

Journal of International Relations (JIR)

Challenges and Opportunities of Digital Diplomacy and Cyberwarfare in Kenya

Collins Maina



**Challenges and Opportunities of Digital
Diplomacy and Cyberwarfare in Kenya**



Collins Maina

Article History

Received 21st January 2024

Received in Revised Form 30th January 2024

Accepted 7th February 2024

How to Cite

Maina, C. . (2024). Challenges and Opportunities of Digital Diplomacy and Cyberwarfare in Kenya. *Journal of International Relations*, 4(1), 46 – 56. <https://doi.org/10.47604/jir.2350>

Abstract

Purpose: The aim of the study was to investigate challenges and opportunities of digital diplomacy and cyberwarfare

Methodology: This study adopted a desk methodology. A desk study research design is commonly known as secondary data collection. This is basically collecting data from existing resources preferably because of its low cost advantage as compared to a field research. Our current study looked into already published studies and reports as the data was easily accessed through online journals and libraries.

Findings: Climate change exacerbates security risks in Mexico through extreme weather events, economic instability, and social tensions. This poses threats to food and water security, increases vulnerability to natural disasters, and fuels conflicts over resources. To address these challenges, Mexico collaborates with international partners, develops adaptation strategies, and invests in renewable energy. Cooperation at national and global levels is crucial to build resilience and mitigate the impacts of climate change on security.

Unique Contribution to Theory, Practice and Policy: Realism theory, constructivism theory & cybersecurity deterrence theory may be used to anchor future studies impact of climate change on global security and cooperation in Mexico. Invest in capacity building for diplomats and foreign service personnel in the field of digital diplomacy and cybersecurity. Implement robust national and international cybersecurity legislation that includes provisions specific to the protection of diplomatic communications and infrastructure.

Keywords: *Challenges, Opportunities, Digital Diplomacy, Cyberwarfare*

©2024 by the Authors. This Article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<http://creativecommons.org/licenses/by/4.0>)

INTRODUCTION

The challenges and opportunities of international relations and cyber risks in the context of developed economies are manifold. On one hand, international cooperation in cybersecurity is essential to prevent and respond to cyberattacks that can have devastating consequences for the global economy, security, and human rights. On the other hand, geopolitical tensions, divergent interests, and mistrust among states can hamper the development and implementation of effective cyber norms and policies. Challenges and opportunities in developed economies such as the USA, Japan, and the UK are shaped by a complex interplay of factors, including international relations, diplomatic outcomes, and cyber risks. One significant challenge in recent years has been the evolving landscape of international relations, marked by increased trade tensions and geopolitical conflicts. For instance, the trade war between the USA and China has had far-reaching implications for global supply chains, leading to disruptions and uncertainties in economic growth (Smith, 2019). Additionally, diplomatic outcomes can impact these economies profoundly. The USA's withdrawal from the Paris Agreement in 2017 created an opportunity for other developed nations like the UK and Japan to take a leading role in global climate action, which has led to an increase in renewable energy investments and the development of green technologies (Jones, 2018).

Another example is the European Union (EU), which faces the challenge of harmonizing its cybersecurity policies and regulations among its member states and enhancing its cyber resilience and capabilities. The EU has adopted several initiatives, such as the Cybersecurity Act, the Network and Information Security Directive, the General Data Protection Regulation, and the Digital Single Market Strategy, to strengthen its legal framework and foster a common approach to cybersecurity. The EU has also established several agencies and bodies, such as the European Union Agency for Cybersecurity (ENISA), the European Cybercrime Centre (EC3), and the EU Cyber Diplomacy Toolbox, to improve its coordination and cooperation in cybersecurity matters. However, the EU also faces the challenge of ensuring compliance with its rules and standards by its member states and third countries, as well as addressing the emerging threats posed by new technologies, such as artificial intelligence (AI) and 5G.

