



Unlocking Public and Private  
Finance for the Poor



# INCLUSIVE DIGITAL ECONOMY SCORECARD REPORT NEPAL 2020

JUNE 2021



## THE UNITED NATIONS CAPITAL DEVELOPMENT FUND

The United Nations Capital Development Fund (UNCDF) makes public and private finance work for the poor in the world's 46 least developed countries. With its capital mandate and instruments, UNCDF offers 'last mile' finance models that unlock public and private resources, especially at the domestic level, to reduce poverty and support local economic development. UNCDF's financing models work through two channels: financial inclusion that expands the opportunities for individuals, households and small businesses to participate in the local economy, providing them with the tools they need to climb out of poverty and manage their financial lives; and by showing how localized investments – through fiscal decentralization, innovative municipal finance and structured project finance – can drive public and private funding that underpins local economic expansion and sustainable development. By strengthening how finance works for poor people at the household, small enterprise and local infrastructure levels, UNCDF contributes to SDG 1 on eradicating poverty and SDG 17 on the means of implementation. By identifying those market segments where innovative financing models can have transformational impact in helping to reach the last mile and address exclusion and inequalities of access, UNCDF contributes to a number of different SDGs.

# INTRODUCTION

## TO THE INCLUSIVE DIGITAL ECONOMY SCORECARD IN NEPAL

*The inclusive digital economy scorecard (IDES) is a policy tool to help governments set their digital transformation priorities. This tool identifies the key market constraints hindering the development of an inclusive digital economy and helps to set the right priorities with public and private stakeholders to foster a digital economy that leaves no one behind.*

