

Communication Technology and Globalization: Bridging Worlds or widening Divides

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Abstract

This study examines how communication technology shapes contemporary globalization and why the same technologies can simultaneously integrate and divide the world. Earlier scholarship has documented either the integrative or the exclusionary effects of digital media, but few studies explain the conditions under which each outcome prevails. Using an integrative narrative literature review, the study synthesized 35 scholarly and institutional sources retrieved from Scopus, Web of Science, Google Scholar, and the statistical repositories of the ITU and UNCTAD. The sources were coded with a combined deductive and inductive thematic framework covering economic, cultural, political, and governance dimensions, and the resulting themes were compared across income groups and regions. The synthesis yields three findings. First, communication technology has steadily lowered the cost of transnational interaction, expanding trade, knowledge flows, and civic mobilization. Second, these gains are filtered by structural conditions: in 2024, internet use reached 93 percent in high income countries but only 27 percent in low income countries, while ownership of major platforms remained concentrated in a few economies. Third, the political and cultural effects of digital networks depend on institutional quality, regulatory capacity, and linguistic representation. The main contribution of the study is a conditional framework showing that infrastructure access, platform ownership, and governance capacity determine whether communication technology bridges or widens global divides. Accordingly, the study recommends affordable rural connectivity, multistakeholder platform accountability, and national digital literacy programs as priorities for more equitable globalization.

Keywords: communication technology; globalization; digital divide; internet governance; cultural exchange

INTRODUCTION

Communication is, in part, the history of human civilization. From cave drawings and oral tradition to the printing press, the telegraph, the telephone, the radio, and the internet, each major advance in communication has reshaped how societies organize themselves, trade, govern, and interact across distance. At its core, communication is how communities are created, knowledge is transferred, and community is defined. Globalization, in general, is understood as the process by which the people, economies, cultures, and governments of the world are becoming more interconnected and interdependent.

Globalization as such existed even before digital technology, but it is undeniable that the development of new communication technologies has, for the first time in history, greatly speeded up and enhanced the globalization process in previously unimaginable ways. In the nineteenth century, the telegraph spanned continents; in the twentieth the telephone spanned oceans; satellite television brought images in real time around the world; and the internet has become a digital commons, connecting billions of people, transactions, and communications in real time, no matter where they are (Rabie, 2013).

The 21st century has ushered in a period of unprecedented change. The rise of smart phones, social media, cloud computing, and broadband internet has transformed the speed and nature of globalization. The information that used to cross national borders within weeks or months now crosses in just milliseconds. In fact, business is conducted across several continents at the same time. Political movements organize across borders via electronic

networks. Music, films, literature, and fashion circulate throughout the world, with little friction. To put it simply, communication technology is the brain of the globalized world (Bakić-Mirić, 2018).

Digital technologies like the internet, mobile systems, social media, and satellite communication have significantly speeded up the process of globalization, making it possible to connect in real-time, transcend borders and cultures. This has facilitated expansion of economic activity, cultural exchange, education and political participation, connecting people, states, corporations, and civil society through a global communication network (Kraidy, 2002). However, such an idealized view of integration is incomplete without reference to the deep disparities and tensions that go along with it. There are no equal connections between all parts of the world. The global flows of information do not reach all communities equally.

The dominant languages, platforms, and narratives of the digital age are those of specific societies: principally affluent, Western, and technologically advanced societies that raise questions of power, representation, and cultural sovereignty in the digital age. Moreover, technology for communication has not only allowed human-to-human interaction but for surveillance, manipulation, propaganda, and even the spread of disinformation to an unprecedented level. This process, however, is uneven and presents considerable challenges. The digital divide continues to prevent significant parts of the population, especially in developing areas, from playing a meaningful role in the world's digital system. Moreover, communication infrastructure is centralized in a handful of large companies, which has led to the fear of unequal power in the control of information flows worldwide.

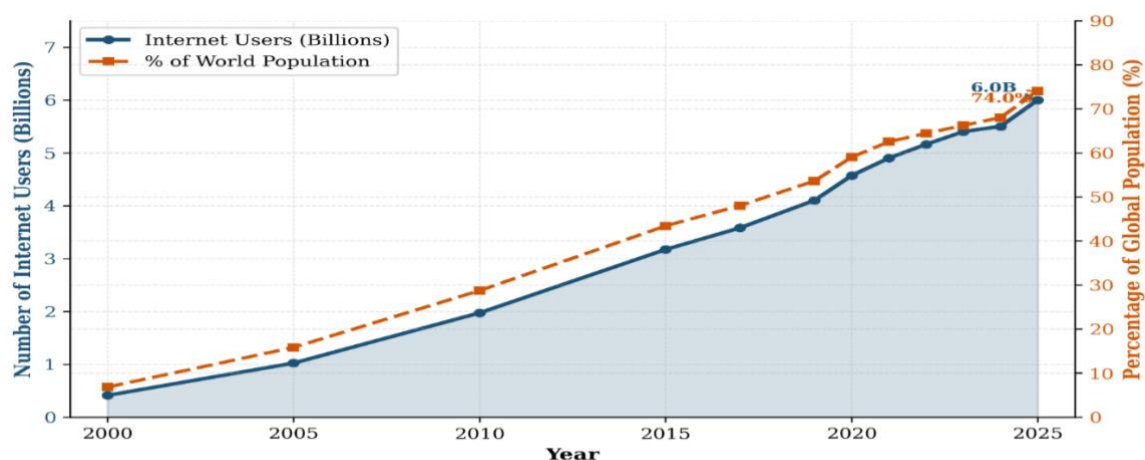
Growing threats of misinformation, hate speech and political manipulation via digital platforms have at times led to social conflict and the interference in democratic processes also exist. Communication technology contributes to globalization in a dual fashion, playing a major role in globalization opportunities, but also in creating inequality and new types of power imbalance, which demand more robust governance and regulation (Ess & Sudweeks, 2001). Three levels of the problem can therefore be distinguished. The global problem is that the benefits of digitally mediated globalization are distributed unevenly between and within countries.

