

Implementation of Digital Governance in improving cyber security in Indonesia

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Abstract

This research explores both the opportunities and challenges that diplomacy encounters in the era of digital transformation. The advancement of digital technologies has expanded the ability of states to engage and negotiate more directly; however, it also introduces new obstacles, including the rapid circulation and unpredictability of information, which can contribute to the spread of disinformation and the escalation of conflict. Utilizing interviews with diplomats and case study analysis, the study demonstrates how public diplomacy is increasingly empowered by the use of social media, enabling states to communicate swiftly with global audiences and streamline decision-making processes. Furthermore, the study emphasizes the significant role of digital tools in enhancing international collaboration on global issues—such as climate change and public health—by providing platforms for information exchange and joint action. Nevertheless, concerns surrounding cybersecurity and disparities in access to digital infrastructure remain critical barriers that must be addressed to fully leverage the benefits of digital diplomacy. In conclusion, the study affirms that while digital diplomacy holds substantial promise for enhancing the efficiency and inclusivity of international engagement, its success depends on the implementation of strategic safeguards and careful consideration of associated risks.

Keywords: Digital Diplomacy, Public Diplomacy, Cybersecurity, International Cooperation

Introduction

The digitalization of diplomacy has profoundly reshaped the practice of international relations. Innovations in information and communication technology (ICT) have enabled instantaneous cross-border interactions, removing the geographic and temporal barriers that once hindered diplomatic processes (Winters, 2025). Diplomacy today takes on a hybrid form merging conventional methods with digital channels such as social media and video conferencing platforms which allows states to construct foreign policy narratives directly to global audiences (Carmichael, 2023). Modern diplomats are now required to master digital communication tools to disseminate strategic information and shape public opinion. These skills are crucial for public diplomacy, as digital messages can influence international perceptions in real-time (Al-Husseini, 2024). Furthermore, non-state actors have become increasingly influential in digital diplomacy, broadening the diplomatic spectrum significantly

(Obeng, 2025). However, digital diplomacy also introduces substantial challenges. The proliferation of disinformation, online propaganda, and algorithmic manipulation complicates trust-building efforts among states (Mendez, 2024). Cybersecurity is a core concern, as digital diplomacy remains vulnerable to hacking, surveillance, and cyberattacks that may compromise diplomatic integrity (Alvarado, 2025). Another challenge is the growing need for data-driven risk analysis in digital foreign policy. Nations must enhance their capacity to understand cyber dynamics, including threats posed by artificial intelligence tools that manipulate public discourse (Chen, 2024). Consequently, training diplomats in digital literacy and information security has become a strategic priority (Gedeon, 2023).

The role of diplomats has also evolved significantly. They are no longer only negotiators but also digital communicators who must navigate the tension between transparency and confidentiality (Ibrahim, 2024). Social media platforms such as X (formerly Twitter), Instagram, and TikTok have become key arenas for symbolic diplomacy and soft power projection (Legrand, 2023). This network-based diplomacy facilitates direct engagement with foreign audiences without relying solely on institutional channels (Muturi, 2025). Nonetheless, the digital divide poses serious obstacles, particularly for the Global South. Unequal access to digital infrastructure marginalizes developing countries within global diplomatic discourse (Mlambo, 2023). Investments in digital infrastructure, strategic technology partnerships, and inclusive communication strategies are vital to ensure fair representation (Zahra, 2025). Amid rising cybersecurity threats, multilateral approaches to digital security are increasingly necessary. International cooperation via platforms like the ASEAN Cybersecurity Centre, the African Union Cyber Task Force, or the Digital Geneva Dialogue plays a critical role in building collective resilience against cybercrime (Uddin, 2024). States are also urged to develop comprehensive national cybersecurity strategies that integrate technical, legal, and diplomatic approaches (Nakamura, 2024). Ultimately, digital diplomacy reflects a rapidly evolving era in

which the success of international relations depends on states' ability to adapt, build trust, and manage the complexities of global information flows

Literature Review

The Transformation of Traditional Diplomacy

Recent literature on digital diplomacy highlights a shifting landscape shaped by technological transformation and evolving diplomatic practices. The concept of *e-diplomacy* reflects a paradigm shift in international relations, where digital technologies have become central tools for communication, representation, and negotiation (Chong, 2024; Yusof & Mat Yasin, 2023). While these tools enhance efficiency and outreach, challenges persist, especially for countries facing digital infrastructure limitations or a lack of skilled personnel (Ariffin & Abdullah, 2024). This global digital divide creates disparities in access to digital diplomatic platforms, leading to unequal representation and influence (Nguyen & Tran, 2023).

