



Restoring Digital Ethics: Multilateral Efforts to Minimize the Erosion of Human Values in Cyberspace

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Abstract

The development of digital technology has transformed communication patterns, social interaction, and information dissemination in contemporary society. Although it provides significant benefits, digital transformation also generates ethical challenges such as misinformation, hate speech, cyberbullying, privacy violations, and declining communication ethics, which collectively contribute to the erosion of human values in cyberspace. These conditions indicate an imbalance between technological advancement and the strengthening of digital ethics and moral awareness among users. This study aims to analyze the forms of human value degradation in cyberspace and examine the roles of government, society, and educational institutions in restoring digital ethics through a multilateral approach. The study employs a qualitative literature review method based on academic journals, books, policy documents, and institutional reports. Data were analyzed using content analysis to identify and interpret key themes related to digital ethics restoration. The findings show that restoring digital ethics requires coordinated efforts among government regulation, societal participation, and educational reinforcement of digital literacy and character building to create a more responsible and human-centered digital ecosystem.

Keywords: *Digital Ethics, Cyberspace, Multilateral Collaboration, Digital Literacy, Human Value.*



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INTRODUCTION

The unprecedented expansion of digital technologies has fundamentally reshaped contemporary social life, transforming how individuals communicate, learn, participate in economic activities, and construct civic identities within increasingly interconnected digital environments (Tomasello, 2023). The rapid diffusion of social media platforms, artificial intelligence systems, and data-driven communication infrastructures has generated new opportunities for global connectivity while simultaneously producing complex ethical dilemmas that challenge traditional understandings of social responsibility and human interaction (Sazali, 2025). As cyberspace becomes a central arena for public discourse and social engagement, concerns regarding the deterioration of empathy, respect, accountability, and trust have attracted growing attention from scholars, policymakers, and civil society organizations worldwide (Assante et al., 2022). Digital transformation has not only altered technological practices but has also reconfigured the moral foundations that govern interpersonal relations in virtual environments. The increasing dependence of societies on digital ecosystems makes ethical governance an issue that extends beyond technological management toward broader questions of social and human development.

A substantial body of literature has examined the relationship between digital citizenship, ethical behavior, and the preservation of human values in online spaces. Research has demonstrated that personal values, critical thinking dispositions, and digital citizenship competencies significantly contribute to responsible participation in digital environments and reduce the likelihood of harmful online behavior (Assante et al., 2022). Studies focusing on cyberspace ethics have further emphasized that educational interventions and civic engagement play crucial roles in fostering ethical awareness among digital citizens (Isdendi et al., 2023). Scholars investigating digital literacy have argued that the capacity to critically evaluate information constitutes an essential safeguard against misinformation,

manipulation, and irresponsible online conduct (Najwa Faradila & Iskandar, 2025). Contemporary discussions on digital ethics have also linked ethical media use to the achievement of sustainable development objectives by promoting inclusive, responsible, and human-centered technological engagement (Syahda et al., 2024). Existing evidence collectively suggests that digital ethics is increasingly recognized as a multidimensional framework encompassing moral judgment, social responsibility, legal awareness, and civic participation. Nevertheless, the practical realization of these principles remains uneven across different social and institutional contexts.

The persistence of cyberbullying, hate speech, privacy violations, disinformation, and online harassment indicates that technological advancement has progressed more rapidly than the ethical capacities required to govern digital interactions (Martha, 2024). The emergence of what some scholars describe as a “digital barbarian society” reflects a pattern of moral degradation characterized by declining civility, increasing hostility, and the normalization of harmful online behavior (Febriansyah et al., 2024). Research examining communication ethics in social media environments has revealed that algorithmic amplification mechanisms often reward sensationalism and polarization rather than accuracy, empathy, or constructive dialogue (Sazali, 2025). Legal studies have identified continuing tensions between freedom of expression, human rights protections, and the regulation of digital content, creating ambiguity in the implementation of ethical standards within cyberspace governance frameworks (Januar, 2024). Investigations into personal data protection have further highlighted growing concerns regarding privacy breaches and the inadequate protection of individual rights in rapidly evolving digital ecosystems (Pemerintah Republik Indonesia, 2022). These developments suggest that ethical deterioration in cyberspace cannot be explained solely through individual misconduct because structural, technological, legal, and cultural factors interact in ways that reinforce the erosion of human values.

