

1. INTRODUCTION

The purpose of this report is to provide a compilation of evidence within the thematic area of digital foundations that includes six sub-themes, including: Rights-based access to the internet, ICT regulation & policy, digital literacy among people living in poverty and oppression, Information & cybersecurity, digital (public) infrastructure, and capacity building. The compilation of evidence was conducted per sub-theme, which also allowed for the identification of gaps in the research, and the inter-play between each sub-theme. Section two of this report provides links to the most important evidence, while section three presents all research results organised by sub-theme. An Excel table is annexed to the report, which enables viewing the results with more variables and possibilities to filter and search the results by keywords, time of publishing and geographical focus. The research results in section three concerns only the most recent and relevant publications and are not an exhaustive collection of evidence.

Most of the 'what works' evidence was found related to digital infrastructure, where Digital Impact Alliance, the Rockefeller Foundation and Digital Development Partnership presented several case studies. Also, an interesting study by Ndubuisi (2021) shows the effect of the digital infrastructure on employment using financial study. In general, the evidence mapping provided the most links between the foundations of digitalisation and digitalisation as a method, regarding creating jobs, trade and education. Digitalisation is seen as a way to increase employment, and relevant digital policies foster an economic environment that can help small and medium-size companies to grow. The digitalisation of employment markets can also help skilled workers in developing countries to work remotely with countries experiencing labour shortages, especially concerning ICT skills (World Economic Forum 2024).

The evidence mapping revealed a growing body of research and reports from international organisations on digital foundations, particularly on Digital Public Infrastructure (DPI). This trend mirrors the rapid development of technology that is permeating all aspects of society. It is crucial to recognize, that while Digital Public Infrastructure can enhance efficiency in delivering government assistance, and providing internet access to rural areas, its adoption without

proper safeguards can lead to mass collection of data, potentially infringing on digital rights and oppressing minorities.

The evidence further shows that most countries are undergoing significant digital transformation and are creating their own Digital Public Infrastructure. The DPIs are considered to consist of digital identity, digital payments and secure data exchange ecosystems, among others. A prime example of DPI is the 'India stack', which includes the digital identity system Aadhaar (Digital Impact Alliance 2022). Most of the reports that showcase 'what works' focus on providing evidence of the benefits of DPI, and how DPI should be built to foster, for instance, rights-based access to the Internet (See, e.g., The Rockefeller Foundation 2021, UNPD 2023). Scientific studies also show a positive correlation between investment in digital infrastructure and economic development and inclusive growth, including in rural areas (see, e.g., Nchake & Shuaibu 2022). Digitalising public infrastructures is also beneficial from a sustainable development perspective (Digital Impact Alliance 2024). For instance, the term twin transition is used to describe compatible digitalisation and climate transformation goals. Some of the broader evidence studies show how DPI can accelerate the achievement of the United Nations (UN) Sustainable Development Goals (SDG).

However, the evidence provided by the DPI studies often remains light in addressing the challenges posed by digitalisation in the context of low- and middle-income countries. This becomes apparent when comparing the the evidence regarding Information and cybersecurity, and rights-based access to the Internet, to digital public infrastructure. Firstly, while governments are increasingly undertaking digital infrastructure projects, the Freedom House (2023) results show that the internet freedom continues to decline every year, and that governments have increased efforts to make online spaces more 'controllable'. There is, thus secondly, a gap in the evidence that links the digital public infrastructure transformation projects with the increased risks related to Information and cyber security that includes the rapid development of Artificial Intelligence (AI) and the adoption of technology that uses generative AI, and risks associated with the use of this technology (Freedom House 2023).

This also demonstrates a need for strong ICT regulation and policy to avoid human rights abuses, surveillance, and reduced connectivity due to for example, internet shutdowns as reported by Bergere (2020). While several reports and statistics by the World Bank and Digital Development Partnership (World Bank) has collected data on the current legal framework concerning digitalization, Access Now (2024) study shows that there is still limited attention given by the international organizations to digital rights.

Ensuring rights-based access to the Internet is also a critical aspect of digital infrastructure. Evidence of the usage gap (GSMA 2023) reveals that while individuals may have mobile broadband coverage, there is a segment of individuals who still do not use it. Notably, the internet adoption of women has slowed down in low- and middle-income countries, according to GSMA (2023). This is a significant concern, given the positive correlation between mobile broadband coverage and poverty reduction (Digital Development Partnerships 2021). Capacity building in terms of building digital skills, as reported by the Digital Development Partnership (2021), is therefore crucial. The organisation also provides an engendering ICT toolkit to address the gender gap in adopting and using ICT tools.

