

DIGITAL DIPLOMACY AND GEOECONOMIC CONNECTIVITY: PAKISTAN'S STRATEGIC POSITION IN THE CHINA–MIDDLE EAST TRADE CORRIDOR

Sunbal Shahzadi^{*1}, Dr. Muhammad Umer²

^{*1}PhD Scholar, Department of Politics and International Relations, Quaid-e-Azam University Islamabad, Pakistan

²Associate Professor, Department of International Relations, University of Peshawar

¹sumbulfarax@gmail.com, ²muhammad.umer@uop.edu.pk

Corresponding Author: *

Sunbal Shahzadi

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ABSTRACT

This study examined the intersection of digital diplomacy and geoeconomic connectivity in shaping Pakistan's strategic position within the China–Middle East trade corridor. In the context of rapid global digital transformation and the expansion of China's Belt and Road Initiative, the research analyzed how digital infrastructure, cyber-enabled diplomacy, and emerging data-driven governance systems influence regional trade integration and strategic alignment. A mixed-methods research design was employed, combining quantitative survey data from 200 respondents with qualitative insights from expert interviews and secondary policy analysis. The findings revealed that digital infrastructure development is the most significant determinant of geoeconomic connectivity, followed by digital diplomacy effectiveness and cybersecurity readiness. The study further demonstrated that while Pakistan's integration into China-led digital ecosystems enhances its connectivity and trade facilitation potential, it also generates challenges related to technological dependency, cybersecurity vulnerabilities, and institutional capacity constraints. Theoretically, the study extended Network Power Theory by demonstrating how digital networks and infrastructure systems redefine state power in contemporary geoeconomic structures. The research concludes that Pakistan's strategic role is increasingly shaped by its integration into digital and physical connectivity networks, transforming it from a transit-based economy into an emerging digital corridor hub.

Keywords: Digital Diplomacy, Geoeconomic Connectivity, CPEC, Digital Silk Road, Cybersecurity, Network Power Theory

INTRODUCTION

The contemporary international system is undergoing a structural transformation in which economic interdependence, digital infrastructure, and data governance are increasingly shaping state behavior. This transition from traditional geopolitics to geoeconomics has elevated connectivity corridors as central instruments of power projection and economic integration.

Within this evolving landscape, digital diplomacy has emerged as a critical foreign policy tool through which states leverage information and communication technologies (ICTs), digital platforms, and cyber governance mechanisms to advance strategic and economic interests (Nye, 2023; Manor, 2019).

In parallel, large-scale infrastructure initiatives such as the Belt and Road Initiative (BRI) have expanded the scope of global connectivity by integrating physical trade routes with digital infrastructure networks, commonly referred to as the Digital Silk Road. China has positioned itself at the center of this transformation by promoting hybrid connectivity models that combine logistics, energy corridors, and digital ecosystems (Ferdinand, 2022). Within this framework, Pakistan occupies a strategically vital geographic and economic position as the primary land-sea bridge between western China, South Asia, and the resource-rich Gulf region.

The China-Pakistan Economic Corridor (CPEC), a flagship component of BRI, has significantly enhanced Pakistan's role in regional geoeconomic integration. It links Xinjiang in western China to Gwadar Port on the Arabian Sea, thereby reducing transportation costs and providing China with direct access to Middle Eastern energy markets. More recently, the expansion of digital infrastructure—such as fiber-optic connectivity, smart ports, and emerging 5G ecosystems—has further embedded Pakistan into a broader digital-geoeconomic architecture that connects East Asia with the Middle East (Hillman, 2020; Small, 2021).

The Middle East, particularly the Gulf Cooperation Council (GCC) states, is simultaneously undergoing rapid digital transformation through investments in smart cities, artificial intelligence, fintech systems, and sovereign digital infrastructures. This convergence of Chinese digital expansion and Gulf digital modernization creates an emerging China-Middle East-Pakistan connectivity triangle. Within this triangle, Pakistan's role is evolving from a purely transit-oriented state to a potential digital corridor hub that facilitates data flows, trade digitization, and platform-based economic exchange.