Although previous studies have generated valuable insights, the literature remains fragmented across disciplinary boundaries and often examines governmental regulation, educational interventions, social participation, or cybersecurity initiatives as separate domains rather than interconnected dimensions of a broader ethical ecosystem (Lumintosari et al., 2024). Research on cyber resilience has predominantly focused on national security and technological infrastructures while paying comparatively less attention to the preservation of human dignity and social cohesion in digital environments (Rai et al., 2022). Studies concerning digital ethics education have largely emphasized individual competencies and school-based character formation without sufficiently exploring how these efforts interact with wider societal and regulatory structures (Kamelia & Khasanah, 2026). Existing scholarship on digital citizenship and e-government has highlighted the importance of ethical participation but has rarely proposed integrated multistakeholder frameworks capable of addressing ethical degradation at systemic levels (Zidane et al., 2023). Investigations of digital diplomacy have also concentrated primarily on cybersecurity cooperation and international relations while overlooking their potential contribution to restoring human-centered ethical norms within cyberspace governance (Waruwu & Sabea, 2024). The absence of a comprehensive analytical framework connecting government, educational institutions, and society represents a significant conceptual gap that limits current understanding of how digital ethics can be effectively restored.

The unresolved nature of this problem carries profound implications for both scientific inquiry and social practice because the erosion of human values within cyberspace increasingly influences democratic participation, social trust, psychological well-being, and collective resilience. Educational research has shown that character formation and moral development face unprecedented challenges in environments where digital interactions frequently normalize unethical conduct and diminish interpersonal accountability (Rahman et al., 2023). Studies on educational leadership have emphasized the necessity of institutional innovation to address the growing moral crisis associated with technology-driven social change (Utami et al., 2025). Scholarly discussions regarding teachers’ ethical responsibilities further indicate that educational actors remain essential agents in cultivating responsible digital behavior among younger generations (Robi’ah et al., 2025). Community-based initiatives have demonstrated that public awareness campaigns and legal-ethical education can contribute to healthier digital cultures, although their long-term effectiveness depends on broader collaborative mechanisms involving multiple stakeholders (Junari et al., 2025). Research on cybersecurity awareness likewise suggests that sustainable digital safety cannot be achieved solely through technological solutions without corresponding ethical transformation among users and institutions (Wijaya & Juardi, 2026).

Contemporary debates increasingly recognize that restoring digital ethics requires a normative foundation capable of integrating legal, cultural, educational, and civic dimensions into a coherent framework of digital responsibility (Vertika & Hakim, 2025). Recent interdisciplinary scholarship has further highlighted the importance of reconciling human rights principles, cyber law, and moral values as part of a broader effort to humanize digital governance systems (Nur et al., 2026).

This study positions itself within the emerging discourse on digital ethics restoration by advancing a multilateral perspective that conceptualizes government, society, and educational institutions as mutually reinforcing actors within a shared ethical governance ecosystem. Rather than treating ethical degradation as an isolated behavioral problem, the study examines it as a systemic phenomenon shaped by the interaction of regulatory structures, cultural practices, educational processes, and public participation. The research seeks to explain how collaborative and integrated interventions can minimize the erosion of human values in cyberspace while simultaneously strengthening responsible digital citizenship. The study contributes theoretically by proposing a comprehensive framework that links digital ethics restoration to broader social and human development objectives. Methodologically, it offers an interdisciplinary analytical approach capable of bridging fragmented strands of literature and generating a more holistic understanding of ethical governance in contemporary digital societies. The findings are expected to provide a conceptual foundation for future research and practical guidance for stakeholders seeking to create a more humane, ethical, and sustainable digital environment.

RESEARCH METHODS

This study employed a qualitative library research approach to examine the phenomenon of digital ethics restoration and the multilateral efforts required to minimize the erosion of human values in cyberspace. Library research was considered appropriate because the study aimed to synthesize conceptual, theoretical, and policy-oriented knowledge rather than generate primary empirical data. The data sources consisted of peer-reviewed national and international journal articles, academic books, legal documents, government regulations, policy reports, and publications from relevant institutions addressing digital ethics, digital citizenship, cybersecurity governance, human values, and digital literacy. The literature was collected through systematic documentation and database searches using keywords related to digital ethics, cyberspace governance, moral degradation, digital citizenship, and multistakeholder collaboration. Only sources published between 2021 and 2026 and demonstrating direct relevance to the research objectives were included in the analysis. The study adopted a thematic analytical framework that integrated perspectives from social development, digital citizenship, ethical governance, and human-centered technology studies to explore the interconnected roles of governments, educational institutions, and society in fostering ethical digital environments (Assante et al., 2022).

The collected data were analyzed using qualitative content analysis, which involved identifying, categorizing, comparing, and interpreting recurring themes across the selected literature (Krippendorff, 2018). The analytical process was conducted in several stages, including literature screening, data extraction, thematic coding, pattern identification, and conceptual synthesis. Particular attention was given to the forms of human value erosion in cyberspace, the factors contributing to unethical digital behavior, and the strategies proposed for strengthening digital ethics through collaborative governance mechanisms. To ensure analytical rigor, the study employed source triangulation by comparing findings across diverse academic, legal, and policy documents and prioritizing publications from credible and authoritative sources. The consistency of interpretations was maintained through iterative review and cross-validation of thematic categories, allowing the development of a comprehensive understanding of digital ethics restoration within contemporary digital societies. Since the study relied exclusively on publicly available secondary sources and did not involve human participants, formal ethical approval was not required; however, all sources were cited and used in accordance with academic integrity and research ethics standards.

