



Power dynamics of information control, censorship, and digital transparency shaping human rights discourse in the information society

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Abstract

The power dynamics of information control, censorship, and digital transparency have become central to contemporary debates on human rights in the information society. From a broad perspective, the digital ecosystem driven by artificial intelligence, platform economies, and algorithmic moderation has reconfigured the traditional balance between state authority, corporate influence, and individual agency. Governments increasingly harness data surveillance, content filtering, and cyber legislation to shape narratives and suppress dissent, while technology corporations wield unprecedented control over global information flows. This concentration of informational power challenges the pluralism and accountability essential to democratic governance and free expression. Within this evolving landscape, censorship extends beyond overt state control to include subtle algorithmic practices such as shadow banning, content demotion, and data manipulation. These mechanisms obscure the line between regulation and repression, undermining transparency and the public's ability to access truth in digital spaces. Conversely, digital transparency once heralded as a democratic safeguard now exposes tensions between openness, privacy, and national security imperatives. The result is a contested environment where information becomes both a tool of empowerment and an instrument of control. Narrowing the scope, this paper examines how these dynamics reshape human rights discourse, particularly the interpretation of freedom of expression, access to information, and the right to participate in public affairs. It analyzes international responses under frameworks such as the International Covenant on Civil and Political Rights (ICCPR), the UN Human Rights Council's digital freedom resolutions, and the Council of Europe's recommendations on internet governance. Ultimately, the study calls for a recalibration of digital power structures through rights-based transparency standards and accountability mechanisms to safeguard democratic integrity and human dignity in the information age.

Keywords: Information Control; Censorship; Digital Transparency; Human Rights; Freedom of Expression; Digital Governance

1. Introduction

1.1. Background and Global Context

The evolution of the information society has redefined the global balance between democratization and state control, with digital communication emerging as both an enabler of freedom and a mechanism of surveillance [1]. The proliferation of the internet, social media, and data-driven platforms has empowered citizens to disseminate ideas, mobilize movements, and challenge authority in unprecedented ways [2]. However, these same technologies have simultaneously provided governments and corporations with sophisticated tools for monitoring, manipulating, and restricting information flows [3]. This duality lies at the heart of contemporary debates on information governance and human rights.

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Historically, media censorship operated through direct suppression such as press bans, broadcast restrictions, and pre-publication reviews [4]. The digital transformation of communication infrastructure has shifted this dynamic toward algorithmic and platform-based control, where the suppression of dissent often occurs invisibly through content moderation systems, algorithmic bias, and data filtering [5]. In this model, control is exerted not only by states but also by private technology companies whose algorithms determine which voices are amplified and which are silenced [6].

This transformation represents a fundamental change in how power is exercised in the public sphere. Unlike traditional censorship, which was overt and state-driven, modern information control relies on opaque computational mechanisms that blur accountability [3]. Social media platforms now function as de facto gatekeepers of information, shaping political discourse through algorithmic design and profit-driven engagement strategies [7]. Consequently, debates surrounding freedom of expression have expanded to include issues of algorithmic transparency, platform governance, and the ethical responsibilities of private intermediaries [8].

At the same time, transparency and access to information have become essential pillars of democratic governance and human rights protection [9]. The recognition of the right to information as a human right by the United Nations and regional bodies underscores its significance in enabling civic participation and government accountability [5]. In this digital era, access to truthful and unmanipulated information has become as critical as freedom itself determining whether individuals can meaningfully exercise their rights or remain passive consumers of filtered realities [2].

1.2. Problem Statement and Significance

The digital age presents a paradox: it offers unprecedented openness while simultaneously enabling new forms of control [4]. This dual reality manifests in the coexistence of vibrant online discourse with pervasive surveillance, data monopolies, and algorithmic suppression [7]. Governments employ sophisticated digital surveillance infrastructures under the pretext of national security, while major corporations consolidate informational power by controlling global communication channels [1]. Together, these forces have created a new architecture of censorship that operates through data analytics, platform algorithms, and information asymmetry [3].

The implications for human rights are profound. Asymmetrical control over information flows directly affects freedom of expression, privacy, and accountability [8]. When access to truth becomes filtered through algorithmic or political bias, the foundational principles of democratic participation erode [2]. Moreover, surveillance regimes whether state-imposed or corporate undermine individual autonomy and chill political dissent by fostering self-censorship [5].

A growing area of tension lies in the regulation of misinformation. While governments cite the need to curb false information to protect public order, such regulations often blur the boundary between legitimate oversight and political manipulation [6]. In authoritarian contexts, misinformation laws have been weaponized to silence journalists, activists, and opposition figures [9]. Even in democratic societies, content moderation practices raise questions about who defines "truth" and how algorithms operationalize those definitions [3].

The convergence of state power and corporate influence thus creates a complex governance dilemma. On one hand, unchecked digital platforms can facilitate hate speech, extremism, and disinformation; on the other, overregulation risks suppressing legitimate speech and eroding transparency [4]. This delicate balance between security, regulation, and liberty lies at the center of global debates on digital rights and governance [8]. The significance of this study, therefore, rests in examining how these tensions reshape the understanding of freedom in the information age.

Research Objectives and Scope

This paper aims to critically examine the evolving relationship between information control, transparency, and human rights within the digital ecosystem [1]. Specifically, it seeks to analyze how new mechanisms of information governance ranging from algorithmic content moderation to data-driven censorship affect access to information and democratic accountability [7]. By exploring these mechanisms, the study situates digital governance within the broader discourse on human rights and the rule of law [9].

The research focuses on three interrelated objectives.

- First, to investigate how digital information control mechanisms, including surveillance and content moderation, influence transparency and freedom of expression [5].
- Second, to assess the role of global and regional regulatory frameworks in addressing these dynamics, particularly in balancing privacy protection, misinformation control, and open discourse [3].

- Third, to evaluate the ethical dimensions of digital authoritarianism and its implications for human dignity and civic participation [6].

The scope of the analysis extends across both democratic and authoritarian contexts, drawing on international human rights standards such as the Universal Declaration of Human Rights (UDHR) and the International Covenant on Civil and Political Rights (ICCPR) [8]. The paper adopts an interdisciplinary approach, integrating legal theory, media ethics, and information governance to develop a nuanced understanding of digital control structures [2]. Through this lens, it illuminates the shifting power dynamics that define global digital citizenship in the 21st century [4].

