

USHERING IN A NEW ERA OF SUSTAINABLE DEVELOPMENT THROUGH DIGITAL PUBLIC INFRASTRUCTURE IN NEPAL

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2024

ASIAN INSTITUTE OF DIPLOMACY AND INTERNATIONAL AFFAIRS

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Abstract

Embodying an urgent call for action, the Sustainable Development Goals, a set of 17 goals was adopted by all the United Nations member states in 2015 under the 2030 Agenda for Sustainable Development.ⁱ These goals aimed to combat political, economic, and environmental challenges that plagued the world. However, progress on these goals has been stalled in the face of several challenges. This research paper attempts to build on existing research on the premise of how Digital Public Infrastructure can catalyze progress on the Sustainable Development Goals. Here, I have taken the case of Nepal, a landlocked South Asian nation that has exhibited a steadfast and enduring commitment to the SDGs, being the first country in the world to publish its SDG Country Report.ⁱⁱ To help expedite the realization of the SDGs, the utilization of Digital Public Infrastructure is gaining traction, which was emphasized in the 2023 G20 'Digital Economy Working Group'.ⁱⁱⁱ During this event, the leaders identified DPI as a crucial instrument and enabler for inclusive and sustainable development. The paper chiefly examines the current state of Digital Public Infrastructure in Nepal, looking into the challenges and opportunities. It further examines how digital public infrastructure can solve contemporary development challenges in Nepal. It concludes by providing recommendations that may prove to be beneficial in Nepal's development trajectory.

Key Words: DPI, SDGs, development, digitalization, Nepal Digital Framework, DaaS

1. Renewing Focus on the 2030 Agenda

The year 2023 marked the halfway point in the 2030 Agenda^{iv}. This forced the stakeholders to reexamine their strategies and served as a turning point in the discourse. A characteristic feature of the SDGs is that they are 'cross-cutting', that is, attaining progress in one of the goals would consequently result in the progress of the other SDGs. The core principle underlying these goals is conserving the existing resources and developing them for future generations. However, despite their importance, it is evident that attaining progress on these goals has been put on the back burner. According to the 2024 SDG Report, in the backdrop of several conflicts and wars that afflict people all around the world, millions of lives have been uprooted, resulting in an alarming number of refugees (37.4 million) and forcibly displaced people (approx. 120 million). To add to this precarious situation, civilian casualties in armed conflicts rose by 72 percent between 2022 and 2023, a catastrophic spike since the adoption of the agenda. The report also points out the fact that a mere 17% of the SDGs are on the road to realization. While

nearly half are progressing, albeit sluggishly, progress on over a third of the goals has stagnated or even deteriorated^v.

Nepal has reinforced its commitment to the SDGs on multiple occasions. Besides being the first country in the world to publish its SDG Country Report in 2015, the Nepal Government has also partnered with the United Nations to nationalize the SDGs. This resulted in cooperation in the spheres of implementation of the SDGs, mobilizing resources, and systematic tracking of the targets' progress by 2030. The initiative of “Sustainable Development Goals, Status, and Roadmap: 2016-2030 is a testament to this cooperation. This partnership has also resulted in the simplification of reviewing and analyzing development finance policies and initiatives, thereby generating a “National Integrated Financing Framework”^{vi}. Although Nepal has achieved 67.07%^{vii} of its goals, it must make considerable headway to fully realize these goals by 2030. Symbolizing SDG 17 – Partnership for the Goals, the United Nations Development Programme partnered with India in light of its 2023 G20 presidency to bring about a report titled “Accelerating the SDGS Through Digital Public Infrastructure: A Compendium of the Potential of Digital Public Infrastructure”^{viii}. This report explored the transformative potential of DPI, analyzed successful cases of DPI from around the world, and connected them to various SDGs. This played an important role in fortifying the connection between DPI and SDGs. Often described as a shared means to many ends, Digital Public Infrastructure (DPI) is defined as “a set of digital systems that enables countries to safely and efficiently provide economic opportunities and deliver social services”^{ix}. By bringing about digital transformation, it plays a significant role in the delivery of public services all across the globe, thereby becoming a driving force for achieving SDGs.