RESULTS AND DISCUSSION

Forms of Human Value Erosion in Cyberspace

The literature analysis reveals that the rapid expansion of digital technologies has generated significant transformations in patterns of social interaction, creating new opportunities for

communication while simultaneously exposing vulnerabilities in the ethical foundations of online engagement. Cyberspace increasingly functions as a social arena where individuals construct identities, exchange information, and participate in public discourse without the conventional social constraints present in face-to-face interactions. The reviewed studies indicate that technological advancement alone does not guarantee the development of responsible digital behavior, particularly when ethical awareness fails to evolve alongside technological capabilities. This imbalance has contributed to the emergence of various forms of behavior that undermine empathy, accountability, tolerance, and respect within digital environments (Tomasello, 2023). From a social development perspective, the deterioration of these values raises concerns regarding the sustainability of healthy digital communities and the preservation of human dignity in increasingly mediated forms of communication.

One of the most prominent manifestations of ethical degradation identified in the literature is cyberbullying. The anonymity and accessibility provided by digital platforms often reduce social accountability and encourage behaviors that would be less likely to occur in direct interpersonal encounters. Existing studies demonstrate that cyberbullying extends beyond isolated acts of harassment because it can produce long-term psychological consequences, including anxiety, emotional distress, social withdrawal, and reduced self-esteem among victims (Martha, 2024). The persistence of such behavior suggests a weakening of empathetic awareness within digital interactions, where users frequently fail to recognize the real-world consequences of their online actions. The phenomenon illustrates how technological connectivity can coexist with declining interpersonal sensitivity when ethical considerations are marginalized in digital communication practices.

Table 1. Typology of Human Value Erosion in Cyberspace

| Form of Degradation | Human Value Affected | Social Consequence | Form of Degradation |
|----------------------------|-----------------------------|--------------------------------------|----------------------------|
| Cyberbullying | Empathy | Psychological distress and exclusion | Cyberbullying |
| Hate Speech | Tolerance | Social polarization | Hate Speech |
| Disinformation and Hoaxes | Honesty and responsibility | Public distrust | Disinformation and Hoaxes |
| Privacy Violations | Human dignity and rights | Insecurity and loss of trust | Privacy Violations |
| Online Harassment | Respect and civility | Toxic digital culture | Online Harassment |

The findings presented in Table 1 suggest that ethical degradation in cyberspace should be understood as a multidimensional phenomenon rather than a collection of isolated incidents. Each form of misconduct contributes to the weakening of social trust and the normalization of behaviors that conflict with fundamental human values. Research on digital citizenship emphasizes that ethical participation depends upon the integration of personal values, critical thinking, and social responsibility in digital environments (Assante et al., 2022). The recurrence of these patterns across different contexts indicates the existence of broader structural and cultural dynamics influencing online behavior.

Another recurring issue identified in the literature is the increasing prevalence of hate speech and digital dehumanization. Individuals and social groups are frequently targeted through discriminatory expressions based on ethnicity, religion, gender, or political identity, creating conditions that intensify social fragmentation and hostility. The concept of a digital barbarian society has emerged to describe a communication environment characterized by declining civility, increasing intolerance, and the normalization of verbal aggression within online spaces (Febriansyah et al., 2024). Such developments are reinforced by algorithmic systems that often reward emotionally provocative content and amplify divisive narratives. The findings indicate that the erosion of human values in cyberspace is not solely the result of individual actions but is also shaped by technological structures and communication cultures that encourage polarization and conflict.

The literature additionally highlights the relationship between inadequate digital literacy and the spread of unethical communication practices. Individuals who lack the ability to critically evaluate information are more vulnerable to misinformation, manipulation, and the rapid dissemination of

inaccurate content. Studies examining communication ethics in social media environments identify algorithmic amplification, viral culture, and limited critical literacy as interconnected drivers of contemporary ethical challenges in cyberspace (Sazali, 2025). The normalization of misinformation and disrespectful discourse contributes to a gradual redefinition of acceptable social behavior, making ethical violations appear increasingly ordinary. These findings suggest that efforts to restore digital ethics require comprehensive interventions addressing educational, cultural, technological, and governance dimensions simultaneously rather than relying on isolated corrective measures.

Multilateral Cross-Border Collaboration for Digital Ethics Restoration

The literature review indicates that the erosion of human values in cyberspace cannot be effectively addressed through unilateral actions because digital interactions transcend territorial boundaries and operate within a highly interconnected global communication infrastructure. Harmful content, misinformation, cyber harassment, and privacy violations can spread rapidly across jurisdictions, creating challenges that exceed the regulatory capacity of individual states. Contemporary discussions on digital citizenship emphasize that the protection of ethical standards in cyberspace increasingly depends on collective governance arrangements capable of responding to transnational digital risks (Tomasello, 2023). The complexity of digital ecosystems has expanded the range of actors involved in governance processes, including governments, international organizations, technology companies, academic institutions, and civil society organizations. The findings suggest that digital ethics restoration requires coordinated efforts that integrate legal, technological, educational, and social dimensions rather than relying exclusively on domestic policy interventions.