1.3. Structure of the Paper

The paper is organized into five main sections to provide a cohesive and systematic analysis of information control and human rights in the digital age [1]. Following this introduction, Section 2 establishes the theoretical foundations, exploring key concepts such as digital sovereignty, algorithmic governance, and transparency ethics [5]. Section 3 examines contemporary mechanisms of censorship and information control, including the role of big data, AI-driven moderation, and surveillance capitalism [7].

Section 4 presents a comparative analysis of global and regional governance frameworks, assessing how institutions like the United Nations, the European Union, and the African Commission on Human and Peoples' Rights address digital rights violations [3]. Section 5 synthesizes findings into a proposed governance framework for balancing freedom, accountability, and transparency in the digital ecosystem [9].

Throughout the paper, the discussion integrates legal, ethical, and technological perspectives to ensure an interdisciplinary approach [8]. The structure is designed to guide readers from conceptual understanding to empirical evaluation and policy synthesis, emphasizing the interconnectedness of information governance and human rights protection [6].

2. Theoretical and conceptual foundations

2.1. Information as Power: A Foucauldian Perspective

Michel Foucault's conceptualization of power and knowledge provides a critical foundation for understanding information control in the digital age [8]. In his view, power does not merely repress; it produces knowledge, social order, and subjectivity [9]. Applied to digital governance, this framework suggests that control over information is not simply about censorship, but about shaping what can be known, said, and believed [10]. Digital infrastructures from search engines to social media algorithms act as instruments of what Foucault termed *governmentality*, embedding surveillance and normalization within everyday communication [12].

In the context of information governance, surveillance technologies represent the institutionalization of knowledge-power relations. The collection and analysis of user data create mechanisms of behavioral prediction and control, enabling governments and corporations to pre-empt social risks or market tendencies [13]. This predictive surveillance transforms individuals into data subjects, whose visibility becomes a precondition for governance [15]. Such visibility, however, is asymmetrical while citizens are made increasingly transparent through data capture, the mechanisms of algorithmic control remain opaque [16].

Foucault's framework also illuminates how information asymmetry sustains authority. Knowledge monopolies whether in media, data analytics, or AI systems consolidate the power of those who control informational infrastructures [17]. States use legal and technical instruments to institutionalize this dominance, while private entities exercise "soft power" through algorithmic recommendation systems that subtly influence user behavior [9].

Thus, information power in the digital age functions not through coercion but through participation. Individuals willingly engage with platforms that surveil and categorize them, internalizing control through the pursuit of convenience and visibility [11]. As such, power is diffused across digital networks rather than centralized it operates through interfaces, code, and policy, shaping subjects who regulate themselves within the limits of the algorithmic order [14]. This Foucauldian reading reframes digital censorship not as an act of overt restriction, but as the normalization of discourse through invisible architectures of control [8].

2.2. Freedom of Expression and the Right to Information

The right to freedom of expression and access to information constitutes a cornerstone of democratic governance and human dignity [10]. International law enshrines this principle in Article 19 of the Universal Declaration of Human Rights (UDHR) and the International Covenant on Civil and Political Rights (ICCPR), guaranteeing the right to “seek, receive and impart information and ideas through any media” [13]. Regional instruments, including the European Convention on Human Rights and the African Charter on Human and Peoples’ Rights, further operationalize this right in specific political contexts [15].

Ethically, freedom of expression is justified on both utilitarian and deontological grounds [12]. From a utilitarian perspective, open discourse maximizes social welfare by fostering innovation, debate, and truth discovery [16]. From a deontological standpoint, it is intrinsic to autonomy and self-realization, as articulated by philosophers such as John Stuart Mill and Immanuel Kant [8]. Yet, the digital era complicates these justifications, as new intermediaries’ algorithms, platforms, and AI moderators filter information in ways that challenge the classical model of free speech [9].

In practice, digital environments blur the distinction between state censorship and private regulation [14]. Platforms like X (formerly Twitter), Meta, and YouTube make editorial decisions that shape global communication norms, yet operate without democratic accountability [17]. These actors have assumed quasi-governmental roles in defining acceptable speech, often guided by opaque community standards rather than constitutional protections [11].

Moreover, freedom of expression in digital spaces must now contend with competing interests: combating hate speech and misinformation while preserving legitimate dissent [13]. Governments invoke national security or public order to justify restrictions, but such measures frequently extend into political suppression [15]. Conversely, the failure to regulate harmful content can result in discrimination and violence, demonstrating the ethical tension between protection and freedom [10].

The right to information, as a corollary of free expression, extends beyond access to content it encompasses the transparency of the mechanisms governing information flow [16]. In the algorithmic era, this implies the public’s right to understand how information is filtered, prioritized, or censored by automated systems [12]. Thus, the digital reformulation of Article 19 must expand from protecting expression to safeguarding informational autonomy [8].

2.3. Defining Digital Transparency and Accountability

Digital transparency represents the evolution of traditional open government ideals into a broader demand for visibility in algorithmic and data-driven decision-making [11]. Originally conceptualized in governance reforms of the late 20th century, transparency sought to ensure that citizens could scrutinize state activities and hold leaders accountable [9]. In the digital age, however, this principle has expanded to include the mechanisms by which platforms, algorithms, and AI systems structure access to knowledge and opportunities [17].

Algorithmic transparency involves disclosing how automated systems make decisions, the data they process, and the criteria by which they filter information [13]. It is a response to the “black box” nature of AI, where opacity undermines accountability and erodes public trust [14]. Yet, transparency alone is insufficient; accountability requires mechanisms for redress when digital systems cause harm or perpetuate bias [10]. Together, these principles redefine the social contract between citizens, states, and corporations in the information economy [8].

Digital transparency also reconfigures civic participation. Where open government initiatives once emphasized passive information disclosure, contemporary frameworks prioritize participatory governance enabling citizens to shape how data and algorithms are deployed in public administration [12]. Transparency thus becomes both a right and a democratic practice, essential to the legitimacy of digital governance systems [15].



Figure 1 *Conceptual Framework of Power, Censorship, and Digital Transparency in Human Rights Discourse*, illustrates this interrelationship between power structures, regulatory oversight, and citizen empowerment [16]. It visually situates transparency as the connective tissue between freedom of expression and accountability, demonstrating how ethical governance emerges through visibility and shared responsibility [17]

3. Mechanisms of information control and digital censorship

3.1. State-Controlled Censorship Regimes

State-directed censorship in the digital era represents an evolution from overt propaganda to sophisticated systems of technological and legal control [15]. Governments increasingly deploy digital infrastructure as a means of information governance, embedding censorship within national security, cultural preservation, and data sovereignty frameworks [17]. These systems function through a combination of surveillance, filtering, and access restriction mechanisms designed to regulate both the production and consumption of online content [18].