However, this emerging connectivity paradigm also raises complex governance, sovereignty, and cybersecurity challenges. Issues related to digital dependency, uneven technological absorption, and external influence over critical infrastructure highlight the need for a more nuanced understanding of Pakistan's position in this

evolving geoeconomic order. Therefore, analyzing digital diplomacy in the context of Pakistan's strategic connectivity provides critical insights into how middle-power states navigate digitalized global power structures.

Problem Statement

Despite Pakistan's central role in the China-Middle East connectivity architecture through CPEC and its expanding participation in digital infrastructure development, there remains a significant gap in scholarly understanding of how digital diplomacy reshapes its geoeconomic positioning. Existing literature primarily focuses on physical infrastructure, trade logistics, and geopolitical dimensions of CPEC, while insufficient attention has been given to the digital layer of connectivity, including cyber diplomacy, data governance, and digital trade facilitation.

Moreover, current research often treats digital diplomacy and geoeconomics as separate analytical domains, failing to integrate them into a unified framework that explains how digital tools enhance or constrain Pakistan's strategic agency in regional connectivity corridors. This fragmentation limits the ability to fully understand the evolving China-Middle East-Pakistan trade nexus in the context of digital transformation.

Therefore, the core problem lies in the absence of an integrated analytical model that explains how digital diplomacy influences Pakistan's geoeconomic role within the China-Middle East trade corridor, particularly in relation to strategic autonomy, infrastructure dependency, and regional digital integration.

Research Questions

1. How does digital diplomacy influence Pakistan's geoeconomic positioning within the China-Middle East trade corridor?
2. In what ways does the integration of digital infrastructure under CPEC reshape Pakistan's role in regional connectivity?
3. What are the key opportunities and constraints associated with Pakistan's participation in emerging digital trade ecosystems?

4. How do cybersecurity and digital sovereignty concerns affect Pakistan's strategic autonomy in geoeconomic relations?
5. To what extent does the convergence of Chinese and Middle Eastern digital initiatives impact Pakistan's long-term economic diplomacy?

Research Objectives

1. To examine the role of digital diplomacy in reshaping Pakistan's geoeconomic strategy within the China-Middle East corridor.
2. To analyze the impact of digital infrastructure development under CPEC on regional connectivity and trade facilitation.
3. To identify opportunities arising from Pakistan's integration into emerging digital trade and data ecosystems.
4. To assess the challenges related to cybersecurity, digital dependency, and governance in Pakistan's digital diplomacy framework.
5. To develop an integrated conceptual understanding of digital-geoeconomic convergence involving Pakistan, China, and Middle Eastern economies.

Significance of the Study

Theoretical Significance

This study contributes to international relations and political economy literature by integrating digital diplomacy with geoeconomic theory. It advances scholarly understanding of how digital infrastructure, cyber governance, and platform economies reshape traditional connectivity paradigms. It also extends existing frameworks on Belt and Road geopolitics by incorporating the digital dimension of state power and regional integration.

Practical Significance

Practically, the study provides insights for policymakers in Pakistan on how to optimize digital infrastructure investments, strengthen cyber resilience, and enhance participation in regional digital trade networks. It also offers strategic guidance for improving coordination between physical and digital components of CPEC to maximize economic returns.

Policy Significance

From a policy perspective, the findings can assist government institutions in designing more coherent digital diplomacy strategies, strengthening data governance frameworks, and improving cybersecurity policies. It also informs regional cooperation mechanisms between Pakistan, China, and Middle Eastern states in developing secure, inclusive, and sustainable digital connectivity corridors aligned with global standards.

Literature Review: Digital Diplomacy and Geoeconomic Connectivity in the China-Middle East-Pakistan Corridor

Digital diplomacy has emerged as a central dimension of contemporary international relations, reflecting the increasing integration of information and communication technologies into foreign policy practice. Scholars argue that diplomacy is no longer confined to traditional state-to-state negotiations but now operates within digitally networked environments where narratives, influence, and strategic communication are shaped in real time. Manor (2019) conceptualizes digital diplomacy as a structural transformation of diplomatic practice, where digital platforms are used not only for communication but also for agenda-setting, persuasion, and strategic engagement. Similarly, Nye (2023) emphasizes that power in the digital era is increasingly exercised through soft power mechanisms embedded in technological ecosystems, where influence is shaped by information flows, platforms, and digital visibility rather than physical coercion.

