

Module 1 Introduction to the Inclusive Digital Transformation Journey



Welcome to this course on inclusive digital transformation for the achievement of the Sustainable Development Goals in Small Island Developing States. This course was developed through a collaboration between UNDP, UNCDF and ITU and aims to offer perspectives on the specific opportunities and challenges for digital transformation in Small Island Developing States. This self-paced course consists of 4 modules. We recommend taking one module per week over a one-month period.

To get the full benefit of this course, you are encouraged to read all the course materials available in each module. A quiz will accompany each module and a badge will be provided at the completion of the course.

Fourth Industrial Revolution: Double-Edged Sword

Vast opportunities – Increased productivity and prosperity, increased inclusion

Daunting challenges – Increased exclusion, new risks to citizens, business and governments



Small Island Developing States as a group are among the most vulnerable countries in the world, and they have much to gain by harnessing the potential of the digital age, to turn challenges into opportunities, to be leaders of innovation and ensure prosperous and inclusive recovery from the pandemic. Across SIDS affordability and accessibility of ICT networks are continuously improving. SIDS economies are embracing digital transformation at an accelerated pace, particularly since the COVID-19 pandemic. They are leveraging important opportunities emerging from this digital revolution, which is considered to be the Fourth Industrial Revolution: tackling tourism shortages with emerging new markets of remote workers, tracking coral reefs and invasive species with underwater robots and drones, and building their climate responsiveness with improved forecasting and communications tools. Digital technologies are helping mitigate many of the challenges and particular vulnerabilities affecting SIDS and are a key catalyst for climate resilience and for broader innovation, and diversification of the economy.

However digital transformation is a double-edged sword. While on the one hand, it presents a world of opportunities, to significantly enhance productivity, create new industries, and improve the functioning and abilities of government. On the other hand, digital transformation introduces new risks to citizens, businesses and governments, which need to be carefully managed. Without any government intervention, digital transformation is likely to be limited to large companies, increasing their market power at the expense of the consumer, and increasing the digital divide and threatening their privacy. Therefore, it is important for governments to focus their efforts on helping to guide and manage the digital transformation, to support the design of digital products and services that meet the needs of marginalised groups, digital transformation can actually help to reduce the digital divide.

This key role of digital transformation was reflected in the Samoa Pathway mid-term review, in the SIDS Offer of UNDP, and will also be of crucial importance in building forward better – following the COVID-19 pandemic.

Key Concepts



In this Module we propose a set of definitions that will be used throughout. We define **digitisation** as the process of converting information from analogue into digital form. By itself, it does not change the business model.

The term **digitalisation** will be used to refer to the use of digital technologies to change a business model, or way of working, in order to provide new opportunities to create value – whether for citizens, customers, or organisations and institutions.

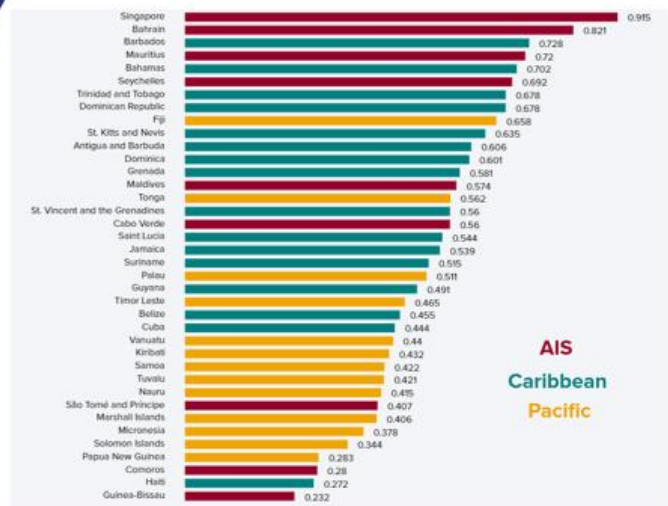
We define **digital transformation** as the development and implementation of an overall digitalisation strategy of a company or country, which includes organizational, regulatory, behavioural and as well as cultural change.

Digital Inclusion is the policy or practice of reducing the digital divide by making sure that all citizens of the world and all segments of the population have access to, use and experience benefits from digital services.

Finally, the term **digital economy** will be used to refer to the output from public, private, personal and social activities and transactions that use digital technology to improve productivity, create wealth and enhance quality of life. While you do not need to learn the definitions by heart, the quizzes that are part of this course do require you to be able to recognise these definitions.