China's Great Firewall stands as the most comprehensive and enduring model of digital censorship [20]. Through deep packet inspection (DPI) and keyword filtering, China's cyber authorities restrict access to foreign platforms such as Google, Facebook, and Wikipedia, while promoting domestic alternatives under strict state oversight [22]. Legal instruments like the Cybersecurity Law of 2017 mandate data localization, user real-name registration, and state auditing of network operators [16]. This architecture creates an enclosed digital ecosystem where online expression is subject to real-time state moderation.

Similarly, Russia's Sovereign Internet Law of 2019 introduced mechanisms for routing domestic internet traffic through government-controlled exchange points [19]. The Roskomnadzor, Russia's telecommunications regulator, exercises centralized control over internet service providers (ISPs), enabling the state to block websites, throttle social media platforms, and impose penalties for "foreign agent" content [23]. Iran's National Information Network (NIN) follows a parallel path, creating a closed network to restrict access to Western platforms and strengthen domestic control over communication flows [21].

Legal frameworks underpin these systems with regulatory justifications such as national security, moral protection, and counterterrorism [17]. Yet, in practice, they serve to institutionalize state dominance over discourse and suppress dissent [25]. States use licensing regimes, media registration, and vague definitions of "harmful content" to ensure compliance across the digital spectrum [18].

The global expansion of state-controlled censorship underscores a shifting paradigm in information governance: from reactive suppression to proactive digital architecture design [15]. By shaping the technological infrastructure itself, states embed control into the operational logic of the internet, blurring the line between regulation and repression [22].

These censorship systems are not isolated national phenomena but interconnected models that inspire emulation across diverse political contexts [20].

3.2. Corporate Gatekeeping and Platform Moderation

Corporate actors now play a decisive role in moderating the digital public sphere, functioning as both intermediaries and arbiters of information legitimacy [16]. Social media platforms employ algorithmic systems to detect, flag, and remove content that violates community guidelines, including hate speech, misinformation, and extremist propaganda [18]. However, this form of governance known as platform moderation often lacks transparency and public accountability [21].

Algorithms prioritize engagement, visibility, and profit, creating unintended consequences where sensational or polarizing content receives amplification [19]. When platforms subsequently deploy content moderation tools to mitigate harm, they risk suppressing legitimate speech, particularly when automated systems misinterpret context or satire [17]. This tension reflects what scholars describe as the “privatization of censorship,” where corporations, not states, determine the boundaries of expression [23].

The moderation process operates at scale through a combination of human review and machine learning classifiers [20]. AI models identify potentially harmful posts using linguistic patterns and image recognition, yet such systems are prone to cultural and linguistic bias [15]. For instance, moderation algorithms trained primarily on English datasets often misclassify political or journalistic content in non-Western languages, disproportionately affecting marginalized communities [25].

The Facebook Oversight Board, established in 2020, represents a novel attempt to introduce quasi-judicial review mechanisms for corporate decisions [22]. Yet its limited jurisdiction and dependency on the platform’s own infrastructure reveal the challenges of ensuring genuine independence [24]. Platforms like twitter and TikTok face similar criticisms, accused of enforcing content policies inconsistently and favoring dominant political or economic interests [19].



Figure 2 *Global Map of State and Corporate Mechanisms for Digital Censorship* [12], illustrates the overlap between governmental and corporate control mechanisms, highlighting the emergence of a hybrid censorship regime that fuses state law with private regulation [18]. This convergence creates an intricate governance web where information is filtered not only by political authority but also by algorithmic economies [21]

Ultimately, the concentration of informational power in a few transnational corporations transforms them into political actors wielding immense influence over public opinion and knowledge dissemination [20]. Their role in moderating discourse often beyond democratic oversight raises pressing questions about accountability, fairness, and the preservation of free expression in an algorithmically mediated world [23].

3.3. The Role of Artificial Intelligence in Censorship

Artificial intelligence (AI) has redefined the mechanisms and scale of censorship, allowing governments and corporations to automate content control with unprecedented precision [16]. Machine learning models trained on vast datasets are now used to detect hate speech, misinformation, and politically sensitive material in real time [25]. While these technologies enhance efficiency, they simultaneously entrench bias and enable new forms of suppression [19].

AI-based censorship tools rely on pattern recognition to identify “harmful” or “unauthorized” content, but their interpretive accuracy is limited by training data and contextual ambiguity [20]. Misclassification errors are frequent particularly in politically charged contexts where nuance and dissenting expression resemble rule violations [17]. Governments exploit these systems under the guise of combating disinformation, effectively delegating censorship to automated systems that obscure human accountability [23].

Corporate platforms also leverage AI moderation tools to enforce community standards at scale. However, the proprietary nature of these algorithms prevents external auditing, leaving users with little recourse when legitimate expression is removed [24]. This opacity undermines the principles of due process and erodes public confidence in digital governance [21].

Table 1, *Comparative Overview of National and Platform-Based Information Control Strategies*, contextualizes these dynamics by contrasting state-led and corporate approaches to censorship [18]. It reveals a shared reliance on AI for scalability and precision, despite differing justifications security in state systems versus “safety” in corporate ones [16].

Moreover, AI-driven censorship reinforces structural inequalities. Content moderation algorithms disproportionately silence activists, journalists, and minority voices, particularly in repressive regimes where state narratives dominate training data [22]. This digital asymmetry transforms AI from a neutral tool into a mechanism of social and political engineering [25].

As automation deepens, the challenge lies not in whether censorship exists but in how it is operationalized and justified [19]. Ensuring accountability in AI-mediated censorship requires new governance models that combine transparency, human oversight, and ethical auditability [20]. Without such safeguards, the digital sphere risks becoming a fully automated environment of control disguised as regulation [17].