The specific research problem is that existing explanations tend to treat communication technology either as an integrating force Baldwin, (2016) or as a source of new dependency and exclusion (Couldry & Mejias, 2019; Kwet, 2019), without specifying when one outcome prevails over the other. The resulting knowledge gap concerns the conditions, namely access to infrastructure, ownership of platforms, and governance capacity, that mediate whether the same technologies bridge or widen global divides. This study addresses that gap.

The question is urgent because the expansion of connectivity has not closed the gap between connected and unconnected populations. The International Telecommunication Union estimates that about 6 billion people, or 74 percent of the world population, used the internet in 2025, which still leaves about 2.2 billion people offline, most of them in low and middle income countries (ITU, 2025). At the same time, value creation in the digital economy is concentrated in a small number of platform firms based mainly in the United States and China (UNCTAD, 2019), and false information has been shown to travel farther and faster than accurate information on social networks (Vosoughi et al., 2018). These developments make the

relationship between communication technology and globalization a matter of immediate policy concern rather than only of historical interest.

The policy relevance to current debates on digital platform regulation, data governance, digital inclusion and global information systems is relevant. It provides attention to the main trade-offs and learning points from various regional experiences that can be drawn on in governance approaches. The study is significant at the societal level because communication technologies impact access to information, economic opportunities, cultural expression, political participation, and privacy of billions of people. It also highlights the often-underrepresented voices of marginalized communities, including communities in the Global South, linguistic minorities, migrants and digitally excluded communities to help create a more inclusive and equitable global digital system (Qureshi, 2011).



Source: International Telecommunication Union (ITU), Facts & Figures 2024/2025.

Figure 1. Global Internet Users Growth 2000–2025

Source: ITU, (2024), (2025)

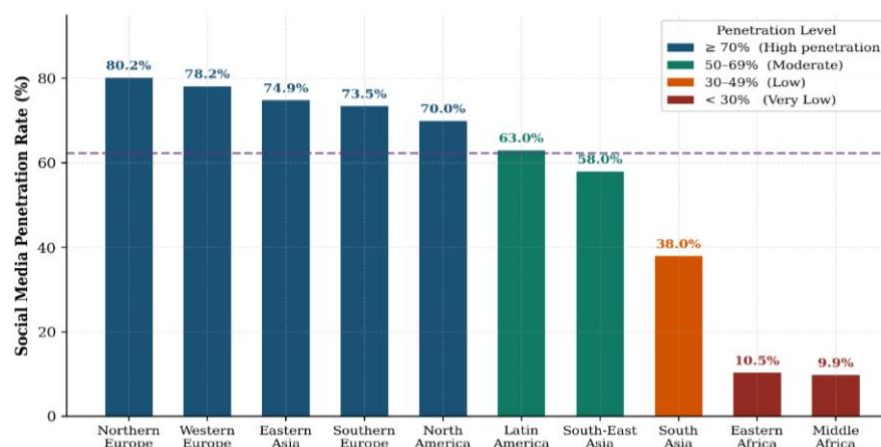
Globalization and communication technology existed long before the dawn of digital technology (Thompson, 2010). In the nineteenth century, the invention of the telegraph made the first global information network by transoceanic cables, and made financial and commercial information, easily transported between international markets (Wenzlhuemer, 2013). Subsequently, the telephone, radio and TV opened a new era of global communications by broadcasting news, entertainment and political information across borders. Satellite TV also diminished the spatial distance as it facilitated live global broadcasts.

With the launch of the internet in the 1990s, the nature of communication changed dramatically as many people became able to interact with many others, to consume and to produce content, and connect directly with each other around the globe without the influence of gatekeepers. The history of communication technology and globalization goes back much further than the digital age, as shown in Figure 1. The data in Figure 1, compiled by the International Telecommunication Union, show that the number of internet users grew from fewer than 0.5 billion in 2000 to about 6 billion in 2025, equivalent to 74 percent of the world population (ITU, 2024, 2025).