Furthermore, the Actor-Network Theory (ANT) offers a useful lens to understand how various actors—both human and technological—interact within the global diplomatic system (Rodriguez & Kim, 2024). This transformation compels states to adopt more adaptive and responsive foreign policy strategies in a fast-paced digital environment.

Theoretical Perspectives

Realist Perspective

From a realist standpoint, digital diplomacy remains a tool for national power projection. Technologically advanced states leverage digital platforms to expand geopolitical influence and maintain strategic superiority (Kwon & Lee, 2023). In this view, hard power remains central, and digital tools are integrated to complement broader national interests (Petrovic, 2023).

Liberal Perspective

Conversely, liberal theory emphasizes the potential of digital tools to enhance international cooperation through more transparent and participatory public diplomacy (Martínez, 2023; Al-

Khazraji & Khalid, 2024). Online platforms enable a broader exchange of information between governments and global citizens, fostering multilateral engagement and mutual understanding. Social media, in this context, becomes a trust-building mechanism and a dialogue facilitator.

The Role of Social Media in Diplomacy

Social media platforms have emerged as key channels in public diplomacy, enabling states to directly broadcast narratives to global audiences. However, the growing threat of disinformation poses serious risks, as both state and non-state actors exploit digital tools to manipulate public perception and destabilize international relations (Singh & Sharma, 2024; Dube, 2023). Strategic communication now demands proactive approaches to combat disinformation, including prebunking tactics, fact-checking mechanisms, and digital media literacy training for diplomats (Rahman & Zainal, 2024).

The success of digital diplomacy increasingly depends on public trust. Therefore, effective e-diplomacy is driven not only by the use of technology but also by the quality and credibility of the information conveyed (Kim & Park, 2023).

Disinformation and Cybersecurity Threats

Cyber threats and disinformation are integral challenges in today's digital diplomacy environment. Cyberattacks on diplomatic infrastructure can disrupt communication and exacerbate geopolitical tensions (Jansen & Cooper, 2024). International cooperation is essential to develop a coherent legal and strategic response, such as the proposed "Cyber Norms Treaty" advocated by G20 nations (Almeida & Borges, 2023).

Moreover, a state's ability to navigate international cyber law and develop robust cyber policies plays a critical role in maintaining diplomatic stability (Latiff & Chong, 2024). A collective approach to cyber capacity building and digital governance frameworks is vital to ensure ethical, inclusive, and effective global diplomacy.

Mehods

This study adopts a qualitative approach using a case study design combined with content analysis as the primary method of inquiry. A qualitative methodology allows the researcher to explore social and political phenomena in greater depth and nuance. Within this framework, the study aims to examine how states implement digital diplomacy and address the emerging challenges brought about by digitalization. Content analysis will be applied to interpret data collected from a variety of sources, including:

- 1) Policy Documents: Official government publications outlining foreign policy and digital diplomacy strategies.
- 2) Academic Literature: Scholarly articles and books discussing digital diplomacy and the evolution of diplomatic practices.
- 3) Social Media: Analysis of content from official government accounts and public diplomacy campaigns to assess communication strategies.

