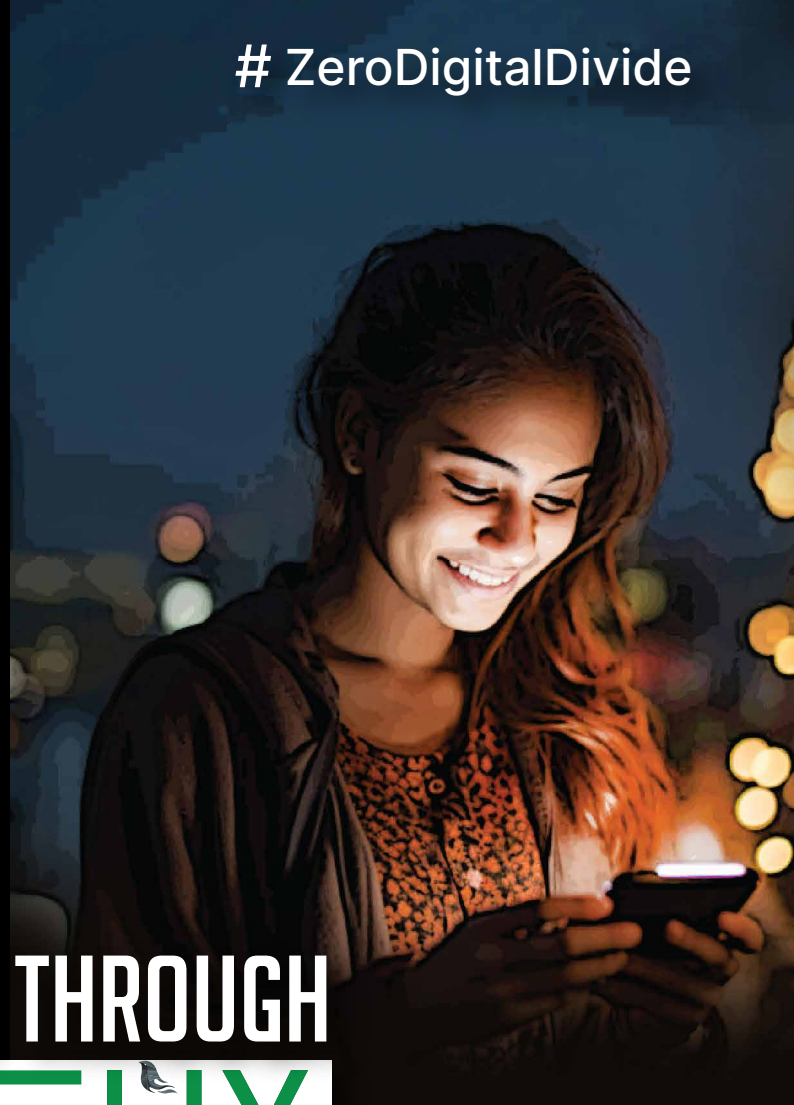


ZeroDigitalDivide



EQUALITY THROUGH



REPORT SUMMARY 2023





Equality through e-Quality Report Summary 2023

Lead Writer and Editor:

Dr. Selim Jahan
Dr. Zulkarin Jahangir

Sub-editor:

Tanjim-UI-Islam

Special Acknowledgement

Purabi Matin
Adnan Faisal

Cover, Design & Illustration

Khaled Arafat
Zakia Sultana Anandi

Publisher & Distributor

a2i-Aspire to Innovate

Publication rights © a2i-Aspire to Innovate

This book contains materials protected under copyright and publishing law of the Peoples' Republic of Bangladesh. Any unauthorised reprint or use of these materials is prohibited. No part of this book may be reproduced or transmitted in any form or by any means, electrical or mechanical, including photocopying, recording, or by any information storage and retrieval system without expressed written permission from the content and copyright owners.

EQUALITY THROUGH
E Quality
REPORT SUMMARY 2023

SCAN TO FIND



EQUALITY REPORT
[SHORT VERSION]


EXECUTIVE SUMMARY


Development is fundamentally about enhancing people's capabilities and opportunities to lead long, meaningful lives, making them active agents rather than passive recipients of progress. The quality of development holds as much significance as its quantity, with human development necessitating job creation, poverty reduction, environmental consciousness, gender sensitivity, and human rights protection. The Sustainable Development Goals emphasize equitable development and leaving no one behind, underscoring the importance of addressing drivers of inequality over time, from land distribution to education, and currently, the digital divide. Despite rapid digital progress, billions of people still lack meaningful digital access, contributing to overall disparities, particularly affecting women. Nevertheless, if managed effectively, digital development has the potential to be a powerful equalizing force, making equitable access to digital advancements a critical factor in achieving overall equitable development.


SIX KEY MESSAGES OF THE REPORT


The **"Equality through e-quality"** report is a comprehensive effort to advance equitable development through inclusive and high-quality e-services. The report's objectives encompass establishing an analytical framework linking e-quality to equality, showcasing Bangladesh's achievements in digitization and assessing access to digitized services for marginalized individuals, identifying barriers to equitable access, exploring implications for fair development, addressing gender disparities in digital progress, and considering environmental sustainability and vulnerabilities like the Covid-19 pandemic. It serves as both an analytical and policy-focused document intended to stimulate domestic policy discussions while contributing to global discourse on digital revolution and inclusive e-services.