In addition, according to another study by Ogbodo (2024), it is important to upskill individuals with digital literacy so that they are more able to recognize fake news targeted to deepen the 'social divide', and spread extremist views. Similarly, to most of the studies selected for the evidence mapping, this study focused on one African country, namely Nigeria. As an overall observation, there was a geographical gap in the research. Most studies and reports focused on examining a country or region in Africa, and very little evidence was provided from South America and Middle Eastern countries. In all the sub-themes, there is a couple of individual 'work works' evidence papers, providing either data or case studies in the African context.

Selecting the most relevant evidence from numerous reports, studies, and scientific research on digital foundations was challenging due to the broad scope of different sub-themes. As a result, the compiled evidence provides a snapshot of each theme. However, further in-depth exploration of each topic is still merited. Still, the evidence mapping offers a comprehensive overview of the current evidence on digital foundations. The evidence, however, does not yet entirely reflect the change brought about by AI. This makes out a gap in the evidence on the impact of AI on development and humanitarian aid. It is anticipated that more research on this topic will emerge in the coming years.

Also, digitalisation and humanitarian aid could be treated as a separate category. The evidence mapping included datasets and catalogues from international organisations such as OCHA and IMPACT REACH. However, more research results could have been dedicated individually to this topic, as there are several concerns about the impact of the data on humanitarian aid recipients. On the other hand, in this domain, AI may also bring new solutions and efficiency gains.

2. KEY EVIDENCE SOURCE – QUICK LINKS PER SUB-CATEGORY OF DIGITAL FOUNDATIONS

RIGHTS-BASED ACCESS TO INTERNET	Internet Society (2024) Resource library on the state of the internet and access to internet GISWatch (2024) From "digital divide" to "digital equality": Unpacking the digital inequality paradox GSMA (2023) The state of mobile connectivity GSMA (2023) Mobile Gender Gap Report Carcia-Mora & Mora-Rivera / New Media & Society (2021) Exploring the impacts of Internet access on poverty: A regional analysis of rural Mexico
ICT REGULATION AND POLICY	Access Now (2024) Publications on content governance, data protection and internet governance World bank (2021) Global Data Regulation Diagnostic Data Set Adams and Akobeng / Telecommunications Policy (2021) ICT, Governance and inequality in Africa
DIGITAL LITERACY, AMONG POOR AND OPPRESSED	Ogbodo / African Journalism Studies (2024) Fighting Fake News Proliferation Through Digital Literacy in Africa: Perspectives from Nigerian Netizens UN (2023) Digital Literacy the Great Divide
INFORMATION AND CYBER SECURITY	Access Now (2024) Publications on the impact of Artificial Intelligence Freedom House (2023) Freedom on the Net 2023 – Repressive power of Artificial Intelligence Digital Development Partnership (2021) Integrating Cyber Capacity into the Digital Development Agenda
DIGITAL (PUBLIC) INFRASTRUCTURE	Access Now (2024) Mapping Humanitarian Tech - Exposing Protection Gaps in Digital Transformation Programmes UNPD (2023) Accelerating the SDGS through Digital Public Infrastructure - A Compendium of the Potential of Public Digital Infrastructure UNPD (2023) The human and economic impact of digital public infrastructure Cordes & Marinova / Discover Sustainability (2023) Systematic literature review of the role of e-commerce in providing pathways to sustainability for poverty alleviation in Sub-Saharan Africa The Rockefeller Foundation (2021) Co-develop Digital Public Infrastructure for an equitable recovery
CAPACITY BUILDING	World Economic Forum (2024) Realizing the potential of Global Digital Jobs Digital partnership development (2022) The demand for Digital and Complementary Skills in Southeast Asia Heeks / Information Technology for Development (2022) Digital inequality beyond the digital divide: conceptualising adverse digital incorporation in the global south

3. TABLE OF EVIDENCE FOR DIGITAL FOUNDATIONS

The table shows a collection of evidence and information about digital foundations. The evidence is collected per sub-category. The table is not an exhaustive list and is showcasing only the 81 of the most relevant and recent findings. The table below does not show all the variables. The complete table is provided on a searchable excel sheet and include the number of studies sorted in different categories with additional information (ANNEX I: Digital foundations_ searchable evidence mapping in Excel).