Table 1 Comparative Overview of National and Platform-Based Information Control Strategies

Dimension	State-Controlled Information Regulation	Corporate Platform Moderation
Primary Objectives	National security, political stability, protection of cultural or ideological integrity	Brand integrity, user safety, content credibility, and compliance with local laws
Regulatory Frameworks	Governed by national legislation (e.g., Cybersecurity Law of China, Russia’s Sovereign Internet Law, Iran’s Computer Crimes Law)	Internal community guidelines, automated moderation policies, and global content standards under self-regulation frameworks
Enforcement Mechanisms	State-controlled Internet Service Providers (ISPs), licensing regimes, and centralized firewalls (e.g., China’s “Great Firewall”)	Proprietary AI-based content filters, algorithmic detection of “harmful” content, and user reporting systems
Technological Tools	Deep packet inspection (DPI), national data gateways, and mandatory data localization infrastructure	Machine learning moderation systems, natural language processing (NLP), and computer vision tools for content classification
Decision-Making Authority	Centralized—government agencies, ministries, or cybersecurity authorities determine permissible content	Decentralized but opaque—corporate algorithmic systems and trust and safety teams apply internal policies

Transparency and Accountability	Low transparency; censorship directives often confidential and legally unchallengeable	Limited transparency; moderation criteria disclosed selectively through transparency reports
Appeal and Redress Mechanisms	Minimal or absent; appeals often politically constrained or unavailable	Structured but uneven; includes appeals through user dashboards, oversight boards (e.g., Meta Oversight Board)
AI Integration	Deployed for mass surveillance, predictive censorship, and social credit scoring systems	Deployed for large-scale content moderation, spam detection, and misinformation labeling
Ethical Justification	“National security” and “public order”	“User safety,” “mental health protection,” and “brand responsibility”
Human Rights Implications	High risk of repression, privacy violations, and freedom of expression constraints	Risk of bias, over-censorship, and algorithmic discrimination due to opaque systems
Representative Examples	China, Russia, Iran, Turkey	Facebook, Twitter, Google (YouTube), TikTok

4. Digital transparency, whistleblowing, and counter-power movements

4.1. The Rise of Digital Transparency Activism

The emergence of digital transparency activism in the 21st century represents a defining shift in global power relations, challenging entrenched hierarchies of secrecy in governance and corporate operations [25]. Initiatives such as WikiLeaks, ICIJ’s Panama Papers, and the Paradise Papers have transformed the act of disclosure into a tool of political resistance and accountability [27]. By leveraging encrypted communication, distributed networks, and open-source platforms, transparency activists have established a new paradigm of civic participation that transcends borders and legal jurisdictions [23].

WikiLeaks, founded in 2006, epitomized this transformation by exposing classified government communications, including the Iraq and Afghanistan War Logs and Cablegate disclosures [26]. These leaks revealed systemic corruption, surveillance abuses, and war crimes, triggering both global outrage and a reevaluation of secrecy in democratic states [29]. The Panama Papers (2016) extended this legacy, uncovering offshore tax evasion networks that implicated political leaders and corporations worldwide [24]. Collectively, these initiatives catalyzed a culture of investigative collaboration between journalists, technologists, and civil society actors [28].

However, transparency activism exists within a profound ethical tension between the right to know and the duty to protect sensitive information [30]. Advocates argue that exposing government misconduct and financial corruption serves the public interest, promoting accountability and informed participation [27]. Critics, however, contend that indiscriminate leaks may endanger national security, diplomatic relations, and individual privacy [31]. This debate highlights the evolving boundary between transparency as a democratic virtue and secrecy as a governance necessity [23].

Technologically, transparency activism has become increasingly decentralized. Platforms use blockchain verification, peer-to-peer data distribution, and anonymized submission channels to resist censorship and ensure the authenticity of leaked materials [25]. Such innovations reinforce transparency movements’ resilience against state suppression and corporate takedowns [28]. Yet, as governments strengthen cybersecurity laws and expand surveillance capabilities, activists face heightened risks of prosecution and digital retaliation [29]. The global discourse on transparency thus remains a struggle over information sovereignty who controls truth, and who has the power to reveal it [26].

4.2. Whistleblower Protections and Legal Retaliation

Whistleblowers occupy a precarious position in the architecture of digital transparency, acting as intermediaries between secrecy and accountability [31]. Their disclosures have reshaped public understanding of surveillance, corruption, and corporate malpractice, yet they frequently face severe legal and personal consequences [25]. Edward Snowden, Chelsea Manning, and Frances Haugen represent pivotal figures whose actions redefined the boundaries of ethical dissent and legal culpability [23].

Edward Snowden's 2013 revelations about mass surveillance programs by the U.S. National Security Agency (NSA) exposed the depth of global data interception, prompting worldwide debates on privacy and digital rights [27]. Snowden's disclosures led to legislative reforms, such as the USA Freedom Act, but also resulted in his exile and criminal charges under the Espionage Act [24]. Similarly, Chelsea Manning's leaks of military documents to WikiLeaks highlighted war-related human rights violations but led to imprisonment and ostracism [30]. Frances Haugen's 2021 testimony against Facebook revealed algorithmic amplification of harmful content, reinforcing corporate accountability debates and prompting regulatory scrutiny of digital platforms [28].

Despite their public significance, whistleblowers often encounter institutional retaliation disguised as legal enforcement [26]. Governments invoke national security or data protection laws to justify prosecutions, while corporations deploy nondisclosure agreements and defamation suits to silence internal dissent [32]. The absence of robust international protections exacerbates these risks as whistleblower laws remain fragmented, with significant variations between jurisdictions [25].

International frameworks such as the UN Convention Against Corruption (UNCAC) and the OECD Anti-Bribery Convention recognize whistleblowing as a critical mechanism for transparency, yet their enforcement remains inconsistent [31]. The European Union Whistleblower Protection Directive (2019) represents progress, mandating confidentiality and protection against retaliation for informants within member states [27]. However, global enforcement asymmetry means that many whistleblowers remain vulnerable to extradition, imprisonment, or reputational destruction [23].



Figure 3 *Interplay Between Digital Transparency, Accountability, and Human Rights Advocacy*, visualizes how whistleblowing connects technological transparency movements with human rights enforcement [25]. It illustrates a triangular relationship where digital tools enable exposure, legal frameworks mediate legitimacy, and civil society transforms leaks into structured accountability [29]. Yet, as Figure 3 emphasizes, these relationships remain fragile in the absence of consistent protections for the individuals who embody transparency in practice [24]

4.3. Open Data and the Right to Access Information

The open data movement represents a parallel trajectory in the quest for transparency, focusing on proactive disclosure rather than reactive leaks [26]. Governments, international organizations, and private actors increasingly recognize open data as a driver of innovation, accountability, and participatory governance [23]. Platforms such as the World Bank Open Data Initiative and the Open Government Partnership (OGP) have institutionalized transparency as a developmental norm, promoting access to datasets on health, environment, and public finance [28].

Legally, the right to access information has gained traction as a fundamental human right under instruments such as Article 19 of the ICCPR and regional charters in Europe, Africa, and the Americas [27]. Many nations have enacted Freedom of Information (FOI) laws, enabling citizens to request public records and data [31]. The digital era has expanded this right beyond documents to include real-time datasets and algorithmic decision processes [30].