6 KEY MESSAGES OF THE REPORT


- 

1 Over the past three decades, a digital revolution took place worldwide and Bangladesh also has had its share in it.
- 

2 In spite of all its achievements, the digital revolution has also created a digital divide, which is a contributing factor to overall inequalities.
- 

3 E-quality is essential for quality digital services for the poor, vulnerable and excluded groups, and marginalized people so that digital rights are established, ensuring equitable development.
- 

4 Digitization can be a critical helping factor during shocks and vulnerabilities, as has been evident during COVID-19. It can be game-changing for the poor and the marginalized groups.
- 

5 Digital literacy, digital inclusion, quality of digital access, and symmetry of information are critical drivers of e-quality
- 

6 E-governance has been changing the face of public service delivery in Bangladesh



INTRODUCTION

Development is all about people, the expansion of their choices by augmenting their abilities and providing avenues to apply them. The priority is to ensure an improved and equitable distribution of resources through active participation. Over time, there have been different drivers of, but currently, the digital divide has become a chief driver of inequality, excluding billions of people globally. Digital development has provided expansion but not inclusion, as it has amplified existing inequalities. But with proper management, it can be an equalizing factor in socio-economic development, which makes it crucial to assess and analyse equitable access to it. The current progress lies in the quantity of digital services, while the elite has captured the quality of services.

The present report, 'Equality through e-quality' is an analytical and policy-oriented endeavour for equitable development through inclusive and quality e-services. It attempts to build an analytical framework for digital equality; highlight the achievements in the digitalization of Bangladesh; assess the access of marginalized people; identify constraints and their implications on development; and demonstrate avenues to overcome them. The report is for both fostering debates within the country and a representation of the country in terms of contribution to the global dialogue.



ICT PROGRESS WORLDWIDE

A SITUATION ANALYSIS

The world has borne witness to industrial revolutions, which catapulted the march of progress through pioneering set of technologies; steam and later electricity. During the last three decades, a digital revolution has been brewing encompassing ICT networks, which stands to vastly improve livelihood by expanding capabilities and opportunities. The fourth industrial revolution is oncoming as smart and automated machines in factories allow precise production and customized products using digital technologies to optimize the flow of assembly.

THE DIGITAL REVOLUTION WORLDWIDE

The digital revolution is transforming working and accelerating globalization in an unprecedented way. In recent years, the digital revolution has accelerated global production, particularly digital trade (figure 1.1). In 2014 global trade in goods reached \$18.9 trillion and trade in services \$4.9 trillion. By 2015, there were more than 7 billion mobile subscriptions, 2.3 billion people on smartphones and about 3.2 billion people connected to the Internet, changing jobs, innovation, interaction and entrepreneurship.

Source: UNDP (1996)

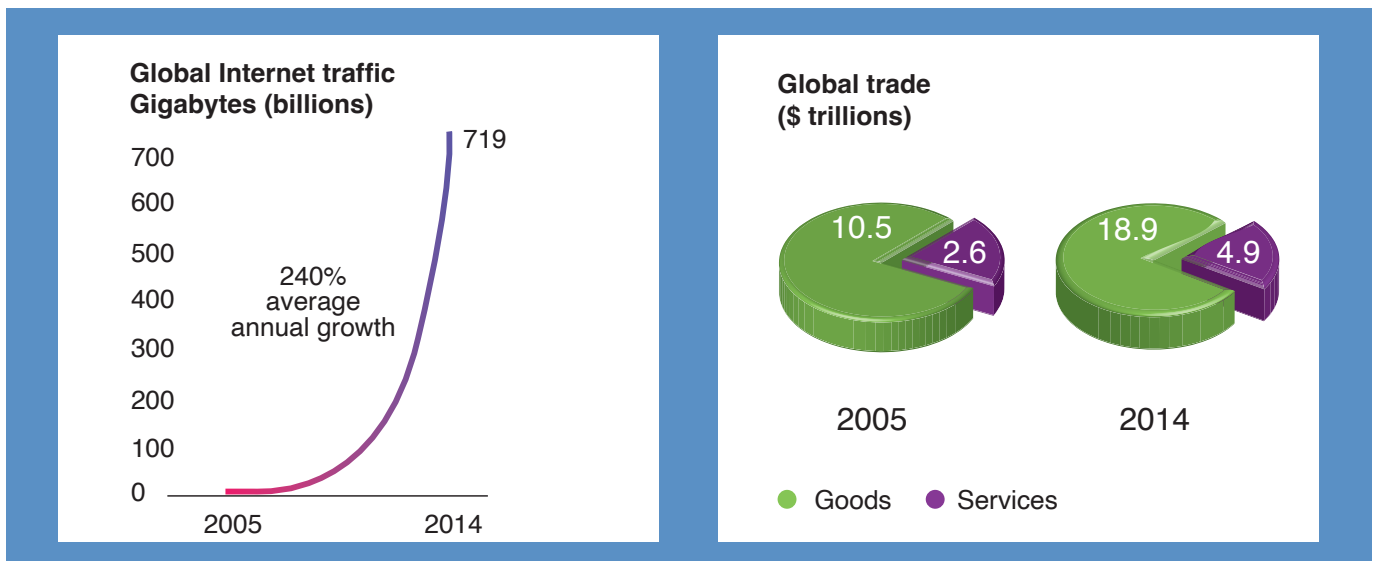


Figure 1.1 The digital revolution has accelerated the global production and trade of goods and services.

The knowledge-intensive portion of global flows are growing at 1.3 times the rate of labour-intensive flows, accounting for half of global flows. As a result, the digital components of goods and services flows have also increased (figure 1.3).