2. The Growing Significance of Digital Public Infrastructure

The COVID-19 pandemic was one of the factors that sped up the process of digitalization. It prompted a rise in demand for digital services and sped up the digitalization of economic production and services. This necessitated an equally comparable integration of technologies into all walks of life, with the world fast becoming dependent on digital technologies, especially concerning governments and other institutions involved in resource management. This underscores the requirement for an efficient digital public infrastructure. While improving communication and data processing was the initial focus of digital public infrastructure, its range has since expanded to other digital systems and services that are now considered indispensable for the efficient delivery of public services.

Knowing what it entails is imperative to understand how DPI works effectively. The technological foundation of DPI lies in innovations like artificial intelligence, IoT (Internet of Things), and blockchain. DPI has two main components: the core DPI and the DPI use case/applications.^x The core DPI is the part that deals with the collection and sharing of information on digital identification, including platforms that enable digital payments from the public to the private sector and platforms to share information and data between institutions. They include digital identity systems, electronic payment systems, and data exchange systems.

On the other hand, use cases encompass digital solutions across many sectors such as digital technologies for pandemic tracking, and digital satellite products in agricultural development.^{xi} DPI includes an approach to digital transformation that emphasizes open solutions, open standards, and open protocols. It acts as a digital scaffold to enable the delivery of effective public services at scale. With a commitment to providing technical assistance and funding support for implementing DPI in low- and middle-income countries, DPI can catalyze sustainable development.

3. Unlocking the Transformative Potential of DPI

DPI offers several avenues for improving the efficiency, reach, and impact of public services and activities. Effective DPI building and further integration into various industry sectors will go a long way toward realizing the SDGs. DPI can, for instance, make financial services efficient and inclusive to spur economic growth within the financial sector. It can hasten economic growth by up to 33 percent.^{xii} (*The Human and Economic Impact of Digital Public Infrastructure*, n.d.) This may help in achieving SDGs, particularly, ‘No Poverty’ (SDG 1) and ‘Decent Work and Economic Growth’ (SDG 8).

However, DPI can have broader development benefits beyond the acceleration of economic growth. DPI also has the potential to facilitate good governance of digital building blocks to unleash an ecosystem of public and private sectors that deliver digital services at the largest scale.^{xiii} It also has the potential to be a strong tool for social and political inclusion, rights protection, and transparency. For example, strong identity programs can prevent child marriage, slavery, and human trafficking^{xiv}. Another example would be how DPI, when applied skillfully in the education sector, can facilitate distance learning, provide a vast variety of materials, and allow for personalized education which would all greatly improve education, thereby catalyzing progress on ‘Quality Education’ (SDG 4). By harnessing the power of digitalization, DPI can help meet the ambition of global sustainability goals. DPI can also enable crucial data sharing needed to arrive at solutions that mitigate climate change, enable communities to proactively plan for adverse weather events, and allow for faster climate responses when disastrous which would go a long way in facilitating ‘Affordable and Clean Energy’ (SDG 7), ‘Sustainable Cities and Communities’ (SDG 11), Responsible consumption and production (SDG 12) and ‘Climate Action’ (SDG 13). It is also to be noted that DPI has enormous potential to enhance governance and transform the provision of public services. Through the digitization of administrative processes, smart infrastructure development, renewable energy integration, citizen engagement, and innovative waste management solutions, DPI can support a country’s journey toward a more sustainable future. DPI initiatives promote digital access and enable the development of smart infrastructure and sustainable urban planning. For example, Singapore has introduced a comprehensive data collection and analysis solution called Smart Nation Sensor Platform (SNSP) whose data integration capabilities extend beyond collecting environmental data. It also incorporates data from transportation systems, public utilities, and other urban infrastructure components. Such systems have the potential to optimize resource allocation, enhance energy efficiency, and

improve overall sustainability.^{xv} While there is huge potential for progress with DPI, this would largely depend on the state of the infrastructure in any country. Here we shall examine the current state of Digital Public Infrastructure in Nepal.

4. Methodology

The paper primarily reviewed and incorporated findings from official reports and journals. This served as a foundation for the conceptual understanding of the theme. A survey was further conducted to gather insights into the current state of digital public infrastructure in Nepal. The questions focused on the following aspects of digital public infrastructure:

1. Digital Access
2. Digital Literacy and Skills
3. Financial Inclusion
4. Digital Governance

The survey consisted of a combination of both close-ended and open-ended questions. We received 30 responses, with the survey in English and Nepali generating 24 and 6 responses respectively through the medium of Google Forms. Based on these responses, a qualitative analysis was formed and incorporated into the study. The responses provided insights into the gaps and challenges present in the digital public infrastructure in Nepal. The inclusion of open-ended questions proved to be valuable not only in the analysis of general trends and perceptions among the public but also served as a medium for suggestions for improvement.