Communication technology also contributed to economic globalization through facilitating global supply chain, international finance, and transnational business (Borcuch et al., 2012). The internet economy has provided opportunities for small businesses, e commerce,

digital financial services, and remote work to make it easier for developing countries to access global markets. But these benefits are not distributed evenly (Kluver, 2000). Social inequalities are exacerbated by the dominance and benefits of large technology firms from rich nations, particularly the United States, who benefit from global data and digital labour. Meanwhile, the digital divide is a significant problem; many people in low income and rural areas are not connected to the internet nor are they digitally literate, and therefore they are not able to take advantage of the global system of communication (Breznitz & Zysman, 2013).

Communication technology has played a significant role in cultural globalization by being a vehicle to the diffusion of cultural products, values and identities at an unprecedented rate across borders (Thompson, 2010). The global media industries have generated common cultural experiences such as music, films, television dramas, and translated literature, which enable audiences to have a glimpse into different traditions and points of view (Anderson & Jiang, 2018). Critics say that these cultural flows are unequal. English is often used as the language of the web, American entertainment brands dominate and the algorithms of social media can reinforce a culture of one kind over another, and when a powerful society can influence the narratives of the world more than a weaker one, there is a form of cultural hegemony (Anderson & Jiang, 2018).



Source: We Are Social, DataReportal & Meltwater, Digital 2024 Global Overview Report (April 2024); Statista (2024).

Figure 2. Social media penetration by world region

Source: Kemp, (2024)

Figure 2 shows that this unevenness is also regional. In 2024, social media penetration exceeded 70 percent in Northern, Western, and Southern Europe, Eastern Asia, and North America, but remained close to 10 percent in Eastern and Middle Africa (Kemp, 2024). Exposure to global cultural and political flows is therefore itself unequally distributed. Political impacts of communication technology are also multifaceted. Through digital networks, global political movements, human rights awareness, and international activism have been supported. Social media campaigns like the Arab Spring, #Metoo, and #BlackLivesMatter were enough to show the power of social media in mobilizing people across borders (Bakić-Mirić, 2018). Meanwhile, governments and corporations have been utilizing these technologies for their surveillance, censorship, and political control. Communication technology, therefore, can reinforce either democracy or authoritarianism, depending on how it is regulated and used.

Despite a significant increase on the Internet over the last few decades, the digital divide is one of the world's great inequalities. But millions of people still don't have meaningful access to digital technologies, particularly in low-income and rural communities (Ess & Sudweeks, 2001; Lythreitis et al., 2022). Among people using the Internet, disparities in access to the Internet, devices, cost, and knowledge of the digital environment create unequal opportunities to access the global digital economy and information (Bajpai, 2021). Three groups of previous studies are particularly relevant to this study, and they are summarized in Table 1. Baldwin, (2016) shows that the information and communication revolution reduced the cost of moving ideas, allowing production to be unbundled across borders; however, his account is primarily economic.

Van Deursen & van Dijk, (2019) demonstrate that the digital divide has shifted from physical access toward inequalities in devices, material resources, and skills, yet their evidence comes from a high income country and does not address global platform power. Couldry & Mejias, (2019); Kwet, (2019) argue that data extraction by dominant platforms reproduces colonial patterns of dependency, but these critical accounts rarely engage with the economic and civic gains documented by integration oriented studies. Lythreitis et al., (2022), reviewing digital divide research, similarly identify the need for work that connects determinants of access and use with their wider outcomes, particularly in developing countries.

Table 1. Synthesis of previous research and the gap addressed by this study

Study	Focus and main finding	Limitation	Gap addressed by this study
Baldwin, (2016)	ICT lowered the cost of moving ideas, allowing production to be unbundled across borders and enabling rapid industrialization in a few developing economies.	Mainly economic; limited attention to cultural and political consequences.	Extends the analysis to cultural, political, and governance dimensions.
Van Deursen & van Dijk, (2019); Van Dijk, (2020)	The digital divide has shifted from physical access to inequalities in material access, devices, and skills.	Evidence from a single high income country; does not address global platform power.	Places layered inequality in a global, comparative frame (Figures 5 and 6).
Couldry & Mejias, (2019); Kwet, (2019)	Data extraction by dominant platforms reproduces colonial patterns of dependency between the Global North and the Global South.	Critical and conceptual; rarely engages with evidence of economic and civic gains.	Weights critical claims against evidence of integration and specifies conditions.
Lythreitis et al., (2022)	Review of digital divide research identifying determinants of access and use and an agenda for future research.	Focused on the divide itself rather than on globalization as a whole.	Links inequality to economic, cultural, and political globalization outcomes.

Golding, (2017)	Communication inequality is rooted in wider material inequality and produces citizen detriment.	Centered on advanced industrial societies.	Applies the argument to the global communication order and to policy options.
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These studies agree that communication technology is consequential for globalization, but they disagree on whether its dominant effect is integration or exclusion, and none of them systematically specifies the conditions that tip the balance. The novelty of the present study lies in synthesizing these economic, sociological, critical, and governance literatures into a single conditional framework (Figure 3 and Table 5) that identifies infrastructure access, platform ownership, and governance capacity as mediating conditions, and in linking each condition to concrete policy options (Table 4). In doing so, the study moves beyond the descriptive acknowledgment of a dual effect found in earlier works such as (Qureshi, 2011; Rabie, 2013; Thompson, 2010).