Nevertheless, the implementation of open data frameworks faces multiple challenges. Privacy concerns, data misuse, and cybersecurity risks often constrain the release of government datasets [25]. Moreover, the uneven quality, interoperability, and accessibility of open data platforms limit their utility for civic engagement [29]. In some cases, governments selectively disclose non-sensitive data to project transparency while concealing politically significant information [32].

Balancing openness with privacy and security remains the central dilemma of data governance [26]. While open data enhances accountability, excessive transparency can expose individuals and institutions to harm, particularly in contexts lacking robust data protection laws [24]. Achieving equilibrium requires adopting principles of data minimization, purpose limitation, and proportional disclosure within transparency policies [28].

Ultimately, open data initiatives exemplify the democratization of information power when designed inclusively and ethically [31]. They mark a shift from secrecy as a default governance condition to transparency as a normative expectation in global policy discourse [23]. By bridging public access and digital participation, open data reaffirms the link between information freedom and the collective pursuit of justice [27].

5. Human rights implications of information power asymmetries

5.1. Freedom of Expression and Democratic Participation

Freedom of expression lies at the core of democratic governance, serving as both a right and a mechanism for public accountability [31]. When censorship and surveillance encroach upon this freedom, the very foundation of democratic participation is undermined [29]. Digital platforms originally envisioned as instruments for global dialogue have increasingly become spaces of algorithmic control, where visibility is curated, and dissenting voices are marginalized [33].

Informed citizenship depends upon pluralism in information access and the ability to critique authority without fear of reprisal [35]. However, state-imposed firewalls, algorithmic suppression, and targeted misinformation disrupt the integrity of public discourse [30]. In regions with strict digital censorship, citizens are often deprived of accurate information on governance, corruption, or social justice movements, limiting their capacity for political engagement [36]. The chilling effect of surveillance both governmental and corporate further inhibits free expression by fostering fear of reprisal [32].

The right to freedom of expression, as articulated in Article 19 of the ICCPR, guarantees individuals the liberty to “seek, receive, and impart information,” yet this right is increasingly constrained by data-driven censorship [34]. Automated moderation systems remove content without due process, silencing activists, journalists, and minority voices under the guise of combating disinformation [29]. When AI-driven algorithms prioritize state-aligned narratives or commercial content, democratic deliberation becomes commodified and controlled [37].

The consequences extend beyond individual rights to collective democratic health. When discourse becomes homogenized or manipulated, citizens lose the capacity to hold governments accountable or engage meaningfully in policy-making [38]. Moreover, the spread of digital disinformation campaigns often state-sponsored further distorts truth, fragmenting the public sphere into polarized echo chambers [30].

Freedom of expression, therefore, is not merely the absence of censorship but the presence of equitable communicative structures [31]. Ensuring this equilibrium requires transparency in algorithmic decision-making, judicial oversight of content regulation, and international collaboration to safeguard cross-border information flows [35]. In this sense, protecting expression is integral to preserving the participatory essence of democracy in the digital era [39].

5.2. Right to Privacy and Protection Against Surveillance

The right to privacy is increasingly jeopardized by the convergence of information control and surveillance capitalism [30]. As states and corporations amass vast quantities of personal data, individuals become subjects of continuous monitoring, their autonomy constrained by invisible systems of behavioral prediction [34]. Privacy violations occur not

only through overt state surveillance but also through corporate data extraction practices embedded in everyday technologies [29].

Mass surveillance programs often justified under national security pretexts create an environment of self-censorship and mistrust [32]. The Snowden revelations illuminated the extent of global interception by intelligence agencies, exposing transnational surveillance alliances such as the Five Eyes Network [33]. Such practices contravene the principles of proportionality and necessity enshrined in international human rights law [31]. Moreover, surveillance-based business models in the private sector, epitomized by targeted advertising and data brokerage, exploit personal information without meaningful consent [37].

Legal protections remain fragmented. The General Data Protection Regulation (GDPR) in the European Union provides a robust model for privacy protection through consent, transparency, and data minimization requirements [35]. In contrast, frameworks like the U.S. CLOUD Act and Patriot Act extend governmental access to digital communications, prioritizing state security over individual rights [29]. Authoritarian regimes go further, employing biometric monitoring, facial recognition, and digital profiling to suppress dissent [36].

The intersection of surveillance and censorship amplifies the erosion of both privacy and expression. Governments that control digital infrastructure often integrate monitoring systems into content regulation, creating feedback loops of repression [30]. In such environments, citizens lose not only anonymity but also the capacity for resistance [38].

Table 2 *Matrix of Human Rights Affected by Information Control and Digital Transparency Deficits*, maps the interconnected harms of censorship and surveillance, illustrating how restrictions on privacy cascade into broader violations of liberty, equality, and access to justice [39]. The table reveals that data opacity when citizens cannot see how their information is used undermines accountability across all governance levels [31]. Protecting privacy in this context requires reframing it not as a solitary right but as a collective condition for freedom [33]. Only through legal harmonization, transparency in surveillance practices, and robust digital rights advocacy can societies reclaim informational autonomy and restore human dignity in the age of data governance [35].

Table 2 Matrix of Human Rights Affected by Information Control and Digital Transparency Deficits

Human Right	Nature of Violation under Information Control	Impact of Digital Transparency Deficit	Examples / Illustrations
Right to Freedom of Expression (UDHR Art. 19)	Censorship of dissenting voices, restricted access to independent media, and algorithmic demotion of politically sensitive content	Lack of visibility into content moderation and AI-based filtering limits users' ability to contest suppression	Blocking of news platforms in authoritarian regimes; opaque moderation on social media platforms [31,39]
Right to Privacy (UDHR Art. 12; ICCPR Art. 17)	Mass surveillance, metadata collection, and mandatory data retention policies	Data opacity prevents citizens from understanding how personal data is used or shared, eroding autonomy and consent	State surveillance programs under "national security" claims; data monetization by corporations [39]
Right to Equality and Non-Discrimination (UDHR Art. 7)	Biased content moderation and algorithmic profiling reinforce stereotypes and digital exclusion	Lack of algorithmic transparency conceals discriminatory outcomes	Automated content flagging disproportionately targeting minority languages and activism [31]
Right to Access Information (UDHR Art. 19)	Restriction of open data, firewalling of foreign information, and selective news dissemination	Absence of transparent disclosure on data handling and algorithmic decisions blocks informed civic participation	Governmental censorship lists undisclosed to the public; opaque search result rankings [39]
Right to Participate in Public Affairs (ICCPR Art. 25)	Manipulation of information ecosystems through disinformation and digital repression	Data opacity enables covert political manipulation and microtargeting	Election interference through data-driven voter profiling; suppression of online mobilization [31]