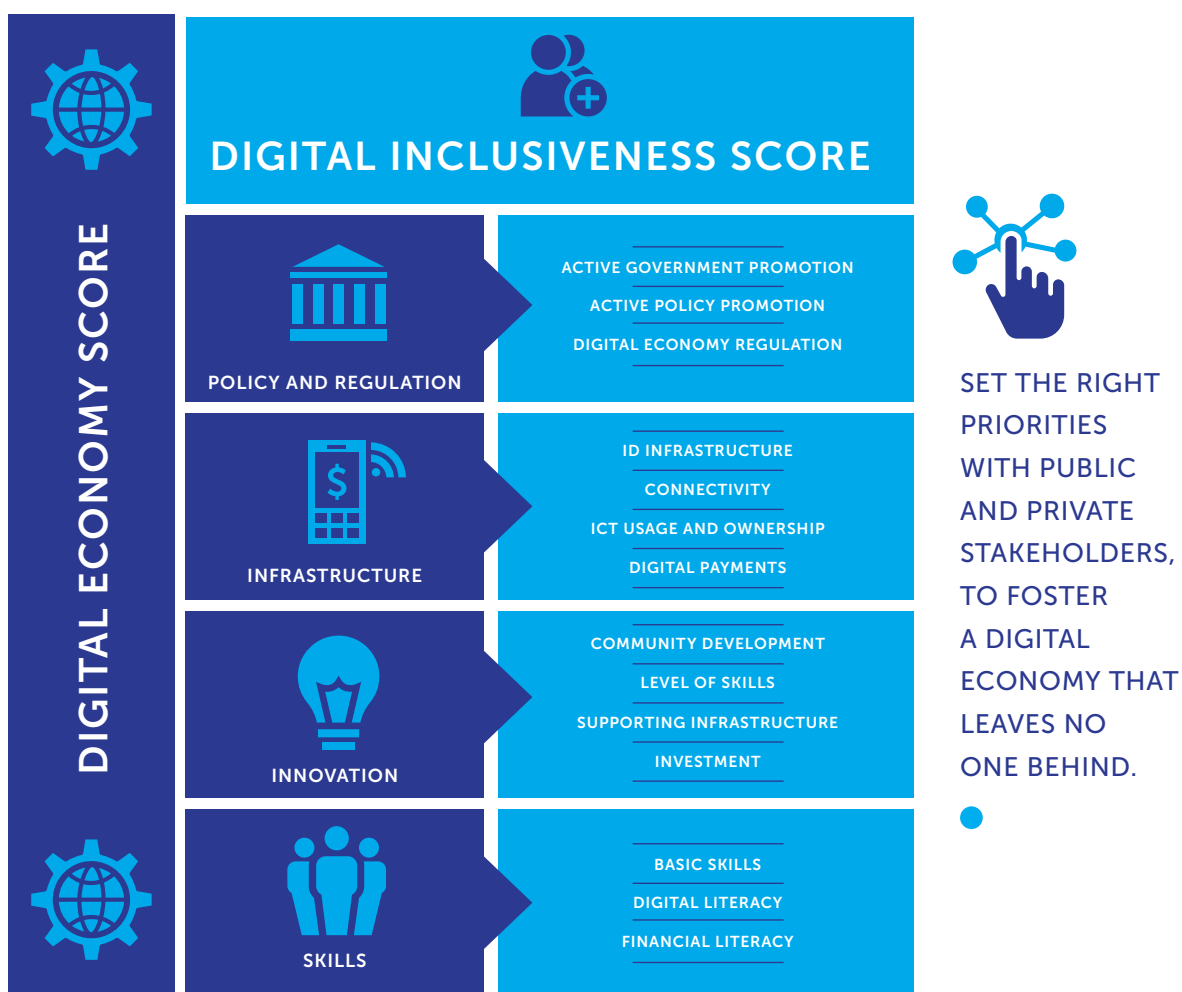


Figure 1. Foundations of the inclusive digital economy scorecard



NEPAL WAS ONE  
OF THE PILOT  
COUNTRIES FOR  
THE IDES IN 2020  
– TOGETHER  
WITH BURKINA  
FASO, SOLOMON  
ISLANDS AND  
UGANDA.

The IDES provides an overall score for the development of a digital economy based on several indicators for its main components – policy and regulation, infrastructure, innovation and skills. It also provides score for the inclusiveness of the digital economy for marginalized segments (rural population, women, youth, micro-, small- and medium-sized enterprises [MSMEs], refugees, older people and people with disabilities). The inclusiveness of the digital economy is measured primarily through the qualitative assessment of the efforts made by the public and private sectors to include specific segments in the expansion of the digital economy.

Nepal was one of the pilot countries for the IDES in 2020 – together with Burkina Faso, Solomon Islands and Uganda. The Government of Nepal and most particularly the National Planning Commission and the Ministry of Communications and Information Technology (MoCIT) were instrumental in reviewing the tool and finalizing the 2019–2020 version of the IDES. In June 2020, a broader consultation meeting with the National Planning Commission, the MoCIT, the Ministry of Finance and the Ministry of Agriculture was held to receive feedback from ministries on different aspects of the IDES.

The data used to implement the IDES in Nepal were gathered from published sources and coincided with its fiscal year (July 2019–July 2020). This report gives an overview of the development and inclusivity of Nepal’s digital economy at the end of the fiscal year 2020.

# DEVELOPMENT OF THE DIGITAL ECONOMY IN NEPAL AND ITS INCLUSIVENESS IN 2020

*The overall digital economy score for Nepal in July 2020 is 47 percent. This score positions the country firmly in the early start-up stage of a digital economy.*

The country's efforts to grow its digital economy are currently focused on strengthening an enabling regulatory environment, supporting the private sector to expand mass-market digital services and building the necessary telecom and financial infrastructure. This will lay the foundations for the innovation sector to grow in the future.

The digital inclusiveness score for the country is 46 percent, indicating that there is room for the public and private sectors to include marginalized segments (rural population, women, youth, MSMEs, the elderly, refugees and people with disabilities) in the developing digital economy.

The gender inclusiveness score is 57 percent, indicating that there is a need to develop more pro-women policies and opportunities for women-owned businesses to innovate and participate in the digital economy. While the country is strongly engaged in investing in the development of its digital economy, emphasis is needed towards all marginalized segments to ensure that the digital divide is lessened as the digital economy expands.