1. DIGITAL FOUNDATIONS	ORANISATION / AUTHOR / JOURNAL	YEAR	TITLE OF THE STUDY / DESCRIPTION	LINK
Rights-based access to internet	Internet Society	2024 (last updated)	Resource library / Includes briefs and reports on the state of the internet and access to internet	https://www.internetsociety.org/resources/?tx_resource_types=resource
Rights-based access to internet	Access Now	2024	Shrinking democracy, Growing Violence - Internet Shutdowns in 2023 / The report investigates triggers for internet shutdowns by governments and the consequent human rights abuses and violence in Africa , Asia Pasific, Latin America and Middle East, among others	https://www.accessnow.org/wp-content/uploads/2024/05/2023-KIO-Report.pdf
Rights-based access to internet	Gillwald / GISWatch	2024	From "digital divide" to "digital equality": Unpacking the digital inequality paradox / The report discussess how technological innovations can be harnessed for innovations from a Majoritan World perspective and identifies areas of digitalisation and datafication that could contribute to more equitable and just digital policies, for example seeing data as a public good	https://www.apc.org/sites/default/files/SE_GISW-Gillwald_final.pdf
Rights-based access to internet	Matli & Malatji / Journal of Informations Systems and Informatics	2024	A Review of Internet Use and Access for BRICS Sustainable Futures: Opportunities, Benefits, and Challenges / Scientific research using the Technology Acceptance Model (TAM) to understand the internet use and access in BRICS countries. Findings include that affordability of internet and lack of digital skills remain barriers for individuals to benefit from the access to internet.	https://journal-isi.org/index.php/isi/article/view/636

Rights-based access to internet	World Economic Forum	2024	AI for Impact: The PRISM Framework for Responsible AI in Social Innovation / Study mapping out the landscape of AI deployment by social impact domain, geography and gender.	https://www.weforum.org/publications/ai-for-impact-the-prism-framework-for-responsible-ai-in-social-innovation/
Rights-based access to internet	PWC	2023	Connecting the World - Ten Mechanisms for Global Inclusion / Report showcasing ten mechanisms for energizing the connectivity, content and retail markets	https://www.pwc.com/gr/en/publications/assets/connecting-the-world-ten-mechanisms-for-global-inclusion.pdf
Rights-based access to internet	GSMA	2023	The State of Mobile Internet Connectivity / The results from the report includes statistics about the usage gap (individuals are living within broadband coverage but not using it, 38%) and coverage gap (individuals living without broadband coverage, 5%)	https://www.gsma.com/r/somic/
Rights-based access to internet	GSMA	2023	Mobile Gender Gap Report 2023 / Report results show that internet adoption by women has slowed down in low- and middle-income countries	https://www.gsma.com/solutions-and-impact/connectivity-for-good/mobile-for-development/blog/the-mobile-gender-gap-report-2023/
Rights-based access to internet	Carcia-Mora & Mora-Rivera / New Media & Society	2021	Exploring the impacts of Internet access on poverty: A regional analysis of rural Mexico / Scientific research that assess the impact of internet access on poverty for a sample of people living in rural Mexico. The findings include a need for targeted public policy solutions that support the use of internet.	https://journals.sagepub.com/doi/full/10.1177/14614448211000650
Rights-based access to internet	Digital Development Partnership / World Bank	2021	Mobile Broadband Internet, Poverty and Labor Outcomes in Tanzania / Report results include household survey data and geospatial information on the mobile broadband coverage in Tanzania that shows positive correlation with broadband coverage and poverty reduction	https://documents1.worldbank.org/curated/en/457061629220877366/pdf/Mobile-Broadband-Internet-Poverty-and-Labor-Outcomes-in-Tanzania.pdf
Rights-based access to internet	IZA Institute of Labor Economics	2020	The Welfare Effects of Mobile Broadband Internet - Evidence from Nigeria / Report results include statistics from a household survey that show positive correlation with mobile broadband coverage and household consumption levels	https://docs.iza.org/dp13219.pdf
Rights-based access to internet	Ben-Hassine / UN Chronicle	2018	Government Policy for the Internet Must Be Rights-Based and User-Centred / Blog post from Access Now policy officer on how digital laws can be used to curb human rights, such as right to freedom of expression, instead of promoting rights-based access to internet	https://www.un.org/en/chronicle/article/government-policy-internet-must-be-rights-based-and-user-centred