Limitations of the study

The survey was conducted online due to the paucity of time and resources. The participants for the survey were chosen purely based on their accessibility to the researcher. As the survey was conducted in an online mode, this restricted the respondents to those who had access to digital devices. Hence, the findings of the survey may not represent the experiences of the entire population.

5. The State of Digital Public Infrastructure in Nepal

5.1. Positive Developments in Nepal's Digital Landscape

Nepal has made significant strides in the process of digitalization. Digital services are being rolled out in several spheres. Be it ride-hailing applications such as 'Pathao' and 'inDrive', payment platforms such as 'e-Sewa' and 'IME Pay', or websites and apps catered towards online shopping such as 'Daraz', and 'Jeevee'. Nepal has also partnered with international organizations to improve its digital public infrastructure. The Digital Nepal Acceleration Project^{xvi} with the World Bank is one such example. The financial sector is also offering web and mobile-based banking services, which is a leapfrog towards a modernizing digital financial market. The volume of digital transactions has also increased^{xvii} together with the development

of digital platforms and other advanced technology. Digital tools are also becoming increasingly popular in supporting education and research processes. For example, the Ministry of Education, Science, and Technology has launched a learning portal for students from classes 1 to 10^{xviii}. Online resources, in particular, are being utilized by students and professionals studying or involved in professional practice. Many have adopted digital financial services since they save time, are convenient to use, and are secure. In addition, online government services are being made available to the public, although they are being rolled out sluggishly^{xix}. Digital technologies are also being employed in the health sector as well, assisting appointments and consultations, thereby improving access to services. Generally, technology has been perceived to facilitate daily life through improved efficiency and convenience.

5.2. Nepal Digital Framework

The 2019 Digital Nepal Framework^{xx} was formed to guide how digital initiatives can be used to facilitate economic growth. It also explores opportunities for new and effective ways of solving major social problems and opens up opportunities for Nepal to integrate into the international economy. The framework comprises eighty activities under eight sectors—digital foundation, agriculture, health, education, energy, tourism, finance, and urban infrastructure. The government has recently backed a steep rise in ICT growth, but it has not yet materialized into something formidable and concrete. The government seems to have given a push to the project four years after Nepal adopted the Digital Nepal Framework, as the Ministry of Communications and Information Technology announced an investment of NPR 22 billion^{xxi} for the same. The World Bank is also lending NPR 5 billion, and business loans amounting to NPR 17 billion for the same project^{xxii}. Digital projects within the private sector are being extended gradually to government organizations. By 2025, global digital transformation investment is predicted to reach US \$ 2.8 trillion from US \$ 1.8 trillion in 2022^{xxiii}. As per the Nepal Rastra Bank Report, FDI in Nepal in the Information and Communication Technology sector has reached NPR 10,858 million^{xxiv}, comprising 4.8 percent of the total FDI stock.

5.3. Roadblocks to Digitalisation

Despite these positive developments, many challenges persist. Nepal has been striving to catch up with furious digitalization across the globe in the quest for sustainable development. For example, Internet connectivity has remained a problem for many parts of the country; slow speed and frequent outages are hampering online processes. To add to this, even though several initiatives have been introduced to improve the state of digital public infrastructure in Nepal, they have not been effectively implemented. For example, the Nagarik App has not been effectively implemented for public service delivery.

Have you used online government services (like Nagarik App) for any purposes such as applying for documents?