This research is of relevance to society, policy, and academia. It bridges disciplines in academic study, such as communication studies and globalization, political economy and digital governance, to gain insights into how communication technology is influencing globalization. Academically, the contribution of the study is conceptual: it offers a conditional framework that integrates political economy, sociological, and cultural perspectives on communication technology and globalization. Practically, it translates this framework into specific governance options for policymakers, regulators, and international organizations.

This is a complex landscape in which the present study is situated. The purpose of this study is to critically analyze the linkage of Communication Technology and the globalization phenomenon, the opportunity created by these technologies and the issues that emerge from these technologies. The analysis is based on the historical record, current case studies, and theory from communication studies, political economy, sociology, and cultural theory to give a balanced and complete picture of the ways in which communication technology influences and is influenced by the processes of globalization.

Specifically, this study aims to follow the evolution of communication technologies and their collective role in the globalization process, from the industrial era to the present-day digital era; to examine economic, cultural, social, and political aspects of communication technology and globalization in the present times; and to propose evidence based policy recommendations for governments, international institutions, and technology governance actors on how to optimize the human development effects of communication technology in an equitable globalization framework.

METHOD

This study uses a qualitative, interpretive design based on an integrative narrative literature review combined with comparative thematic analysis. The methodological approach corresponds with the nature of the questions the research aims to answer, which focus less on the measurement of exact quantitative relationships, and more on gaining an understanding of the complex, multidimensional interaction between communication technology and globalization in various historical periods, geographical settings and theoretical approaches (Haseeb et al., 2019).

The research questions addressed in this study are as follows. How has the relationship between the expansion of globalization and the development of communication technology changed over time (RQ1)? How have contemporary digital communication technologies had effects on global political participation, cultural exchange, and economic integration (RQ2)? What policy and governance options are available to guarantee sustainable globalization using communication technology (RQ3)?

The label narrative is used deliberately. Following Snyder (2019), an integrative review is appropriate when the aim is to synthesize diverse theoretical and empirical literatures into a new conceptual framework rather than to estimate effect sizes; the study therefore does not claim the exhaustive, protocol registered screening of a systematic review.

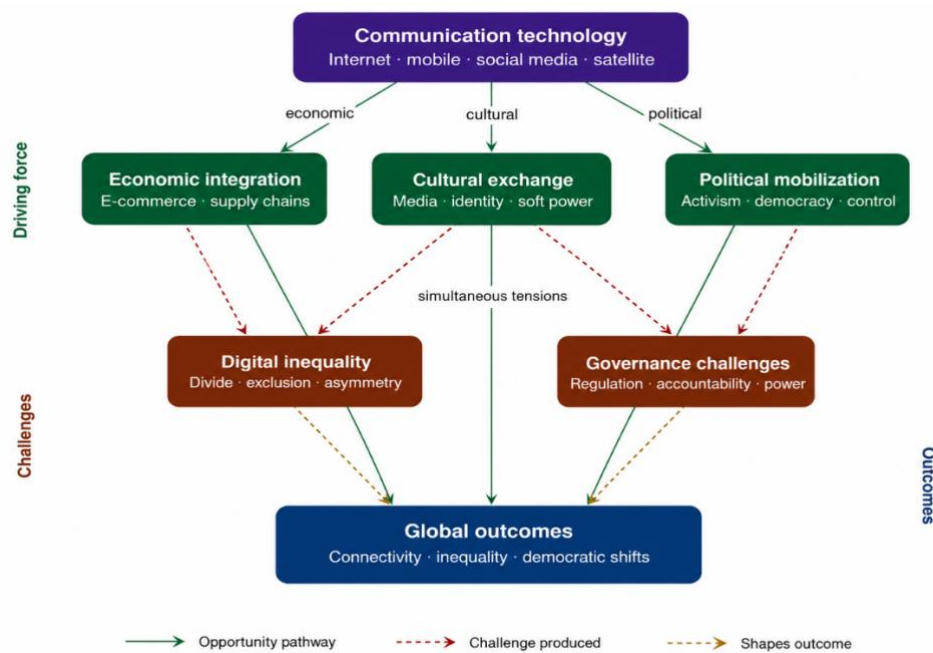


Figure 3. Conceptual Framework: Communication Technology and Globalization.

Source: Developed by the authors from the thematic synthesis (see Table 3)

The conceptual framework presented in Figure 3 guides the analytical structure of this research. Communication technology is treated as the central analytical construct that contributes to globalization through three distinct but interrelated channels: economic integration, cultural exchange, and political mobilization. The technologies produce two categories of structural challenge: digital inequality and governance gaps.

Both the opportunity pathways and the challenges ultimately converge to shape global outcomes, represented at the base of the framework. Because the study does not test variables empirically, the arrows in Figure 3 represent relationships of contribution and mediation identified in the literature, not estimated causal effects.