ICT Regulation and policy	Access Now	2024	Publications on Content Governance / Blog posts and reports on content governance and how new regulatory frameworks such as (EU) Digital Services Act can protect those most effected by oppressive regimes and weak content moderations by large online platforms, like META	https://www.accessnow.org/publications/? issue=content-governance
ICT Regulation and policy	Access Now	2024	Publications on Data Protections / Blog posts and reports include on how personal data is protected in different regions and on the state of the data protection laws, for example, opinions on the laws to register SIM-cards in Kenya and the subsequent risk of unlawful collection and use of biometric data	https://www.accessnow.org/publications/? issue=data-protection
ICT Regulation and policy	The Digital Policy Alert	2024	The Anatomy of AI Rules - A systematic Comparative Analysis of AI Rules Across the Globe / Report provides a breakdown of the elements of AI governance to help governments in deploying robust AI rules.	https://media.licdn.com/dms/document/media/D4E1FAQFMAdy7HYxKjw/feedshare-document-pdf-analyzed/0/1719488442075?e=1720656000&v=beta&t=rQLZLM5FMGj86BLcN_q8pspB9oDtv3DXk386zongLNA
ICT Regulation and policy	Accociation for Progressive Communications (APC)	2024	Internet Governance / Reports on internet governance and impact on civil society, digital inequality, freedom of expression, among others	https://www.apc.org/en/resources
ICT Regulation and policy	Accociation for Progressive Communications (APC)	2024	Human Rights in the digital context and the state of civic space in the Democratic Republic of Congo (DRC) / Joint Stakeholder Report analyzing the legal framework in the DRC and conducting interviews with human rights defenders. Report focuses on technology-facilitated gender-based violence targeting women journalist, politicians and rights defenders	https://www.apc.org/en/node/40163
ICT Regulation and policy	SIDA	2024	Digitalisation and multidimensional poverty / Brief showcases the relationship between digital transformation and dimensions of poverty and gives guidance on which aspects of digitalisation are important for poverty reduction	https://cdn.sida.se/app/uploads/2024/03/31145852/MDPA_Digitalisation_and_Poverty_2024.pdf
ICT Regulation and policy	Hammer et al. / UNSTATS	2023	Putting Mobile Phone Big Data to work for Policy and Official Statistics / Blog post on how mobile data can be used in policy making, taking the COVID-19 use case in Gambia	https://unstats.un.org/unsd/undataforum/blog/putting-mobile-phone-big-data-to-work/
ICT Regulation and policy	World Bank	2021	Global Data Regulation Diagnostic Data Set / Comprehensive assessment on the quality of laws and regulations related to digitalisation and data governance environment. The results show that there is more effort to adopt enabling regulatory practices for digitalisation than safeguarding regulatory practices, including data protection and cybersecurity.	https://datacatalog.worldbank.org/search/dataset/0043590/Global-Data-Regulation-Diagnostic-Survey-Dataset-2021

ICT Regulation and policy	Adams and Akobeng / Telecommunications Policy	2021	ICT, Governance and inequality in Africa / Scientific study that investigates whether governance indicators can reinforce the benefit from ICT development. Findings include that ICT indicators reduce inequality in Africa and they can be strengthened by governance indicators.	https://www.sciencedirect.com/science/article/abs/pii/S0308596121001026
ICT Regulation and policy	Bergere / International Journal of Communication	2020	Internet Shutdowns in Africa “Don’t Tax My Megabytes”: Digital Infrastructure and the Regulation of Citizenship in Africa / Scientific article discusses the new laws in Guinea and Benin to tax internet data and argues that African governments 'rework digital infrastructures to regulate populations'	https://ijoc.org/index.php/ijoc/article/view/11493
ICT Regulation and policy	Digital Development Partnership / World Bank	2020	Digital Regulation Handbook / Practical guidance and best practices in regulating the digital economy, including regulatory responses to evolving technologies	https://www.digitaldevelopmentpartnership.org/knowledge.html?ddp=kn-pb-20-t1-02
ICT Regulation and policy	European Parliament	2015	ICT in the developing worlds / Study on the extent ICT can alleviate poverty and the role of public policies. Also, a chapter about ICT policies in low and middle income countries to support development of e-Health care.	https://www.europarl.europa.eu/thinktank/en/document/EPRS_STU(2015)563482
ICT Regulation and policy	VTT Technical Research Centre of Finland	2011	From ICT towards information society - policy strategies and concepts for employing ICT for reducing poverty / study examines how new ICT ecosystems can alleviate poverty. Examples from ICT strategies in Sub-Saharan Africa and a case study from Tanzania.	https://publications.vtt.fi/pdf/workingpapers/2011/W158.pdf
Digital literacy, among poor and oppressed	Sun et al. / African Journalism Studies	2024	Digital Literacy in Africa: Exploring its Relationship with Infrastructure, Policy, and Social Inequality / Scientific study examining the relationship between digital literacy and ICT infrastructure and policies. The results from 25 African countries show that ICT infrastructure increases digital literacy but social inequality decreases it	https://www.tandfonline.com/doi/full/10.1080/23743670.2024.2329705
Digital literacy, among poor and oppressed	Ogbodo / African Journalism Studies	2024	Fighting Fake News Proliferation Through Digital Literacy in Africa: Perspectives from Nigerian Netizens / Scientific study examining the relationship between digital literacy and fake news through Focus Group Studies in Nigeria	https://www.tandfonline.com/doi/full/10.1080/23743670.2024.2329705
Digital literacy, among poor and oppressed	UN	2023	Digital Literacy: the Great Divide / Report from UN consultation on the topic of digital literacy in which 40 experts from 25 countries participated. The conclusions include that while the world is connected through the digitalisation, the majority is still disconnected due to lack of access to digital tool and due to digital literacy	https://www.un.org/techenvoy/sites/www.un.org.techenvoy/files/GDC-submission_Digital-National-Alliance-Bulgaria.pdf
Digital literacy, among poor and oppressed	Barbier / Review of Development Economics	2022	Overcoming digital poverty traps in rural Asia / Scientific research that develops a model to illustrate the digital poverty trap phenomenon, where smallholders in remote communities are unable to take advantage of the access to internet and ICT solutions due to lack of digital skills.	https://onlinelibrary.wiley.com/doi/full/10.1111/rode.12962