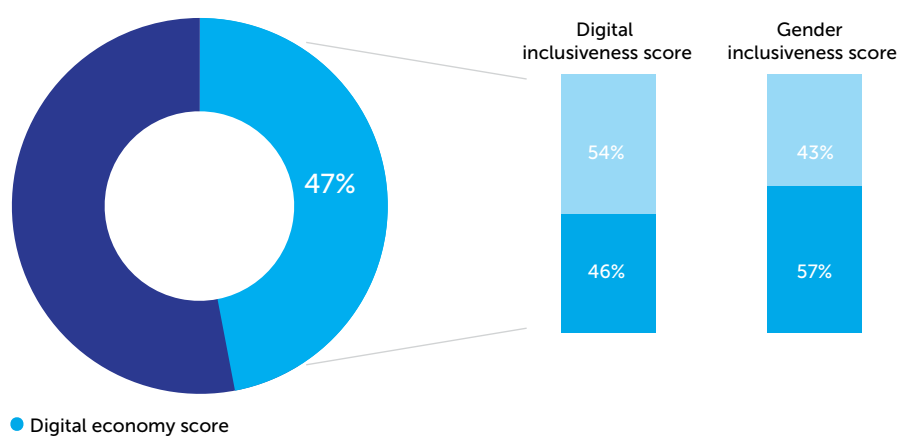


Figure 2. IDES score for Nepal, 2020

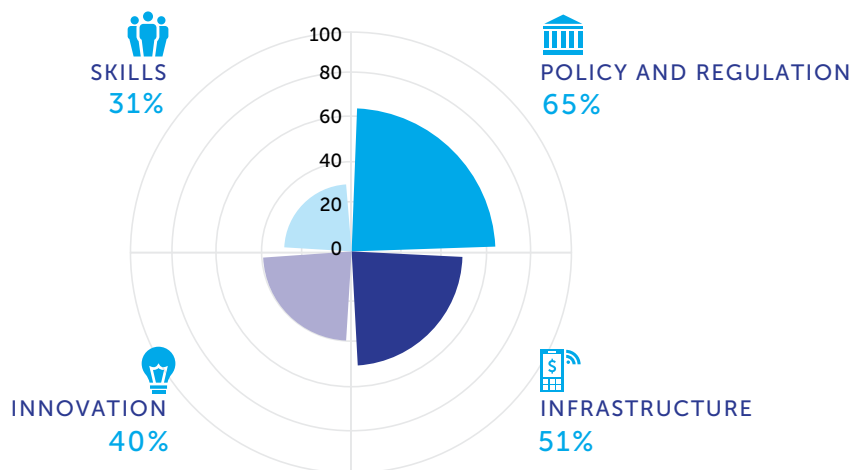


Figure 3. The digital economy score for Nepal, 2020



**THE COUNTRY CONTINUES TO BUILD THE FOUNDATIONAL DIGITAL RAILS THROUGH THE DIGITAL NEPAL FRAMEWORK AND OTHER POLICY INITIATIVES.**



The country continues to build the foundational digital rails (policy and regulation, infrastructure and skills) through the Digital Nepal Framework and other policy initiatives, for the citizens to access and use the basic digital services, mainly in the telecommunications and finance sectors. The score of 65 percent on policy and regulation shows that the government has made great progress to spur the development of a digital economy. The score of 51 percent on infrastructure reflects that the country needs to increase access to and usage of mass-market digital and financial services, in particular in the rural areas. The score of 40 percent on innovation shows, on the one hand, the capacity of the country to attract finance for entrepreneurs in the digital economy to a certain extent. On the other hand, it highlights the limited development of the innovation ecosystem with few incubators or start-ups launching services combined with the low level of development of payment services and the lack of open systems, thus not allowing digital innovation to grow rapidly. The score of 31 percent on the skills component evidences the need to invest in developing the digital capabilities of citizens and a digital-ready workforce.

