



POLICY BRIEF

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KEY POINTS

- Digital identity refers to the set of electronically captured and stored attributes and credentials used to uniquely identify a person
- Countries should establish policies that support a robust national digital identity framework to ensure their economies are regionally integrated, including through e-commerce
- Digital identification can provide a cost-effective means for developing countries to provide citizens with access to rights and services such as banking, schooling and collecting social benefits
- When effectively implemented, participation in the digital economy can be a powerful tool in helping to achieve the Sustainable Development Goals

Why robust digital identity systems are essential in fostering trade and development

The coronavirus disease (COVID-19) pandemic has accelerated the shift toward a more digital world in a way that will have long-lasting effects. Lockdown measures have led to a surge in electronic commerce (e-commerce), as consumers look for alternatives to in-person shopping. Such shifts in global consumer behaviour mean that a robust e-commerce framework is rapidly becoming an essential component of a regionally integrated economy. Moreover, e-commerce and other economic activities enabled by information and communications technology have the potential to accelerate progress towards all 17 Sustainable Development Goals. However, many developing countries face challenges when it comes to the promotion and implementation of e-commerce. Leading these challenges are consumer concerns over the cybersecurity infrastructure that underpins electronic transactions, especially the lack of strong methods of authentication to tackle fraud-related issues. To address such challenges, countries should establish policies that lead to the implementation of a robust national digital identity framework.



Such implementation involves building policies on digital identity, defining the limits of data protection and digital identity, determining the scope of digital identity governance and assessing risks and solutions related to digital identity.¹

The key to unlocking a more inclusive digital economy

Radically new social and economic opportunities have emerged for Governments, the private sector and individuals through the rise of digital technologies. Access to new information, resources and opportunities are emerging every day, and the speed of development is particularly fast with regard to e-commerce. Companies are leveraging e-commerce and other digital platforms to reach new clients, improve productivity and develop new business models.

Since 2017, UNCTAD has been working closely with developing countries and the least developed countries, through its eTrade Readiness Assessment programme, to consider key areas, including payment solutions, to help ensure that countries are prepared to benefit from the digital transformation. The digital economy presents a significant opportunity for economic growth and employment, yet one thing is clear: economies should be underpinned by a reliable digital identity framework.



Digital identity refers to the set of electronically captured and stored attributes and credentials used to uniquely identify a person. An individual's digital identity can include biographic data (e.g. name and date of birth), biometric data (e.g. fingerprints and facial features) and/or government-issued identification. Digital identity systems provide technology-based solutions for identification to uniquely establish a person's identity and verify credentials. This ensures that an identity can be securely and unambiguously asserted and verified through electronic means, for the delivery of services across Governments and the private sector.

Establishing a reliable system of digital identity is critical, to enable every person to fully participate in society and the economy. As such, it is the key to unlocking a more inclusive digital economy.

Digital identification can provide a cost-effective means whereby emerging economies can provide citizens with access to rights and services, including the ability to open a bank account, attend school, access health services, collect social benefits, seek legal protection and safely engage in online transactions. For example, in one report, emerging economies, through the use of digital identity, are estimated to have the potential to achieve an average benefit of 6 per cent of gross domestic product in 2030.²

1 See UNCTAD, 2020, *Digital Identity for Trade and Development: TrainForTrade[Train for Trade programme] Case Studies in South-East Asia* (United Nations publication, Geneva).

2 McKinsey Global Institute, 2019, *Digital Identification: A Key to Inclusive Growth*, Washington, D.C.

Many developed economies have made advancements in this area and developing countries are also implementing initiatives. For example, in India, the Aadhaar national digital identification system has directly led to the opening of over 150 million new bank accounts, many of which are for people previously unable to open an account.³ In addition, member countries of the Association of Southeast Asian Nations are seeking to leverage the region's digital integration framework by, among others, facilitating trade, protecting data and enabling seamless digital payments, including extending financial inclusion to underserved populations.⁴

Contributions to sustainable development

E-commerce is introducing a wide range of new opportunities to connect the unconnected to global trade, thereby contributing to economic growth, inclusive trade and job creation across developing countries. Ensuring countries are equipped with a reliable digital identification system is an essential part of creating a robust e-commerce system and is crucial to achieving inclusive development. With smart policies in place, the digital economy can be a powerful vehicle for helping to achieve the Sustainable Development Goals.