In contrast to developed economies, developing economies face different challenges and opportunities in international relations and cyber risks. Developing economies often lack the resources, expertise, and infrastructure to cope with the increasing frequency and sophistication of cyberattacks. They also face the risk of being left behind in the digital transformation and being excluded from the global governance of cyberspace. However, developing economies also have the opportunity to leverage their potential as digital innovators and partners in shaping a more inclusive and equitable cyberspace.

For example, India is a developing economy that has emerged as a major player in the global digital landscape. India has a large population of internet users, a vibrant IT industry, and a growing digital economy. India has also taken steps to enhance its cybersecurity posture, such as establishing the National Cyber Security Coordinator (NCSC), adopting the National Cyber Security Policy (NCSP), creating sectoral Computer Emergency Response Teams (CERTs), and launching various initiatives to promote cyber awareness and capacity building. However, India also faces several challenges in cybersecurity, such as inadequate legal framework, low cyber

literacy, insufficient funding, lack of coordination among stakeholders, and dependence on foreign technology. India also faces the challenge of balancing its strategic interests with its values of democracy, sovereignty, and multilateralism in cyberspace.

Another example is Kenya, a developing economy that has become a regional leader in digital innovation and development. Kenya has a high rate of internet penetration, a dynamic mobile money sector, and a thriving startup ecosystem. Kenya has also made progress in improving its cybersecurity readiness, such as enacting the Computer Misuse and Cybercrimes Act (CMCA), establishing the National Kenya Computer Incident Response Team Coordination Centre (National KE-CIRT/CC), joining the African Union Convention on Cyber Security and Personal Data Protection (Malabo Convention), and hosting various regional and international forums on cybersecurity. However, Kenya also faces several challenges in cybersecurity, such as low cyber awareness, weak enforcement of laws, limited technical skills, and vulnerability to cybercrime and cyber espionage. Kenya also faces the challenge of fostering regional cooperation and integration in cybersecurity matters and advancing its interests and values in the global cyberspace arena. On the other hand, the growth of cyber risks poses both challenges and opportunities in these economies. As technology continues to advance, cyber threats have become more sophisticated. In 2021, the USA faced a significant cyberattack on its critical infrastructure, highlighting the vulnerabilities within the nation's cybersecurity framework (Zou, 2021). However, this challenge has also opened up opportunities for cybersecurity companies to innovate and offer advanced solutions to protect sensitive data and critical infrastructure, fostering growth in the cybersecurity sector (Smith & Brown, 2020).

Turning to developing economies, they often face unique challenges and opportunities. For example, in India, a challenge lies in managing the demographic dividend, with a large and young workforce, which can be an asset or a liability depending on whether there are sufficient employment opportunities and education (Roy, 2018). On the other hand, the opportunity lies in harnessing this demographic dividend to boost economic growth through skill development and job creation (Srivastava, 2017). Another challenge in Brazil is the socio-economic inequality, which has been exacerbated by the COVID-19 pandemic (Bolt, 2020). However, this crisis has also prompted initiatives to address inequality, such as cash transfer programs and healthcare reforms, presenting an opportunity to narrow the gap and promote inclusive growth (Baum, 2021).

In Sub-Saharan economies, challenges and opportunities are often closely tied to issues such as political stability and access to healthcare. For instance, in Nigeria, political instability has been a challenge, with implications for economic growth and foreign investments (Adejumobi, 2020). However, as the government takes steps to improve governance and attract foreign investments, there is an opportunity to stimulate economic growth and diversify the economy (Adegbite, 2019). In contrast, the lack of access to healthcare in many Sub-Saharan African countries has been a significant challenge, particularly highlighted during the COVID-19 pandemic (Nyasulu, 2020). This has also spurred opportunities for international partnerships and investments in healthcare infrastructure and capacity building, aiming to strengthen healthcare systems and improve public health outcomes (Makoni, 2020).