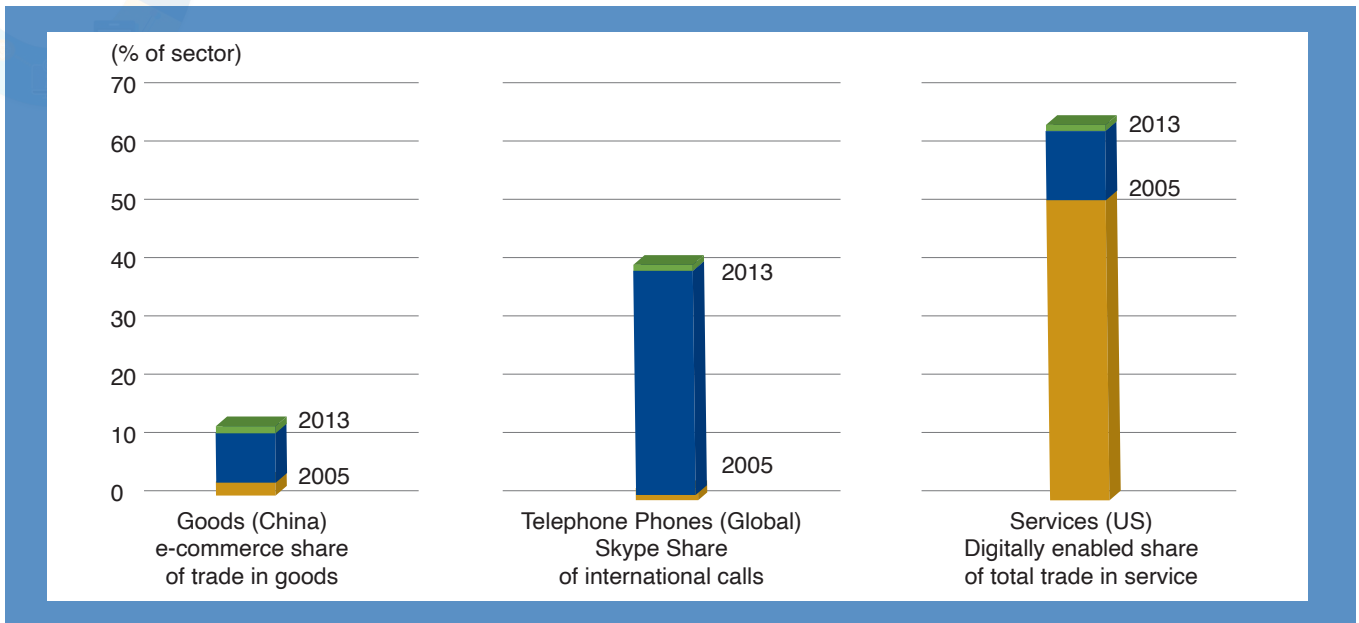


Figure 1.3: The digital component of global flows has increased—selected examples

GLOBAL ICT DEVELOPMENTS, 2001-2019

Figure 1.5 presents some features of global ICT development over the past two decades with three main trends: First, the mobile phone subscriptions grew from less than twenty percent to 108 percent in two decades. Similarly, the active mobile broadband subscriptions have grown from less than 10 per 100 people in 2007 to 83 per 100 people in 2019. Second, internet use is missing from nearly half of the global population. Third, the fixed-telephone subscriptions have decreased over the years. The fixed-broadband subscriptions showed little growth.

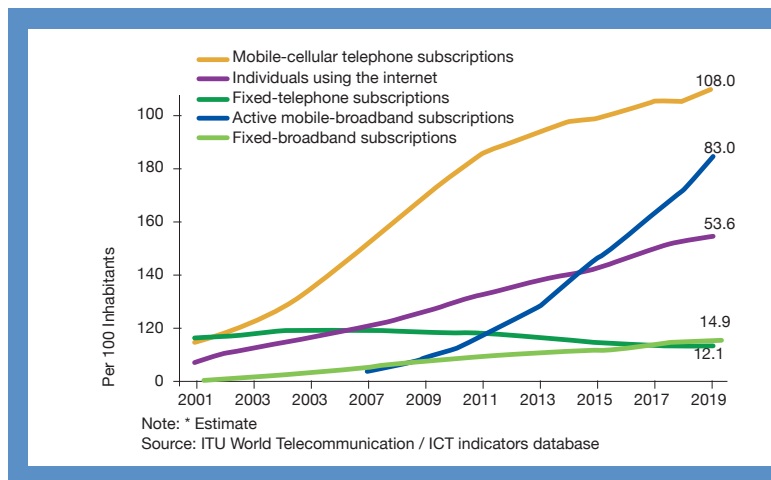


Figure 1.5: Worldwide ICT development during the past two decades

Global ICT spending has consistently grown over the past five years (figure 1.6), rising from US\$ 4.658 million in 2018 to nearly US\$ 6,000 million in 2022. More than 80 percent of this is on traditional ICT and only 18 percent on new technologies, which has been increasing at 4 percent and 17 percent rates, respectively,[1] implying experimentations and innovations are being funded more. Mobile technology significantly drove GDP in the 2000–2017 period—a 10 percent increase in mobile adoption boosted GDP by 0.5 percent to 1.2 percent.[1] Thus, digital technologies can transform economies with digitalization in both public and private sectors driving socio-economic development.

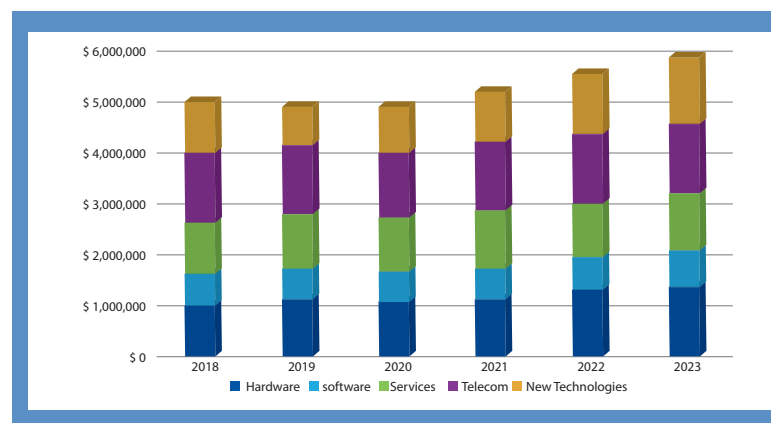


Figure 1.6: Worldwide ICT spending (in million constant US\$)