Data Sources

For this research, the main data sources are peer-reviewed academic journal articles, scholarly books and book chapters, policy documents issued by international organizations, including the United Nations, International Telecommunication Union (ITU) and the World

Bank, and analytical and journalistic outputs relating to the present developments in communication technology and global affairs by civil society organizations working on digital rights and the governance of the internet. Scholarly sources were retrieved from Scopus, Web of Science, and Google Scholar, and statistical evidence was taken from the ITU Facts and Figures series, the UNCTAD Digital Economy Report, and DataReportal.

Selection Criteria

Sources were included if they (a) addressed the relationship between communication technology and at least one economic, cultural, political, or governance dimension of globalization, (b) were peer reviewed publications, academic books, or reports of recognized international organizations, and (c) were written in English. Opinion pieces, sources without an identifiable author or publisher, and studies limited to technical engineering aspects were excluded. The priority was placed on sources published in the past decade and a half; however, fundamentals of theoretical works of the previous decades were also included when they still had a significant impact on the conceptual framework of the study. Table 2 summarizes the review protocol, and the final corpus comprised 35 sources: 16 journal articles, 12 books, book chapters, and theses, and 7 institutional reports or proceedings.

Table 2. Review protocol

Protocol element	Description
Review type	Integrative narrative literature review with comparative thematic analysis (Snyder, 2019)
Databases and repositories	Scopus, Web of Science, Google Scholar; ITU Facts and Figures; UNCTAD Digital Economy Report; DataReportal
Search strings	("communication technolog*" OR "ICT" OR "internet" OR "social media") AND "globali*"; ("digital divide" OR "digital inequality") AND ("global" OR "Global South"); ("platform governance" OR "internet governance" OR "data colonialism")
Time frame	Empirical evidence prioritized from 2016 to 2025; foundational works from 1997 onward retained when they shaped the conceptual framework
Inclusion criteria	Addresses communication technology and at least one dimension of globalization; peer reviewed, academic book, or international organization report; English language
Exclusion criteria	Opinion pieces; no identifiable author or publisher; purely technical engineering studies; duplicates
Quality appraisal	Peer review or institutional authorship, transparent data sources, and clarity of argument or method
Final corpus	35 sources: 16 journal articles, 12 books, chapters, and theses, 7 institutional reports or proceedings
Analysis	Deductive and inductive thematic coding (Table 3), followed by comparison across income groups, regions, and political systems

Analytical Process

The analysis was carried out in three stages. To chart the state of the art on communication technology and globalization, the relevant literature was first systematically collected and

analyzed. Second, a thematic coding process was used to uncover common themes, conflicts, and discussions throughout the literature. Third, a comparative study was carried out to investigate the different aspects of the relation between communication technology and globalization in regional, economic, and political spheres (Kim, 1997). This comparative dimension gives the study an opportunity to go beyond the generalizations and to focus on the specificity of various globalization experiences.

Coding combined deductive codes derived from the research questions with inductive codes that emerged during reading, following the reflexive thematic analysis phases of familiarization, coding, theme development, and review (Braun & Clarke, 2019). Each source was entered into a source to theme matrix; codes were grouped into candidate themes, and a theme was retained only when it was supported by at least three independent sources. Where sources disagreed, the contradiction was recorded as a tension and examined in the comparative stage by asking under which economic, regional, or institutional conditions each claim held. The coding framework, which served as the research instrument, is presented in Table 3.

Table 3. Coding framework used as the research instrument

Dimension	Example codes	Theme	RQ	Example sources
Historical development	telegraph, broadcasting, internet diffusion, communication cost	T1 Acceleration of globalization	RQ1	Baldwin, (2016); ITU, (2025); Thompson, (2010); Wenzlhuemer, (2013)
Economic	e commerce, supply chains, platform concentration, data extraction	T2 Integration with concentrated gains	RQ2	Borcuch et al., (2012); UNCTAD, (2019); Xue et al., (2016); Zuboff, (2019)
Social	access, skills, affordability, urban and rural gap	T3 Structural digital inequality	RQ2	Golding, (2017); ITU, (2024); Lythreatis et al., (2022); van Deursen & van Dijk, (2019)
Cultural	hybridity, language dominance, cultural flows	T4 Exchange with asymmetry	RQ2	Conti, (2025); Couldry & Mejias, (2019); Kraidy, (2002); Kwet, (2019)
Political	mobilization, misinformation, surveillance	T5 Empowerment and control	RQ2	Bajpai, (2021); Bakić-Mirić, (2018); Feldstein, (2019); Vosoughi et al., (2018)
Governance	platform regulation, internet governance, digital literacy, AI	T6 Governance gaps and options	RQ3	Crawford, (2021); Dziundziuk, (2024); Gorwa, (2019); Wardle & Derakhshan, (2017)

This study uses only open source and public material. Proprietary data, which could be the property of technology firms or classified government communications intelligence, was not available. Moreover, it is a qualitative study, not a quantitative study that would yield generalized and statistically broad conclusions, but rather a study that would provide theoretical insights to help explain the complexity of the topic. The very dynamic and changing character of communication technology also implies that developments as described may have been

followed by other developments. Because the study relies exclusively on published secondary sources and involves no human participants, formal ethical approval was not required.