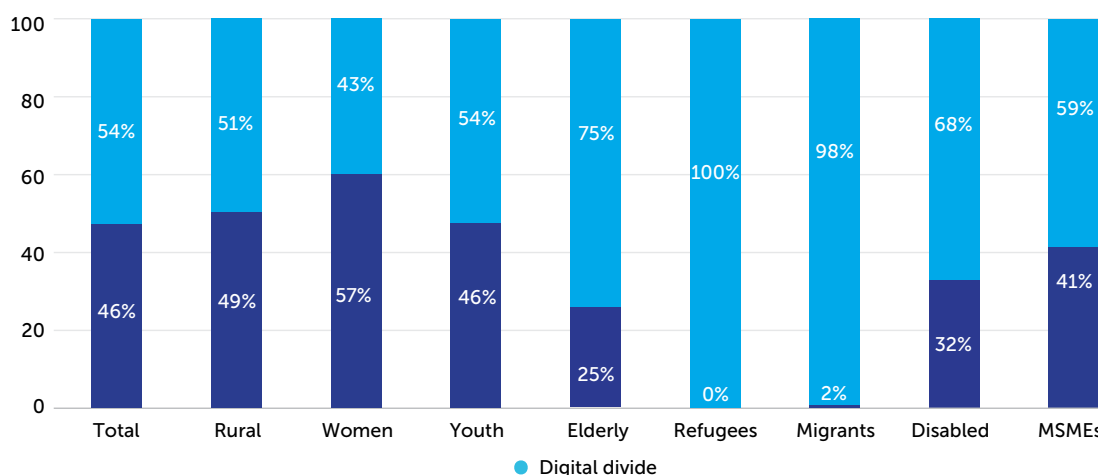
# INCLUSIVENESS OF NEPAL'S DIGITAL ECONOMY DEVELOPMENT

*Digital inclusiveness score is 46 percent, and the gender inclusiveness score is 57 percent. If inclusiveness barriers in the four dimensions of the IDES are not addressed by the public and private sectors in the years ahead, these key segments of the population in Nepal are at risk of being further excluded from the benefits of the digital economy.*

As 48 percent of the population are below 25 years of age,<sup>1</sup> youth unemployment is 21 percent,<sup>2</sup> the gender inequality index positions Nepal at 110 out of 162 countries,<sup>3</sup> the agricultural sector produces 67 percent of total employment<sup>4</sup> and MSMEs are key to the economy of Nepal, it is imperative that the government and the private sector develop strategies and action plans to increase the digital inclusiveness scores for youth, women, the rural population and MSMEs, currently at 46, 57, 49 and 41 percent, respectively. While older people and people with disabilities represent only a small percentage of the population, they should also benefit from the tremendous opportunities of the digital transformation in Nepal.



**MARGINALIZED GROUPS SHOULD ALSO BENEFIT FROM THE TREMENDOUS OPPORTUNITIES OF THE DIGITAL TRANSFORMATION IN NEPAL.**



**Figure 4.** Digital inclusiveness by segment in Nepal, 2020

1 Government of Nepal, National Planning Commission, Central Bureau of Statistics, <https://cbs.gov.np/>  
 2 International Labour Organization, [www.ilo.org/kathmandu/lang--en/index.htm](http://www.ilo.org/kathmandu/lang--en/index.htm)  
 3 UNDP, Gender Inequality Index, <http://hdr.undp.org/en/content/gender-inequality-index-gii>  
 4 The World Bank

# KEY COMPONENTS AND SUB-COMPONENTS OF NEPAL'S DIGITAL ECONOMY

## POLICY AND REGULATION

*The score of 65 percent for policy and regulation indicates that policies and regulatory frameworks provide a good foundation for establishing an enabling environment for the development of the digital economy.*

For instance, the National Information and Communications Technology (ICT) Policy provides a vision for transforming Nepal by leveraging the ICT sector; the National Broadband Policy seeks to expand broadband availability across the country; and the Retail Payment Strategy provides the basis for safe and efficient payment systems in Nepal. Furthermore, under the leadership of the MoCIT, several government agencies and public administrations (National Planning Commission, Ministry of Finance, Nepal Telecommunications Authority, Nepal Rastra Bank, etc.) are actively promoting the development of the digital economy. In this context, the 2019 Digital Nepal Framework clearly identified a programmatic agenda leveraging digital technologies across different sectors of the economy (that is, finance, agriculture, education, energy, etc.).

However, the government must address key gaps in the regulatory environment to fully support the transformation into a digital economy.