DIGITAL DEPRIVATIONS IN THE DEVELOPING WORLD

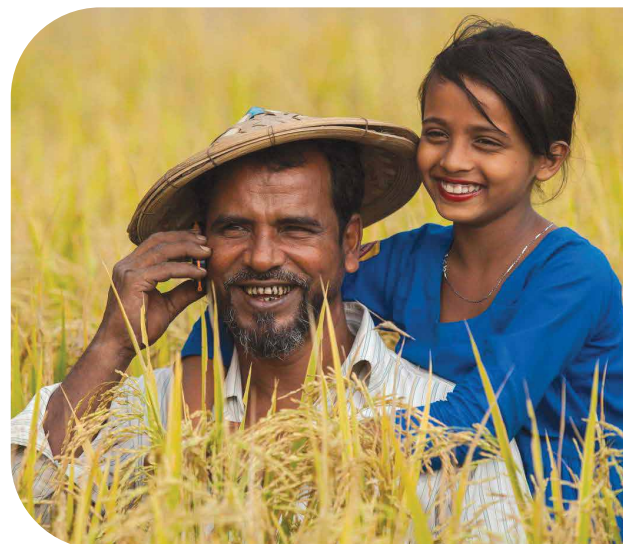
Digital inclusion is of paramount importance. Yet in 2022, nearly 3 billion people in the world remain offline, and developing countries lack access and usage. Nearly half the world (43 percent) was not using mobile internet last year while located inside coverage. About 1 billion people lack access for not having proof of identity. Women remain 7 percent and 16 percent less likely than men to own a mobile phone and use mobile internet respectively, with 264 million fewer women than men have mobile internet access.² Urban internet use is twice as high than that of rural areas, and at the end of 2021, 71 percent of (15-24) age group and 57 percent of all others were internet users. 60 percent of global GDP is estimated to rely on digital communication technologies in 2022. Vulnerable people without digital access risk exclusion from post-pandemic recovery, leading to potentially heavier knock-on effects.

The global digital divide

'Digital divide' is defined as 'the gap between individuals, households, businesses and geographic areas at different socio-economic levels' as a result of differences in 'opportunities to access information and communication technologies and to their use for a variety of activities.'³ It is descriptive of multi-dimensional inequalities in online communities characterized by gap in access and ability to use technology, with both being complementary.

Developed countries have achieved advanced levels of digitization, reaping many benefits in economies, society and public sector function. This entails mass adoption of connected digital technologies by most entities. There, 87 percent of households have access to the Internet, and 82.3 percent have access to a computer opposed to only 46.7 percent and 38.5 percent in developing countries and only 11.8 percent and 9.5 percent in LDCs respectively.⁴ Technological advancement causes structural displacement of work, widening the divide internally and among countries exacerbating inequality.

There is a trend for women to use fewer digital services than men despite having access. Education and age remain the main drivers of the gender gap. This gap restricts the benefit from opportunities in the digital space. Empirically among teenagers, girls were found less likely for mobile phone ownership and Internet usage, with this disparity peaking in South Asia. In Nepal twice as many boys than girls used the Internet, with quadruple ratios in Pakistan. Access to information media per week was limited in Afghanistan, India, Nepal, and Timor-Leste for girls. Overall, in South Asia, the gender gap in mobile phone ownership is 26 percent. Lack of physical access to use digital tools and develop the skills, and the absence of autonomy combine to create the gender gap.



THE DIGITAL ROADMAP: HOW DEVELOPING COUNTRIES CAN GET AHEAD

Digital technologies are transforming the world, and with the highest stakes in developing countries. A Digital Roadmap for the developing world may ensure that the digital revolution leads to inclusive growth and human development for everyone. Some countries will prosper in a new global digital economy, but unready countries will risk being left behind, so, countries have the imperative to act now. The Digital Roadmap for developing countries identifies five priority areas for countries to create their own digital future (figure 1.7).

¹ UNDP (2021)

² World Bank (2022a)

³ OECD (2001)

⁴ Antara et.al. (2022)