Cybersecurity cooperation emerges as one of the most significant forms of multilateral engagement identified in the literature. Digital threats such as cyberattacks, data breaches, online fraud, and malicious information campaigns frequently involve actors operating across multiple jurisdictions, making international coordination a practical necessity. Studies examining cybersecurity resilience argue that collaborative mechanisms facilitate information sharing, capacity building, and the development of common response strategies to emerging threats (Rai et al., 2022). These initiatives contribute not only to technical security but also to the protection of public trust, social stability, and individual rights within digital environments. Ethical governance in cyberspace is strengthened when states recognize that digital security and human well-being are interconnected dimensions of the same policy challenge.

Table 2. Multilateral Actors and Their Roles in Digital Ethics Restoration

| Actor | Primary Role | Strategic Contribution |
|-----------------------------|--|---|
| Governments | Regulation and policy coordination | Legal protection and accountability |
| International Organizations | Norm development | Global cooperation and standard setting |
| Educational Institutions | Ethical and digital literacy education | Character formation and responsible citizenship |
| Civil Society Organizations | Public advocacy and monitoring | Social accountability and awareness |
| Technology Companies | Platform governance and content moderation | Safer digital environments |

The distribution of responsibilities presented in Table 2 demonstrates that digital ethics restoration depends on complementary interactions among multiple stakeholders. Government institutions provide legal authority and enforcement mechanisms, while educational institutions contribute to the development of ethical competencies among digital citizens. Civil society organizations function as mediators between public interests and governance structures, whereas technology companies influence the conditions under which online interactions occur. Existing scholarship indicates that fragmented approaches often produce limited outcomes because ethical challenges frequently emerge at the intersection of technological systems, social behavior, and

institutional governance (Isdendi et al., 2023). The effectiveness of multilateral collaboration therefore depends on the ability of diverse actors to align objectives and establish shared commitments regarding responsible digital conduct.

Another important dimension identified in the literature concerns the development of international norms governing behavior in cyberspace. The increasing importance of cyber norms reflects growing recognition that technical regulations alone cannot adequately address the ethical implications of digital transformation. Participation in international forums dedicated to cybersecurity governance enables states to negotiate common principles regarding responsibility, accountability, and acceptable conduct in digital environments (Waruwu & Sabea, 2024). The emergence of these normative frameworks contributes to greater predictability and stability in cyberspace while encouraging cooperation among actors with diverse political and cultural backgrounds. Ethical restoration is more likely to succeed when shared principles are institutionalized through international agreements and collaborative governance mechanisms.

The findings also highlight the growing relevance of digital diplomacy and human rights-based approaches in contemporary cyberspace governance. Efforts to strengthen cybersecurity frequently generate debates regarding the balance between security objectives and the protection of fundamental freedoms, including privacy, access to information, and freedom of expression. Legal scholars have emphasized the importance of harmonizing digital regulations with human rights principles to prevent the emergence of overly restrictive governance practices that may undermine democratic values (Januar, 2024). At the same time, digital diplomacy provides opportunities for states to exchange knowledge, coordinate policy responses, and enhance collective capacities for addressing emerging ethical challenges in cyberspace (Lumintosari et al., 2024). Recent discussions further argue that sustainable digital governance requires the integration of legal protection, ethical values, and human rights considerations within a common framework capable of supporting both security and human dignity in the digital era (Nur et al., 2026).

The Strategic Role of Government in Regulatory Frameworks and Public Policy

The literature identifies government institutions as central actors in the restoration of digital ethics because they possess the authority to formulate regulations, establish governance standards, and coordinate stakeholder responses to emerging challenges in cyberspace. Ethical deterioration in digital environments is frequently associated with regulatory gaps, weak enforcement mechanisms, and the rapid evolution of technologies that often outpace legal adaptation. Digital citizenship scholarship emphasizes that the creation of safe and responsible online environments requires institutional frameworks capable of balancing individual freedoms with collective responsibilities (Isdendi et al., 2023). Government intervention is particularly important in contexts where market-driven technological development may not adequately protect public interests or uphold ethical standards. The findings indicate that effective digital governance depends not only on technological innovation but also on the capacity of public institutions to establish normative boundaries for acceptable digital behavior.

One of the most significant policy developments identified in the literature concerns the strengthening of legal protections related to privacy and personal data. The increasing volume of personal information circulating through digital platforms has intensified concerns regarding unauthorized access, misuse of data, and violations of individual rights. Regulatory frameworks addressing data protection seek to reinforce accountability among digital service providers while safeguarding citizens from potential harms associated with digital surveillance and exploitation. The legal recognition of privacy as a fundamental component of digital citizenship reflects a broader shift toward human-centered governance approaches that prioritize dignity and autonomy within digital environments. Such measures demonstrate that ethical restoration requires institutional commitments capable of translating normative principles into enforceable legal protections.