Digital literacy, among poor and oppressed	Buchan et al. / Smart Learning Enviroments	2024	Navigating the digital world: development of an evidence-based digital literacy program and assessment tool for youth / Scientific research on digital literacy programs, the research conducted a systematic literature review to identify key components for digital literacy	https://slejournal.springeropen.com/articles/10.1186/s40561-024-00293-x
Information and Cyber security	Access Now	2024	Publications on the impact of Artificial Intelligence / Blog posts and articles on how Artificial Intelligence is being used to oppress individuals, for example, by automating human rights abuses in conflict zones, such as Gaza and mapping the risks of emerging biometric tech when used by oppressive regimes	https://www.accessnow.org/publications/?issue=artificial-intelligence
Information and Cyber security	Access Now	2023	African LGBTI activists gather to guard against digital security attacks / Blog post about how digital security helplines can help to protect LGBTI communities against cyberattacks and digital surveillance	https://www.accessnow.org/digital-security-health-clinic-at-pai-conference/
Information and Cyber security	Freedom House	2023	Freedom on the Net 2023 - Repressive power of Artificial Intelligence / Annual report on the state of the internet freedom focusing on the impact of the AI, where it has on one hand AI has made the disinformation campaigns worse and more effective, and on the other hand, allowed governments to enhance their online censorship	https://freedomhouse.org/sites/default/files/2023-10/Freedom-on-the-net-2023-DigitalBooklet.pdf
Information and Cyber security	Freedom House	2022	Freedom on the Net 2022 - Countering an Authoritarian Overhaul of the Internet / Annual report on the state of the internet freedom, findings include that internet freedom continues to decline especially in Russia, Myanmar, Sudan and Libay and governments continue to create more controllable online spaces	https://freedomhouse.org/sites/default/files/2022-10/FOTN2022Digital.pdf
Information and Cyber security	Accociation for Progressive Communications (APC)	2024	Spotlight on the vexing questions around biometrics and Digital IDs / News article highlighting the surveillance risks associated with the new government provided digital identity schemes in Africa	https://www.apc.org/node/40213
Information and Cyber security	Digital Development Partnership / World Bank	2021	Integrating Cyber Capacity into the Digital Development Agenda / The report gives recommendations on how to integrate cybersecurity and digital resilience in a project	https://www.digitaldevelopmentpartnership.org/knowledge.html?ddp=kn-pb-21-t4-01
Digital (public) infrastructure	Sahasranamam & Prabhu / Stanford Social Innovation Review	2024	Digital Public Infrastructure for the Developing World / Blog post about Digital Public Infrastructure (DPI), which in India is also referred to as "India Stack" including digital identity, digital payments and sectoral applications	https://ssir.org/articles/entry/digital-public-infrastructure-developing-world
Digital (public) infrastructure	Singapore Government Developer Portal	2024	Singapore Government Tech Stack / Blog posts that visualise the Government Tech or Digital Public Infrastructure in Singapore	https://www.developer.tech.gov.sg/singapore-government-tech-stack/