24 responses

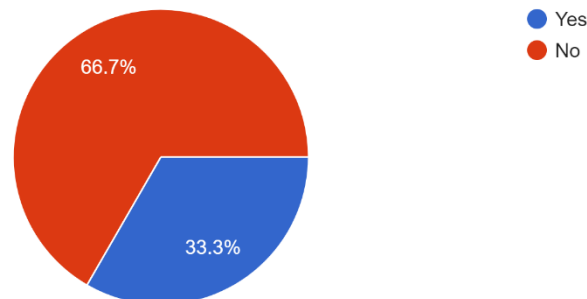


Chart sourced from survey responses (English version)

Complex interfaces and less Nepali language support stand as a barrier to the utilization of digital services. Even during instances where programs to improve digital literacy are introduced, the general public remains largely unaware of such initiatives. This consequently results in the digital exclusion of several segments of society and further propels the marginalized sections into deprivation. Thus, a digital divide is brought about due to low digital literacy and uneven infrastructure development, which creates gaps, specifically between urban and rural areas. There are also heightened privacy concerns, as users are very suspicious about the safety of their data. This fear is justified as there are cases wherein a government might misuse digital ID programs by deploying them for political and social control, while a private sector firm might misuse digital ID for commercial gain by influencing consumers.

Even as the number of internet users in Nepal saw a significant spike, the country's digital literacy seems to not be at par. A recent report by DataReportal under their Global Digital Insights^{xxv} indicated that while internet users in Nepal were 15.40 million in January 2023, by January 2024 they had increased to 15.85 million. This depicts a growth rate of 1.1%. In percentage, the rate of internet penetration comes out to be 49.6%. Data from The Global Broadband Test by Ookla also depicted increases in both mobile and fixed internet speeds, with the total number of mobile connections surpassing the population figures. Specifically, it had 37.47 million connections for a 120.6 percent penetration rate. However, this growth in number is shadowed by a low digital literacy rate of about 31 percent, which is far beneath the financial literacy rate of 57.9 percent that the Nepal Rastra Bank reported (*FINANCIAL LITERACY FRAMEWORK*, 2022). Unlike concentrated infrastructure and development in the urban hub of Nepal, villages lack services like health, education, and finance. While penetration of the Internet is growing, its use remains spotty. Reliability, complexity of the user interface, and lack of Nepali language support are some of the greater barriers. This 'digital divide' cripples the prospects of Nepal moving into the digital age. It is also reflected in the country's ranking in the UN e-Government Development Index (125th position out of 193 countries) and E-

Participation Index (143rd position out of 193 countries)^{xxvi} which illustrate the limited effectiveness of online government services and citizen engagement. Most infrastructure and socio-economic developments in Nepal are centered in a few large cities while people in remote rural areas continue to struggle with poor infrastructure and limited access to basic services such as healthcare, education, and financial services. The digital footprint in Nepal is on the rise, with increasing numbers of people across age groups and occupations owning digital devices and gaining access to the internet. However, for most, it is still very unaffordable, especially in rural areas. DPI is a double-edged sword. Even though it has the potential to generate benefits, it is to be wielded carefully as it can also be used for purposes that can prove detrimental. The challenges range from the existence of a digital divide to inadequate network infrastructures, low levels of digital literacy, unclear policies and regulations, high costs of the internet, concerns over data privacy and security, and a digital divide.

6. Recommendations for Maximizing the Potential of DPI

To realize the potential of digital technology, Nepal must combat existing challenges and maximize upcoming opportunities. By adopting better practices and relevant strategies, Nepal can increase its pace in the development of DPIs. Effective DPI requires one of its cornerstones to be a robust digital identity system. A good digital ID may be the foundation for access to essential services, financial inclusion, and empowerment of citizens. Apart from the economic benefits, digital IDs can also improve social and political participation, protection of rights, and transparency. With the right technology for digital ID, founded upon sound principles and backed by effective policies, we would have a better opportunity to secure people against exploitation and bring billions of them into the digital economy. Currently, Nepal runs multiple overlapping identity systems, some of which are inefficient and prone to error. All these would have to be collapsed into one interoperable digital ID system. The Modular Open-Source Identity Platform (MOSIP) provides a promising framework through which to construct such a system.^{xxvii} A comprehensive national data strategy is needed to capture the full value of digital ID and other DPI components. Decentralized interoperability mechanisms can make the sharing of data between agencies easier and safer in a way that supports government implementations of a "once-only" policy for citizens.^{xxviii}

