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GLOBAL CONNECTIVITY REPORT-RISING GLOBALIZATION

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In the 21st century, when the world is increasingly interconnected with intricate connectivity patterns, globalisation has become the most significant propeller of this interconnectedness. In this regard, the Global Connectivity Report 2022 emerges as an important instrument in understanding and measuring the contours of this global phenomenon.

The Global Connectivity Report of 2022 highlighted the progress in digital connectivity over the period of 3 decades. It presented a detailed assessment of the current state of connectivity and how close the world is to achieving universal and meaningful connectivity, using a unique and detailed analytical framework.

This essay briefly discusses the essence of the global connectivity report and tries to explore its profound relationship with the rising tide of globalisation. The report provides a comprehensive analysis of the state of global connectivity across various domains while encompassing a range of parameters, including internet penetration, mobile connectivity, digital infrastructure, trade networks, and cultural exchanges.

Background

The International Telecommunication Union (ITU), the UN's specialised agency for information and communication technologies, noted in its report that the immense potential of the internet for social and economic good remains largely untapped despite three decades of steady growth. The report argues that access to affordable and fast broadband is nearly ubiquitous in most rich nations, but a vast swath of humanity still remains excluded from the immense possibilities offered by the online experience, which ultimately is a big contributor to deepening global inequalities. Today, around 5 billion people use the internet, but 2.9 billion people, almost one-third of humanity, still remain outside of the purview of internet connectivity and struggle with expensive and poor-quality access¹. The report advocates for universal and meaningful connectivity and the possibility of a safe, enriching, productive, and affordable online experience for everyone by 2030.

¹ News, ITU. "Facts and Figures 2021: 2.9 Billion People Still Offline." ITU, December 7, 2021. <https://www.itu.int/hub/2021/11/facts-and-figures-2021-2-9-billion-people-still-offline/>.

ITU Secretary-General Houlin Zhao mentions in his speech that “Equitable access to digital technologies isn't just a moral responsibility, it's essential for global prosperity and sustainability.” “We need to create the right conditions, including promoting environments conducive to investment, to break cycles of exclusion and bring digital transformation to all.”²

The Covid-19 pandemic has led to an increase in demand for internet access and has brought around 800 million³ people online. Still, along with this, it had also dramatically increased the cost of digital exclusion, with those unable to connect abruptly facing shutoff of employment, schooling, healthcare advice, financial services, and much more. The report data suggests that the urban areas have twice as many internet users (81%) as in rural areas. This demographic divide, accompanied by a gender divide, exists globally, where 62% of men use the Internet compared to only 57% of the women population⁴. This steady but uneven progress in global internet connectivity highlights the disparities of the digital divide and its impact on low-income countries more. According to ITU’s annual connectivity report, fixed broadband services accounted for over 80% of global internet traffic in 2022, but this dominance of fixed networks underscores the global connectivity disparity between high and low-income countries, with only fixed broadband subscriptions per 100 people in low-income countries due to a lack of infrastructure and high prices.⁵

² Price, Gary. “New Data, Statistics: ITU Releases 2022 Global Connectivity Report, Global Potential of Internet Remains Largely Untapped.” Library Journal infoDOCKET, June 6, 2022. <https://www.infodocket.com/2022/06/06/itu-releases-2022-global-connectivity-report-global-potential-of-internet-remains-largely-untapped/>.

³ *Global Connectivity Report 2022*. (n.d.). https://www.itu.int/dms_pub/itu-d/opb/ind/d-ind-global.01-2022-pdf-e.pdf

⁴ Gehner, Monika. “Global Potential of Internet Remains Largely Untapped, Says UN Agency for Digital Technology.” ITU, June 6, 2022. <https://www.itu.int/en/mediacentre/Pages/PR-2022-06-06-Global-potential-of-internet-remains-untapped.aspx>.

⁵ “ITU Report: Steady but Uneven Progress in Global Internet Connectivity.” Telecom Review, November 29, 2023. <https://www.telecomreview.com/articles/reports-and-coverage/7584-itu-report-steady-but-uneven-progress-in-global-internet-connectivity/>.

