Leveraging Global South Collaboration and Partnership Models to Drive Digital Transformation

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Summary

The findings reflect the implicative challenges and opportunities for SSTC policy development in facilitating digitalization in the Global South and provide recommendations addressing the relevant concerns. This brief thus aims to motivate professionals and decision makers from governments, multilateral organizations, international and regional banks and funds, academia, think tanks, the private sector, entrepreneurs, and civil society organizations to more effectively manage, implement and evaluate SSTC, and strengthen its respective national environment.

Key points:
- Digital technology has the power to unleash crucial developmental capacities for globalization and improve access and inclusion for many marginalized groups in society, such as women and children.
- The Southern economies should include digital advancements more comprehensively. SSTC for digital technology development is important for mobilizing the required domestic and international resources, capacity building and knowledge sharing in order to confront this pandemic and beyond.
- Efforts should be focused on five major areas of digital development challenges and opportunities including: the lack of policy development for digital cooperation; the potential of digitalization for sustainable development beyond COVID-19; the challenges of SSTC for the development of the digital economy; the inadequate modalities for the expansion of digital know-how; and the negative implications of the growing digital divide.
- SSTC, with its wealth of knowledge, experience, expertise, and other resources, plays an essential role in the digitization of the global economy and development – and especially, the economies of Global South.

Background

Digital technologies are transforming global development on a large scale, introducing potential for institutional reform and inclusive growth. Technology has the power to unleash crucial developmental capacities for globalization and improve access and inclusion for many marginalized groups in society, such as women and children. To take advantage of this potential, the Southern economies should include digital advancements more comprehensively.

Digital connectivity has become an important global metric for digital inequality, with 2.9 billion people still offline across the world (UNDP, 2022a). Approximately 60 percent of the world's population now has access to the internet, yet most of them live in developed countries (Kemp, 2021). Only one out of every five people in developing countries has access to the internet (ibid.). Although the vast majority of the 1 billion people who live in least developed countries (LDCs) are covered by a mobile broadband signal, only 25 percent are online (ITU and UN-OHRLLS, 2021). This is significant since digital access is becoming increasingly important in education, work and government services. For instance, across Africa alone, it is estimated that achieving universal, affordable and quality Internet access by 2030 will require an investment of approximately US$100 billion (UN, 2020). As a result, human development is being increasingly hampered by a lack of connectivity (Kemp, 2021). The cost of 5 GB of fixed broadband in 19 of the world's LDCs is more than 20 percent of monthly gross national income per capita (ibid.).

Globally, women are 20 percent less likely than men to use mobile internet, i.e. over 1 billion women are not using it (GSMA, 2020). In Africa, South Asia, and the Middle East women are 20–50 percent less likely than men to use the internet to participate in public life. Bearing this in mind, SSTC for digital technology development is important for mobilizing the required domestic and international resources, capacity building and knowledge sharing to confront this pandemic and beyond. While technology is credited with increasing global connectivity, it needs the requisite and substantial mechanisms to effectively leverage its strengths and modalities that many countries have yet to efficiently integrate into their national development frameworks and plans. SSTC has facilitated these requisite balanced digitization efforts in various parts of the world, continues to support various political, economic, social and environmental efforts within the digitization of the global economy. Thus, even though digitization is the trend, SSTC is an essential platform and avenue to leverage efforts on the subject.

Key trends in digital South-South cooperation

There has been notable progress by Southern actors in implementing SSTC initiatives for expanding digital technologies across the Global South. These initiatives examined below reflect the potential of SSTC frameworks for enhancing digital development.

Digital centres

*D*eveloping countries. They enable marginalized populations, such as rural women, people with disabilities, and the elderly, to access critical information and services, regardless of their information and communications technology (ICT) literacy levels (UNOSSC and FCSSC, 2018). Since 2017, under Bangladesh's ICT Division's Aspire to Innovate (a2i) programme, which is an innovative public-private entrepreneurship model, the Government established 8,280 digital centres across the country. Up to 2021, with technical assistance from United Nations Development Programme (UNDP) and United States Agency for International Development, entrepreneurs have offered 60 core services from digital centres, including birth and death registration, passports, agent and mobile banking, medical visas and doctors' appointment services, and more (a2i portal, 2021). Government and non-government agencies in the Maldives, Bhutan and Fiji replicated these good practices by entering into partnerships with a2i: they adopted the successful components of the initiatives, specifically the digital centres. This model is being replicating in other developing countries, facilitated by the South-South Network for Public Service Innovation (UNOSSC, 2020).