Nepal stands to benefit by learning from already established digital systems and practices that have been tested out by other nations. For instance, the United Payments Interface in India and Mojaloop^{xxix} implemented in Malawi and Rwanda serve as good examples of digital payment systems. Through assistance from DPI, like digital payment systems, we could clone models of success such as Angola's Kwenda program^{xxx} which paved the way for the broader adoption of digital financial services through government-to-public initiatives by using digital payments for social assistance. The Ayushman Bharat Digital Mission of India and the Electronic Health Records system in Spain^{xxxi} offer several lessons in building digital health ecosystems. The use of blockchain in the land registry by Sweden^{xxxii} maybe used as a potential model for reforming property rights administration. The education sector is another opportunity for DPIs. Nepal can also make use of global initiatives like 'Giga'^{xxxiii}, which is a partnership between UNICEF

and the International Telecommunication Union that aims to connect every school to the Internet and provide learning resources digitally. A supportive digital ecosystem, with wide adoption, is required for DPI to reach its full potential. That will mean improving digital literacy, the reduction of costs of internet access, and the development of clear and enabling regulations. In addition, governments can promote the use of digital signatures in official transactions, thus driving the usage of digital ID cards when accessing e-government services. Working on these areas and drawing lessons from good practices in other parts of the world, Nepal can build a firm foundation for DPI that will be instrumental in building the paths of inclusive growth, service delivery improvement, and enhancing citizens' participation.

6.1. Catering to Nepal's needs: DPI as a Packaged Solution

DaaS (DPI as a Packaged Solution) is a model under digital public infrastructure. In contrast to the traditional and more capital-intensive models of DPI, DaaS comes packaged, cloud-based, and flexible, and is well-suited for rapid deployability, particularly in smaller nations like Nepal. This accelerates the adoption rate of DPI through standardized, modular components that have the ability for fast proof-of-concept demonstrations. By combining open source-based digital public goods with pre-trained technology service providers, DaaS has greatly compressed the development life cycle of DPI, together with resource requirements.^{xxxiv}