Digital (public) infrastructure	Raji et al. / International Journal of Management & Entrepreneurship Research	2024	Digital Transformation of SMES: A Comparative Review Between the USA and Africa / Scientific research highlights the innovative ways African SMES leverage mobile technology, localised digital solutions and collaborative networks to overcome challenges related to lack of funding or infrastructure. The article provides an digital ecosystem approach to digital development of SMES	https://fepl.com/index.php/ijmer/article/view/884
Digital (public) infrastructure	Digital Impact Alliance	2024	Trust data exchange is key to driving Africa's digital future. Uganda's approach offers many essential learnings / Article examines the data sharing ecosystem developed in Uganda and the impact of it to drive economic growth and societal progress	https://dial.global/data-exchange-key-to-africas-digital-future-uganda-learnings/
Digital (public) infrastructure	Digital Impact Alliance	2024	Lessons Learned: Reflecting on MOSIP's Journey to Scale / Report on implementation of the Modular Open Source Identity Platform (MOSIP) such as Ethiopia, Phillippines and Morocca. The report examines the opportunities and challenges of the open-source identity platform	https://dial.global/research/lessons-learned-reflecting-mosips-journey-scale/
Digital (public) infrastructure	Digital Development Partnership / World Bank	2024	Knowledge catalog / Publications and reports on digital development, including Digital Economy Diagnostics per country	https://www.digitaldevelopmentpartnership.org/knowledge.html
Digital (public) infrastructure	World Economic Forum	2024	Empowering Small and Medium-Sized Enterprises through Digital Business Model Innovation / A whitepaper on how governments can empower SMEs digital business models. A study example from Brazil.	https://www3.weforum.org/docs/WEF_Empowering_Small_and_Medium_Sized_Enterprises_through_Digital_Business_Model_Innovation_2024.pdf
	Access Now	2024	Mapping Humanitarian Tech - Exposing Protection Gaps in Digital Transformation Programmes / A report on private companies' role in digital transformation programmes. Offer recommendations based on gap analysis	https://www.accessnow.org/wp-content/uploads/2024/02/Mapping-humanitarian-tech-February-2024.pdf
Digital (public) infrastructure	UNPD	2023	Accelerating the SDGs through Digital Public Infrastructure - A Compendium of the Potential of Public Digital Infrastructure / The report presents examples of succesful digital public infrastructure projects and how they connect to SDGs	https://www.undp.org/sites/g/files/zskgke326/files/2023-08/undp-g20-accelerating-the-sdgs-through-digital-public-infrastructure.pdf

Digital (public) infrastructure	Ballesteros / Economist Impact	2023	Digital public infrastructure: building the rails of the digital revolutions / Blog post on how DPI can host inclusive and resilient economies but require investment	https://impact.economist.com/perspectives/technology-innovation/digital-public-infrastructure-building-rails-digital-revolution
Digital (public) infrastructure	Bill & Melinda Gates Foundation	2023	Digital Ids are an effective tool against poverty / The blog post introduces the global identity problem and how open-source solutions can help to solve it	https://www.gatesfoundation.org/ideas/articles/mosip-digital-id-systems
Digital (public) infrastructure	UNPD	2023	The Human and Economic Impact of Digital Public Infrastructure / The report provides a quantitative analysis of the potential impact of digital public infrastructure by 2030 across the finance, climate and justice sectors	https://www.undp.org/publications/human-and-economic-impact-digital-public-infrastructure
Digital (public) infrastructure	Financial Times	2024	India points the way to digital access across Africa / Article about Digital Public Infrastructure in India, reporting some of the data breaches that have occurred and showcasing how civil liberties could be at risk with DPIs	https://www.ft.com/content/3c1504ef-96f7-4656-a5cf-d474123dc31e?sf182097681=1
Digital (public) infrastructure	Cordes & Marinova / Discover Sustainability	2023	Systematic literature review of the role of e-commerce in providing pathways to sustainability for poverty alleviation in Sub-Saharan Africa / Literature review on the role e-commerce in poverty reduction. The findings include absence of formal research and application of theories in low-income countries. The article introduces a framework for the implementation and management of networks of SMEs for sustainable development.	https://link.springer.com/article/10.1007/s43621-022-00109-3
Digital (public) infrastructure	Nchake & Shuaibu / Scientific Africa	2022	Investment in ICT infrastructure and inclusive growth in Africa / Scientific study uses the Blundell-Bond system to examine the impact of ICT infrastructure in Africa. The results show positive correlation between investment in ICT infrastructure and inclusive growth especially in rural areas	https://www.sciencedirect.com/science/article/pii/S2468227622002009
Digital (public) infrastructure	Digital Impact Alliance	2022	How India is Reimagining Consent to Empower People / Report on how India aims to give more control to its citizens through Data Empowerment and Protection Architecture (DEPA)	https://dial.global/research/case-study-india-consent/
Digital (public) infrastructure	Digital Impact Alliance	2022	Algorithms in Government - A magic formula or a divisive force / Report investigates automatic decision-making in the public sector and the specific challenges of automatic decision making in developing countries, starting from transparency issues to lack of data and lack of representation of AI training data	https://dial.global/research/algorithms-in-government-a-magic-formula-or-a-divisive-force/