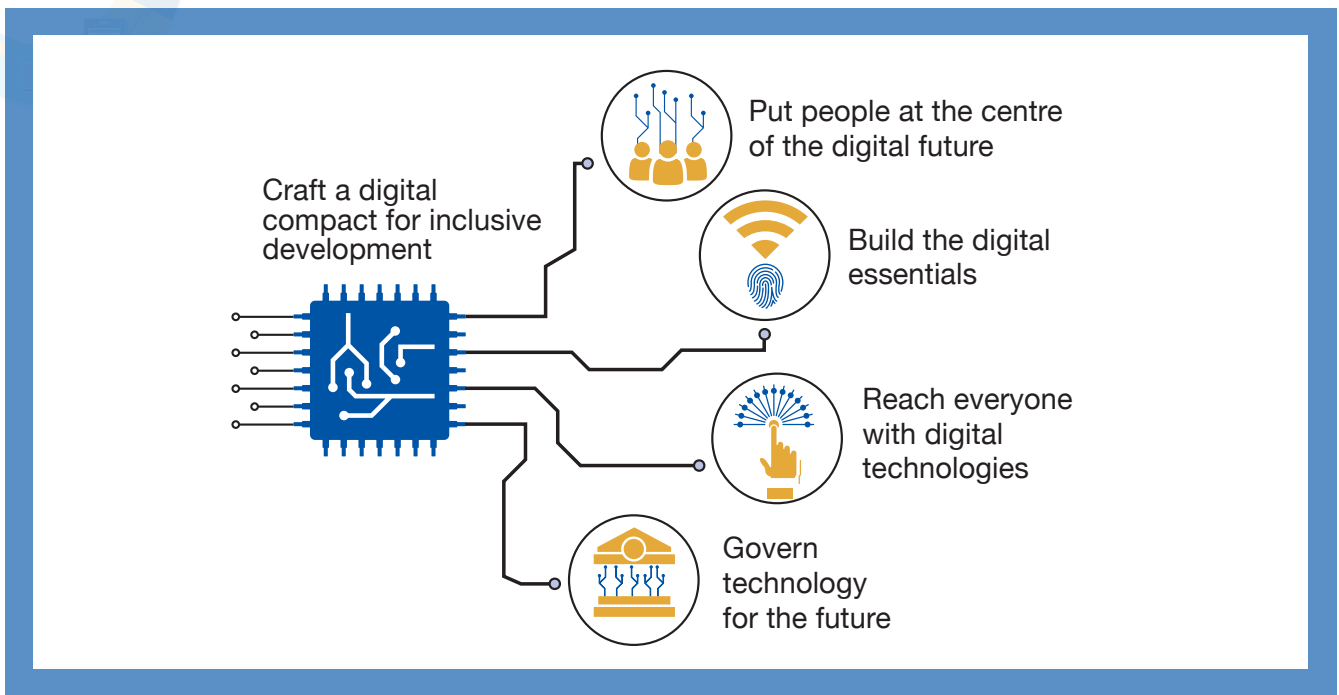


Figure 1.7: Five priorities for the developing world to get ahead in the digital age

Such a Roadmap should emphasize some basic guiding principles:

- ❖ Deliberate effort for inclusion and creating a conducive environment is necessary for success, no matter the innovativeness of the technology.
- ❖ Collaboration is key between all parties to realize a shared national vision. The digital revolution has both risks and opportunities which need to be optimized for its fruition.
- ❖ The best way to navigate such a disruptive change by mitigating resistance is through dialogue among all levels of society. These dialogues should result in a national digital compact: a shared and committed vision of the future.
- ❖ The social and economic change should be people centric lest it creates unrest. This entails equipping and protecting people to adapt to the change. Both the public and private sectors need to engage in adaptive and concurrent training.
- ❖ Digital products need a foundational ecosystem to thrive in, which requires physical and digital infrastructure and financing, which would make production for firms efficient.
- ❖ Ensuring access to digital platforms to allow the utilization of opportunities inclusively is crucial. Reaching everyone requires targeted effort beyond the current paradigm to prevent people from being left behind.
- ❖ The unprecedented pace of change and emergence of new risks in the digital era (such as algorithmic bias, cybersecurity, and threats to privacy) are challenging for even developed countries, requiring new and adaptive approaches to decision-making. Emerging global norms will need to consider the needs of developing countries.



EQUALITY THROUGH E-QUALITY

Development should be for everyone. It should be with equal opportunities and benefits for all. Thus, 'equality' and 'equity' are centrepieces of inclusive, equitable, and sustainable development⁵ Equality and equity make a society egalitarian and cohesive.

VARIOUS NOTIONS AND DIMENSIONS OF EQUALITY -ANALYTICAL ISSUES

Equality has different dimensions such as that of opportunities versus of outcomes; the second is vertical equality versus horizontal equality, and finally, the present-day equality versus intergenerational equality. Traditionally, equality is referred to as outcomes, but now equality in opportunities is just as important, even determining the former. Vertical inequality is defined as among individuals by class, while horizontal inequality is defined as inequality among groups by ethnicity, religion or race. Present-day inequality represents inequity within a generation, while inter-generational one is between generations. Gender, urban-rural divide, and socio-economic groups determine different planes of inequality, with some being intersectional. For example, a poor woman can be doubly deprived in terms of gender and income. In the present report, equality is referred to in all its dimensions and planes.

THE NOTION OF 'E-QUALITY'

In today's world, digital inclusion must mean access to quality services. Thus, the term e-Quality is coined to refer to a meaningful, high-quality digital experience that comprises of digital quality. So defined, e-quality ensures provision of quality digital services as even after gaining access, people are not receiving high quality experiences. Four major constraints in achieving e-quality have been identified—last person access, information asymmetry, service gaps and digital literacy. The existing gender asymmetry is a cross-cutting theme relevant to each one of them.

e-Quality as a Fundamental Right

According to the Declaration on the Right to Development, it is the state that has the primary responsibility of creating an enabling environment for its citizens for the realization of the right to development. Development has to be of quality, and rooted in human rights. The rights concerning people's primary material and non-material needs are what we call "basic rights". With growing needs, how we define these rights has also evolved.

Currently, basic rights and digital inclusions are intertwined. Digital access enables people ability to participate in society, accessing services that enhance their capabilities, with the alternative being deprivation. Lack of resources, information and connectivity often prevent individuals from exercising their democratic rights, which are to be ensured by the state. Thus, digital access must take priority lest the digitalization process create undue disenfranchisement. Beyond digital inclusion, multiple dimensions of exclusion exist, requiring the analyses to evolve. There are concerns about unfavourable inclusion or 'adverse digital incorporation'. There are two conditions through which deprivations can arise: one where some people are being left out and another where some people are being included but in unfavourable terms.⁶

⁵ Equality is an absolute concept, while equity is a relative notion.

⁶ Sen (2000)

The main idea of 'adverse digital incorporation' is that inclusion in a digital system may enable a more privileged group to extract disproportionate value from the resources of another, less-advantaged group. It can be observed within the gig economy of Bangladesh. Despite changing lives, the rapid emergence of the platform-based gig economy consists of unfair labour practices and lack of protections afforded to employees and find themselves earning below the living wage necessary to fulfil basic needs.⁷ Quality digital services are still captured by the elites, and poor and marginal people are not included in them. There is no automatic link between digital expansion and digital inclusion, which implies digital equality. This linkage has to be established through policies and institutions.

