relevant equipment and services. Another critical area is education and training. All countries will need to adjust their education and training systems to deliver the skills required in the evolving digital economy. Workers should be able to expand their opportunities to retrain and upgrade their skills and make use of redistribution policies to mitigate the risk of increased polarization and income inequality.

It is important to enhance the ability of micro, small and medium-sized enterprises to participate in global value chains. Policymakers can explore ways to integrate digital solutions in export promotion. Trade promotion organizations should embed digital tools in the services

Share of economies with relevant e-commerce legislation (Percentage)

Region	Number of economies	Share in e-transaction laws	Share in consumer protection laws	Share in privacy and data protec- tion laws	Share in cybercrime laws
Developed economies	42	97.6	85.7	97.6	97.6
Developing economies Africa Asia and Oceania Latin America and the Caribbean	54 50 33	51.9 70.8 87.9	33.3 41.7 63.6	38.9 37.5 48.5	50.0 66.7 72.7
Transition economies	17	100	17.6	88.2	100
All economies	196	77	50	57.1	71.9

Source: UNCTAD, 2017b, Global Cyberlaw Tracker database.

they offer to small businesses. For instance, online platforms could be better leveraged to present businesses internationally and reach desired communities, facilitate data collection and analysis, and assess customer needs. There should be greater use of e-market solutions and social media platforms in events such as trade shows, and in other efforts to facilitate e-commerce. Public–private partnerships can also be useful in such a context.

Countries should deepen their understanding of the interface of trade logistics, digitalization and e-commerce. More and more goods are being delivered digitally rather than physically. At the same time, the expansion of e-commerce in physical goods implies fast growth in shipments of small parcels and low-value goods. Policymakers should explore and harness opportunities to embrace cross-border e-commerce and create conditions, procedures and resources to enable e-commerce to thrive, particularly in micro, small and mediumsized enterprises. New technologies may help overcome logistical bottlenecks; for example, they can help navigate traffic by calculating the fastest routes or identifying the most fuel- and time-efficient pick-ups.

As trade in goods and services is increasingly affected by digitalization, it becomes important for trade policymakers to consider how the Internet is governed and operated. The way in which trade policies are developed, involving State-to-State negotiations in closed rooms, differs greatly from how Internet policies are formulated. Internet governance is characterized by multi-stakeholder dialogues in more open settings. Trade policymakers could benefit by engaging with players in the Internet community to ensure that future agreements influencing trade in the digital economy are operationally feasible and politically sustainable.

Regarding cross-border data flows, the need for companies to collect and analyse data for innovation and efficiency gains should be balanced against the concerns of stakeholders regarding security, privacy and ownership of data. There is a need to move towards a unifying initiative or a smaller number of internationally compatible data initiatives. Enforcement of privacy and security obligations is often inadequate. Moreover, many developing countries still lack data protection in privacy legislation altogether (see table).

Lastly, for developing countries - especially the least developed countries - to benefit from e-commerce and the digital economy, overall assistance to this area must expand significantly and be made more effective. The current level of support is unsatisfactory: the share of ICT in total aid for trade declined from 3 per cent in 2002-2005 to 1.2 per cent in 2015. Proactive efforts are therefore warranted. One way to capitalize on existing knowledge and maximize synergies with partners is to tap into eTrade for all, a recent UNCTAD initiative. UNCTAD has also launched a project to help the least developed countries assess their readiness to engage in and benefit from e-commerce and other activities in the digital economy.

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