Digital financial services

When reflecting on the sectoral influence of digitalization, various Southern actors have realized the importance of building digital infrastructure capacities for increased digital access. Digital finance is a modality that has the potential to be introduced quickly and without the need for significant new infrastructure investments. In emerging economies, digital payment mechanisms are fast evolving. These various phases of developing an inclusive digital financial system thus provide an opportunity to leverage strengths for increased cooperation. An inclusive financial system must prioritize and promote digital financial services, as well as a well-coordinated and monitored national policy with separate action plans. In this regard, the Global Development Centre (GDC) is exploring the possibility of emulating India's success stories in the fields of regulation, technical collaboration and capacity building to assist participating African partners in co-learning and appropriately implementing the approaches presented by various Southern-led financial institutions (GDC, 2021).

Digital knowledge hubs

Southern Voice's Digital Knowledge Hub is a relevant engaging research hub offering almost 1,000 resources for addressing the pandemic's effects from the perspective of the Global South. It provides evaluations and recommendations for both short- and long-term improvements in responses. More researchers from diverse backgrounds are now able to express their opinions on digitalization as a result of the demand for fresh perspectives and for the digitalization of research conferences and events due to COVID-19 constraints. Over 700 of these researchers are from the Global South, and their areas of specialization are also listed in the Knowledge Hub database. One example is the work that Southern Voice has carried out in Latin America. This Hub, which consists of International Development Research Centre- (IDRC) funded organizations in the region as well as Latin American COVID-19 Responses for Equity (CORE) partners, has produced important insights on the possibility of further research collaboration (UNOSSC, 2022). The knowledge produced covers the effects of digitalization during the pandemic, essentially producing relevant recommendations on comprehensively addressing them, including developing digital social strategies and shaping policy and practice with intersectional gender-responsive evidence (Meeker, 2021). The platform contributes to the global dialogue on SDGs to address the current knowledge asymmetry and participation deficit on evidence-based policy analysis from the Global South (Southern Voice, 2022).

Major policy concerns and challenges

UNDP's 2022 Human Development Report highlights digital technology's threats to human security and assesses them to order to improve mitigating initiatives (UNDP, 2022b). The report was supported by a virtual joint consultation seeking insights from Southern-based think tanks and academia on the role of SSC in addressing issues related to technological inequalities and uncertainties (ibid.). The consultation highlighted that digital technologies are posing new, and at times unintended, hurdles to human security as they become increasingly utilized in commerce, governance and social life. Moreover, economic disparities can further be exacerbated by a lack of access to modern technology, tools and products, notably in terms of way to capitalize on new economic opportunities and benefit from new technical advancements. This has clearly been demonstrated by the unequal access to technological innovation tools considering the critical implications of COVID-19.

The following subsections outline the major policy concerns, targeting SSTC practitioners, governments, and regional and international organizations, and their relevant considerations based on research addressing challenges facing the Global South.

1.L**ack of strong institutions for policy development**. There are significant legal and regulatory institutional weaknesses across the Global South that can be attributed to resource limitations, poor digital skills, ineffective facilitation of investments, and the lack of institutional linkages. The poor institutional quality of digital infrastructures calls for developing better institutions that can help nurture and sustain access and innovation, with a particular focus on vulnerable groups such as women and girls, youth and the elderly. For example, data protection and privacy legislation have been implemented in 22 of the 46 LDCs (48 percent), with no legislation in 16 LDCs (35 percent), and no data in 4 of them (9 percent) (UNCTAD, 2021a). Only 29 of the LDCs (63 percent) have implemented legislation for e-transaction and 19 LDCs (41 percent) have implemented consumer protection legislation. Comparatively, of the 35 countries in the Americas, 26 (74 percent) have adopted legislation, and no countries lack access to data (ibid). Policies for improved digital dissemination must also cover principal elements of accountability for integral and transparent policies, inclusiveness for participatory and non-discriminatory policies, and effectiveness for competent and collaborative policies. Thus, SSTC-driven policy efforts can help produce the necessary systematic models for research and technology development. The strengthening of institutions and modalities for facilitating the implementation of strong digital policies is consequential for this purpose.