Right to Freedom of Association (ICCPR Art. 22)	Disruption of online organizing platforms and surveillance of activists	Hidden surveillance infrastructures discourage collective digital engagement	Shutdown of protest hashtags or activist group chats under pretexts of “cybersecurity” [39]
Right to Liberty and Security of Person (UDHR Art. 3)	Use of surveillance data for arbitrary arrests and profiling	Inaccessible data trails prevent individuals from challenging unlawful detention	Predictive policing tools misclassifying individuals as “risky” without recourse [31]
Right to Fair Trial and Access to Justice (UDHR Art. 10)	Suppression of digital evidence and censorship of judicial transparency portals	Lack of visibility in data-sharing between platforms and law enforcement obstructs accountability	Closed digital court databases; algorithmic sentencing without interpretability [39]
Right to Development and Education (UDHR Art. 26)	Inequitable access to online resources due to state-imposed internet restrictions	Data opacity prevents equitable evaluation of educational technology outcomes	Internet blackouts in marginalized regions; undisclosed data tracking in e-learning platforms [31]
Right to Democratic Participation and Accountability (Customary Law, ICCPR Art. 25)	Suppression of investigative journalism and whistleblowing	Lack of transparency mechanisms prevents scrutiny of public institutions	Prosecution of journalists exposing corruption; restricted access to public data [39]

5.3. Access to Justice and Knowledge Inequality

Access to justice in the digital age increasingly depends on equitable access to information [30]. When data, algorithms, and communication networks are controlled by powerful states or corporations, marginalized populations face systemic exclusion from both legal recourse and social participation [32]. This informational inequality mirrors historical patterns of economic exploitation, producing what scholars’ term “digital colonialism” [29].

Legal empowerment requires that citizens understand, access, and challenge the decisions that affect them [37]. However, opaque digital systems whether predictive policing algorithms, automated welfare adjudications, or content moderation platforms obscure accountability and deny due process [33]. Without transparency, individuals cannot contest bias or identify violations of their rights [35].

Human rights advocacy increasingly emphasizes digital inclusion as a pathway to justice [36]. Initiatives by the UN Human Rights Council and the World Summit on the Information Society (WSIS) call for inclusive digital infrastructures that ensure participation across gender, socioeconomic, and regional divides [38]. Yet, many developing economies remain constrained by limited connectivity, digital literacy gaps, and restrictive information policies [31].

Knowledge inequality is not merely a technical problem but a moral one: when access to truth becomes stratified, justice itself becomes selective [34]. Addressing this asymmetry requires global commitments to open information ecosystems, equitable data governance, and civic technology innovation [39]. Only by dismantling these barriers can societies ensure that digital progress aligns with the universal pursuit of human rights and social equity [30].

6. Comparative analysis of global information governance regimes

6.1. European Union: Digital Rights and Governance Accountability

The European Union (EU) represents the most comprehensive regional framework for balancing information governance, privacy, and digital transparency [36]. Central to this framework is the General Data Protection Regulation (GDPR), enacted in 2018, which established the global benchmark for data protection and user rights [38]. The GDPR codifies principles of data minimization, informed consent, and accountability, placing individuals at the center of digital governance [35]. It also mandates breach notifications and impact assessments, ensuring transparency in both public and private data processing [39].

Complementing the GDPR, the Digital Services Act (DSA) and Digital Markets Act (DMA) expand regulatory oversight to online platforms, focusing on algorithmic transparency, content moderation, and market fairness [41]. The DSA requires

large platforms to disclose how algorithms recommend content and manage illegal or harmful material, thereby addressing opacity in automated decision-making systems [40]. These laws mark a significant evolution in the EU's regulatory architecture, positioning transparency as an enforceable duty rather than a voluntary principle [37].

The European Commission and European Data Protection Board (EDPB) further reinforce these measures through ethical frameworks emphasizing fairness, accountability, and human-centered AI [44]. Initiatives like the EU Artificial Intelligence Act seek to prohibit AI systems that pose "unacceptable risk," such as social scoring or predictive policing [43]. Collectively, these policies reflect an institutional commitment to protecting citizens against digital exploitation while maintaining freedom of expression [35].

Nevertheless, challenges persist. The tension between innovation and regulation has prompted debates over compliance burdens, data localization, and cross-border data transfer restrictions [42]. Smaller firms argue that strict privacy mandates limit competitiveness, while critics warn that over-regulation may stifle technological growth [36]. Despite these concerns, the EU remains the global leader in integrating human rights principles into digital governance [39]. Its regulatory model continues to inspire legislative frameworks worldwide, emphasizing the indivisibility of privacy, transparency, and democratic accountability [45].

6.2. United States: Free Speech Tradition and Platform Autonomy

The United States' approach to digital governance is rooted in its constitutional protection of free expression and market-driven innovation [46]. The First Amendment ensures broad safeguards for speech, restricting government interference even in cases involving controversial or harmful content [37]. This foundational principle underpins a legal environment where online expression thrives but also where harmful or false information proliferates unchecked [47].

At the heart of U.S. digital regulation lies Section 230 of the Communications Decency Act (1996), which grants online platforms immunity from liability for user-generated content while permitting them to moderate "objectionable" material in good faith [35]. Section 230 has been instrumental in enabling the rise of major technology companies such as Meta, Google, and Twitter, allowing them to curate content without the threat of excessive litigation [38]. However, this autonomy has sparked intense debate over accountability, censorship, and the social responsibilities of tech corporations [43].

Critics argue that the absence of clear transparency mandates enables platforms to operate as private arbiters of public discourse [41]. Unlike the EU's DSA, the United States lacks a comprehensive federal framework governing algorithmic transparency or data ethics [44]. Content moderation policies are largely self-regulated, driven by corporate interest rather than democratic oversight [42]. This has led to accusations of political bias, opaque decision-making, and inadequate safeguards against misinformation [36].

Efforts to reform Section 230 reflect growing bipartisan concerns about the unregulated power of digital intermediaries [39]. Proposed reforms include conditioning immunity on transparent moderation practices or limiting protections for platforms that amplify illegal content [37]. Yet, opponents caution that such measures could erode free speech protections and introduce state interference in digital expression [45].