Table 3. Government Policy Instruments for Digital Ethics Restoration

| Policy Instrument | Primary Function | Ethical Objective |
|--------------------------|-------------------------|--------------------------|
|--------------------------|-------------------------|--------------------------|

| | | | |
|------------------------------|--|------------------------------------|----------------------------------|
| Personal Data Protection Law | | Protection of personal information | Safeguarding privacy and dignity |
| Digital Content Regulation | | Governance of online content | Responsible communication |
| Cybersecurity Policies | | Prevention of digital threats | Public trust and digital safety |
| E-Government Frameworks | | Digital public service delivery | Transparency and accountability |
| Digital Literacy Programs | | Public awareness development | Ethical digital participation |

The policy instruments presented in Table 3 illustrate that government involvement in digital ethics extends beyond law enforcement and encompasses broader efforts to shape responsible digital cultures. Legal regulations provide formal mechanisms for addressing misconduct, while literacy initiatives seek to cultivate preventive forms of ethical awareness among citizens. The adoption of the Personal Data Protection Law represents an important step toward strengthening individual rights in digital environments and reducing vulnerabilities associated with data misuse (Pemerintah Republik Indonesia, 2022). Ethical governance becomes more sustainable when regulatory measures are complemented by educational and institutional interventions that encourage voluntary compliance with ethical norms. The findings suggest that digital ethics restoration is most effective when legal protection and social empowerment operate in a mutually reinforcing manner.

The regulation of digital content constitutes another critical dimension of governmental responsibility. Contemporary digital environments frequently generate tensions between freedom of expression and the need to prevent harmful content, misinformation, hate speech, and online harassment. Legal analyses highlight the importance of developing balanced regulatory approaches that protect democratic freedoms while addressing the social consequences of unethical communication practices (Januar, 2024). Excessively restrictive policies risk undermining civil liberties, whereas insufficient regulation may allow harmful behaviors to proliferate unchecked. The challenge for policymakers lies in establishing governance mechanisms that preserve openness while maintaining ethical standards compatible with human rights principles. This balancing process reflects the increasingly complex nature of digital governance in contemporary societies.

The findings further indicate that the role of government extends into the development of ethical public-sector digital transformation initiatives. The implementation of e-government systems is frequently associated with improvements in efficiency, accessibility, and service delivery, yet these benefits depend on public trust in digital institutions. Research on digital governance argues that ethical principles such as transparency, accountability, and fairness should function as foundational elements of public digital infrastructures rather than supplementary considerations (Zidane et al., 2023). At the same time, policy effectiveness cannot be evaluated solely through the existence of regulations or technological systems. Recent discussions emphasize that digital governance should contribute to broader social development objectives, including the cultivation of responsible citizenship and the promotion of ethical awareness consistent with the goals of sustainable development (Syahda et al., 2024). The restoration of digital ethics ultimately requires governments to act not only as regulators but also as facilitators of long-term cultural and institutional transformation.

The Role of Educational Institutions in Strengthening Digital Character and Ethics

The literature consistently positions educational institutions as fundamental agents in shaping ethical awareness and responsible digital behavior among younger generations who are increasingly immersed in technologically mediated environments. Schools and universities function not only as knowledge transmission spaces but also as formative environments where moral reasoning, social responsibility, and civic values are developed alongside digital competencies. The acceleration of digital transformation in education has intensified the urgency to integrate ethical awareness into learning processes, particularly as students are continuously exposed to social media ecosystems and algorithm-driven information flows. Educational studies emphasize that character formation in the digital era requires structured pedagogical interventions that connect technological literacy with moral

reflection and social responsibility (Rahman et al., 2023). Without such integration, digital environments risk reinforcing behavioral patterns that weaken empathy, discipline, and respect in interpersonal relations.

Digital literacy education emerges as a central mechanism for addressing ethical challenges in student behavior within cyberspace. The concept extends beyond technical proficiency and includes critical abilities to evaluate information credibility, recognize manipulation, and understand the social consequences of online actions. The literature highlights that students who receive structured digital ethics education demonstrate greater awareness of misinformation risks and exhibit more responsible communication behavior in digital spaces (Junari et al., 2025). This indicates that education functions not only as a reactive mechanism but also as a preventive framework for minimizing unethical digital conduct. The embedding of ethical reflection into digital literacy strengthens students' capacity to navigate complex information environments with discernment and accountability.