Digital Diplomacy refers to the use of digital technologies and online platforms by governments and diplomats to conduct diplomatic activities and engage with foreign audiences. This includes activities such as using social media, websites, and digital tools to communicate foreign policy, build international relationships, and address global issues. The main challenge of Digital Diplomacy is the potential for miscommunication or misinterpretation of messages on digital platforms, which can lead to diplomatic tensions or conflicts (Wang, 2019). However, it also offers opportunities for reaching a wider global audience and fostering greater transparency in diplomatic processes, ultimately enhancing international relations (Fisher-Onar, 2020).

On the other hand, Cyberwarfare Activities involve offensive and defensive actions in the digital realm, including cyberattacks and espionage carried out by nation-states and other actors. One prominent challenge is the difficulty in attributing cyberattacks to specific entities, which can lead to ambiguity and uncertainty in diplomatic responses (Libicki, 2012). The opportunities in Cyberwarfare Activities lie in the potential for cyber capabilities to be used as a tool of statecraft, allowing countries to achieve political or strategic goals through cyber means (Schmitt, 2017). However, the cyber risks associated with such activities include the potential for escalation and unintended consequences in the international arena, as well as the threat to critical infrastructure (Nye, 2010).

Problem Statement

Digital diplomacy and cyberwarfare are two interrelated and increasingly important domains of international relations in the 21st century. Digital diplomacy refers to the use of digital technologies and platforms to advance diplomatic objectives, such as building alliances, promoting norms, and resolving conflicts (ECDPM, 2022). Cyberwarfare refers to the use of offensive cyber operations to disrupt, degrade, or destroy the adversary's information systems, networks, or critical infrastructure (CFR, 2021). Both digital diplomacy and cyberwarfare pose significant challenges and opportunities for states and non-state actors in a rapidly evolving and contested cyberspace.

One of the main challenges of digital diplomacy and cyberwarfare is the lack of a clear and universally accepted legal and normative framework to regulate state and non-state behavior in cyberspace. While some efforts have been made to develop multilateral agreements on cyber norms, such as the UN Group of Governmental Experts (GGE) and the Open-Ended Working Group (OEWG), there is still no consensus on key issues such as sovereignty, attribution, proportionality, and retaliation in cyberspace (European Parliament, 2020). Moreover, some states, such as China and Russia, have advocated for a more sovereign and controlled approach to cyberspace, which clashes with the vision of an open, free, stable, and secure cyberspace promoted by the EU and other like-minded countries (ECDPM, 2022).

Another challenge of digital diplomacy and cyberwarfare is the growing sophistication and diversity of cyber threats, which can undermine the security, stability, and resilience of states and societies. Cyberattacks can target not only military or government assets, but also civilian infrastructure, such as energy grids, transport systems, health services, or elections. Cyberattacks can also have cross-border and cascading effects, affecting regional and global security. Furthermore, cyberattacks can be carried out by a variety of actors, such as states, proxies, hackers,

terrorists, or criminals, which makes attribution and deterrence more difficult (European Parliament, 2020).

However, digital diplomacy and cyberwarfare also offer opportunities for cooperation and innovation among states and non-state actors. Digital diplomacy can facilitate dialogue, confidence-building measures, capacity-building initiatives, and joint responses to common cyber threats. For example, the EU has developed a cyber-diplomacy toolbox that includes diplomatic measures to prevent or respond to malicious cyber activities. The EU has also engaged in bi- and multilateral partnerships with countries and organizations that share its values and interests in cyberspace (ECDPM, 2022). Cyberwarfare can also spur technological development and innovation in the fields of cybersecurity, artificial intelligence, quantum computing, or blockchain. These technologies can enhance the defensive and offensive capabilities of states and non-state actors in cyberspace, but also create new opportunities for economic growth, social inclusion, and environmental sustainability (European Commission, 2021).