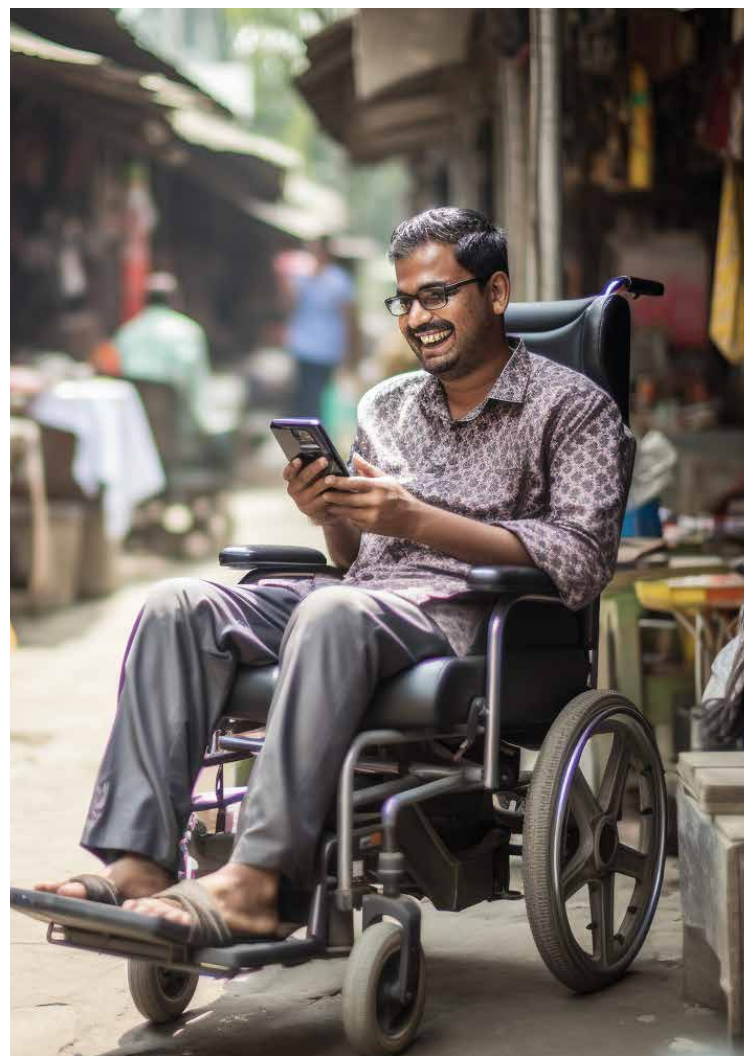
ANALYTICAL FRAMEWORK FOR DIGITAL RIGHTS AND E-QUALITY

The concept of e-quality is analytically and operationally anchored in the idea of digital rights. Digital rights derive from the notion of freedom from discrimination – for equality, as contained in the Universal Declaration of Human Rights and thus, are inalienable and indivisible, implying they cannot be voluntarily given up or its components hierarchically conflicted. The actors enabling them, like the State are all accountable to the people.

The discussions on digital rights are woven around **5** fundamental questions:

- ⇒ **Specifically, why digital rights are required?**
- ⇒ **For whom, these rights are necessary?**
- ⇒ **Where the digital rights operate?**
- ⇒ **How these rights work?**
- ⇒ **When such rights should be pursued?**

Figure 3.6 represents these aspects of digital rights in terms of an analytical framework. Digital rights enhance the capabilities of people increasing their choices; they expand the agency, autonomy, and well-being of people; and increase their opportunities. These rights are universal, i.e., for everyone. Yet, they are specifically important for groups of persons whose material well-being is low and whose voice and autonomy is restricted, and whose opportunities are limited—e.g., poor people, persons with disabilities, people who live on environmentally fragile lands. Such rights are also required for cottage, small and medium enterprises (CSMEs). The sectors like health, education, employment etc. should have services based on digital rights along with public services and financial services. The process of providing these rights would require access and connectivity and people-friendly service design and improved skill. In all these areas, power and information would be a crucial element in the modus operandi of equitable service delivery. The digital rights must be ensured as soon as possible.



⁷ Fairwork (2021)