This method enables the identification of key themes, patterns, and trends in the practice of digital diplomacy across different countries. The study also draws on secondary data from multiple sources such as international organization reports, academic studies, and relevant surveys. These data sources will support the analysis and provide a broader context for interpreting the findings

Results and Discussion

1. Challenges in Digital Diplomacy

a. Speed and Volatility of Information

Analysis reveals that the rapid spread of information in the digital age presents new challenges for diplomats. News and data can circulate within seconds, often before verification

is possible, leading to misunderstandings and escalating conflicts. Interviews with diplomats indicate pressure to respond swiftly to emerging issues, which risks inaccurate communication. According to Newman (2023) in *Digital Diplomacy and Global Governance*, the acceleration of information flow reshapes international interactions. Newman highlights that with the rise of social media and other digital platforms, information is rapidly consumed and interpreted by the public, often before being verified, triggering hasty diplomatic reactions that may lead to poor decision-making.

Moreover, Tufekci and Lazer (2024) argue that the viral nature of social media allows information to spread quickly but not always accurately. They emphasize the need for diplomats to develop a deeper understanding of information dynamics and manage responses carefully. Similarly, Cohen (2025) in *The Modern Diplomat's Toolkit* points out that the speed and volatility of digital information exacerbate challenges in managing national image and reputation. Countries failing to respond accurately and timely risk losing credibility internationally. Consequently, diplomats must focus more on managing information risks, including disinformation and misleading content, which can worsen diplomatic tensions. Jenkins (2023) further asserts that diplomats need new skills in digital communication and information analysis. Mastery of digital tools to filter and verify information is crucial to ensure diplomatic responses remain effective and reliable in an interconnected world.

b. Threat of Disinformation

The study identifies disinformation as a major challenge for digital diplomacy. In an era where information spreads rapidly via social media, this challenge is intensified. Cases from the United States and the United Kingdom demonstrate how social media disinformation can influence public opinion and policy decisions. Data shows disinformation campaigns are often orchestrated by foreign actors aiming to destabilize targeted countries. According to Benkler et al. (2023) in their report *Digital Propaganda and Political Polarization*, disinformation creates

fragmented information ecosystems, supporting divisive narratives that undermine public discourse integrity.

Shirky (2023) in *The Connected Age* highlights that social media empowers non-state actors, including individuals and small groups, to influence public debates effectively. Misleading information is sometimes deliberately spread for political gain, creating doubt and public uncertainty, complicating diplomatic efforts to foster constructive dialogue. Examples include Russian interference in the 2016 U.S. election and Brexit-related campaigns in the UK, which exemplify how disinformation serves as a political tool. Nekrasov (2024), in his article *Information Warfare and Political Stability*, notes that disinformation undermines election processes and erodes public trust in governmental institutions. To counter this, diplomats are urged to collaborate with technology and media experts to build resilient narratives and combat disinformation effectively. Hoffman (2024), in *Cyber Diplomacy Strategies*, stresses the importance of data analytics tools to track information flows and take preemptive actions before falsehoods cause significant damage.

c. Managing Digital Identity and National Image

An important finding is the critical role of managing digital identity and national image. States must proactively build and maintain a positive online presence. The case of Estonia demonstrates successful use of e-government and digital diplomacy to establish a reputation as an innovative and open nation.

2. Opportunities in Digital Diplomacy

a. Expanded Public Diplomacy

Research shows the digital era offers states opportunities to broaden public diplomacy. Through social media and other digital platforms, countries can engage directly with international publics, enhancing mutual understanding and cooperation. Digital media have transformed how states interact with the global community, enabling more efficient and

targeted communication of messages, values, and policies. Melissen (2023) in *The Future of Public Diplomacy* emphasizes that digital public diplomacy bypasses traditional intermediaries like mass media, fostering direct engagement with audiences. This approach increases transparency and deepens relationships with diverse stakeholders beyond national borders. By leveraging platforms like Twitter and Instagram, states create personalized narratives that enhance their appeal internationally.