Digital (public) infrastructure	Digital Development Partnership / World Bank	2022	South Asia's Digital Opportunity - Accelerating Growth, Transforming Lives / Report examines the opportunities and challenges for digital transformation in South Asia. The findings includes, among others, that despite high connectivity, region's poor cannot afford to buy smartphones (largest usage gap in the world) and there is a low digital literacy especially among women	https://www.worldbank.org/en/topic/digital-development/publication/south-asia-s-digital-opportunity-accelerating-growth-transforming-lives
Digital (public) infrastructure	Digital Development Partnership / World Bank	2022	Catalyzing the Green Digital Transformation in Low- and Middle- income countries / Report on the twin transition (climate and digital transitions) in low and middle income countries	https://www.digitaldevelopmentpartnership.org/knowledge.html?ddp=kn-pb-22-t1-10
Digital (public) infrastructure	The Rockefeller Foundation	2021	Co-develop Digital Public Infrastructure for an equitable recovery / Report on how to develop DPI for common good and with public-private partnerships	https://www.rockefellerfoundation.org/wp-content/uploads/2021/08/Co-Develop-Digital-Public-Infrastructure-for-an-Equitable-Recovery-Full-Report.pdf
Digital (public) infrastructure	Digital Public Good Alliance	2021	Digital Public Goods: Enablers of digital sovereignty / Chapter on Development Co-operation Report from 2021. The chapter argues that proprietary technology can lead to technological lock-ins whereas digital public goods, referring often to open-source technology, can advance economic development (and development co-operation as such)	https://www.oecd-ilibrary.org/sites/c023cb2e-en/index.html?itemId=/content/component/c023cb2e-en
Digital (public) infrastructure	Ndubuisi et al. / Telecommunications Policy	2021	Digital infrastructure and employment in services: Evidence from Sub-Saharan African countries / Scientific research on the effect of digital infrastructure on employment in Sub-Saharan Africa using financial data	https://www.sciencedirect.com/science/article/pii/S0308596121000574
Digital (public) infrastructure	Digital Development Partnership / World Bank	2020	Digital Government Readiness Assessment Toolkit / Toolkit provides 67 questions and nine core functions to examine the readiness of a digital government	https://www.digitaldevelopmentpartnership.org/knowledge.html?ddp=kn-tk-20-01
Digital (public) infrastructure	Banga et al.	2020	Digitally Enabled Economic Transformation and Poverty Reduction - Evidence from Kenya and Cambodia / A report that explores the correlation between digitally enabled economic transformation and poverty reduction, using statistics from two countries, Kenya and Cambodia.	https://set.odi.org/wp-content/uploads/2020/09/DEET-and-poverty-reduction_final-2.pdf

Digital (public) infrastructure	Wille / The New Humanitarian	2023	You don't need to demand sensitive biometric data to give aid. The Ukraine response shows how / Opinion piece that arguing that shifting away from biometrics is better direction to protect the rights of the people who use aid.	https://www.thenewhumanitarian.org/opinion/2023/07/11/you-dont-need-demand-sensitive-biometric-data-give-aid-ukraine-response-shows?utm_content=buffer90e36&utm_medium=social&utm_source=linkedin.com&utm_campaign=buffer
Digital (public) infrastructure	Zaballos et al. / Inter American Development Bank	2019	The Impact of Digital Infrastructure on the Sustainable Development Goals: a study for selected Latin America and Caribbean countries / Report shows how the investment in digital infrastructure can help to achieve SDG targets	https://publications.iadb.org/en/impact-digital-infrastructure-sustainable-development-goals-study-selected-latin-american-and
Capacity building	Digital Impact Alliance	2024	Ukraine: Digital resilience in a time of war / Article on digitalisation in Ukraine during the war with Russia	https://dial.global/research/ukraine-digital-resilience-war/
Capacity building	Access Now	2024	Wavering Resolutions: The UN Security Council on Digital Rights - Digital, cyber and human rights in the language of UN Security Council resolutions between 2001 - 2023 / The report finds that there is limited attention given by the international organisations to digital rights and provides a gap analysis of the digital governance within the UN	https://www.accessnow.org/wp-content/uploads/2024/06/UN-Security-Council-in-the-digital-age-Technical-brief.pdf
Capacity building	World Economic Forum	2024	Realizing the potential of Global Digital Jobs / White paper on showcases how global digital employment market can help to connect skilled workers from developing countries with those with labour shortages.	https://www3.weforum.org/docs/WEF_Realizing_the_Potential_of_Global_Digital_Jobs_2024.pdf
Capacity building	World Bank	2024	Digital Transformation Drives Development in Africa / Brief showcases research results on the digital infrastructure in Sub-Saharan Africa, including lack of accessible and affordable connectivity, digital gender gap and inadequate regulatory and policy environments. However, the results also show improvement as more and more are using mobile payments and online learning platforms, and as such benefitting from the digital transformation.	https://www.worldbank.org/en/results/2024/01/18/digital-transformation-drives-development-in-afe-afw-africa