Figure 2.7: The urban-rural divide

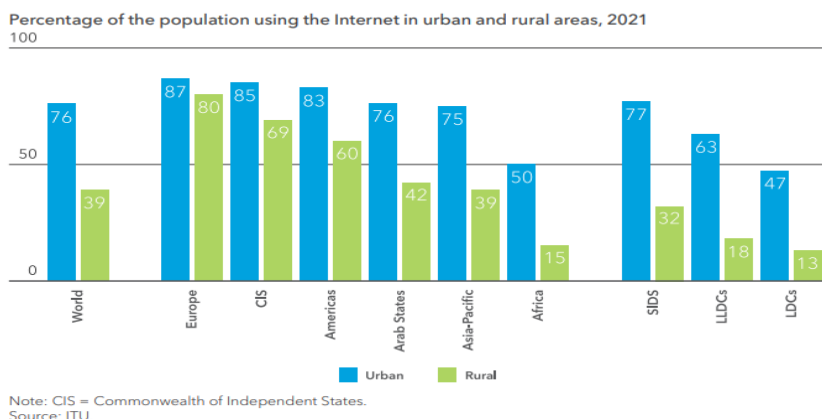


Figure 1⁶

The ITU report also tracks global connectivity on key indicators, including infrastructure, affordability, gender, and location; it now includes new indicators on global 5G mobile network coverage and intent traffic data. Reports show that 5G network coverage has expanded to almost 40% of the world’s population, but this distribution is uneven. While 89% of the population in high-income countries is recovered by 5G, the service is nearly absent in low-income countries where 3G is still used in large amounts. However, 3G is not sufficient to access the full benefits of digital technology, such as remote medical diagnostics and online learning. On the other hand, 4G covers only 39% of the population of low-income countries.⁷

The report also takes into account the regional digital disparity existing in the world where “5.4 billion people, equivalent to 67% of the world’s population, use the internet. In Europe, the Commonwealth of Independent States, and the Americas, about 90% of the population uses the Internet. Approximately two-thirds of the population in the Arab States, Asia, and the Pacific uses the Internet, in line with the global average. However, just 37% of the population uses the Internet in Africa today.⁸

⁶ Press release. (2022, June 6). ITU

⁷ “Nearly 40% of the World Is Now Covered by 5G Says ITU.” 5G Observatory. Accessed November 27, 2024. <https://5gobservatory.eu/nearly-40-of-the-world-is-now-covered-by-5g-says-itu/>.

⁸ Press release. (2022, June 6). ITU

In terms of affordability in low-income economies, the median price of an entry-level mobile-broadband subscription amounts to 8.6% of average income, a share 22 times larger than in high-income countries (0.4%).⁹

Figure 2.5: The global digital divide

Percentage of the population using the Internet, 2020

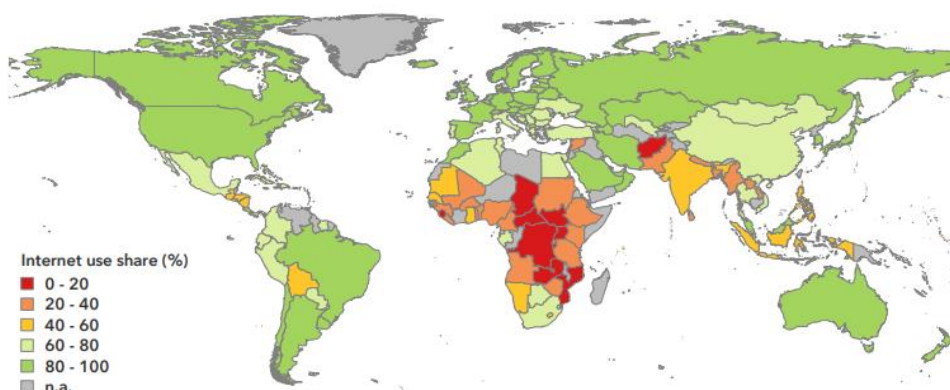


Figure 2¹⁰

The figure shows how the global digital divide persists, where the population in Northern America and Europe are well connected with internet services, whereas in the Asian region, the population is moderately connected, whereas in the African continent, the number of people using the internet is the lowest.

To understand the current state of global connectedness and examine the rising trends of globalisation in relation to the Global Connectivity report, this essay uses data from DHL's (Dalsey, Hillblom, and Lynn.) report. DHL and New York University's Stern School of Business release their Global Connectedness Report 2024¹¹, which provides a comprehensive analysis of globalisation and its trajectory. It tracks the flow of trade, capital, information, and people around

⁹ Press release. (2022, June 6). ITU

¹⁰ Press release. (2022, June 6). ITU

¹¹ Experience stern: Faculty & research. Research Highlights | DHL Global Connectedness Index 2024 Update - NYU Stern. (n.d.).

the world as a measure of globalisation in 181 countries. The report suggested that 2022 marked the year when globalisation reached its record high despite global shocks over the past decades, including the COVID-19 pandemic, the Russia-Ukraine war, the US-China trade conflict, and Brexit. Trade growth played a crucial role in boosting global connectedness, where the share of global output traded internationally was back to record high levels in 2022. The report further affirms the considerable potential to continue growing global flows. According to the report, Singapore ranks number one in the globalised countries index, followed by the Netherlands and Ireland. Further evidence showcases that Europe is the world's most globally connected region, followed by North America, the Middle East, and North Africa¹². According to Ih-Ming Chan, executive vice president of the Singapore Economic Development Board, Singapore has invested heavily in strengthening its physical and digital connectivity to the world and continues to enhance our connectivity and trade links to remain a critical and trusted node in the global supply chain.¹³

Connectivity-related Environmental Challenges

The report also mentions tackling connectivity-related environmental challenges that are essential for minimising the environmental impacts of ICTs, from discarded equipment that contains dangerous materials like mercury, cadmium, and lead to telecommunication network carbon emissions and the significant power needed to run the data centres. Data centres and transmission networks used approximately 1-1.5% of global electricity in 2021, according to the IEA report 2021¹⁴. In terms of energy efficiency, fibre optic cables are more energy efficient than copper wires, and each generation of wireless technology uses less energy than the previous one. For many low- and middle-income countries, balancing the provision of sufficient energy for connectivity infrastructure with the shift to renewable energy sources is a challenge.