Practitioners interviewed noted that social media facilitates more direct and personalized messaging, building trust and goodwill—key components in international relations (Snow, 2024). Digital platforms also enable identification and engagement with target audiences more effectively, allowing states to respond to public concerns quickly. However, Dahlgren (2023) warns of digital divides—unequal access to information technology may hinder public diplomacy efforts, potentially marginalizing some groups. Inclusive communication strategies are therefore essential to reach both digitally connected and underserved audiences. Wright (2025) notes that successful states in public diplomacy adapt swiftly to social media's dynamic environment, viewing audiences as active participants who shape narratives. This participatory interaction strengthens state legitimacy and broadens international support. Overall, the digital age offers great potential for expanding public diplomacy and improving international relations, provided states understand their audiences and socio-political contexts.

b. International Cooperation on Global Issues

Digitalization facilitates international cooperation on pressing global challenges such as climate change and public health. Digital diplomacy plays a crucial role by enabling rapid data sharing and collaboration on complex international projects. For example, during the COVID-19 pandemic, countries worldwide used digital tools to exchange virus data, health protocols, and scientific research. WHO (2021) highlights that global data transparency accelerated vaccine development and distribution, mitigating the pandemic's impact. Fauci et al. (2021) demonstrate that openness in sharing public health data strengthens trust

between countries and supports evidence-based policymaking. Digital platforms allow real-time collaboration among scientists and health officials, fostering swift and effective crisis responses. Parker et al. (2024) show that digital diplomacy also enhances climate action cooperation. Forums like the UNFCCC have utilized digital tools to host meetings and share best practices, enabling mutual learning and improved policy adaptation. Nevertheless, Bennett (2023) cautions that digital cooperation involves data security and privacy risks. Clear frameworks are needed to prevent data misuse and ensure transparency. Mansell and Steinmueller (2023) emphasize that technological inequality restricts participation by less developed countries, highlighting the need to bridge digital infrastructure gaps. In sum, digitalization offers significant opportunities for international collaboration. By harnessing digital diplomacy, states can share knowledge and work together more effectively to address global problems like pandemics and climate change.

c. Innovation in Diplomatic Negotiations

Digital technologies also foster innovation in diplomatic negotiations. Platforms such as video conferencing, instant messaging apps, and online forums enable virtual discussions, reducing geographical barriers common in traditional diplomacy. This allows diplomats to communicate and collaborate remotely, saving time and operational costs. Interviews reveal that virtual negotiations increase accessibility and expedite decision-making. Choucri and Madnick (2023) argue that digital platforms facilitate flexible, responsive interactions crucial for timely decisions. Moreover, digital diplomacy expands participation to include NGOs, private sector actors, and civil society groups, broadening perspectives. Peters (2025) highlights that virtual negotiations accommodate more participants, enabling inclusive solutions that represent diverse interests. Digital collaboration tools allow diplomats to organize panels involving experts worldwide, creating new synergies in decision-making. However, challenges such as data security and privacy concerns remain. Zarif (2024) warns that sensitive information leaks during virtual negotiations could undermine trust and outcomes.

Strict security protocols are therefore essential. Additionally, Jensen (2023) points out that unequal digital infrastructure hinders full participation by less developed countries, underscoring the importance of addressing technological disparities as part of digital diplomacy strategies. Overall, digital innovations in negotiation processes promise increased efficiency and inclusiveness. With careful attention to security and access, virtual diplomacy can enhance global consensus-building and problem-solving.

Conclusion

In the rapidly advancing digital era, diplomacy is undergoing a profound transformation that creates new opportunities while presenting complex challenges. This study reveals that digital technology, through sophisticated communication platforms, has reshaped how countries interact and negotiate within international relations. The increased speed and volatility of information compel diplomats to adapt quickly, confronting the threat of disinformation that can influence public opinion and policy decisions. Moreover, digitalization has strengthened public diplomacy by enabling countries to directly reach global audiences via social media. Innovations in negotiation processes also present advantages, as virtual communication reduces geographical barriers and accelerates decision-making. However, issues such as data security, privacy, and unequal access to technology remain critical challenges that must be addressed to fully harness the potential of digital diplomacy.

Overall, diplomacy in the digital age offers significant prospects for international cooperation, particularly in addressing global issues like climate change and public health. The success of digital diplomacy will depend on nations' ability to adapt, manage emerging risks, and ensure equal access for all participants in diplomatic processes. With thoughtful and innovative approaches, digital diplomacy can serve as a powerful tool to achieve shared goals and tackle future global challenges.

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