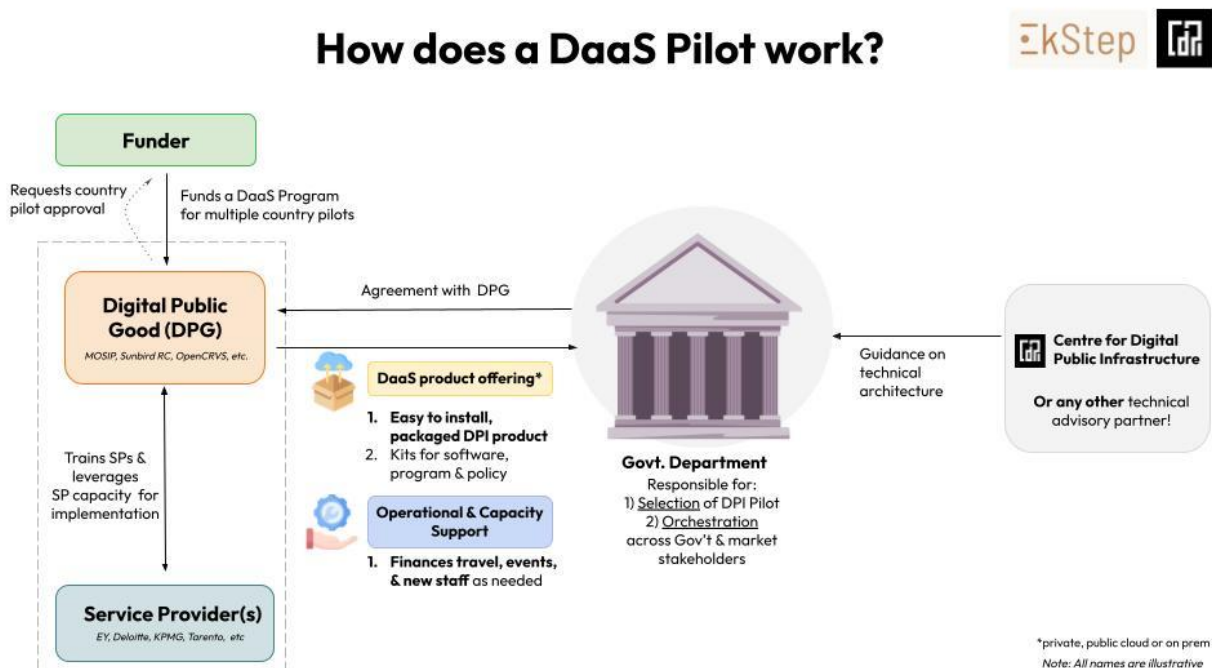


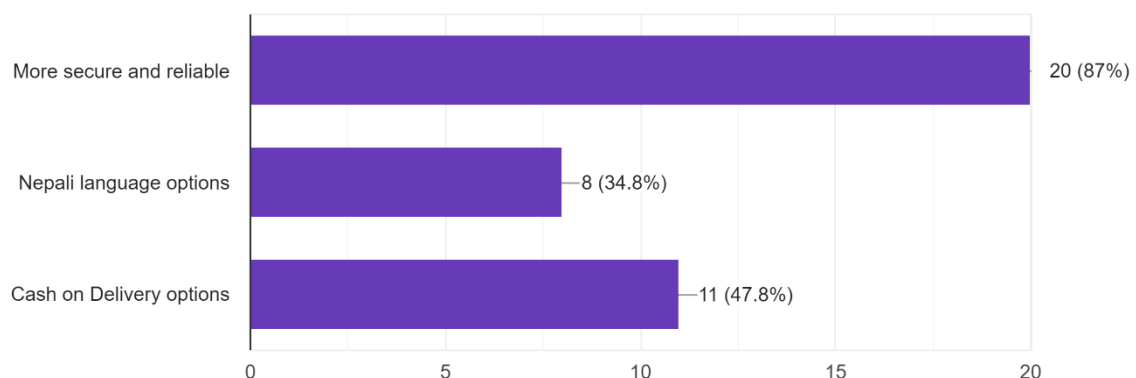
Image source: DaaS in a nutshell | Centre for Digital Public Infrastructure. (n.d.). <https://docs.cdpi.dev/initiatives/dpi-as-a-packaged-solution-daas/daas-in-a-nutshell>

DaaS can fast-track Nepal's path to digital transformation through strategic use in Nepal and can be a game-changer in the acceleration of the delivery of much-needed digital public services, bringing efficiency to services, and bridging the digital divide. Further, the post-pilot customization enables it to align with Nepal's specific national priorities and context. DaaS has

the potential to become a very strong tool in the achievement of the SDGs in Nepal. It can assist in evidence-based policy formulation, resource allocation, and delivery, including the ease of access to data. For instance, DaaS can be applied in supporting disease surveillance, resource optimization, and impact assessment (SDG 3 – Good Health and Well-Being). DaaS can also be applied in planning, disaster management, and traffic management under urban development (SDG 11- Sustainable Cities and Communities). The economic potential of DaaS is equally promising. It can fuel entrepreneurship by giving data-driven insight into trends in the market and consumer behavior. DaaS can further amplify the unique strengths that Nepal possesses, particularly hydropower and agriculture. Additionally, it has the potential to attract FDI by highlighting Nepal's investment potential by giving data-driven insight into agriculture, tourism, and renewable energy sectors. In hydropower, real-time data about water flow and electricity demand could optimize growth. In agriculture, data on soil quality, weather patterns, and market prices could raise productivity and support product development. On the effective harnessing of the power of DaaS, Nepal will be well on its way to digital transformation, attainment of the SDGs, and unlocking the full potential of its natural resources and comparative advantages. Adding on to this, several other initiatives could further expedite progress on the realization of the SDGs.

What would make online services better for you ? (Select all that apply)

23 responses



Graph sourced from survey responses (English version)

Investing in robust infrastructure to support improved connectivity and affordability of the internet is key. Developing user-centric platforms with Nepali language support could improve user experience and access. Strengthening cybersecurity engenders trust in digital services. Comprehensive digital literacy programs should not only be introduced but also effectively implemented to empower citizens and bridge this digital divide. Moreover, the development and enhancement of e-government services for their wider use can help reduce bureaucracy and offer better service delivery. Last but not foremost, addressing gender-specific needs and challenges in the digital age is indispensable on the road toward gender equality and

inclusiveness. Such strategic attention to these areas will help Nepal leverage digital technology in creating economic growth, and public services, and raising the quality of life for its citizens.