Theoretical Framework

Realism Theory

Originated by scholars like Hans Morgenthau and E.H. Carr, Realism is a dominant theory in international relations that focuses on the pursuit of power and national interests by states. In the context of digital diplomacy and cyberwarfare, Realism emphasizes the role of nation-states as key actors in shaping international relations. Realist scholars argue that states engage in digital diplomacy to protect and advance their own interests in cyberspace, including strategic advantages and defense against potential threats. They view cyberwarfare as a means of asserting dominance in the digital realm, often in pursuit of national security objectives. Realism is relevant to the topic as it provides insights into the motivations and actions of states in the digital sphere, highlighting the competitive and power-driven nature of digital diplomacy and cyberwarfare (Morgenthau, 1948).

Constructivism Theory

Developed by Alexander Wendt and others, Constructivism emphasizes the role of ideas, norms, and identities in shaping international relations. In the context of digital diplomacy and cyberwarfare, Constructivism highlights the importance of norms and perceptions in governing state behavior in cyberspace. Constructivist scholars argue that diplomacy and conflict in the digital realm are influenced by state perceptions of cybersecurity, sovereignty, and international norms regarding cyber operations. Constructivism is relevant to the topic as it explores how states construct their understanding of digital diplomacy and cyberwarfare, the impact of norms on state behavior, and the potential for cooperation and norm-building in cyberspace (Wendt, 1999).

Cybersecurity Deterrence Theory

Originating from the field of cybersecurity, this theory focuses on strategies and actions aimed at deterring cyber threats and attacks. Scholars like Richard A. Clarke have contributed to this theory. Cybersecurity deterrence theory emphasizes the importance of credible threats and consequences to dissuade potential adversaries from engaging in cyberwarfare. It suggests that states can create effective deterrence by demonstrating their capability and willingness to respond to cyber threats,

thereby reducing the likelihood of conflict in cyberspace. This theory is relevant to the topic as it addresses the challenges and opportunities of maintaining stability and security in the digital realm through deterrence strategies (Clarke, 2010).

Empirical Review

Smith and Johnson (2017) analysed of the challenges and opportunities presented by digital diplomacy through an examination of Twitter engagement by diplomatic missions. Their study encompassed over 10,000 tweets from 100 diplomatic missions, with a primary objective to discern communication patterns. Their findings underscored the versatility of digital diplomacy in engaging a global audience and furthering diplomatic objectives. However, they also unveiled challenges related to maintaining diplomatic decorum, cyberattacks, and the imperative of consistent messaging. To navigate these complexities, Smith and Johnson recommended the formulation of comprehensive social media strategies. Additionally, they stressed the importance of robust cybersecurity measures to harness the potential of digital diplomacy while minimizing potential vulnerabilities (Smith & Johnson, 2017).

Chang (2019) examined of the cyber capabilities and strategies of nation-states was undertaken. Their research, grounded in qualitative content analysis, encompassed publicly accessible reports and official government statements. The study illuminated the advanced cyber capabilities harnessed by several nation-states for activities such as espionage, disruption, and influence operations. Notably, different states emphasized various facets of cyberwarfare in alignment with their distinct national interests. To address the complex landscape of cyber conflicts, Chang and colleagues recommended the establishment of international norms and agreements to regulate cyber activities and mitigate the risks associated with cyber conflicts (Chang, 2019).

Liu and Wang (2018) delved into the role of digital diplomacy in crisis communication during international conflicts, with a specific focus on the South China Sea dispute. Employing a case study approach, the researchers illuminated the advantages of digital diplomacy in enabling real-time crisis communication. Simultaneously, they identified challenges stemming from information warfare, propaganda, and the spread of misinformation. In light of these findings, Liu and Wang's recommendations revolved around harnessing digital diplomacy to enhance transparency and uphold open channels of communication, especially in territories marked by disputes. Furthermore, they stressed the importance of countering disinformation through digital diplomacy efforts (Liu & Wang, 2018).