Capacity building	Digital Development Partnership / World Bank	2022	The demand for Digital and Complementary Skills in Southeast Asia / The research working paper investigates jobs postings data from Malaysia to identify the digital skills required for low income jobs, revealing that virtually all occupations require some basic and intermediary digital skills	https://www.digitaldevelopmentpartnership.org/?ddp=news-06-22-04
Capacity building	Heeks / Information Technology for Development	2022	Digital inequality beyond the digital divide: conceptualizing adverse digital incorporation in the global south / Scientific research providing a systematic literature review on development studies on chronic poverty to introduce a new concept 'adverse digital incorporation' to designate digital exploitation	https://www.tandfonline.com/doi/full/10.1080/02681102.2022.2068492?src=recsys
Capacity building	Digital Development Partnership / World Bank	2021	Digital Skills for Everyone / A guidebook to set priorities to train young people's digital skills (focus in Africa)	https://www.digitaldevelopmentpartnership.org/knowledge.html?ddp=kn-pb-21-t6-03
Capacity building	Mukuni / Journal of African Studies and Development	2019	Challenges of educational digital infrastructure in Africa: A tale of hope and disillusionment / Scientific research article providing a systematic analysis of the literature on developing the educational digital infrastructure in Africa	https://academicjournals.org/journal/JASD/article-full-text/38A96FF61548
Capacity building	Digital Development Partnership / World Bank	2016	Engendering ICT Toolkit / Toolkit to recognise the gender gap in the adoption and use of ICT tools	https://www.digitaldevelopmentpartnership.org/knowledge.html?ddp=kn-tk-16-01
Statistics & Indicators	World bank	2024 (last updated)	World development indicators: science and technology / Statistics on the technology investments, patents and research	https://wdi.worldbank.org/table/5.12
Statistics & Indicators	IMPACT REACH	2024 (last updated)	Data on humanitarian situations / Granular level datasets on humanitarian situations	https://www.impact-initiatives.org/what-we-do/reach/
Statistics & Indicators	OCHA	2024	The State of Open Humanitarian Data 2024 / A report on humanitarian data exchange	https://data.humdata.org/dataset/2048a947-5714-4220-905b-e662cbcd14c8/resource/97e7f593-82c5-490d-a24c-2d4e5b02f35b/download/the-state-of-open-humanitarian-data-2024.pdf
Statistics & Indicators	World bank	2024 (last updated)	World development indicators: the information society / Statistics on internet use and secure internet	https://wdi.worldbank.org/table/5.11

Statistics & Indicators	World bank	2024 (last updated)	World development indicators: power and communications / Statistics on energy and mobile phone use	https://wdi.worldbank.org/table/5.10
Statistics & Indicators	UNESCO	2024 (last updated)	Internet Universality Indicators / Based on four principles (rights, openness, accessibility and multistakeholder participation), eight completed assessments including Benin, Brazil, Kenya and Paraguay	https://www.unesco.org/en/internet-universality-indicators
Statistics & Indicators	World Data Lab	2024 (last updated)	Internet Poverty Index / Shows the countries with the highest number of people living in internet poverty	https://internetpoverty.io
Statistics & Indicators	ECONOMIST	2022	The Inclusive Internet Index / The index factors in the availability, affordability, relevance and readiness of internet	https://impact.economist.com/projects/inclusive-internet-index/2022
Statistics & Indicators	OCHA	2024 (last updated)	The Humanitarian Data Exchange / Catalog for humanitarian aid datasets	https://data.humdata.org
Statistics & Indicators	CISCO	2021	Digital Readiness Index / Calculating country's readiness score by examining seven components	https://www.cisco.com/c/en/us/about/csr/research-resources/digital-readiness.html

ANNEX I: Digital foundations_ searchable evidence mapping in Excel