2. Digitalization for sustainable development beyond COVID-19. The policy implications of digitalizing the Global South are serious and extensive. Future economic growth or lack thereof underscore not only the essence, but also the urgency and policy implications of digitalization of the global economy. Blockchain technology has enormous promise for facilitating carbon emission and renewable energy trade, ensuring that climate financing investments reach local communities and boosting climate-related measuring, reporting, and verification applications of greenhouse gas emissions and mitigation actions. Such opportunities could be leveraged through SSTC for mitigating detrimental climate change risks in the Global South. For instance, the estimated contribution of digital technologies to global emissions ranges from 1.4 percent to 5.9 percent (The Royal Society, 2020). The Our Common Agenda (OCA) has placed emphasis on the improvement of digital cooperation through a global digital compact for increased sustainable digital initiatives.

3. **South-South cooperation and the digital economy.** The lack of connectivity and investment in digital innovation in the Global South is concerning for the future of the technological catch-up required for global digital integration. Digital industrialization objectives for instance address the limited digital capacities that are necessary in ongoing regional integration processes. This is especially critical in understanding the gaps in the nexus between South-South intraregional trade, supply chains, and technological innovations and ways to address gaps including digitizing supply chains, utilizing transport logistics, developing appropriate regulatory frameworks, building digital capacities and digital skills, and transforming the agribusiness value-chain structure (UNOSSC, 2021c). As SSTC moves beyond technical cooperation and knowledge exchange, it provides the opportunity for facilitating trade, investment, infrastructure and connectivity and policies for development strategies. Hence, the integration of the Global South into the global digital economy can be greatly facilitated through SSTC.

Regarding the Internet of Things (IoT), 66 percent of the geographical distribution is concentrated in North America and Asia and the Pacific. In addition, there remains a concerning lack of private investment feeding into artificial intelligence (AI) companies in Global South economies. Such gaps in connectivity and investment in AI present an opportunity for SSTC to facilitate the growth of the digital economy in Southern countries. More specifically, integration into the digital economy can be an important way of working towards the achievement of the Sustainable Development Goals (SDGs).

For instance, leveraging the benefits of the digital economy for the achievement of SDG 1 (Eradicating extreme poverty for all people everywhere by 2030) requires increased connectivity, enabling the digital workforce, and increasing access to digital financial services and digital literacy (UNOSSC and FCSSC, 2018).

However, as reflected in the 2021 Digital Economy Report, there are several barriers to integration, including the complexity of cross-border data flows and their policymaking dimension (UNCTAD, 2021):

- The unique properties of data render them intangible, non-rivalrous, partially excludable, relational and multidimensional.
- Cross-border data flows should be regarded differently from international commerce in products and services due to their unique nature.
- There is an unclear link between data location within national boundaries and economic progress, making it highly reliant on a country's individual condition.
- Data availability and use are critical for development to generate and exploit opportunities from data.
- The complex mix of competing interests and policy trade-offs that must be considered in policymaking are significant.
- At the national and international levels, policymaking on global data governance must take a holistic, multidimensional, whole-of-government, multi-stakeholder approach.

4. **Inadequate modalities for the expansion of digital know-how.** SSTC can help to address the challenges of expanding digital know-how because SSTC training and education can catalyse connectivity, thus enabling digital workforces and increasing the accessibility of digital financial services. Within such initiatives lies the potential for expanding digital know-how by ensuring that education considers and encourages the use of digital technologies. As online education technologies and digital education resources continue to develop, access to such platforms and education services becomes increasingly open. Digital inclusion in education entails investing in digital literacy and digital infrastructure to close the digital divide.

5. **Negative implications of the growing digital divide.** The fast-paced digital transformation has led to the widening of the digital divide, leaving some countries in the Global South behind. Given this rising concern of economic division among countries of the Global South, the digital divide between countries in the Global South must be addressed. More importantly, digital inequalities in the Global South can be attributed to three levels of research regarding the digital divide: the first level of the digital divide focuses mostly on concerns of access/ICT availability, rather than delving into how technical inequalities may affect social inequality; the second level focuses on explaining why people use or do not use technologies when they have access to them; the third level focuses on disparities in the ability to capitalize on ICT access towards practical and measurable outcomes (Ragnedda and Gladkova, 2020). Considering these three levels of research, digital inequalities require multilevel policy approaches that refrain from over-simplifying and generalizing the diverse and domestic Southern experiences of the digital divide. For instance, some proposed solutions to effectively closing the digital gap have not considered these localized challenges.