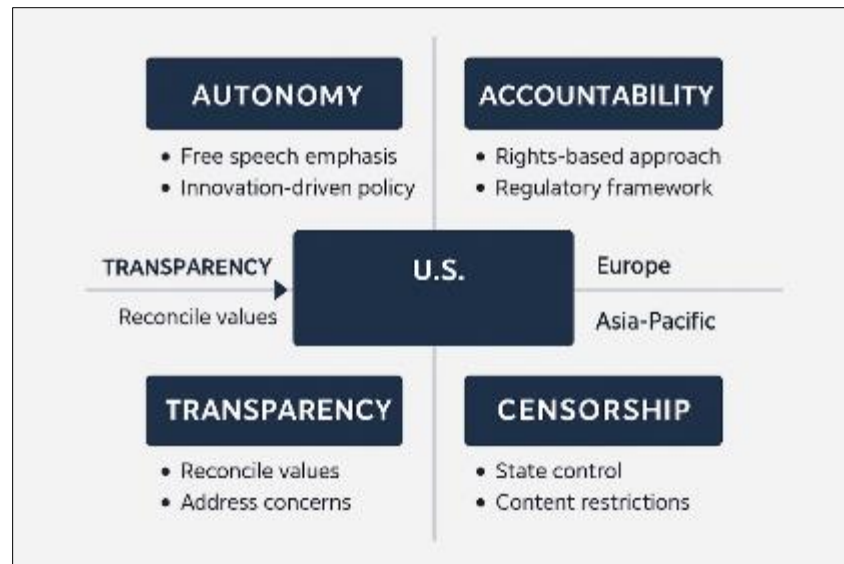


Figure 4 *Comparative Framework of Global Information Governance and Censorship Practices*, situates the U.S. approach alongside European and Asia-Pacific models, illustrating how the emphasis on free speech contrasts with the EU's rights-based regulatory paradigm [40]. The figure highlights that while the U.S. prioritizes autonomy and innovation, it faces increasing pressure to reconcile these values with accountability and transparency imperatives [38]

Ultimately, the U.S. framework embodies the paradox of digital freedom: a system that maximizes speech but minimizes collective responsibility [35]. Its model underscores the enduring tension between liberal expression and the governance of digital harms in an age where platforms shape public knowledge and civic engagement [43].

6.3. Asia-Pacific and Authoritarian Information Models

The Asia-Pacific region presents a markedly different trajectory, where centralized state control and digital sovereignty dominate information governance [36]. Governments in China, Vietnam, and Singapore have institutionalized surveillance and censorship as mechanisms of political stability and national identity preservation [41]. The Cyberspace Administration of China (CAC), for example, oversees the Great Firewall, which filters foreign content, monitors online communication, and enforces ideological conformity [39].

China's Cybersecurity Law (2017) and Data Security Law (2021) exemplify this model, embedding information control into national security and economic frameworks [44]. These laws mandate real-name registration, restrict cross-border data flows, and enable algorithmic auditing of online content [37]. Similarly, Vietnam's Law on Cybersecurity (2018) and Thailand's Computer Crime Act (2017) empower governments to block content deemed harmful to "national unity" or "public order" [40].

In democratic contexts like Japan and South Korea, regulatory emphasis leans toward content moderation ethics rather than suppression [38]. However, regional tendencies toward data nationalism prioritizing domestic control of digital resources reflect growing skepticism toward Western-led internet governance models [42].

These developments have significant implications for global human rights advocacy. The convergence of digital authoritarianism with technological innovation threatens to normalize surveillance governance as a model for digital control [35]. As shown in Figure 4, the Asia-Pacific framework represents the polar opposite of the EU's transparency-oriented governance, revealing a geopolitical divide in information ethics [43].

Human rights organizations continue to call for cross-regional dialogue and stronger international norms to counterbalance authoritarian influence in global digital policy [45]. Without coordinated responses, the entrenchment of such models risks eroding global commitments to transparency, privacy, and freedom of expression [36].

7. Toward a human right–centered information order

7.1. Ethical and Legal Reforms for Digital Freedom

Reforming global information governance requires embedding freedom of expression, privacy, and transparency within an ethical and legal framework that transcends national boundaries [40]. A rights-based digital order must treat access to information as a global public good rather than a privilege mediated by governments or corporations [43]. Embedding these principles into digital governance charters both national and international can ensure that technological innovation aligns with the foundational values of openness and justice [42].

The reform process begins with establishing binding commitments to free expression within digital policies, ensuring that regulatory measures targeting misinformation or cyber threats do not become instruments of suppression [44]. Governments should be mandated to justify any restrictions under internationally recognized human rights criteria of legality, necessity, and proportionality [41]. Furthermore, corporate platforms must integrate transparency-by-design principles, publishing algorithmic decision logs and data-sharing practices to allow for independent oversight [45].

Cross-border collaboration is essential to align content moderation ethics across jurisdictions [43]. Shared protocols can prevent regulatory fragmentation and ensure that platforms respect both local cultural contexts and universal human rights norms [40]. Establishing a Digital Freedom Compact, endorsed by multilateral institutions, would help define collective standards for online expression and data governance [44]. Such reforms would strike a balance between sovereignty, accountability, and the universal right to seek and impart information [42].

7.2. Strengthening Global Digital Accountability

Global digital accountability demands a multilateral approach driven by international institutions with the authority to harmonize governance practices [41]. Organizations such as the United Nations (UN), UNESCO, and the Organisation for Economic Co-operation and Development (OECD) are positioned to develop normative frameworks that reinforce transparency and digital human rights [40]. UNESCO's Internet Universality Indicators, for instance, already provide a foundation for assessing rights, openness, accessibility, and multistakeholder participation [42].

A Global Charter on Information Freedom and Algorithmic Transparency could consolidate these efforts, offering a binding international standard that mandates ethical data handling, algorithmic fairness, and public accountability [43]. Such a charter would complement existing treaties like the ICCPR and UDHR, extending their protections into the digital realm [45]. This framework would require states and corporations alike to submit to independent audits verifying compliance with transparency and privacy standards [44].

The UN Human Rights Council could also play a coordinating role by creating a Special Rapporteur on Digital Accountability to investigate abuses of information control and algorithmic discrimination [41]. Simultaneously, the OECD could develop cross-national benchmarks for platform transparency and algorithmic impact reporting, ensuring comparability across regions [43].

Ultimately, digital accountability is inseparable from the legitimacy of governance itself [40]. By establishing enforceable norms that hold both states and corporations answerable for their digital practices, the international community can bridge the gap between information sovereignty and global justice [42].