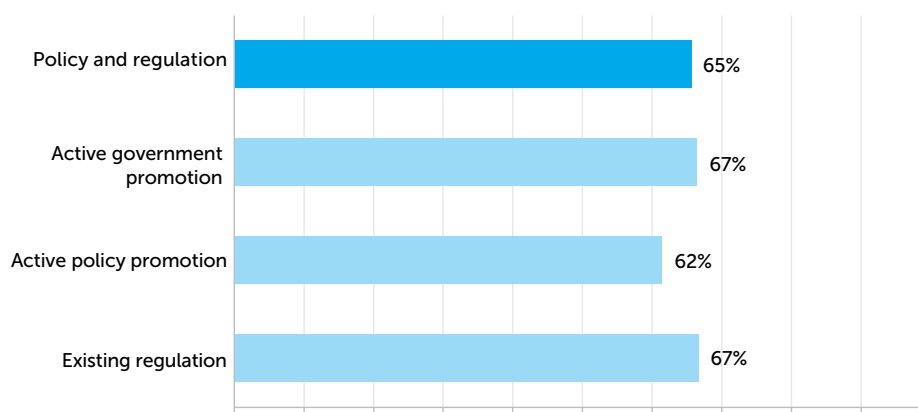


Figure 5. Breakdown of the policy and regulation score, 2020



A regulatory priority for the government should be to develop a wider data-driven public–private dialogue on the digital economy to ensure that the current policies and regulations have the expected impact in the market. The findings from these policy dialogues will help the government to learn more about the impact of policy actions, to continuously improve current frameworks and to develop new regulations that respond to the dynamic development of the digital sector. This dialogue should focus on the marginalized segments to reduce the digital divide in the country, in particular for women, youth and those living in rural areas. Specific policy recommendations include the following:

- Promote a forum for collaboration with external stakeholders (public–private dialogue) to further assess regulatory constraints to the development of an inclusive digital ecosystem – and gauge the need to adapt the regulatory framework accordingly to deliver better results and policy outcomes – with a clear focus on the inclusion of marginalized segments.
- Organize a dialogue among public sector institutions to provide guidance and agree on a common vision on how to streamline legal development work among different government agencies involved in the digital economy.
- Develop policies and regulatory frameworks that enable a secure and interoperable digital payment system and a robust framework ensuring data protection, security and privacy.
- Strengthen the institutional capacities of the MoCIT with the establishment of an effective coordination mechanism to monitor the implementation of 2019 Digital Nepal Framework.
- As part of the implementation of the 2019 Digital Nepal Framework, encourage ministries to launch action plans and set strategic objectives for the digital transformation of key sectors of the economy (agriculture, energy, education, health, etc.). Alternatively, identified ministries could integrate digital transformation into their general sectoral strategy.
- Assess, design, develop and implement the requisite digital skills training programmes for civil servants with commensurate investment needed to support the shift to e-government.
- Foster innovation in governance and leverage digital technologies to improve public service delivery, especially in rural areas.
- Through a whole-of-government approach, develop frameworks to enable the collection, access to and use of gender- and age-disaggregated data.



**A REGULATORY  
PRIORITY  
FOR THE  
GOVERNMENT  
SHOULD BE  
TO DEVELOP  
A WIDER  
DATA-DRIVEN  
PUBLIC–PRIVATE  
DIALOGUE ON  
THE DIGITAL  
ECONOMY.**



## INFRASTRUCTURE

*Developing all aspects of the digital infrastructure – digital ID, network coverage, ICT ownership and digital payments – is a broad focus in Nepal at the current stage of its development. Continuously improving connectivity, enabling more citizens to own a phone with a SIM card, easily accessing relevant financial services and starting to use digital payment services will remain a priority.*

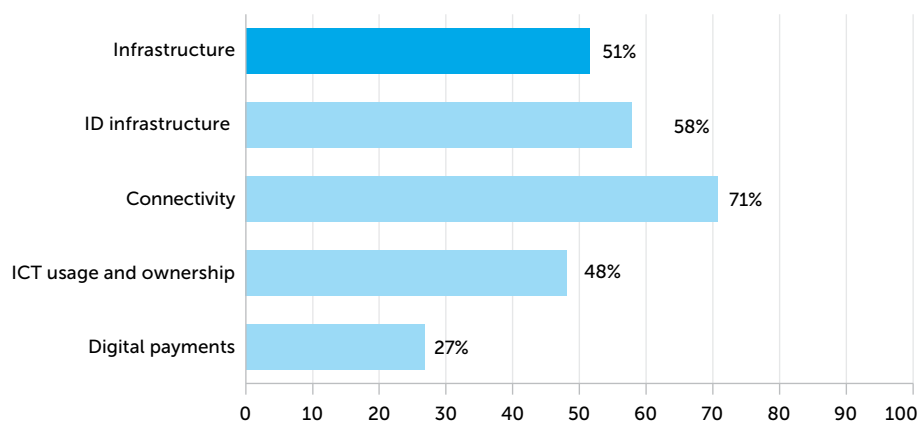


Figure 6. Breakdown of the infrastructure score, 2020



THE COUNTRY SHOULD FOCUS ON IMPLEMENTING OPEN AND INTEROPERABLE PAYMENT SYSTEMS.