Recent developments in digital international relations further extend this perspective by highlighting the role of artificial intelligence, data governance, and algorithmic influence in shaping diplomatic behavior. Emerging literature suggests that states are increasingly dependent on digital infrastructures to project influence, manage international perception, and engage with foreign publics. This transformation has led to the rise of what is often described as networked or platform diplomacy, where diplomatic authority is

distributed across digital systems rather than centralized in traditional institutions.

Parallel to this evolution in diplomacy, the concept of geoeconomics has gained prominence in explaining how states use economic instruments such as infrastructure investment, trade corridors, and financial integration to achieve strategic objectives. Ferdinand (2022) highlights that China's Belt and Road Initiative represents a paradigmatic shift in global economic order, where infrastructure connectivity becomes a mechanism for long-term geopolitical influence. Within this framework, economic corridors are not merely trade routes but strategic systems that reshape regional dependencies and global supply chains.

The China-Pakistan Economic Corridor is widely recognized as a flagship project of this geoeconomic transformation. Hillman (2020) and Small (2021) describe CPEC as a dual-purpose initiative that enhances regional trade connectivity while simultaneously strengthening strategic alignment between China and Pakistan. However, critical perspectives in recent literature point to structural asymmetries in investment distribution, governance challenges, and concerns regarding financial sustainability. These critiques highlight that while CPEC enhances infrastructure connectivity, it also generates complex dependency relationships that must be carefully managed.

In addition to physical infrastructure, the emergence of the Digital Silk Road has introduced a technological dimension to geoeconomic competition. Scholars note that China's expansion into digital infrastructure—including fiber-optic networks, telecommunications systems, artificial intelligence platforms, and cloud computing ecosystems—represents a strategic effort to shape global digital standards and governance frameworks (Chang, 2023; Hussain et al., 2024). This digital expansion is not merely economic but also geopolitical, as it embeds technological dependencies within partner states and influences data governance structures.

Within this evolving digital-geoeconomic landscape, Pakistan occupies a strategically significant position. Its geographic location

between western China and the Arabian Sea, combined with its integration into CPEC infrastructure, positions it as a critical transit hub for both physical and digital connectivity. Recent studies suggest that Pakistan's role is expanding beyond traditional logistics into digital corridor functions, including data transmission, smart port development, and digital trade facilitation. This shift reflects a broader transformation in which connectivity is increasingly defined by both physical infrastructure and digital integration.

At the same time, the literature highlights significant challenges associated with Pakistan's integration into these networks. Issues such as cybersecurity vulnerabilities, weak institutional capacity, uneven technological adoption, and dependency on external digital ecosystems constrain the country's ability to fully leverage its strategic position. Mehta (2023) argues that such dependencies may reinforce structural asymmetries within the broader China-led digital order, limiting the autonomy of partner states.

A key limitation in existing scholarship is the fragmentation between studies on digital diplomacy and those on geoeconomic connectivity. While digital diplomacy research focuses on communication, influence, and cyber engagement, geoeconomic studies emphasize infrastructure, trade, and strategic investment. Few studies integrate these perspectives into a unified analytical framework that explains how digital systems actively reshape economic corridors and strategic alignments simultaneously. Furthermore, limited attention has been given to Pakistan's specific role in the emerging China-Middle East digital-trade nexus, particularly in relation to data governance, cyber diplomacy, and platform-based economic integration.

This gap necessitates a more comprehensive analytical approach that captures the intersection of digital diplomacy and geoeconomic connectivity, particularly in relation to corridor-based regional integration involving China, Pakistan, and Middle Eastern economies. Such an integrated perspective is essential for understanding how digital infrastructures are reshaping traditional concepts of sovereignty, trade, and strategic influence.

Underpinning Theory: Network Power Theory

Network Power Theory provides a suitable theoretical foundation for this study by explaining how power is exercised through interconnected systems of infrastructure, data, and communication rather than through territorial dominance alone. In this framework, power is derived from the ability of states or actors to position themselves advantageously within networks that structure global flows of trade, information, and technology.

This theory is particularly relevant to the China–Middle East–Pakistan corridor, which functions as a multi-layered network consisting of physical infrastructure such as ports, highways, and energy pipelines, as well as digital infrastructure including fiber-optic systems, telecommunications networks, and data platforms. The interaction between these layers creates a complex system in which influence is distributed through connectivity rather than concentrated in a single geographic center.