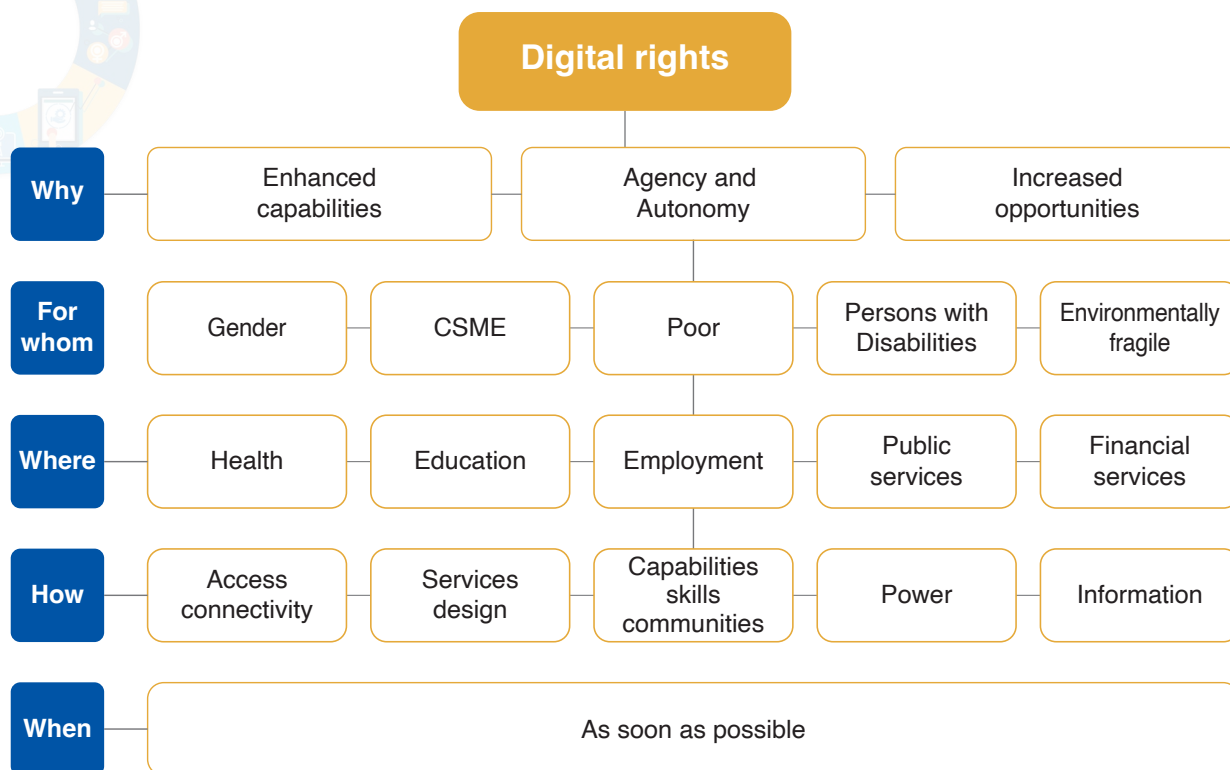


Figure 3.6: Digital rights – analytical linkages

Anchored in digital rights, the analytical linkages between e-quality and equality in the society runs in the following way- e-quality is the input to achieve the intermediate objective of quality digital inclusion, which contributes achieving the ultimate goal of overall equitable development. Thus, first, e-Quality entails effective and inclusive digital expansion in all dimensions, including connectivity, financial inclusion, public services, health, education, employment, digital literacy, etc; and also ensure quality.

Even if poor and marginalized people are included in the digital expansion, they may have access in the services, but those services would be of poor quality. The quality services would be captured by the rich and powerful. As a result, a disparity in effective digital inclusion would contribute to widening the overall inequalities in a society. On the other hand, with an increasing of overall inequalities, the disparity in e-quality will also be enhanced.

MEASURES OF E-QUALITY

Sector-specific measures of digital inclusion exist, each providing a conceptual framework in their respective domains. However, no single holistic measure to establish digital e-quality has been defined until now, and the primary goal of the e-quality framework is to close this gap. Further research on the e-quality index has been going on both in a2i and beyond⁸, focusing on themes, indicators, and sub-indices to be incorporated in such an index. Whether the emphasis should be on input or output indicators. For example, in the case of digital education and eHealth, most of the indices are related to readiness and infrastructure, thus focusing mainly on input components. On the other hand, connectivity, digital literacy, digital gender disparity, employment, and e-government service delivery use output measures. Apart from its analytical structure, an e-quality index must be robust with good predictive power and at the same time, simple and easy to understand. The ongoing research on e-quality index is focussing on all these aspects.

⁸ The full background paper Zulkarin Jahangir, Tanjim-UI-Islam, Hasibul Hasan, Khandakar Iffah, Farzin Mumtahena, Namira Shameem, Shafa Tasneem (2022) e-Quality Index: A Framework for the Holistic Assessment of Digital Development on which the e-quality index has been built is presented in Annex 1 in the present report.



E-QUALITY FOR EQUALITY POLICIES & STRATEGIES

"Global Digital Transformation" envisions revolutionizing traditional public administration into a modern, transparent, citizen-centered system. Governments worldwide seek to enhance processes, connect citizens, and improve lives through ICT. Digitalization of public services initially facing challenges in developing countries achieved significant milestones, including narrowing the digital divide, reducing harassment, and enhancing service efficiency, transparency, and accountability. Expanding e-service networks has reached untapped populations. Monitoring and strategic approaches have been crucial for these accomplishments.

GLOBAL IMPACT AND POTENTIAL

Education Advancement

ICT empowers education by ensuring connectivity in institutions worldwide. Digitizing universities and schools enhances access, admission processes, and results, fostering knowledge societies.

Agriculture empowerment

With many reliant on agriculture, e-governance bridges agricultural knowledge gaps and improves management and marketing. Farmers access market data, enabling informed decisions and reducing intermediary influence.

Local governance boost

E-governance enriches local transparency, enhancing governance. Cities and regions implement initiatives for transparent, swift services.

Corruption Curtailment

E-governance fights global corruption by increasing transparency and accountability. Direct access to government information diminishes corruption risks.

E-Democracy and Accountability

E-governance promotes transparent party candidate selection and secure e-voting systems, bolstering democracy and electoral processes.

Effective Governance

E-governance makes bureaucracy accountable, improves administration, and intergovernmental relations, ensuring good governance.