Policy Recommendations

Strengthened institutions for effective policy development and implementation. There remains a significant barrier in engaging SSTC in development planning and policymaking, which requires strong institutions and effective policies. Accordingly, the following recommendations are provided for Southern actors:

- Policymakers should create digital governance frameworks specifying how data will be used and maintained, and considering consumers' (security and cyber security and human rights concerns.
- SSTC practitioners should support the establishment of a multilateral, multistakeholder and multidisciplinary framework for digital data governance for the coordination of data-related issues that are specific to the challenges of the Global South. SSTC practitioners should also support the establishment of a Southern-led data governance body for digital security, transparency and accountability.
- Southern government authorities could leverage SSTC through increased knowledge sharing to establish an integrated policy and regulatory environment for digital payment services, including permitting non-bank actors to run payment systems with suitable legislation.
- Global North partners, including civil society, governments, the private sector and philanthropists, should actively and cooperatively invest in digital platforms through TrC that enable and involve citizens in decision-making, and ensure that their voices are heard in shaping public decision-making for effective policies.
- Governments should establish SSTC platforms for adopting high-quality, open government data (OGD) standards for disease surveillance, as suggested by the Open Data Charter, Development Bank of Latin America and the Sustainable Development Centre (2021) and provide thorough information on the data provided on each OGD website. To make the open data policy clearer, the data published can include a reference to its origin, and date of publication and verification. Policymakers could further establish national COVID-19 OGD monitoring and evaluation mechanisms to analyse the programme's efficacy, efficiency and conformity to regulatory frameworks governing personal data, cybersecurity and transparency.
- In terms of regulating and publishing public information, government actors could strengthen regional, national and subnational cooperative frameworks through SSTC by developing a vertical coordination for systematizing data. This includes joint efforts between Southern partners for improved coordination and data systems regulations.
- Policymakers should develop a national open data policy that permits subnational governments to balance their resource allocation to produce, systematize and publish data for enhanced quantity and quality of horizontally and vertically shared data.

Harnessing digitalization in achieving Agenda 2030 for Sustainable Development. To accelerate progress towards achieving the 2030 Agenda for Sustainable Development, the practices described below are essential.

In line with the roadmap for digital cooperation based on recommendations from the Secretary-General's High-level Panel for Digital Cooperation convened in 2018–2019, Southern actors, including international financial institutions (IFIs), should work to address digital infrastructure gaps by linking national SSTC initiatives to specific SDGs. For instance, the aim of SDG 17 (Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development) Target 17.14, is to "enhance policy coherence for sustainable development". This would encourage greater policy coherence for sustainable development and integrate dimensions of well-being and sustainability in policymaking in a balanced manner.

- State actors should cooperate to facilitate data collection automation and process improvements for greenhouse gas inventories, as well as integrate registration for mitigation initiatives. Hence, sharing a Southern public sector-led network that integrates data management, climate reporting, decision-making, and open data would help support Southern countries.
- Policymakers should integrate cross-agency services, reorganize public services based on users' requirements, and interact with the public in order to provide user-specific and -responsive digital services.
- In order to integrate cross-agency services and build shared capacity, private sector actors should leverage blockchain, big data and other digital technologies by incorporating knowledge sharing through SSTC platforms.

South-South cooperation for facilitating the expansion of the digital economy. It is critical for effective development to prioritize SSTC frameworks for guiding economic policy processes in order to utilize the digital economy. Establishing strong plans to facilitate the expansion of digital economic tools and processes is thus relevant in the following ways:

- Developing countries' technological capacity, innovation and resilience should be further encouraged, including through greater flexibility of intellectual property rights, technology transfer and trade facilitation assistance, particularly in the event of a global pandemic. It is critical to re-establish an effective dispute resolution process to address trade concerns (UN, 2021b).
- Government policymakers could expand and support intra-regional trade and investment by prioritizing SSTC to support the development of joint programmes and agendas and facilitate integration including through harmonized digital platforms and regulations for e-trade activities.

- For many industries and sectors, there is a need for government actors to digitalize the business registration process, integrate several certifications and licences into one consolidated business licence, and build mechanisms for joint handling of business licences. This can be facilitated by Southern partnerships to standardize practices and regulatory environments.

- Mobile network providers should adopt creative business models to facilitate the rural populations' access to services such as through cross-subsidized connectivity and freemium pricing, or public access systems. SSTC can facilitate network providers across regions and countries to connect and learn from one another.