The State of the Digital Transformation in SIDS

E-Government Development Index in SIDS, UN-DESA, 2020

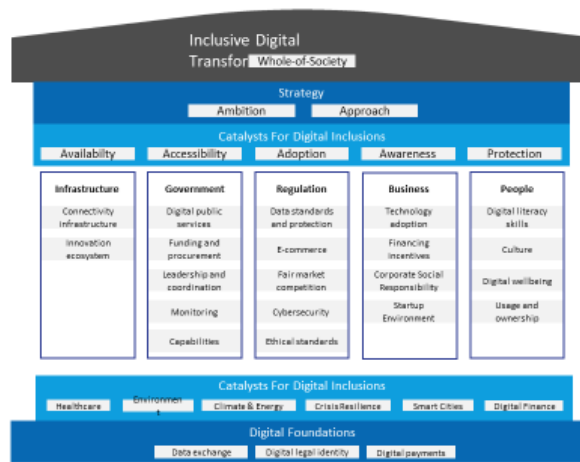


The technology revolution has allowed many SIDS countries to leapfrog several stages in their development, and is continuing to reshape the economy and society.

The UN DESA E-Governance Index is a composite index tracking human capital, digital infrastructure and government online service delivery. SIDS as a group are characterized by the highest variance in their E-governance index ratings, which range from 0.23 in Guinea-Bissau to 0.92 in Singapore. The latter is one of the world leaders in e-government development and is part of the highest rating group, along with Bahrain, the only other SIDS country at this rating. Many other SIDS have made important progress, transitioning from the middle to the high EGDI group such as Cabo Verde, Saint Lucia, Jamaica and Suriname. Pacific SIDS, with highly dispersed populations are among the furthest behind.

Mobile phones have been an important catalyst in digital transformation, and they have been rapidly transforming the economy, public and financial service delivery, including for those often left behind. Today around 50% of the combined adult population of Fiji, Samoa, Solomon Islands and Tonga have a mobile money account. For many small islanders, this is the first formal financial service they have used. Other innovations – such as 3D printing, drones, cloud computing, and data infrastructure – are also lowering the barriers to the digital economy. However, the small market size of SIDS presents a persistent challenge to make some digital services profitable, slowing the process of digital transformation, as we will learn more about in Module 3.

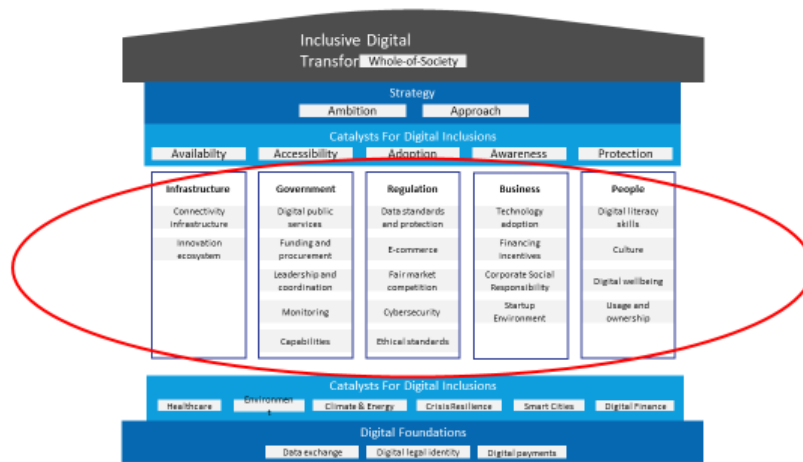
The UNDP Digital Transformation offers a framework for SIDS countries to transform their digital economy.



- 5 Pillars
- Sectoral Opportunities
- Cross-cutting digital foundations

To help us better assess the digital transformation journey, UNDP has developed a digital transformation framework that aims to support prioritization, planning and implementing of digital strategies and initiatives. It is a top-level framing that can be adapted by each country based on national priorities and development objectives. The Framework for a whole-of-society digital transformation breaks down into the 5 core pillars of government, infrastructure, regulation, business, and people. These pillars are supported by sectoral opportunities, such as in healthcare or energy and are based upon digital foundations of data exchange, digital legal identity and digital payments. In this course we will explore each of these foundational pillars and their key elements for supporting a whole-of-society digital transformation.