Teachers play a strategic role in operationalizing digital ethics education because they function simultaneously as facilitators of knowledge and as behavioral exemplars for students. In digital learning environments, their responsibility extends beyond instructional delivery to include the modeling of ethical communication practices and responsible technology use. Research indicates that teacher behavior significantly influences students' attitudes toward digital interaction, particularly in relation to respect, honesty, and accountability (Robi'ah et al., 2025). When teachers demonstrate consistent ethical conduct in digital platforms, students are more likely to internalize similar values in their own online behavior. This positions educators as critical intermediaries in translating abstract ethical principles into everyday digital practices.

Educational leadership further determines the effectiveness of institutional responses to digital ethics challenges. Schools that implement innovative leadership approaches are better equipped to adapt to technological disruption while maintaining a strong moral framework within their learning environments. Studies suggest that leadership strategies focusing on character resilience and ethical awareness are essential in addressing the moral crises associated with rapid technological advancement (Utami et al., 2025). Institutional coherence between policy, curriculum, and classroom practice enhances the sustainability of digital ethics education. This alignment ensures that ethical values are not treated as supplementary content but as integral components of the educational ecosystem.

Sustainable strengthening of digital ethics requires systemic integration across all levels of education rather than isolated interventions. The effectiveness of educational initiatives depends on continuous adaptation to evolving digital landscapes and the reinforcement of ethical norms across formal and informal learning spaces. Institutional collaboration, curriculum innovation, and teacher capacity building collectively contribute to the long-term development of responsible digital citizens (Kamelia & Khasanah, 2026). Education in this context functions as a long-term social investment that shapes the moral architecture of future digital societies. The findings indicate that educational institutions occupy a pivotal position in bridging technological advancement with ethical sustainability in cyberspace.

The Contribution of Society and the Private Sector as Social Control Mechanisms in the Digital Ecosystem

The literature indicates that society and the private sector occupy a crucial position in shaping the ethical quality of digital ecosystems because they directly influence everyday patterns of online interaction. While governments establish regulatory frameworks and educational institutions develop ethical competencies, societal actors and technology companies determine how digital norms are enacted in practice. The increasing dependence of individuals on social media platforms, digital services, and algorithm-driven communication systems has shifted ethical responsibility beyond formal institutions toward distributed networks of users and providers. Studies on digital citizenship emphasize that responsible online behavior emerges through the interaction between individual values and broader social structures that either reinforce or weaken ethical conduct (Isdendi et al., 2023). In this context, society and private sector actors function as continuous social control mechanisms that shape the moral boundaries of digital participation.

The role of digital platforms and technology companies is particularly significant because they design the technological infrastructures that structure online behavior. Algorithmic systems, content moderation policies, and platform governance mechanisms influence what information is visible, how

it circulates, and which behaviors are rewarded or discouraged. Research on cybersecurity and digital safety highlights that technology companies have a responsibility to mitigate risks such as misinformation, online harassment, and harmful content through proactive governance strategies (Wijaya & Juardi, 2026). However, the literature also notes that commercial incentives often prioritize engagement metrics over ethical considerations, which can inadvertently amplify polarizing or sensational content. This tension illustrates the complex relationship between technological innovation, economic interests, and ethical responsibility in shaping digital environments.

The contribution of society is equally critical because users collectively define the cultural norms that govern online interaction. Digital ethics is not only enforced through formal mechanisms but also sustained through informal social practices such as peer moderation, collective reporting, and reputational accountability. The concept of “saring before sharing” reflects an emerging awareness among users regarding the importance of verifying information before dissemination, particularly in response to the widespread circulation of misinformation (Najwa Faradila & Iskandar, 2025). These practices demonstrate that ethical behavior in cyberspace is reinforced through everyday actions that either normalize or discourage harmful communication patterns. When such norms are widely adopted, they contribute to the formation of a more responsible and self-regulating digital community.

The literature suggests that the effectiveness of digital ethics restoration depends on the alignment between technological design and socially shared values. Without such alignment, gaps may emerge between institutional expectations and actual user behavior in digital environments, weakening the overall governance of cyberspace. The integration of cultural values into digital practices becomes essential in sustaining ethical communication, particularly in contexts where global digital culture interacts with local moral frameworks. In the Indonesian context, values derived from Pancasila are often emphasized as normative foundations for guiding ethical behavior in digital spaces (Vertika & Hakim, 2025). These values function as moral anchors that encourage respect, justice, and social harmony in online interactions.

The findings further indicate that sustainable digital ethics cannot be achieved through isolated efforts from any single actor, but rather through continuous interaction among institutional, technological, and societal forces. The private sector, society, government, and educational institutions must operate in a coordinated ecosystem that reinforces ethical standards across multiple layers of digital life. Studies on digital governance highlight that ethical ecosystems are formed through the integration of regulatory frameworks, platform governance, and civic participation (Zidane et al., 2023). This interconnected model ensures that digital ethics is not merely a normative ideal but becomes an embedded practice within everyday digital interactions. The contribution of society and the private sector therefore lies in maintaining this dynamic balance between innovation, responsibility, and moral accountability in cyberspace.