RESULT AND DISCUSSION

This section presents the findings of the thematic synthesis. Each subsection states the finding, summarizes the supporting evidence from the reviewed sources, and then interprets it in light of the theoretical perspectives introduced earlier. The findings are organized around the three research questions, and Table 5 summarizes how each theme answers them.

Communication Technology as an Accelerator of Globalization (RQ1)

The synthesis indicates that the reviewed literature offers consistent evidence for the role of communication technology as one of the main factors that has contributed to the rapid globalization of the world in economic, cultural, and political fields. A century and a half of increasingly lower costs of communication (from the telegraph to the internet) has steadily eliminated one of the key obstacles to cross-border interaction and exchange, creating the conditions for the emergence of truly global markets, transnational communities and international governance networks. In particular, the internet has enabled the cost of communicating across any distance to be virtually zero, drastically reshaping the geography of economic production, cultural consumption, and political mobilization (Jacucci et al., 2013).

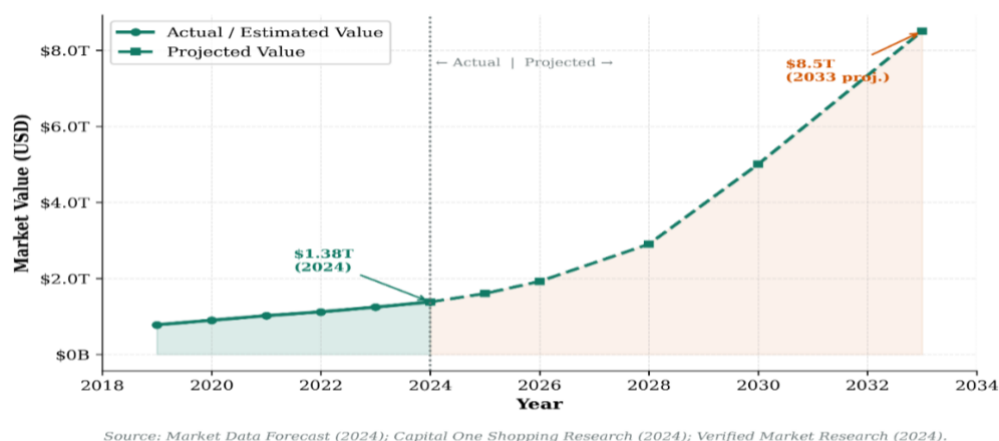


Figure 4. Global Cross-Border E-Commerce Market Value

Source: Compiled by the authors from commercial market estimates published in 2024; values after 2024 are projections

The synthesis further indicates that this technological advance in globalization has brought real and meaningful human benefits. Global information networks have increased the possibility of educational access, made scientific research possible across borders, led to international solidarity of social movements, and have opened new access routes for economic participation for communities that were denied access to global markets. Communication technology has revolutionized the way people connect and communicate across cultural and geographic barriers and has also created avenues for cross-cultural understanding and a sense of shared humanity that are significant strides toward a more connected and interdependent world (Xue et al., 2016).

Finding 1 (RQ1). Across the historical sources, the relationship between communication technology and globalization has shifted from one in which technology mainly connected

states, markets, and elites, as with the telegraph and early broadcasting, to one in which it connects individuals and small firms directly through the internet and mobile platforms (Thompson, 2010; Wenzlhuemer, 2013). Baldwin, (2016) describes this as a move from globalization driven by falling transport costs to globalization driven by falling communication costs, which allowed production knowledge to travel across borders.

Figure 4 illustrates the economic expression of this shift: industry estimates place transnational e commerce at about USD 1.38 trillion in 2024, with projections above USD 8 trillion by 2033. Because these figures are commercial estimates, they should be read as indicating direction rather than as precise measurements, but they are consistent with the growth of digitally enabled trade documented by (UNCTAD, 2019; Xue et al., 2016). Read through a political economy lens, however, the same evidence shows that value capture is uneven, since UNCTAD, (2019) reports that the United States and China account for most of the market value of the largest digital platforms. Communication technology is therefore best understood as an enabling condition that is associated with deeper integration, not as an autonomous cause of it.

Structural Inequalities in the Global Communication Order (RQ2)

The second finding concerns the continued structural disparities in the global communication system. An inequality in access, skills and quality of use, the digital divide is a result of economic, technological and political processes, and not a simple gap. This also reveals that the market for digital platforms and infrastructure is extremely oligopolistic with a handful of firms from rich countries. These companies have a huge impact on the flow of information and the economy online, and governance and regulations have not responded to the rapid changes in technology (Golding, 2017).