Petrov (2016) influenced of cyber capabilities on diplomatic relations between Russia and the United States. The researcher employed qualitative analysis, scrutinizing diplomatic interactions, cyber incidents, and policy documents. The research illuminated the growing prominence of cyber incidents, including hacking and cyber espionage, as significant tools in international diplomacy. In response to these findings, Petrov recommended diplomatic initiatives aimed at addressing cyber issues through negotiation, the establishment of confidence-building measures, and fostering collaboration on cybersecurity (Petrov, 2016).

Kim and Park (2017) investigated into North Korea's utilization of digital diplomacy as a means to advance foreign policy objectives. Through content analysis of North Korean state media and

official statements, their study highlighted North Korea's adeptness in deploying digital diplomacy to engage global audiences, shape its international image, and further its strategic interests. To underscore the study's significance, Kim and Park emphasized the necessity of comprehending North Korea's digital diplomacy efforts for fostering effective international engagement (Kim & Park, 2017).

Zhang and Wei (2018) the cybersecurity challenges confronting Chinese diplomatic missions operating abroad came under scrutiny. The researchers employed a combination of surveys and interviews involving Chinese diplomats stationed overseas. Their findings pinpointed a spectrum of challenges, including cyberattacks, espionage attempts, and the urgent need for enhanced cybersecurity training for diplomatic personnel. Zhang and Wei's recommendations emphasized the strengthening of cybersecurity measures and raising awareness among diplomatic staff. Such measures were deemed imperative to safeguard sensitive information and communication channels (Zhang & Wei, 2018).

Kaspersky Lab's (2019) research constituted a comprehensive analysis of the evolving landscape of cyber threats within the context of international diplomacy and geopolitical conflicts. By amalgamating threat intelligence analysis with case studies of cyber incidents involving nation-states, their study provided valuable insights into the escalating sophistication of cyber threats. These threats encompassed activities like espionage, influence operations, and disruption, all carried out by nation-states. In response to these findings, the report underlined the necessity of reinforcing cybersecurity measures. Additionally, it underscored the importance of international cooperation and the formulation of cyber norms to effectively address the multifaceted challenges posed by cyberwarfare (Kaspersky Lab, 2019).

METHODOLOGY

This study adopted a desk methodology. A desk study research design is commonly known as secondary data collection. This is basically collecting data from existing resources preferably because of its low-cost advantage as compared to field research. Our current study looked into already published studies and reports as the data was easily accessed through online journals and libraries.

FINDINGS

The results were analyzed into various research gap categories that is conceptual, contextual and methodological gaps

Conceptual Research Gap: While Smith and Johnson (2017) analyzed the challenges and opportunities of digital diplomacy, there is a conceptual research gap in comprehensively understanding the cyber strategies employed by diplomatic missions. Future research could delve deeper into the conceptualization of cyber strategies, including their objectives, tactics, and implications in the context of digital diplomacy. Such research could provide a more nuanced understanding of the strategic aspects of digital diplomacy.

Contextual Research Gaps: Liu and Wang (2018) focused on crisis communication in the South China Sea dispute, but there is a contextual research gap concerning regional variations in the practice of digital diplomacy. Further investigations could explore how different regions or conflict zones utilize digital diplomacy uniquely, considering the geopolitical context, historical factors, and communication strategies specific to each region. Kim and Park (2017) highlighted North Korea's digital diplomacy efforts, but there is a contextual research gap in understanding the broader implications of North Korean digital diplomacy on regional stability, security, and international relations. Future studies could delve into the impact of North Korea's digital diplomacy beyond engagement with global audiences, considering its influence on inter-Korean relations and international security dynamics. Zhang and Wei (2018) examined the cybersecurity challenges confronting Chinese diplomatic missions, indicating a specific contextual research focus. However, a contextual research gap remains in exploring similar challenges faced by diplomatic missions from other countries and regions. Comparative studies could shed light on commonalities and distinctions in cybersecurity vulnerabilities and responses among diplomatic missions worldwide.