CONCLUSION

The rapid expansion of transnational digital technologies has generated a dual-layered disruption in contemporary society, where increased efficiency and connectivity coexist with a growing erosion of human values in cyberspace. Phenomena such as cyberbullying, hate speech, digital dehumanization, and the widespread circulation of misinformation reflect not only technological misuse but also a deeper crisis of digital ethical awareness. The anonymity and borderless nature of cyberspace further intensify this moral degradation by weakening traditional social accountability mechanisms and enabling harmful behaviors to spread rapidly across jurisdictions. These conditions indicate that digital transformation, while structurally beneficial, simultaneously produces ethical vulnerabilities that require systemic and coordinated intervention.

The study emphasizes that restoring digital ethics cannot rely on unilateral governance approaches, as the complexity of cyberspace demands integrated multilevel responses involving diverse institutional actors. Multilateral cross-border cooperation is essential in addressing the globalized nature of digital harm through the development of shared cyber norms and international coordination mechanisms. At the domestic level, governments are responsible for strengthening regulatory frameworks and embedding ethical principles within digital governance systems. Educational institutions contribute through the development of digital literacy and character formation, while the private sector ensures ethical platform governance and safer technological infrastructures. Society

functions as a critical layer of social control through everyday practices that reinforce responsible digital behavior.

The convergence of these strategic pillars demonstrates that digital ethics restoration is an ecosystemic process rather than a sector-specific intervention. Each actor plays a distinct yet interconnected role in shaping the moral architecture of cyberspace, from regulation and education to technological design and civic participation. When these elements operate in isolation, ethical interventions tend to be fragmented and less effective. However, when integrated, they create a reinforcing system that strengthens accountability, digital awareness, and responsible communication practices. Ultimately, restoring digital ethics requires sustained collaboration to ensure that cyberspace evolves into a more human-centered, responsible, and socially balanced environment.

REFERENCES

- Assante, G. M., Popa, N. L., & Momanu, M. (2022). How personal values and critical dispositions support digital citizenship development in higher education students. *Frontiers in psychology, 13*, 990518. <https://doi.org/10.3389/fpsyg.2022.990518>
- Febriansyah, F. I., Syam, A. R., & Permatasari, V. A. (2024). Barbarian Digital Society: A Legal Philosophy Perspective on Efforts to Overcome the Moral Degradation of Indonesian Netizens. *NOVUM: JURNAL HUKUM, 11*(04). <https://ejournal.unesa.ac.id/index.php/novum/article/view/74371>
- Isdendi, R. R., Nanda, I., & Suganda, M. W. (2023, August). The role of Indonesia's digital citizenship generation in the realization of ethics in cyberspace. In *4th Annual Civic Education Conference (ACEC 2022)* (pp. 514-525). Atlantis Press. <https://www.atlantis-press.com/proceedings/accec-22/125990162>
- Januar, R. M. (2024). Menjembatani ambiguitas antinomi hukum: Harmonisasi pengaturan konten digital dengan perspektif hukum hak asasi manusia dalam UU ITE 2024. *KEADILAN: Jurnal Penelitian Hukum Dan Peradilan Yuridumelu: Pengadilan Negeri Bale Bandung, 2*(2), 26-36. <https://jurnal.pn-balebandung.go.id/index.php/keadilan/article/view/48>
- Junari, N., Finur, H., Ballan, O., & Feriandref, A. C. (2025). Membangun Budaya Digital Sehat: Edukasi Penggunaan Media Sosial Beretika Dan Berbasis Hukum. *Pelayanan Unggulan: Jurnal Pengabdian Masyarakat Terapan, 2*(4), 201-208. <https://ejournal.kampusakademik.my.id/index.php/jipm/article/view/1933>
- Kamelia, F. N., & Khasanah, N. (2026). Peran Sekolah Dalam Membentuk Karakter Dan Etika Siswa Di Tengah Tantangan Era Digital. *Jurnal Ilmiah Penelitian Mahasiswa, 4*(1), 489-499. <https://journal.univgresik.ac.id/index.php/je/article/view/674>
- Lumintosari, F. R., Santoso, M. P. T., & Hakiem, F. N. (2024). Peluang dan Tantangan Diplomasi Digital dalam Meningkatkan Keamanan Siber Indonesia. *Innovative: Journal Of Social Science Research, 4*(3), 746-754. <https://j-innovative.org/index.php/Innovative/article/view/10537>
- Martha, A. E. (2024). Perundungan siber (Cyberbullying) melalui media sosial Instagram dalam teori the space transition of cybercrimes. *Jurnal Hukum Ius Quia Iustum, 31*(1), 199-218. <https://doi.org/10.20885/iustum.vol31.iss1.art9>
- Najwa Faradila, & Ranu Iskandar. (2025). ETIKA BERMEDIA SOSIAL: LITERASI DIGITAL SEBAGAI BEKAL ANAK MUDA. *ARIMA : Jurnal Sosial Dan Humaniora, 2* (4), 198-209. <https://doi.org/10.62017/arima.v2i4.4692>
- Nur, I., Hadisiswati, I., Fajarwati, H., Fithriy, H. N., & Rais, M. D. (2026). Wisdom in the Digital Era: Bridging Human Rights, Indonesian Cyber Law, and Progressive Fiqh. *The Journal of Society and Media, 10*(1), 312-336. <https://journal.unesa.ac.id/index.php/jsm/article/view/49101>
- Pemerintah Republik Indonesia. (2022). *Undang-Undang Nomor 27 Tahun 2022 tentang Pelindungan Data Pribadi*.
- Rahman, F. A., Rohmah, M., Rustiani, S., Fatmawati, I. Y., & Zahro, N. A. D. S. (2023). Pendidikan karakter dalam era digital: bagaimana teknologi mempengaruhi pembentukan moral dan etika. *Journal of Creative Student Research, 1*(6), 294-304. <https://pkm.lpkd.or.id/index.php/Unggulan/article/view/2416>
- Rai, I. N. A. S., Heryadi, D., & Kamaluddin, A. (2022). The Role of Indonesia to Create Security and Resilience in Cyber Spaces [Peran Indonesia dalam Membentuk Keamanan dan Ketahanan di