Private sector Upliftment

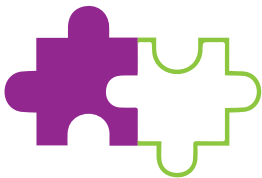
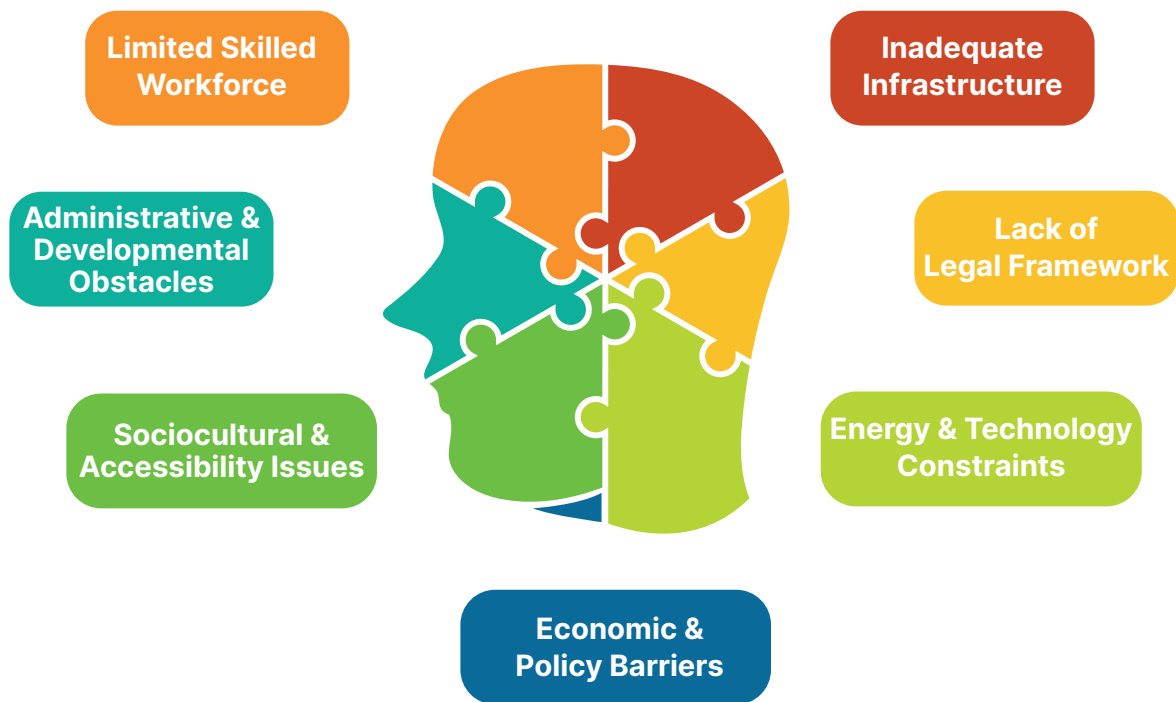
Transparency boosts investor confidence, encouraging investment. E-governance's efficiency benefits private sector growth.

Citizen-centric Service

Global e-governance prioritizes accessible, convenient service for citizens, bridging the gap between governments and people.

CHALLENGES

Governments globally confront similar challenges in e-governance implementation, including:



Policies and Strategies

To achieve successful global e-governance:

- ❖ **Strategic Focus:** Emphasize inclusive policies, addressing disparities and gender equality.
- ❖ **Digital Infrastructure:** Develop robust ICT infrastructure, improve connectivity, and reduce internet costs.
- ❖ **Capacity Building:** Prioritize training for skilled manpower and foster public-private partnerships.
- ❖ **Accessibility:** Ensure equitable access to digital services, particularly in rural areas.
- ❖ **Research and Data:** Establish think tanks to tackle challenges, generate data, and promote evidence-based policies.
- ❖ **Service Enhancement:** Upgrade digital centers, raise awareness, reduce costs, and publicize available services.
- ❖ **Digital Education:** Blend teaching methods, tailor e-services for diverse learners, and address infrastructural needs.

Embracing these strategies, global digital transformation can bridge gaps, ensure equitable access, and empower societies through enhanced governance and socio-economic growth.

THE WAY FORWARD

EQUALITY THROUGH E-QUALITY



The integration of Information and Communication Technology (ICT) has ignited a powerful wave of development as the private sector boldly ventures into realms traditionally governed by public authorities. This dynamic shift has brought about a transformative recalibration of services, finely attuned to the pulse of citizens' needs. At the core of this evolution lies the pivotal drive toward successful e-government development, a journey intricately woven with threads of enhanced connectivity, elevated standards of service delivery, and the cultivation of digital literacy. Complementing these aspects is the indispensable presence of a technologically adept public sector workforce.

This orchestrated approach stands as an indomitable cornerstone in pursuing global developmental aspirations, including the momentous graduation of the Least Developed Countries (LDCs) into the echelons of prosperity. It also intricately weaves the tapestry of an inclusive high-income future, wherein every strand resonates with the principles of equity and accessibility.

However, while filled with promise, the trajectory of digital advancement must tread with circumspection. It should not unwittingly magnify the pre-existing chasms entrenched within the realms of economics, society, and culture. Recognizing this imperative, governments across the globe have unfurled a collective commitment to engendering parity. This ethos is encapsulated within the very essence of 'e-Quality'—a conceptual scaffold that upholds the ideals of unbiased digital entry, indifferent to the trappings of socio-economic standings, gender classifications, age brackets, or any other differentiating traits.

By placing the marginalized segments of society at the vanguard of this digital odyssey, the world stands poised to unravel the tapestry of comprehensive and impartial growth. Through this conscious approach, the roots of inclusivity will entwine themselves within the very fabric of our society, nurturing a habitat where every resident thrives.

The voyage toward a future empowered by digital innovation is an expedition that demands unceasing dedication. The pillars of digital infrastructure must be fortified incessantly; the light of digital literacy must be kindled in every corner, dispelling the shadows of ignorance; and the aspirations of the underserved must be met with solutions as vibrant and diverse as their needs. As we channel our energies into these endeavors, we pave a promenade toward a global tapestry characterized by inclusiveness and prosperity, ensuring that the brilliance of the digital age radiates equally upon all.





a2i - innovate for all

📍 ICT Tower, Agargaon, Sher-e-Bangla Nagar, Dhaka, Bangladesh

☎ 88 02 55006931-34 ✉ info@a2i.gov.bd 🌐 a2i.gov.bd

📱 a2iBangladesh 📷 a2ibangladesh 📺 a2i-bd 📺 a2i_bd 📺 a2iBangladesh



Cabinet Division
Government of the People's Republic of Bangladesh