Geographical Research Gap: Kaspersky Lab's (2019) research primarily addressed the global landscape of cyber threats in international diplomacy. However, there is a geographical research gap concerning the regional variations in cyber threats, tactics, and targets. Future research could analyze how cyber threats differ in their geographical distribution, impact, and motivations, providing insights into the localized nature of cyber conflicts.

CONCLUSION AND RECOMMENDATIONS

Conclusion

The challenges and opportunities presented by digital diplomacy and cyberwarfare are complex and multifaceted. Digital diplomacy offers a powerful means of engaging global audiences, promoting diplomatic agendas, and fostering international cooperation. However, it also introduces challenges related to maintaining diplomatic decorum, countering disinformation, and safeguarding cybersecurity. On the other hand, cyberwarfare presents new avenues for state actors to engage in espionage, influence operations, and disruptive actions. Yet, it raises pressing concerns about human rights violations within immigration detention facilities, healthcare access disparities for migrant populations, and the psychological well-being of vulnerable groups like unaccompanied migrant minors.

The economic impact of labor migration through remittances is a notable opportunity for poverty reduction and development, emphasizing the importance of policies that protect the rights of migrant workers. Additionally, addressing climate-induced displacement is crucial for ensuring food security and sustainable livelihoods in vulnerable regions. To navigate these challenges and seize opportunities, comprehensive reforms and international cooperation are imperative. Policies must prioritize human rights, cybersecurity, and the well-being of vulnerable populations. Only through such efforts can nations effectively harness the potential of digital diplomacy, mitigate cyber threats, and promote sustainable development and human rights on a global scale.

Recommendation

Theory

Develop and refine interdisciplinary theoretical frameworks that integrate elements of diplomacy, international relations, cybersecurity, and communication studies. This will enhance our understanding of the intricate interactions in the digital realm and contribute to the development of comprehensive digital diplomacy theories. Integrate a human rights-centered approach into digital diplomacy theories, emphasizing the importance of respecting and protecting individuals' rights in cyberspace. Theoretical models should consider the impact of digital diplomacy on human rights and include mechanisms for evaluating its compliance with international human rights standards.

Practice

Invest in capacity building for diplomats and foreign service personnel in the field of digital diplomacy and cybersecurity. This includes training in online communication strategies, crisis management in the digital sphere, and cybersecurity best practices to enhance diplomatic effectiveness. Foster collaborative networks between diplomatic missions, academic institutions, and private sector cybersecurity experts. These networks can facilitate information sharing, joint threat assessments, and the development of innovative digital diplomacy strategies. Develop standardized crisis response protocols for cyber incidents affecting diplomatic missions. Rapid and coordinated responses to cyberattacks are essential to mitigate potential damage and protect diplomatic interests.

Policy

Implement robust national and international cybersecurity legislation that includes provisions specific to the protection of diplomatic communications and infrastructure. This should encompass legal frameworks for attributing cyberattacks and imposing consequences on perpetrators. Advocate for and adhere to international norms and confidence-building measures in cyberspace, such as those articulated in the United Nations Group of Governmental Experts (UN GGE) reports. Encourage states to engage in dialogue and cooperation to enhance trust and reduce the risk of cyber conflict. Formulate comprehensive national digital diplomacy strategies that align with foreign policy objectives. These strategies should encompass public diplomacy, crisis communication plans, and the use of social media to engage global audiences effectively. Prioritize the protection of human rights in cyberspace within diplomatic policies. Encourage adherence to international human rights standards, even in the context of digital diplomacy, and raise awareness about the potential human rights impact of cyber activities.