- Ruang Siber]. *Jurnal Politika Dinamika Masalah Politik Dalam Negeri Dan Hubungan Internasional*, 13(1), 43-66. <https://jurnal.dpr.go.id/index.php/politika/article/view/2641>
- Robi'ah, R. A., Ulfa, D., Silfia, A., Putri, S. A., & Nabila, N. (2025). Peran Etika dan Tanggung Jawab Guru dalam Pembentukan Kepribadian Siswa di Era Pembelajaran 5.0. *Jurnal Studi Guru dan Pembelajaran*, 8(2), 701-710. <https://e-journal.my.id/jsgp/article/view/5909>
- Sazali, H. (2025). Krisis Etika Komunikasi di Media Sosial: Analisis Multidisipliner terhadap Peran Algoritma, Literasi Digital, dan Regulasi dalam Mewujudkan Ruang Publik Digital yang Bertanggung Jawab. *Jurnal Indonesia: Manajemen Informatika Dan Komunikasi*, 6(2), 1342-1352. <https://doi.org/10.63447/jimik.v6i2.1424>
- Syahda, F. L., Nur'aisyah, Y., & Rachman, I. F. (2024). Pentingnya pendidikan etika digital dalam konteks SDGs 2030. *Perspektif: Jurnal Pendidikan Dan Ilmu Bahasa*, 2(2), 66-80. <https://journal.staiypiqaubau.ac.id/index.php/Perspektif/article/view/1259/1324>
- Tomasello, F. (2023). From Industrial to Digital Citizenship: Rethinking Social Rights in Cyberspace. *Theory and society*, 52(3), 463-486. <https://link.springer.com/article/10.1007/s11186-022-09480-6>
- Utami, B., Nurdyastutik, T., & Safitri, A. (2025). Inovasi Kepemimpinan Pendidikan dalam Membangun Karakter Siswa Tangguh di Era Digital dalam Menjawab Krisis Moral Siswa di Era Teknologi Informasi. *Journal Educatione*, 2(2). <https://ejournal.politeknikpratama.ac.id/index.php/jcsr/article/view/2975>
- Waruwu, SWN, & Sabea, AD (2024). PARTISIPASI INDONESIA DALAM KELOMPOK PEMERINTAH PERSATUAN BANGSA. *Retorika: Jurnal Komunikasi, Sosial Dan Ilmu Politik*, 1 (6), 283–290. Diperoleh dari <https://jurnal.kolibi.org/index.php/retorika/article/view/3941>
- Vertika, R. C., & Hakim, H. A. (2025). Pancasila Sebagai Fondasi Etika Digital: Menghadapi Tantangan Globalisasi dan Disrupsi Teknologi: Pancasila Sebagai Fondasi Etika Digital: Menghadapi Tantangan Globalisasi dan Disrupsi Teknologi. *Jurnal Multidisiplin Ilmu Akademik*, 2(6), 101-108. <https://ejournal.kampusakademik.co.id/index.php/jmia/article/view/6932/6027>
- Wijaya, R., & Juardi, D. (2026). Edukasi Masyarakat Tentang Keamanan Siber dalam Tantangan dan Solusi di Era Digital. *Jurnal Informatika dan Teknik Elektro Terapan*, 14(1). <https://journal.eng.unila.ac.id/index.php/jitet/article/view/8336>
- Zidane, BP, Naufaldi, IA, Iswandi, MA, & Prasetyo, MR (2023). Membangun Etika Digital Sebagai Tulang Punggung E-Government Indonesia. *Kultura: Jurnal Ilmu Hukum, Sosial, Dan Humaniora*, 1 (3), 27–36. <https://doi.org/10.572349/kultura.v1i3.305>