The applicability of Network Power Theory to this study lies in its ability to explain Pakistan's evolving strategic role. Pakistan's importance is not solely determined by its geographic location but by its embeddedness within China-led infrastructure and digital networks. This embeddedness shapes its economic opportunities, diplomatic leverage, and strategic dependencies. It also explains how China is able to project influence through infrastructure integration, technological standards, and digital ecosystems under the Digital Silk Road framework.

Moreover, the theory helps to interpret how digital diplomacy operates within networked systems. Diplomatic influence is increasingly mediated through platforms, data exchanges, and digital governance structures rather than traditional bilateral channels. In this context, Pakistan's participation in digital connectivity initiatives reflects both an opportunity to enhance its geoeconomic position and a challenge in maintaining strategic autonomy within increasingly interconnected systems.

Hypotheses

The following directional hypotheses are developed based on the integration of digital

diplomacy and geoeconomic connectivity within the China–Middle East–Pakistan trade corridor:

H1: Strengthening digital diplomacy practices significantly enhances Pakistan's geoeconomic positioning within the China–Middle East trade corridor.

H2: Expansion of digital infrastructure under CPEC positively influences Pakistan's role as a regional digital connectivity hub.

H3: Increased integration into China-led digital ecosystems significantly raises Pakistan's dependency on external technological frameworks.

H4: Growth in digital trade facilitation mechanisms positively improves Pakistan's economic engagement with Middle Eastern markets.

H5: Cybersecurity vulnerabilities negatively affect Pakistan's effectiveness in implementing digital diplomacy strategies.

H6: Enhanced coordination between physical infrastructure and digital systems significantly improves Pakistan's strategic influence in regional connectivity networks.

H7: The convergence of Chinese and Middle Eastern digital initiatives positively strengthens Pakistan's role in transregional geoeconomic integration.

Methodology

The methodology of this study was designed to examine digital diplomacy and geoeconomic connectivity in relation to Pakistan's strategic position within the China–Middle East trade corridor. A structured and systematic approach was adopted to ensure analytical rigor, empirical relevance, and theoretical alignment with the research objectives.

Research Design

The study employed a mixed-methods research design, integrating both qualitative and quantitative approaches to provide a comprehensive understanding of the phenomenon. A descriptive and explanatory research design was used to explore the relationships between digital diplomacy, geoeconomic connectivity, and Pakistan's strategic

positioning. Qualitative components focused on policy documents, expert analyses, and secondary literature, while quantitative elements examined patterns in digital infrastructure development, trade connectivity indicators, and diplomatic engagement indices.

Population

The population of the study comprised key stakeholders involved in digital diplomacy and geoeconomic connectivity. This included policymakers, foreign affairs experts, digital economy specialists, academics, and professionals engaged in China–Pakistan Economic Corridor (CPEC)-related institutions, as well as regional trade and ICT development authorities in Pakistan.

Sampling Technique

A purposive sampling technique was employed to select respondents with relevant expertise and experience in digital diplomacy, international relations, and geoeconomic strategy. This non-probability sampling method was considered appropriate due to the specialized nature of the research topic and the need for informed expert perspectives.

Sample Size

A total sample size of **200 respondents** was determined for the quantitative component of the study. In addition, **20 semi-structured interviews** were conducted with subject-matter experts to enrich the qualitative analysis and provide deeper contextual insights into digital-geoeconomic dynamics.

Data Collection Procedures

Data were collected through multiple sources to ensure triangulation and robustness of findings. Primary data were gathered using structured questionnaires distributed among selected respondents and semi-structured interviews conducted with experts in relevant fields. Secondary data were obtained from policy reports, academic journals, official government publications, and international development databases. Data collection was carried out in

phases to ensure systematic coverage of both qualitative and quantitative dimensions.

Instruments/Measures

The primary instrument for quantitative data collection was a structured questionnaire developed based on a five-point Likert scale ranging from strongly disagree to strongly agree. The questionnaire measured variables such as digital diplomacy effectiveness, geoeconomic integration, digital infrastructure development, cybersecurity readiness, and strategic connectivity. For qualitative data, an **interview guide** was developed to explore expert opinions on digital diplomacy strategies, CPEC-related digital transformation, and regional connectivity dynamics. Documentary analysis was also used as a supplementary instrument to examine official reports and policy frameworks.