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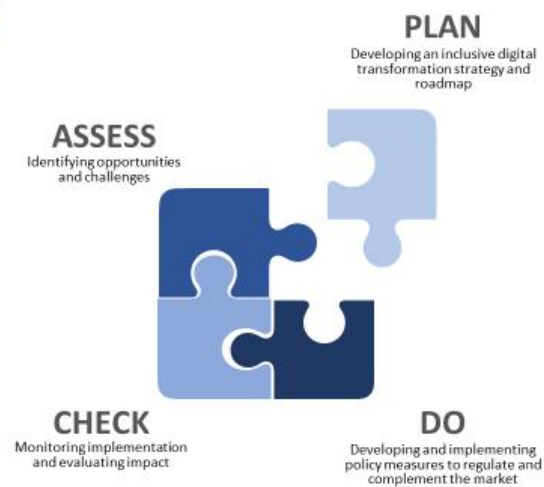
The foundation pillars are the key levers for accelerating progress towards digital transformation. Although they aren't necessarily sequential, there are definitely linkages and parallel activities across them. For example, an enabling environment creates conditions for the digital transformation to flourish, create jobs and provide quality services to citizens. It is essential for the development of the digital economy that the public and private sector invest in the necessary digital infrastructure, including payment systems.

The digital economy requires a strong business ecosystem that fosters private initiative, and that provides technical and financial support to those willing to innovate. Not the least, for the digital economy to work, people need to develop basic, intermediate and advanced digital skills.

- Strong foundational pillars allow private companies and nonprofits in different sectors of the economy to build digital platforms, products and services in critical sectors like industry, trade, financial services and agriculture.
- Strong foundational pillars also allow national, regional and local governments to build digital platforms, and products and services in in critical sectors like education, health and governance.

Digital Transformation Journey An Ongoing, Iterative Cycle

The inclusive digital transformation journey consists of a series of steps, the crucial ones being:

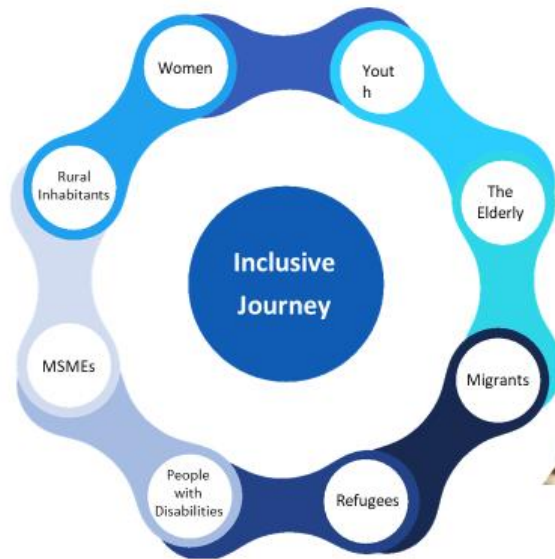


The diagram on this slide describes the different steps in a country's digital transformation strategy.

- When governments wish to embark on a systematic inclusive digital transformation journey, it is a good idea to start with a thorough analysis or diagnostic. Based on this, government officials can identify opportunities as well as the key market and internal constraints hindering the development of an inclusive digital economy and set the right priorities to foster a digital economy that leaves no one behind.
- The next step in the journey is the development of a national inclusive digital transformation strategy. The strategy should be informed by a participatory process with stakeholders and accompanied by a roadmap that sets out detailed actions, clear targets and deadlines and the lead institutions responsible for implementation. Senior sponsorship – both political, and within the public sector – is crucial in shaping a mandate for digital transformation.
- A national inclusive digital transformation strategy needs to be translated into laws and regulations that the government needs to develop and enforce, as well as fiscal and financial policies in support of inclusive digital transformation.
- An ongoing step in the inclusive digital transformation journey is the careful monitoring of implementation and evaluation of impact of the strategy and the specific instruments used. It is important that lessons learned are taken into account in the update of the digital transformation strategy.

Overall, it's important to recognise – and remember – that digital transformation is an ongoing process, a cycle equiring exploration, experimentation, and iteration.

Ensure No One is Left Behind



Inclusion in the digital era is not a given. Technology is not neutral, and it can lead to either inclusion or exclusion based on how it is deployed. Active measures are needed to ensure new forms of exclusion are not introduced. In its “Leaving no one behind in the digital era” strategy, UNCDF places particular importance on the inclusion of disadvantaged, marginalised or vulnerable groups.

Gender inequality in the physical world is replicated in the digital world. There is a large gap in women and girls’ digital adoption and use of digital technologies compared to men and boys, with women and girls less likely to own smart phones and to access the internet as regularly. This limits women’s access to the full range of opportunities offered by digital. Equally women and girls face higher exposure to violence and abuse in technology-enabled spaces.