7. The Road Ahead

The integration of DPI into Nepal's development trajectory is significant to realize the Sustainable Development Goals. DPI, being a crucial medium for delivering important services, has huge potential for transforming health, education, agriculture, and governance. With mechanisms such as the diffusion of digital technologies, improved accessibility of the internet, mobile phone usage, and so on, Nepal would be in a better position to tap into industries related to e-commerce, online services, and digital entrepreneurship, therefore promoting innovation and attracting investments for economic growth. The government, regulators, service providers, the public, and all other stakeholders should work jointly to reduce the digital divide and explore the digital economy across the nation. Concerted efforts from both governments and the business sector will be essential to overcome obstacles and seize the opportunities brought forth by the digital revolution.

The upcoming United Nations Summit of the Future which will be held this year from the 22nd – 23rd of September^{xxxv} is a key opportunity for accelerating global action on SDG achievement. This is such a critical juncture that calls for collective global action in taking stock of progress, new challenges, and strategic ways to boost implementation towards the attainment of SDGs. Artificial intelligence and digital technologies had just made their incipient steps forward when the 2030 Agenda was adopted in 2015. Therefore, the Summit of the Future will explore how these fast-changing technologies could interact with the implementation of the SDGs and the innovative strategies that may be required to unlock their transformative power and accelerate progress. This includes the imperative for adaptation and strengthening multilateral governance frameworks to advance the 43 commitments of the Political Declaration of the SDG Summit.^{xxxvi} Global digital cooperation should be based on realizing all the benefits that digital technologies have to offer while sharing them fairly. The summit's focus on how digital technologies can be used to help address pressing global challenges resonates deeply with Nepal's aspirations for DPI-driven development. If Nepal were to actively contribute to the summit, the nation would be in a better position to influence the global discourse on digital cooperation and advocate for policies that promote the development and deployment of DPIs. This attainment of the SDGs should be interpreted as a collective duty, and Nepal's commitment to attaining progress on DPI signifies its commitment to a resilient and prosperous future.

ANNEXE 1: QUESTIONNAIRE (ENGLISH)

This survey aims to gather insights into the current state of digital public infrastructure in Nepal. It is part of a larger study looking into how digital public infrastructure can help catalyze progress on the SDGs.

1. Age:
2. Location (District):
3. Occupation:
4. Do you have a digital device (phone, computer, tablet) and internet access? (Yes/No)
 - If yes, rate your internet reliability
(Very/Somewhat/Unreliable)
 - How affordable are data packages?
(Very/Somewhat/Unaffordable)
5. How comfortable are you using the internet and digital services?
(Very/Somewhat/Not comfortable)
6. Have you used online educational resources (websites, courses)?
 - If yes, how has it benefitted your education?
7. Do you use digital financial services (mobile wallets, online banking, Fone pay/E-Sewa)?
 - If yes, how does it compare to traditional methods?
8. Have you used online government services (eg: Nagarik App, applying for any documents)?
 - If yes, how easy was it to navigate
(Very easy/Somewhat easy/Difficult)?
9. What are the biggest challenges you face accessing digital services?

10. How can Nepal improve digital infrastructure and services in your opinion?
11. Would you say technology has made your daily life easier or harder?
12. Have you used the internet for healthcare-related activities (appointments, consultations)?
- If yes, how did it improve your access?
13. How has the internet changed your experience with shopping and banking?
(More/Less convenient/No change)
14. What would make online financial services and shopping more appealing (select all that apply): -
- More secure and reliable
 - Nepali language navigation
 - Cash on delivery options
 - Other (please specify)
15. Have you felt excluded from accessing services due to limited digital skills? (Yes/No)
- If yes, what kind of training would be helpful?
16. Are you aware of government initiatives for digital literacy?
- If yes, have you participated? If so, how effective were they?
(Very/Somewhat/Not effective)
17. Has access to technology impacted opportunities or challenges faced by women in your community? (Yes/No)
18. Do you have any suggestions for us?

ANNEXE 2: QUESTIONNAIRE (NEPALI)

यो सर्वेक्षणले नेपालमा हालको डिजिटल सार्वजनिक पूर्वाधारको अवस्थाबारे जानकारी संकलन गर्ने लक्ष्य राखेको छ। यो एक ठूलो अध्ययनको भाग हो जसले डिजिटल सार्वजनिक पूर्वाधारले दिगो विकास लक्ष्यहरूमा प्रगतिलाई कसरी त्प्रेरित गर्न सक्छ भन्ने बारेमा हेर्छ।

प्रश्नहरू

१. उमेर:

२. स्थान (जिल्ला):

३. पेशा/व्यवसाय:

४. तपाईंसँग डिजिटल उपकरण (फोन, कम्प्युटर, ट्याब्लेट) र इन्टरनेट पहुँच छ?