¹² Altman, Steven. "Singapore TOPS List as Most Globalized Country, Reveals DHL Global Connectedness Report 2024." DHL, March 13, 2024. <https://www.dhl.com/sg-en/home/press/press-archive/2024/singapore-tops-list-as-most-globalized-country-reveals-dhl-global-connectedness-report-2024.html>.

¹³ Yifan, Zhao. "Deglobalisation Is Still Only a Risk, Not a Reality: DHL." The Business Times, March 13, 2024. <https://www.businesstimes.com.sg/international/global/deglobalisation-still-only-risk-not-reality-dhl>.

¹⁴ Iea. "Data Centres & Networks." IEA, 2023. <https://www.iea.org/energy-system/buildings/data-centres-and-data-transmission-networks#>.

The report highlights that foreign investors are increasingly concerned about climate change in their risk assessments and may be reluctant to invest in projects that are not environmentally responsible. However, many low- and middle-income nations have considerable untapped renewable potential from solar, wind, hydroelectric, and geothermal sources of power generation, and as major energy users, ICT companies can provide the scale of investment to make renewable energy economically feasible. The report recommends governments help by creating climate-friendly energy strategies and liberalising markets, particularly by working with independent renewable power producers.

In this era of rapid technological advancements and unprecedented interconnectedness, the global connectivity report emerges as a critical instrument for the assessment of globalisation and its agenda of digital interconnectedness. The report made its analysis in various dimensions, including global, digital, economic, and social, as well as providing a nuanced understanding of global interconnectedness. By providing diverse data sets, the holistic approach of the report enables it to capture the multifaceted nature of connectivity and its impact on various sectors and stakeholders.

The findings from the DHL report regarding global interconnectedness state that the level of globalisation has been at a record high in the present time, suggesting the resilience of its structure to survive many global shocks. Even during the pandemic, when the supply chains and manufacturing value chains were disrupted worldwide, the level of integration was not affected much, and the main propeller of this was digital connectivity. Ranging from a multitude of services like online schooling, university lectures, video conferencing, working from home, and doctor's appointments in the cases of quarantine or online goods delivery, cash transfer all became significant parts of daily functioning, new access, vaccine slot bookings, etc. The world in years of pandemic realised that the world has reached a level of globalisation-led interconnectedness whose actual driver in the 21st century is digital connectivity. In this increasingly digitised world, access to high-speed internet, digital platforms, and emerging technologies play a pivotal role in economic growth, fostering innovations and empowering individuals and communities. Global connectivity reports consider how digital connectivity has affected trade flows, investment patterns, supply chain resilience, and market integration. Digital accessibility has also proved crucial for social connectivity, enabling large-scale cultural exchanges, usually through social

media, and empowering cross-cultural communication. This shows how social networks, digital platforms, and virtual communities transcend geographical boundaries, enabling people to connect, collaborate, and share experiences across continents and cultures.

The Cyber Risks

The report also discusses the risks of digital or internet connectivity; for instance, the largest users of the internet around the world are young people falling under the age bracket of 15-21 years, and for them, the risks are associated with cyber-sexual harassment, inappropriate content, internet pornography, etc. The report also suggests that for a hyper-digitized, globalised world to function smoothly and risk-free, the stakeholders need to work in a direction to enhance the digital framework and its resilience to survive the shocks of cybersecurity threats, data thefts, and rising challenges of artificial intelligence. For this, cross-border collaboration is needed, and intergovernmental cooperation should be seriously pursued to ensure data privacy, build a durable digital infrastructure that is affordable, and have the vision to reduce the digital disparity and integrate more people in the tide of globalisation.

Implications

The findings of the report have profound implications for policymakers, businesses, civil society, and academia as they provide valuable insights into the opportunities and challenges posed by global interconnections and guide the formulation of strategies to harness the benefits of connectivity while addressing its associated risks and disparities. The evidence-based recommendations offered by the reports are to enhance digital infrastructure, promote digital literacy, bridge the digital divide, and foster inclusive internet-driven economic growth.

In conclusion, the global connectivity report provides helpful insights into the complex web of global interconnectedness shaping our world. By illuminating the opportunities, challenges, and implications of connectivity across digital, economic, and social domains, the report catalyses informed decision-making and fosters collaboration. It paves the way for a more interconnected, inclusive, and resilient globalised world.

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