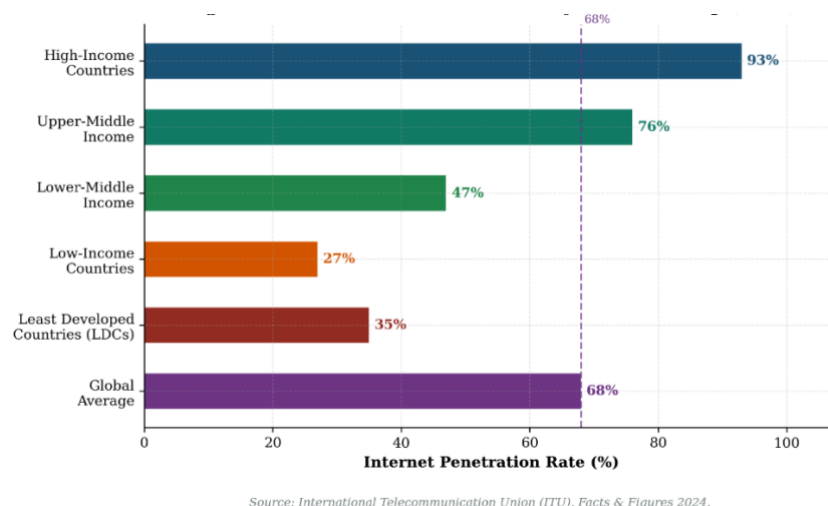
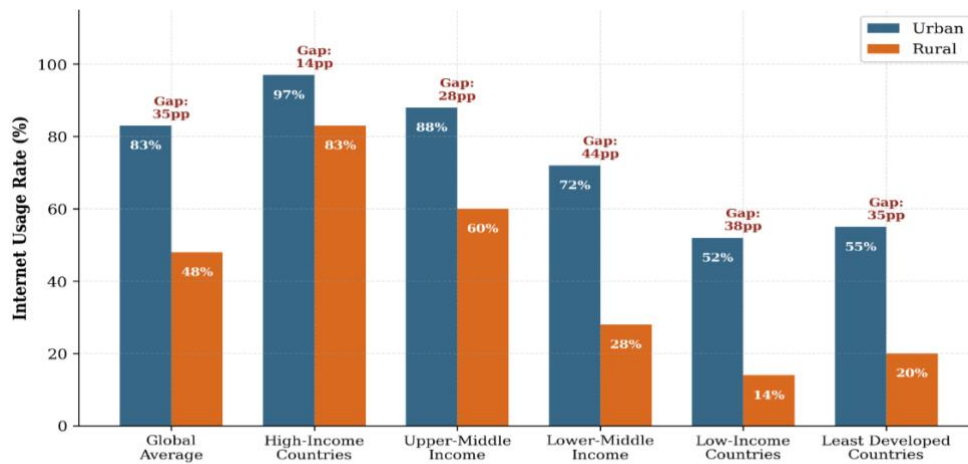


Figure 5. Internet Penetration by Income Group 2024
Source: ITU, (2024)



Source: International Telecommunication Union (ITU), Facts & Figures 2024. Note: pp = percentage points.

Figure 6. Urban vs Rural Internet Access Gap 2024

Source: ITU, (2024)

Finding 2 (RQ2). Figure 5 shows that in 2024 internet use reached 93 percent in high income countries but only 27 percent in low income countries and 35 percent in the least developed countries, against a global average of 68 percent (ITU, 2024). Figure 6 shows that the divide also runs within countries: globally, 83 percent of urban residents used the internet compared with 48 percent of rural residents, and the gap was widest in lower middle income countries at 44 percentage points (ITU, 2024). These patterns support the sociological argument that digital inequality is layered, moving from physical access toward inequalities in devices, affordability, and skills (Lythreath et al., 2022; Van Deursen & van Dijk, 2019).

They also support the political economy view that communication inequality reflects wider material inequality (Golding, 2017). The comparative reading suggests that the divide widens where three conditions coincide: weak rural infrastructure, high device and data costs relative to income, and limited digital skills. Where these conditions are addressed, as in high income and many upper middle income economies, the same technologies are associated with broad participation in global networks.

Cultural and Political Challenges in the Digital Age (RQ2)

The third finding is that communication technology exerts both positive and negative influences on cultural globalization. Digital networks promote cross-cultural trade and facilitate the dissemination of local and non-Western cultures on a global scale. But the weight of the English language and Western media can exclude small cultures and languages from the mainstream of culture and influence (Conti, 2025).

Communication technologies have been used to facilitate global activism, public engagement, and awareness of international issues, politically. Meanwhile, they have also provided the means to surveillance, censorship, disinformation, and digital authoritarianism (Novak & El-Burki, 2016). The study underlines that the role of communication technology is very much shaped by political and institutional environment and that global governance of the

internet is still lacking in balance in terms of representation of the developing world and civil society (Dziundziuk, 2024).

Finding 3 (RQ2). The contradictory political outcomes reported in the literature become intelligible when institutional conditions are considered. In open societies with independent media and courts, digital networks have supported transnational activism and accountability (Bakić-Mirić, 2018). In settings with weak checks on executive power, the same infrastructures have been used for surveillance and information control, a pattern Feldstein, (2019) describes as digital repression enabled by artificial intelligence, and one that comparative studies associate with regime type (Bajpai, 2021; Dziundziuk, 2024).

The information environment adds a further risk: Vosoughi et al. (2018) found that false news spread farther and faster than true news on Twitter, and Wardle & Derakhshan, (2017) show how such information disorder undermines shared public knowledge. Culturally, the concept of hybridity proposed by Kraidy, (2002) explains why global flows do not simply homogenize local cultures but mix with them, while critiques of data and digital colonialism show that the infrastructures carrying these flows are owned largely by firms from a few countries (Couldry & Mejias, 2019; Kwet, 2019). The ambivalence of communication technology is therefore not random; it reflects the institutional and ownership conditions within which the technology operates.