Reliability and Validity

To ensure reliability, the questionnaire was tested using Cronbach's alpha, and all constructs achieved acceptable reliability levels above the threshold of 0.70, indicating internal consistency. Pilot testing was conducted with a small subset of respondents to refine instrument clarity and structure.

Validity was ensured through content validity and construct validity techniques. Content validity was established through expert review from scholars in international relations and digital governance. Construct validity was ensured through alignment of measurement items with established theoretical frameworks in digital diplomacy and geoeconomics. Additionally, triangulation of quantitative and qualitative data enhanced the overall validity and credibility of the findings.

Data Analysis

The collected data were analyzed using descriptive and inferential statistical techniques to examine the relationship between digital diplomacy and geoeconomic connectivity in Pakistan's position within the China–Middle East trade corridor. The analysis was conducted using structured questionnaire responses and interview-based thematic insights. Quantitative data were

processed through statistical software, and results were interpreted at a 95% confidence level.

Descriptive Statistics of Key Variables

Table 1: Descriptive Statistics

Variables	N	Mean	Std. Deviation
Digital Diplomacy Effectiveness	200	3.84	0.76
Goeconomic Connectivity	200	3.91	0.71
Digital Infrastructure Development	200	4.02	0.69
Cybersecurity Readiness	200	3.45	0.83
Strategic Trade Connectivity	200	3.88	0.74

The descriptive statistics indicated that respondents generally perceived digital infrastructure development as the strongest component ($M = 4.02$), suggesting that Pakistan's digital expansion under initiatives such as CPEC has positively contributed to connectivity enhancement. Goeconomic connectivity also recorded a high mean score ($M = 3.91$), reflecting a strong perceived integration of Pakistan into regional trade corridors.

Digital diplomacy effectiveness was moderately high ($M = 3.84$), indicating that digital tools are increasingly being utilized in Pakistan's foreign

policy engagement, though not yet at optimal levels. Strategic trade connectivity ($M = 3.88$) also showed positive perceptions, reinforcing Pakistan's emerging role as a regional transit and digital hub.

However, cybersecurity readiness recorded the lowest mean score ($M = 3.45$), indicating moderate concerns regarding institutional capacity, cyber resilience, and data protection mechanisms. This suggests that while digital expansion is progressing, governance and security frameworks remain comparatively underdeveloped.

Correlation Analysis

Table 2: Correlation Matrix

Variables	DD	GC	DID	CSR	STC
Digital Diplomacy (DD)	1				
Goeconomic Connectivity (GC)	0.72*	1			
Digital Infrastructure Development (DID)	0.78*	0.81*	1		
Cybersecurity Readiness (CSR)	0.55*	0.60*	0.58*	1	
Strategic Trade Connectivity (STC)	0.69*	0.74*	0.77*	0.52*	1

Significant at $p < 0.05$

The correlation analysis revealed a strong positive relationship between digital diplomacy and goeconomic connectivity ($r = 0.72$), indicating that improvements in digital diplomatic engagement are associated with stronger goeconomic positioning. Digital infrastructure development showed the strongest correlation with goeconomic connectivity ($r = 0.81$),

confirming its central role in enhancing regional integration.

Strategic trade connectivity was also strongly correlated with both digital diplomacy and infrastructure development, suggesting that trade flows are increasingly dependent on digital systems. Cybersecurity readiness showed moderate correlations with all variables, indicating that while it supports connectivity, its weaker strength

reflects existing institutional gaps in digital governance.

Regression Analysis

Table 3: Regression Results (Dependent Variable: Goeconomic Connectivity)

Predictor Variables	Beta (β)	t-value	p-value
Digital Diplomacy	0.31	4.82	0.000
Digital Infrastructure Development	0.42	6.15	0.000
Cybersecurity Readiness	0.18	2.97	0.004
R ²	=		0.67
F-statistic	=		92.45
p < 0.001			

The regression model demonstrated that the independent variables collectively explained 67% of the variance in goeconomic connectivity, indicating a strong explanatory power of the model.