The low score of 48 percent on ICT usage and ownership is linked to the low usage of (34 percent) and the affordability of mobile services and devices (44 percent) in the country. Similarly, the score of 27 percent on digital payments is linked to the low score on digital finance accounts (10 percent) and the low score on interoperable payment systems (32 percent). Nevertheless, the nascent nature of digital payments in the country makes these indicators significant ones to watch for improvement over the next years. While Nepal continues to focus on network coverage, interoperability, ICT ownership and the increase of usage of digital payments, the country could also focus on these infrastructural priorities:

- The government and private sector should start developing a strategy on the implementation of an inclusive digital ID to allow all citizens equal access to the digital revolution.
- The private sector should offer the right incentives to increase access and usage of smartphones and the Internet, particularly for marginalized segments of the population (women, youth, rural households and micro-entrepreneurs).
- The country should focus on implementing open and interoperable payment systems.
- The private sector should develop use cases and value propositions that benefit digital finance account holders.

## INNOVATION

*The innovation ecosystem is at an early stage (40 percent) in Nepal, with limited development and synergies in the innovation community (34 percent), with low skills available in the innovation community (39 percent), a low score on supporting infrastructure (36 percent) and a mid-level availability of financing at all stages of the entrepreneur journeys (53 percent).*

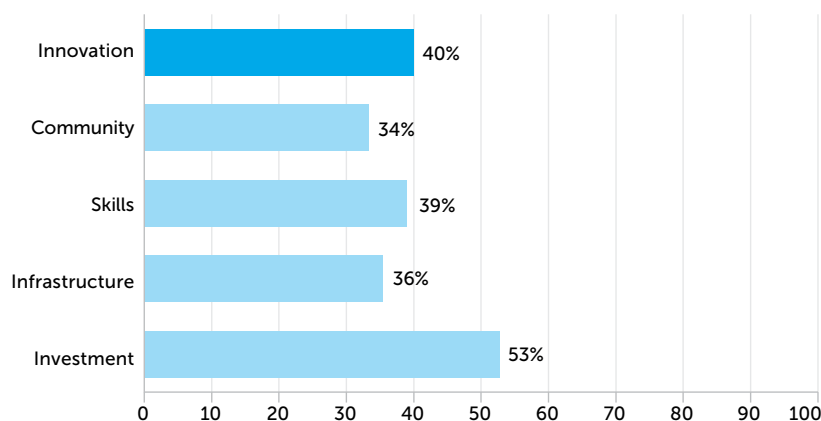


Figure 7. Breakdown of the innovation score, 2020

Furthermore, the innovation ecosystem cannot yet rely on strong and open digital infrastructure to develop mass-market digital products and services. The innovation ecosystem could benefit from a more cohesive organization and linkages among all stakeholders (incubators, entrepreneurs, mentors, investors, etc.) for more synergies and greater visibility. In this regard, Nepal could benefit from an enhanced public–private sector dialogue that includes business accelerators and venture capitalists to ensure mutual understanding and unlock private capital. A comprehensive mapping of the fintech and start-up ecosystem will provide a starting point to build upon.

Likewise, data collection on the effectiveness of different innovation-driven programmes, an analysis of the incubator/accelerator business models and financing/investment opportunities can contribute to building the pipeline of locally driven technology solutions for the benefit of marginalized populations. Structural constraints of the private sector, such as the low number of women-led MSMEs, the low human capital of the country or the low capacity to access private finance to start up a business, are also translated into the innovation ecosystem and should be addressed. Furthermore, the government should look at policies to facilitate and incentivize the development and growth of innovations in the country from both fiscal and business perspectives.



THE INNOVATION ECOSYSTEM CANNOT YET RELY ON STRONG AND OPEN DIGITAL INFRASTRUCTURE TO DEVELOP MASS-MARKET DIGITAL PRODUCTS AND SERVICES.



Some other recommendations include:

- Promote the development of fintech addressing a range of sectors (agriculture, education, health, commerce, energy) to meet diverse needs, particularly for harder-to-serve segments (women, rural population, youth).
- Develop tertiary schools focused on technology, coding or other skills greatly needed in the modern workforce.
- Foster forums for multisectoral collaborative partnership building, particularly between academia and industry research.

## SKILLS



SCHOOLS CAN BUILD ON THE APPARENT STRENGTHS TO FURTHER DEVELOP FINANCIAL EDUCATION AND DIGITAL SKILLS WITHIN THE SCHOOL CURRICULUM.