Governance Options for Sustainable Globalization (RQ3)

Finding 4 (RQ3). The reviewed literature converges on the view that governance has not kept pace with the speed and scale of platform based communication (Golding, 2017; Gorwa, 2019). Platform governance research shows that rules are currently made through a mix of company self regulation, national legislation, and weak international coordination, which leaves users in the Global South with little influence over the platforms on which they depend (Gorwa, 2019; Kwet, 2019).

The business model of large platforms, which converts user behaviour into data for prediction and advertising, creates incentives that do not necessarily align with public interest goals (Zuboff, 2019). Emerging uses of artificial intelligence in communication intensify these concerns because they concentrate computing power, data, and expertise in a small number of firms (Crawford, 2021). Table 4 links each finding to a specific governance option and to the actors responsible for it.

Table 4. Governance options derived from the findings

Finding or condition	Recommended action	Responsible actors	Supporting sources
Infrastructure access gap (Figures 5 and 6)	Prioritize affordable rural broadband and device financing, with national targets for meaningful connectivity	National governments, ITU, development banks	ITU, (2024); Lythreath et al., (2022)
Skills and usage inequality	Integrate digital and media literacy into school and adult education curricula	Ministries of education, civil society	Van Deursen & van Dijk, (2019); Van Dijk, (2020); Wardle &

			Derakhshan, (2017)
Platform concentration and data extraction	Require transparency reporting, data portability, and fair data sharing arrangements	National regulators, regional blocs, UNCTAD	Couldry & Mejias, (2019); UNCTAD, (2019); Zuboff, (2019)
Information disorder and surveillance	Establish independent oversight of content moderation and limits on state surveillance technologies	Legislatures, courts, multistakeholder bodies	Feldstein, (2019); Gorwa, (2019); Vosoughi et al., (2018)
Unequal representation in global governance	Strengthen the participation of developing countries and civil society in internet governance forums	UN agencies, Internet Governance Forum, national delegations	Dziundziuk, (2024); Kwet, (2019)

Synthesis and Implications

Table 5 summarizes the answers that the synthesis provides to each research question. Two implications follow. Theoretically, the debate between integration oriented and critical accounts of digital globalization is better reframed as a question of conditions: the same technology is associated with integration where access, ownership, and governance capacity are broadly distributed, and with exclusion where they are concentrated. Practically, policies that only extend network coverage will be insufficient unless they also address affordability, skills, and platform accountability.

Table 5. Synthesis of findings by research question

Research question	Theme(s)	Synthesized answer
RQ1 Evolution of the relationship	T1	The relationship shifted from elite and state mediated connection (telegraph, broadcasting) to direct connection of individuals and firms (internet, mobile); falling communication costs became a central driver of integration.
RQ2 Economic effects	T2, T3	Digital trade and transnational production expanded, but value capture and access remain concentrated by income group and platform ownership.
RQ2 Cultural effects	T4	Global flows promote hybridity and visibility of non Western content, yet language dominance and infrastructure ownership create asymmetry.
RQ2 Political effects	T5	Networks support mobilization in open institutional settings but enable surveillance, censorship, and information disorder where checks on power are weak.
RQ3 Governance options	T6	Five options linked to the findings: affordable rural connectivity, digital literacy, platform accountability, independent oversight, and inclusive global governance (Table 4).

Scope and Limitations

The research explores the role played by communication technologies, the internet, mobile technologies, digital networks, and social media in its impact on globalization in economic, cultural, political, and social perspectives. It is both global and comparative, and incorporates evidence from both developed and developing areas, with a focus on developments since the 1990s, particularly in the digital era. A limitation of the study is that secondary qualitative literature was used, which may contain any existing bias and gaps in the published literature.

In addition, the findings may be outpaced by rapid technological developments, particularly in areas such as platform governance and artificial intelligence. Furthermore, the main sources in English can give some cultural and geographical bias. Lastly, the wide-ranging interdisciplinary nature of the subject restricts the scope of analysis in each specific discipline. Because the review is integrative rather than exhaustive, relevant studies outside the selected databases may also have been missed.

CONCLUSION

Communication technology has an ambivalent role in globalization. It has evolved from connecting states, markets, and elites through telegraph and broadcasting to connecting individuals and small enterprises directly through internet and mobile platforms. Contemporary digital technologies deepen economic integration, cultural exchange, and political participation, but their benefits remain conditioned by infrastructure access, platform ownership, and institutional quality. Structural inequalities in access, ownership, and governance continue to create digital divides and unequal global participation.

Therefore, sustainable and equitable globalization requires affordable rural connectivity, digital and media literacy, platform transparency, independent oversight of content moderation and surveillance, and stronger representation of developing countries in global internet governance. The study concludes that extending connectivity alone is insufficient; communication technology can support human development and global integration only when inequalities in access, ownership, and governance are addressed simultaneously.

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