7.3. Multi-Stakeholder Governance and Civic Empowerment

A sustainable digital governance system must be participatory, enabling civil society, NGOs, journalists, and citizens to play active roles in shaping transparency norms [44]. Multi-stakeholder governance fosters collective responsibility, ensuring that the power to regulate information is not monopolized by states or corporations [41]. Civil society organizations can act as watchdogs, monitoring censorship, advocating for open data access, and promoting digital literacy to counter disinformation [40].

Building resilient digital ecosystems requires empowering communities to develop decentralized communication networks, open-source tools, and participatory data governance platforms [45]. These initiatives redistribute informational power, transforming users into co-governors of the digital public sphere [42]. International funding bodies and philanthropic organizations can strengthen these grassroots movements through capacity-building and policy advocacy [43].

By embedding inclusivity, transparency, and accountability at every level of digital governance, multi-stakeholder frameworks can counterbalance authoritarian tendencies and corporate opacity [44]. This model not only democratizes information control but also reaffirms the digital domain as a space of collective empowerment and human dignity [40].

8. Conclusion

8.1. Synthesis of Key Arguments Linking Information Power, Censorship, and Transparency

The preceding analysis reveals that control over information has become one of the most defining instruments of power in the twenty-first century. States, corporations, and digital intermediaries have assumed roles once reserved for traditional gatekeepers of knowledge newspapers, broadcasters, and libraries yet now operate with far greater reach and opacity. The tension between information freedom and control is not simply a technical or policy dilemma; it is a structural feature of global governance. Censorship and surveillance mechanisms, whether state-imposed or algorithmically mediated, shape who gets to speak, what narratives dominate, and how truth itself is negotiated.

Digital censorship operates across multiple layers: infrastructural, algorithmic, and psychological. On the infrastructural level, states deploy technical firewalls, content filters, and network restrictions to suppress dissent and regulate cross-border communication. Algorithmically, corporations embed moderation systems that curate visibility, often privileging engagement metrics over democratic discourse. Psychologically, users internalize surveillance, adapting behavior in anticipation of digital scrutiny. Together, these mechanisms generate a culture of self-censorship that erodes public deliberation and trust.

Transparency serves as the counterforce to this dynamic. It is both a governance tool and a moral principle that restores visibility where opacity dominates. The concept of digital transparency extends beyond open data or procedural disclosure; it encapsulates the right of citizens to understand how information is shaped, filtered, and circulated in digital spaces. In this sense, transparency is not merely about accountability after harm it is preventive, empowering users to question, critique, and reshape the systems that govern their informational lives.

The synthesis of information power, censorship, and transparency underscores that digital governance cannot be detached from human rights. Freedom of expression, privacy, and access to information are interdependent rights that form the ethical architecture of the information society. Without these foundations, technological progress risks perpetuating inequality, consolidating surveillance, and eroding democratic institutions.

8.2. Reflection on Emerging Global Norms Redefining Freedom, Privacy, and Accountability

Across regions, new governance models are emerging that reflect shifting global attitudes toward freedom and accountability. The European Union's regulatory philosophy anchored in the GDPR, Digital Services Act, and AI Act embodies a rights-centered paradigm. It frames privacy and transparency as non-negotiable principles, integrating ethical oversight into digital innovation. In contrast, the United States continues to prioritize free expression and market autonomy, emphasizing innovation over restriction. Its decentralized, litigation-based system offers flexibility but often at the expense of consistent accountability.

Meanwhile, the Asia-Pacific region presents an alternative model centered on information sovereignty and national control. Governments such as China and Vietnam perceive digital regulation as an extension of state security, while democratic nations like Japan and South Korea seek a balance between public order and online freedom. This divergence underscores that digital governance is not evolving toward uniformity but rather toward a contested pluralism shaped by political culture, ideology, and economic power.

Global institutions most notably the United Nations, UNESCO, and OECD are increasingly active in harmonizing these fragmented approaches. Initiatives like UNESCO's Internet Universality Indicators and the UN's calls for digital cooperation demonstrate growing recognition that information governance must be rooted in universal values rather than regional exceptionalism. These norms advocate transparency as a right, not a privilege, and call for binding international commitments to algorithmic accountability and data ethics.

The evolving global framework also redefines privacy beyond individual protection to include collective and systemic dimensions. In a world where personal data fuels predictive analytics and political profiling, privacy becomes a cornerstone of democracy rather than a consumer preference. Likewise, freedom is being reinterpreted not as unregulated expression, but as informed participation within transparent systems. Accountability, therefore, emerges as the connective principle bridging state, corporate, and civic responsibilities.

This transformation is gradual and uneven, but it marks a shift toward a more ethical digital order. The emerging consensus across global governance debates suggests that true digital freedom will depend less on deregulation and more on the cultivation of fairness, visibility, and institutional responsibility.

8.3. Final Remarks on the Path Toward Inclusive and Rights-Based Digital Governance

The path toward inclusive and rights-based digital governance lies in rebalancing power among the state, market, and citizen. At its core, the challenge is not simply to prevent abuse but to redefine the purpose of technology in society. A governance system that privileges control and profit over participation inevitably corrodes human dignity. Conversely, one that embeds transparency, inclusivity, and justice transforms technology into a democratic instrument of empowerment.

Future governance models must therefore integrate ethical reflexivity at every level of design and regulation. Legislators should adopt transparency-by-design frameworks, ensuring algorithmic systems are explainable and auditable. Corporations must transition from self-regulation to co-regulation, collaborating with civil society and independent oversight bodies. Citizens, empowered by digital literacy and civic engagement, should be active participants in shaping the norms that govern information ecosystems.

Equity in access to knowledge remains the moral frontier of the digital age. Without addressing informational asymmetries between the Global North and South, between the affluent and the marginalized digital governance will reproduce rather than rectify global inequalities. Bridging this divide requires international investment in infrastructure, education, and open data initiatives that democratize participation in the information economy.

As the digital world expands into domains of artificial intelligence, quantum computing, and immersive media, the urgency of establishing ethical guardrails intensifies. The task before policymakers and societies is to ensure that technological evolution does not outpace the principles of justice and humanity that sustain social order. Digital governance, at its best, must reflect a collective commitment to transparency, truth, and human rights.

In conclusion, reclaiming digital freedom is not a nostalgic return to pre-digital ideals but the creation of a new social contract one that acknowledges data as power, transparency as protection, and human dignity as the ultimate metric of progress. Only by embracing this vision can the international community build a digital future that is not only innovative and interconnected but also just, equitable, and profoundly human.

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