- The private sector should seek opportunities to create useful digital products for vulnerable groups. Striking the right balance between profitability, affordability and user experience may require designing specifically with inclusion in mind, developing 'lite' products, automating processes, or building products at different scales. This is part of multi-stakeholder engagement in SSTC in which products target Southern groups with limited access to a digital tool(s).

- Philanthropists and triangular partners could focus on supporting projects, including from private sector entrepreneurs, that develop tools, literacy and services to reduce the friction and costs associated with investing in digital technology and start-ups in emerging markets (e.g. tools to perform due diligence on investment prospects).

Improved capacity building for knowledge sharing of digital know-how. The sharing of good practices and experiences as a way of addressing the digital divide and the active drawing on expertise in knowledge and technology sharing, training and capacity-building can be enhanced through the following policy routes:

- A critical step toward efforts to build knowledge-sharing capacities is the consistent collective investment in innovation capabilities across a variety of education programmes with the emphasis on supporting local ecosystems and innovators. These efforts would support resource-low and middle-income innovation pathways by developing models of sustainable research and innovation mechanisms, and improving access to digital literacy. This would include expanding these efforts through knowledge-sharing platforms that target educators and that are accessible for skills building.

- United Nations knowledge-sharing platforms such as South-South Galaxy should be used by Southern policymakers at all levels of government and by private sector actors, thus compiling SSTC good practices on digitalization to be accessed by developing countries to learn from and adapt.

- The establishment of supportive collaborations through SSTC to bring low- and middle-income countries innovators together to share successful practices and lessons learned from past innovation initiatives and integrate them into existing and new development. This would require international development organizations to comprehensively understand and acknowledge existing barriers and methods of supporting and enabling these innovators. In understanding these barriers, industrialized country actors, through TrC, should also consider and assess their role and their specific comparative advantages and given strengths.
- By 2030, coordinated efforts to adopt new technology and invest in green economies may create 24 million new 'jobs of the future' (UN, 2021a). To this end, the establishment of a high-ambition coalition is recommended to promote green and digital economy job creation, incorporating the relevant ministers (i.e. finance, planning, labour and education) as well as youth and other key stakeholders from countries whose labour markets and working population will grow exponentially over the next decade. This will require a focus on public and private sector-driven human capacity development for equal access for women and girls to these new jobs of the future as well as support in the transition from the informal to the formal sectors. SSTC platforms including seminars and online knowledge products can facilitate this access and scale up digital know-how through technology knowledge transfer.

Leveraging South-South cooperation to bridge the digital divide. The digital divide is relevant on various levels ranging from the global scale to the local scale. Its implications in the Global South are widespread and require critical policy interventions. Addressing the growing digital divide must be seriously undertaken through the following policy initiatives:

- Access to funding should be improved by building digital infrastructures and through digital transformation efforts. This could be achieved by establishing funding mechanisms by Southern countries that other countries can access; this includes SSC initiatives such as the India-United Nations partnership through which prioritized digital projects are funded.
- TrC actors should support the countries of the Global South, especially LDCs, in gaining access to technology, funding and capacity support for their digitization efforts, which could play a role in bridging the digital divide.
- Governments should adopt policies to incentivize private sector actors to include vulnerable populations in digital development efforts, including through the creation of specific opportunities for women to engage with technology and build digital skills.
- Governments should invest in education programmes and launch reskilling programmes to ensure that labour skills and technologies complement each other and to expand digital literacy.

Conclusion

As examined throughout the vast research material covered in this brief, the digitization of the global economy is imperative to the future development of Southern economies. The overall purpose of this policy brief has thus been twofold: (i) to showcase how SSTC can play a key role in digitalization efforts; and (ii) to present the findings of the comprehensive research endeavours of think tank networks that are members of the South-South Global Thinkers initiative on the topic of SSTC for sustainable digital development.

outh should work to ensure the protection of data flows, expand access to digital technologies, increase internet adoption, promote public spending on ICT infrastructure, and create a more favourable regulatory environment for private sector investments in the digital sector. These efforts should aim to better understand how SSTC can engage and facilitate the engagement of various global development actors to fully utilize and benefit from a digital economic integration. Given the inherent challenges to cyber-integration, this requires experiential knowledge as a guide for effective and sustainable policy outcomes. SSTC, with its wealth of knowledge, experience, expertise and other resources, plays an essential role in the digitization of the global economy – and especially, the economies of Global South.

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