REFERENCES

- Adegbite, E., Amaeshi, K., & Nakajima, C. (2019). Multiple Influences on Corporate Social Responsibility: Evidence from Developing Countries. *Journal of Business Ethics*, 160(4), 1-20.
- Adejumobi, S. (2020). Political Instability and Economic Development in Africa: An Overview. *Journal of Asian and African Studies*, 55(2), 135-151.
- Baum, C. F., Schaffer, M. E., & Stillman, S. (2021). COVID-19 and Poverty in Brazil: Disentangling the Effects of Social Distancing. *Journal of Population Economics*, 34(2), 637-687.
- Bolt, J., Dolls, M., & Eichhorst, W. (2020). Socio-Economic Inequality and COVID-19 Pandemics: A Regional Analysis for Brazil. IZA Discussion Paper No. 13282.
- Clarke, R. A. (2010). *Cyber War: The Next Threat to National Security and What to Do About It*. HarperCollins.
- EU Cybersecurity: Challenges, Policies, and Prospects, European Parliamentary Research Service, [https://www.europarl.europa.eu/RegData/etudes/IDAN/2020/646172/EPRS_IDA\(2020\)646172_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/IDAN/2020/646172/EPRS_IDA(2020)646172_EN.pdf)
- Fisher-Onar, N. (2020). Public diplomacy in the age of digital transformation: Opportunities and challenges. *The Hague Journal of Diplomacy*, 15(1-2), 109-128.
- Increasing International Cooperation in Cybersecurity and Adapting to New Threats, Council on Foreign Relations, <https://www.cfr.org/report/increasing-international-cooperation-cybersecurity-and-adapting-cyber-norms>, DOI: 10.2307/resrep25724
- India's Tryst with Cybersecurity: A Survey of India's Cyber Landscape, Observer Research Foundation, <https://www.orfonline.org/research/indias-tryst-with-cybersecurity-a-survey-of-indias-cyber-landscape-67097/>
- Jones, R. (2018). The UK's Role in Global Climate Action Post-Brexit. *Climate Policy*, 18(8), 1005-1015.
- Kenya's Journey to Improved Cybersecurity, Centre for International Governance Innovation, <https://www.cigionline.org/articles/kenyas-journey-improved-cybersecurity>
- Libicki, M. C. (2012). *Cyberdeterrence and cyberwar*. Rand Corporation.
- Morgenthau, H. J. (1948). *Politics Among Nations: The Struggle for Power and Peace*. Knopf.
- Nigeria's National Cybersecurity Policy and Strategy 2021: A Comprehensive Overview, The Conversation, <https://theconversation.com/nigerias-national-cybersecurity-policy-and-strategy-2021-a-comprehensive-overview-156065>
- Nyasulu, P. (2020). Pandemic Threats to African Health Security. *The Lancet*, 395(10237), 1510.
- Nye, J. S. (2010). *Cyber power*. Harvard Kennedy School Belfer Center for Science and International Affairs.

- Roy, S. (2018). India's Demographic Dividend: Opportunities and Challenges. *Journal of Applied Economic Sciences*, 13(2), 420-432.
- Schmitt, M. N. (2017). *Tallinn Manual 2.0 on the International Law Applicable to Cyber Operations*. Cambridge University Press.
- Smith, G. W., & Brown, A. J. (2020). Cybersecurity Risks and Opportunities: The Evolving Role of CISOs. *Journal of Information Systems Applied Research*, 13(3), 13-22.
- Smith, M. D., Weyl, E. G., & Hu, L. (2019). International Trade and Investment. *Annual Review of Economics*, 11(1), 753-776.
- South Africa's National Cybersecurity Policy Framework: An Assessment, Institute for Security Studies, <https://issafrica.s3.amazonaws.com/site/uploads/Paper287.pdf>
- Srivastava, P., & Upadhyay, P. (2017). Skill Development in India: Challenges and Opportunities. *Indian Journal of Industrial Relations*, 53(2), 305-316.
- Wang, Y. (2019). Digital diplomacy in the age of the internet: A literature review. *Place Branding and Public Diplomacy*, 15(1), 1-15.
- Wendt, A. (1999). *Social Theory of International Politics*. Cambridge University Press.
- Zou, H. (2021). Cybersecurity in the Digital Age: Trends and Challenges. *Journal of Cybersecurity*, 7(1), taaa052.