Digital infrastructure development emerged as the strongest predictor ($\beta = 0.42$), confirming that physical and digital connectivity infrastructure plays a decisive role in shaping Pakistan's goeconomic position. Digital diplomacy also had a significant positive effect ($\beta = 0.31$), indicating that diplomatic engagement through digital platforms enhances international connectivity and strategic visibility.

Cybersecurity readiness, although statistically significant, showed a comparatively weaker influence ($\beta = 0.18$), suggesting that while it contributes to connectivity, its current limitations reduce its overall impact on goeconomic outcomes. The findings collectively support the argument that digital transformation is a central driver of Pakistan's evolving role in regional trade corridors.

Thematic Analysis (Qualitative Findings)

Qualitative interview data revealed four dominant themes:

Digital Integration as Strategic Opportunity

Experts emphasized that Pakistan's integration into China-led digital infrastructure projects has enhanced its visibility as a regional connectivity hub. Respondents highlighted the expansion of fiber-optic networks and smart port technologies

as key enablers of digital goeconomic transformation.

Dependency and Asymmetry Concerns

Several participants expressed concerns regarding increasing technological dependency on external partners, particularly in relation to Chinese digital systems. This dependency was viewed as a potential limitation on Pakistan's digital sovereignty.

Cybersecurity and Institutional Weakness

Interviewees consistently identified cybersecurity governance as a major challenge. Weak regulatory frameworks and limited technical capacity were seen as barriers to fully leveraging digital diplomacy.

Emerging Digital Trade Potential

A recurring theme was the growing potential for digital trade integration with Middle Eastern economies, particularly in fintech, logistics, and e-commerce sectors. This was viewed as a key future opportunity for Pakistan's goeconomic expansion.

The combined quantitative and qualitative findings indicate that digital diplomacy and digital infrastructure development are key drivers of Pakistan's goeconomic positioning within the China-Middle East trade corridor. While significant progress has been made in infrastructure expansion and diplomatic engagement, institutional weaknesses—particularly

in cybersecurity and governance—continue to limit full optimization of these gains.

The study confirms that Pakistan's strategic role is increasingly defined not only by its geographic location but also by its integration into digital networks and platform-based economic systems. This reinforces the transition from traditional transit-based connectivity to digitally enabled geoeconomic integration.

Discussion

The findings of this study demonstrate that digital diplomacy, digital infrastructure development, and cybersecurity readiness significantly influence Pakistan's geoeconomic positioning within the China–Middle East trade corridor. These results are broadly consistent with existing literature that emphasizes the increasing role of digital technologies in shaping international economic relations and diplomatic influence (Manor, 2019; Nye, 2023). The strong positive relationship between digital diplomacy and geoeconomic connectivity supports the argument that diplomacy in the digital era is no longer symbolic but structurally embedded in economic and infrastructural networks.

The empirical evidence showing digital infrastructure development as the strongest predictor of geoeconomic connectivity aligns with Ferdinand (2022), who argues that infrastructure-led connectivity under initiatives such as the Belt and Road Initiative (BRI) fundamentally restructures regional economic power. Similarly, Hillman (2020) and Small (2021) highlight that corridors like CPEC function as strategic economic instruments that reshape trade routes and regional dependencies. The current study extends these findings by demonstrating that digital infrastructure—not only physical infrastructure—is now the dominant force shaping geoeconomic integration.

However, the findings also reveal persistent concerns regarding cybersecurity readiness and institutional capacity. This is consistent with Mehta (2023), who argues that digital expansion under Chinese-led frameworks often creates structural dependencies and governance vulnerabilities in partner states. The moderate

influence of cybersecurity readiness suggests that while digital connectivity is expanding rapidly, institutional safeguards have not developed at the same pace. This imbalance may expose Pakistan to risks related to data sovereignty, cyber threats, and technological dependency.

From a theoretical perspective, the findings strongly support Network Power Theory, which posits that power is exercised through interconnected systems rather than territorial dominance. Pakistan's strategic importance is increasingly derived from its embeddedness in China-led digital and physical networks. The results validate the theory by demonstrating that influence within the China–Middle East corridor is shaped by access to infrastructure, digital platforms, and data ecosystems rather than geography alone. The theory also explains why digital diplomacy significantly enhances geoeconomic outcomes, as it operates through network positioning and connectivity amplification.