*The skills component has the lowest score of the four main components in the IDES for Nepal at 31 percent, which evidences the lack of digital skills and capabilities, especially among underprivileged populations and remote rural areas, as the key barrier for the transformation of Nepal into a digital economy.*

Although the score for basic skills (56 percent) is relatively high, the overall skills score is brought down by the lack of digital literacy (20 percent) and financial literacy (16 percent). The full potential of a digital economy is untapped when there are high levels of digital illiteracy among the population. Although some government initiatives such as the One Laptop per Child and Lab Model seek to develop the infrastructure in rural schools, there is no evidence of appropriate curricula to build digital skills, and only 12 percent of schools have Internet access. While the government should continue its efforts to increase basic skills and financial literacy, a key priority is to develop strategies and plans to increase the development of digital skills in the population, in particular in the last mile. This can be achieved at schools, in the private sector and by leveraging digital channels. By working with Nepal's Ministry of Education, schools can build on the apparent strengths to further develop financial education and digital skills within the school curriculum.

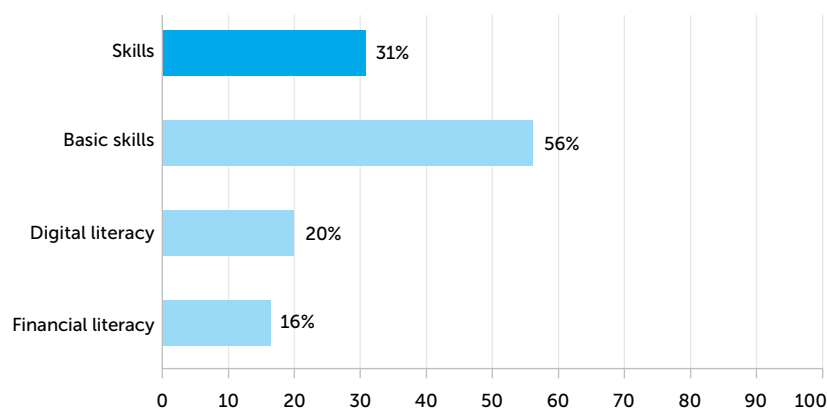


Figure 8. Breakdown of the skills score, 2020

# CONCLUSIONS

*The focus for a country such as Nepal – at the start-up stage of development of its digital economy – should remain on building the digital rails (policy and regulation, infrastructure, skills) while strengthening the foundation of an innovation ecosystem. In the case of Nepal, a specific focus to incentivize innovation and build a digital-ready workforce is key.*

With a low digital inclusiveness score, there is a pressing need for the government to mainstream marginalized segments (rural population, women, youth and MSMEs) in the development of its economy to ensure that no one is left behind. Recommendations for Nepal include:

- Set-up a cross-functional government-led reference group for the implementation of 2019 Digital Nepal Framework by leveraging the findings from the IDES with all the relevant stakeholders of the digital economy.
- Strengthen the capacities of the members and key actors of the reference group on the concept, tools and importance of the IDES and make sure to put inclusion at the centre of the group's discussion to increase inclusiveness in the country.
- Agree on clear priorities and objectives to implement policy recommendations for the country and measure progress yearly.
- Work with the MoCIT and the Central Bureau of Statistics to embed the use of the IDES in their annual planning and include data collection at the country level.
- Advocate the formulation of projects and programmes that address challenges and have a strong impact on accelerating the digital inclusion of marginalized populations.



THE GOVERNMENT SHOULD AGREE ON CLEAR PRIORITIES AND OBJECTIVES TO IMPLEMENT POLICY FOR THE COUNTRY AND MEASURE PROGRESS YEARLY.






## LEAVING NO ONE BEHIND IN THE DIGITAL ERA

The UNCDF strategy 'Leaving no one behind in the digital era' is based on over a decade of experience in digital finance in Africa, Asia and the Pacific. UNCDF recognizes that reaching the full potential of digital financial inclusion in support of the Sustainable Development Goals (SDGs) aligns with the vision of promoting digital economies that leave no one behind. The vision of UNCDF is to empower millions of people by 2024 to use services daily that leverage innovation and technology and contribute to the SDGs. UNCDF will apply a market development approach and continuously seek to address underlying market dysfunctions.

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