E-commerce and other economic activities enabled by information and communications technology have the potential to accelerate progress towards all 17 Goals. For example, digital technologies can allow women to directly participate in e-commerce trading and the e-commerce ecosystem and can therefore serve as a powerful tool for achieving gender equality. E-commerce and digitally enabled trade can support productive activities, decent job creation, entrepreneurship, creativity and innovation. In addition, e-commerce is encouraging the formalization and growth of microenterprises and small and medium-sized enterprises in both developing and developed countries. Cross-border e-commerce is also helping to significantly increase exports from developing countries, including the least developed countries.⁵

However, the potential for development should be balanced with the reality that many developing countries lack the capacity to fully engage in e-commerce. This is due to a range of factors, including a lack of access to information and communications technology infrastructure, transportation and logistical challenges, a lack of secure payment solutions and weak legal frameworks on data, consumer rights and intellectual property protection. The current e-commerce landscape is also skewed against latecomers and smaller players, in particular those from developing countries. Therefore, to ensure that e-commerce contributes to sustainable development, policies need to be carefully considered, to ensure that they maximize positive effects while mitigating and eliminating negative effects.

The establishment of a reliable digital identity system is the essential foundation for robust e-commerce sectors that form part of regionally integrated economies. E-commerce is economic in nature yet should not be considered in isolation from other areas of development. Digital identity is important as part of a holistic approach to achieving sustainable development. In this regard, Sustainable Development Goal 16, to promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels, includes target 16.9 to, by 2030, provide legal identity for all, including birth registration.

Considerations for policymakers

A number of policy recommendations have been elaborated based on discussions during the TrainForTrade four-year project on leapfrogging skills development in e-commerce in South-East Asia in the framework of the 2030 Agenda for Sustainable Development.⁶ These policy recommendations aim to support national and regional priorities and help deliver tangible results for the inclusive and sustainable development of digital identity as an integral part of a broader e-commerce framework.

3 World Bank, 2020, *The Digital Economy in South-East Asia: Strengthening the Foundations for Future Growth*, Washington, D.C.

4 Association of Southeast Asian Nations, 2019, Digital integration framework action plan 2019–2025, available at <https://asean.org/our-communities/economic-community/asean-e-commerce/key-documents/> (accessed 10 February 2022).

5 UNCTAD, 2020, The intricacies, impact and opportunities of e-commerce for trade and development, 22 June, available at <https://unctad.org/news/intricacies-impact-and-opportunities-e-commerce-trade-and-development> (accessed 10 February 2022).

6 See <https://tft.unctad.org/projects/trainfortrade-project-in-south-east-asia/> (accessed 10 February 2022). The recommendations were validated at a restitution workshop held in Indonesia from 6 to 9 December 2021, which included 110 participants from 17 countries.

First, when planning for the implementation of a national digital identity framework, Governments should formulate a clear vision of the objectives of the planned digital identification system. It is also important to explore the possible use of such a framework as a means of accessing other services, such as government identification issuance, voter registration, payment of taxes and banking. A wide range of electronic synergies is possible through a national digital identity framework, and Governments should seek to strike a balance between convenience and privacy requirements.

Second, Governments should take into account established best practices and international standards when implementing a national digital identity framework. Key aspects of the governance of digital identification systems include the following:

- Ensuring data privacy and security and safeguarding user rights by setting up a comprehensive and robust legal and regulatory framework
- Setting out clear institutional mandates and establishing accountability
- Leveraging independent oversight and the proper adjudication of grievances to bolster legal and trust frameworks

Third, Governments should engage in internal and external communications prior to implementing a national digital identity framework. For example, government institutions and the private sector need to be made aware of the many cross-cutting functions that digital identity can offer for social and economic development. Civil servants need to be equipped with the technical knowledge required to implement digital technology, particularly with regard to digital identification systems. Similarly, citizens need to be made aware of how to access such new digital technology, including through awareness campaigns on mobile platforms. Awareness initiatives should emphasize the risks and obligations of digitalization, through multi-stakeholder and multi-level advocacy activities. Trust-building exercises are also crucial in implementation, to establish confidence in the interaction between public and private service providers and users.

Fourth, with regard to operationalizing a national digital identity framework, Governments should be prepared for broad collaboration both within and outside the Government. National Governments should work with other levels of government to create an inclusive framework encompassing services, registration and statistics collection. Enhanced collaboration should also extend to interministerial and inter-agency collaboration on legislation pertinent to the digital economy, to foster compliance with cross-border regulations. Additionally, strong collaboration with the private sector is necessary to expand use cases of digital identity in a country, to increase the value added for businesses and citizens and to encourage efficient investment within the country, particularly in data infrastructure.

Fifth, Governments should establish effective institutional mechanisms to ensure the oversight of digital identification, cybersecurity and data protection. Among others, security issues require careful attention to ensure trust in an established digital identity framework, which entails engaging in ongoing efforts to develop legal texts on identity management and trust services, including cybersecurity and personal data protection.

Finally, to minimize the risk of obsolescence as the sector quickly develops, Governments should undertake regular audits and adapt systems accordingly. Also key are open standards and vendor neutrality, which refers to the implementation of national digital identity framework platforms and solutions that are operable across products and technologies provided by various suppliers, to avoid being locked in to a specific solution or equipment supplier.

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