The COVID-19 pandemic has accelerated the uptake of digital technologies, but it has also exacerbated inequalities, with disparities in access to the internet threatening education and other essential services. Disparities are driven by many factors. User interfaces and digital services require careful customization to meet the needs of people with disabilities or the elderly. Rural inhabitants may have lower access to broadband or even electricity. Migrants and minority groups may experience difficulty finding local content in their own language.

As the digital economy expands into all aspects of life, economic and social growth increasingly depend upon people’s ability to use technology. For young people in SIDS, ensuring access to technology and the development of digital skills has become a critical factor in their future job prospects.

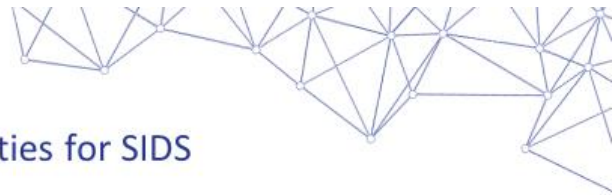
UNDP defines inclusive digital transformation as a thoughtfully designed and implemented change process that puts people at centre of digital transformation to leave no one behind. It aims to build a more responsive, agile, transparent and accessible society. It has four main characteristics. It:

- **Addresses** the needs of the most poor and vulnerable, including those not connected
- **Mitigates** the tendency of digital transformation to exacerbate existing inequalities

- **Empowers** underrepresented groups to take part in a meaningful way
- **Protects** people from the adverse effects of digital technologies



As we close this introductory module, let me emphasize that digital transformation is not the end in itself. Rather as governments embark on their digital transformation journey, the ultimate objective is the tremendous progress that can be achieved by fully harnessing the possibilities offered by advances in technology. As experienced worldwide during the pandemic, digital technologies serve as a powerful tool to facilitate the much needed social and economic transformation to meet the Sustainable Development Goals. The traditional supply-side, siloed approaches to provide these services do not address the problem in a holistic and sustainable manner. It is important to take a step back from driving digital innovations in individual sectors to see how the foundational elements of the digital transformation drive progress across all sectors. So, in planning for this transformation, a whole- of-government and whole-of-society approach helps to ensure success. The transformation that is needed will be difficult to drive from the ICT ministry alone and high-level champions across government play a key role. Stakeholders in private sector, academia and civil society are also key players. A whole-of society approach that integrates across ministries and stakeholder groups is an important way to ensure that the foundational elements and investments needed for this digital transformation are considered priorities that will directly support progress across the SDGs. You can read more about this in the additional materials.



Opportunities for SIDS



Policy-makers and government officials in SIDS may wish to seek inspiration from a number of regional and global developments:

- CARICOM has embarked on a journey to accelerate digital transformation in the Caribbean Region, as outlined in its Digital Development Strategy and Single ICT space workplan, with special meetings to fast-track digital transformation in the wake of the COVID-19 pandemic. Recent advances in digital payments in the Eastern Caribbean and elsewhere also hold promise for transformation.
- In February 2020, the African Union published the Digital Transformation Strategy for Africa (2020-2030), and in line with the African Continental Free Trade Agreement, the Digital Transformation Strategy, aims for the creation of a secure Digital Single Market in Africa.
- In the Pacific, a regional e-commerce strategy and roadmap, is under development in 2021. This is a multi-stakeholder initiative to support digital trade and e-commerce across the region. To complement the work being undertaken at country level, as one of the five priorities of the Pacific Aid-for-Trade Strategy 2020-2025, to promote diversification of Pacific economies.
- At a global level, extensive knowledge resources and multistakeholder networks are available to support digital transformation. For instance, the GovStack initiative is an expert-driven and community-based platform, to enable countries to kickstart their journey by offering digital “building blocks” whereby governments can easily create or modify their digital platforms, services, and applications by also simplifying cost, time, and resource requirements.

Structure of this course



This brings us to the end of the introductory module of this course. The remaining 3 modules will provide an overview of the five pillars of digital transformation and offer information on the use of UN assessment tools to support the development of national digital transformation strategies.

In Module 2 we will cover the digital transformation pillars of the regulatory environment and the digital infrastructure needed to enhance access to digital solutions.

Module 3 addresses first the pillar of People, that is, the education, digital skills and culture surrounding digital, and secondly, the pillar of Business, the degree to which the private sector is driving innovation, and is empowered to embrace new technologies.

Module 4 looks at the leadership role and the pillar of Government to drive digital transformation across these pillars and deliver digital services. This module also provides a brief overview of the UNCDF and UNDP tools to support the development of Digital Transformation Strategies.

Thank you very much for listening. We wish you all the best with the course.