(छ/ छैन)

- यदि छ भने, तपाईंको इन्टरनेटको भरपर्दानापन कस्तो छ? (धेरै/ मध्यम / भर नपर्दो)

- डाटा प्याकेजहरू कति सस्तो छन्? (धेरै सस्तो / मध्यम / महँगो)

५. तपाईं इन्टरनेट र डिजिटल सेवाहरू प्रयोग गर्न कतिको सहज हुनुहुन्छ? (धेरै/मध्यम / असहज)

६. तपाईंले अनलाइन शिक्षा स्रोतहरू (वेबसाइटहरू, कोर्सहरू) प्रयोग गर्नुभएको छ?

- यदि छ भने, यसले तपाईंको शिक्षामा कस्तो फाइदा पुऱ्यायो?

७. तपाईंले डिजिटल वित्तीय सेवाहरू (मोबाइल वालेट, अनलाइन बैंकिङ, फोनपे/ई-सेवा) प्रयोग गर्नुभएको छ?

- यदि छ भने, यो परम्परागत विधिहरूसँग कसरी तुलना गर्छ?

८. तपाईंले अनलाइन सरकारी सेवाहरू (जस्तै: नागरिक एप, कुनै पनि कागजातको लागि आवेदन) प्रयोग गर्नुभएको छ?

- यदि छ भने, नेभिगेट गर्न कतिको सजिलो थियो? (धेरै सजिलो/केही सजिलो/गाह्रो)

९. डिजिटल सेवाहरू पहुँच गर्न तपाईंले सामना गर्ने सबैभन्दा ठूला चुनौतीहरू के हुन्?

१०. तपाईंको विचारमा नेपालले डिजिटल पूर्वाधार र सेवाहरूलाई कसरी सुधार गर्न सक्छ?

११. तपाईंले प्रविधिले तपाईंको दैनिक जीवनलाई सजिलो वा गाह्रो बनाएको छ भन्न सक्नुहुन्छ?

१२. तपाईंले स्वास्थ्यसम्बन्धी गतिविधिहरू (अपोइन्टमेन्ट, परामर्श) को लागि इन्टरनेट प्रयोग गर्नुभएको छ?

- यदि छ भने, यसले तपाईंको पहुँचलाई कसरी सुधार गर्यो?

१३. इन्टरनेटले तपाईंको किनमेल र बैंकिङको अनुभवलाई कसरी परिवर्तन गर्यो? (अधिक/कम सुविधाजनक/कुनै परिवर्तन छैन)

१४. अनलाइन वित्तीय सेवाहरू र किनमेललाई थप आकर्षक केले बनाउन सक्नेछ ? (लागू हुने सबै चयन गर्नुहोस्) :

- सुरक्षित र भरपर्दो

- नेपाली भाषा नेभिगेसन

- नगद डेलिभरी विकल्पहरू

- अन्य (कृपया स्पष्ट गर्नुहोस्)

१५. सीमित डिजिटल सीपका कारण तपाईं सेवाहरू पहुँच गर्नबाट बहिष्कृत महसुस गर्नुभएको छ? (छ/ छैन)

- यदि छ भने, कस्तो प्रकारको तालिम उपयोगी हुनेछ?

१६. तपाईं डिजिटल साक्षरताको लागि सरकारी पहलहरू बारे जानकार हुनुहुन्छ?

- यदि छ भने, तपाईंले भाग लिनुभयो? यदि हो भने, तिनीहरू कतिको प्रभावकारी थिए? (धेरै/ मध्यम/अप्रभावकारी)

१७. प्रविधिमा पहुँचले तपाईंको समुदायमा महिलाहरूले सामना गर्ने अवसरहरू वा चुनौतीहरूलाई असर गरेको छ?

(छ/ छैन)

१८. तपाईंसँग हाम्रो लागि कुनै सुझाव छ?

नोट: यो प्रश्नपत्रलाई स्थानीय भाषा र बोलीचालीको

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