Furthermore, the study extends Network Power Theory by highlighting the dual nature of digital integration: while it enhances connectivity and economic opportunity, it simultaneously creates dependency structures that may limit strategic autonomy. This duality is particularly evident in Pakistan's case, where increased digital integration strengthens corridor participation but raises concerns regarding technological reliance on external actors.

Conclusion

The study concludes that digital diplomacy and digital infrastructure development play a decisive role in shaping Pakistan's geoeconomic position within the China–Middle East trade corridor. Pakistan's strategic relevance is no longer defined solely by geographic location but increasingly by its integration into digital and infrastructural networks under initiatives such as CPEC and the Digital Silk Road.

The findings confirm that digital infrastructure is the most influential driver of geoeconomic connectivity, followed by digital diplomacy effectiveness and cybersecurity readiness. However, the benefits of digital integration are

moderated by institutional weaknesses, particularly in cybersecurity governance and technological self-reliance. Overall, Pakistan is transitioning from a traditional transit economy to an emerging digital corridor hub within a rapidly evolving regional connectivity architecture.

Implications

Theoretical Implications

The study contributes to international relations and geoeconomics literature by integrating digital diplomacy into Network Power Theory. It demonstrates that power in contemporary global politics is increasingly network-based, operating through digital infrastructure, data flows, and platform ecosystems. The study also extends theoretical understanding by highlighting the interaction between digital diplomacy and geoeconomic connectivity as mutually reinforcing processes.

Managerial Implications

For policymakers and institutional managers, the findings emphasize the need for coordinated governance between digital diplomacy institutions, telecommunications authorities, and trade ministries. Effective management of digital infrastructure projects is essential to maximize economic returns and strengthen Pakistan's strategic positioning in regional corridors.

Practical Implications

Practically, the study highlights the importance of investing in digital infrastructure, strengthening cybersecurity systems, and improving technical capacity. Enhancing digital literacy and institutional readiness will enable Pakistan to fully benefit from emerging opportunities in digital trade, fintech, and smart logistics systems.

Policy Implications

From a policy perspective, the findings suggest that Pakistan should develop a comprehensive national digital diplomacy strategy aligned with geoeconomic objectives. Strengthening data governance frameworks, improving cyber regulations, and ensuring technological diversification are essential for reducing

dependency risks. Regional cooperation mechanisms with China and Middle Eastern states should also prioritize secure and standardized digital connectivity protocols.

Recommendations

Pakistan should prioritize the expansion of secure digital infrastructure under CPEC with a focus on cybersecurity resilience and data sovereignty. Establishing a centralized digital governance authority could improve coordination between fragmented institutions involved in digital diplomacy and infrastructure development.

Investment in indigenous technological capabilities should be increased to reduce dependency on external digital ecosystems. Partnerships with multiple international technology providers, rather than reliance on a single source, can help diversify technological risk. Capacity-building programs in cybersecurity, artificial intelligence, and digital trade management should be implemented across public institutions to enhance institutional readiness. Academic and training collaborations with international partners can further strengthen expertise in digital governance.

Pakistan should also actively pursue digital trade agreements with Middle Eastern economies to expand fintech integration, e-commerce platforms, and smart logistics networks. This would enhance Pakistan's role as a digital intermediary in the China-Middle East trade corridor.

Limitations and Future Directions

The study is limited by its reliance on a relatively small sample size and purposive sampling technique, which may restrict the generalizability of the findings. Additionally, the cross-sectional nature of the data does not fully capture the dynamic and evolving nature of digital diplomacy and geoeconomic connectivity.

Another limitation is the dependence on perceptual data, which may introduce subjective bias in responses. The rapidly changing nature of digital technologies also means that some findings may require periodic updating to remain relevant.

Future research should adopt longitudinal designs to examine how digital diplomacy and geoeconomic integration evolve over time. Comparative studies involving other Belt and Road Initiative countries could provide broader insights into regional patterns. Further research should also explore the role of artificial intelligence, blockchain, and emerging technologies in shaping digital diplomacy and trade corridor governance. Additionally, more empirical work is needed on cybersecurity governance and data sovereignty in developing economies integrated into global digital networks.

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