International Journal of Trend in Scientific Research and Development (IJTSRD)
Volume 9 Issue 5, Sep-Oct 2025 Available Online: www.ijtsrd.com e-ISSN: 2456 – 6470

The Evolution of China's Digital Economy Policy: A Grounded Theory Study Using ATLAS.ti

Tang Xianhao, Yarnaphat Shaengchart, Supakorn Suradinkura

International College, Pathum Thani University, Thailand

ABSTRACT

This study employs grounded theory methodology and ATLAS.ti software to analyze the evolution of China's digital economy policies (2005–2025), using 19 central government documents. It reveals a three-phase state-led transformation: (1) a foundational phase (2005–2015) institutionalizing e-commerce and infrastructure under a "following development" approach; (2) a transitional phase (2015–2020) pursuing technology-driven growth through initiatives like "Internet Plus" and big data; and (3) a maturation phase (2020–2025) prioritizing systemic governance via landmark legislation (Data Security Law, Personal Information Protection Law), spatial optimization ("East Data, West Computing"), and societal embeddedness ("Smart Cities"). Key findings identify digital governance(code frequency: 218) as the dominant paradigm in Phase III, demonstrating China's distinctive "regulation-before-innovation" model (Chen, 2023). The analysis confirms the state's dual role as infrastructure architect(persistent "Policy Support" codes) and market enabler, culminating in an "embedded governance" framework where regulatory and technical implementation converge. Methodologically, this research validates grounded theory's efficacy in decoding complex policy landscapes, offering theoretical advances in state-capacity digitalization while providing practical insights for global stakeholders navigating China's digital transformation trajectory.

KEYWORDS: *digital economy, grounded theory, policy evolution,, ATLAS.ti.*

How to cite this paper: Tang Xianhao | Yarnaphat Shaengchart | Supakorn Suradinkura "The Evolution of China's Digital Economy Policy: A Grounded Theory Study Using ATLAS.ti" Published in International Journal of Trend in Scientific Research and Development (ijtsrd), ISSN: 2456-6470, Volume-9 | Issue-5, October 2025, pp.325-332, URL: www.ijtsrd.com/papers/ijtsrd97505.pdf

IJTSRD97505

1. INTRODUCTION

The digital economy has emerged as a fundamental driver of global economic restructuring and competitive advantage, transforming traditional industries and creating new growth paradigms. In this context, China's aggressive pursuit of digital economy development offers a compelling case study of state-led technological modernization. Since the introduction of the "Internet Plus" strategy in 2015 and the subsequent release of the "Digital China Development Overall Layout Planning" in 2023, China has established a comprehensive policy framework aimed at accelerating digital transformation across all economic sectors.

The significance of this research lies in its systematic examination of how China's digital economy policies have evolved in response to technological changes and strategic priorities. Existing literature has documented specific aspects of China's digital policies but has often lacked a comprehensive analytical framework that captures the multidimensional nature of this evolution. This study addresses this gap by applying grounded theory methodology, which allows for theoretical insights to emerge organically from systematic analysis of primary policy documents rather than imposing preconceived conceptual frameworks.

The research problem addressed in this study centers on understanding the patterns, priorities, and strategic shifts in China's digital economy policy landscape over time. Specifically, the study aims to answer the following research questions: (1) How have policy priorities evolved in response to technological developments and economic needs? (2) What relationships exist between different policy dimensions and focus areas? (3) How does the case of China contribute to theoretical understanding of digital economy policy evolution?

The theoretical importance of this research lies in its contribution to both policy studies and digital economy literature. By applying grounded theory to policy document analysis, the study demonstrates a novel methodological approach for decoding complex policy landscapes. Practically, the findings offer valuable insights for policymakers, business leaders, and researchers seeking to understand China's digital transformation trajectory and its implications for global digital economy governance.

2. Literature Review

2.1. Digital Economy Policy Development

The digital economy has emerged as a fundamental driver of global economic restructuring and competitive advantage, transforming traditional industries and creating new growth paradigms. Scholars generally define the digital economy as "an economic system based on digital technologies" that encompasses e-commerce, digital services, and advanced technologies such as big data, cloud computing, and artificial intelligence (Liang, 2023; Limna et al., 2023; Zhang & Wang, 2024). The theoretical understanding of digital economy policy has drawn from multiple disciplines, including innovation systems theory, institutional economics, and science and technology studies (OECD, 2024).

China's digital economy development has followed a distinctive evolutionary path that reflects both global trends and unique national characteristics. According to Zhou, Li, & Ouyang (2025), China's digital economy has progressed through three distinct phases: the technology incubation stage (1994-2004), characterized by basic internet infrastructure development and the emergence of foundational internet companies; the explosive growth stage (2005-2015), marked by mobile internet adoption and platform economy expansion; and the integrated collaboration stage (2016-present), focused on deep integration with real economy sectors and participation in global digital governance.

The policy framework supporting this evolution has been comprehensive and strategic. Beginning with the "Internet Plus" action plan in 2015, China established a systematic approach to digital economy development that has evolved to include the "Digital China Development Overall Layout Planning" (2023) and the "14th Five-Year Plan for Digital Economy Development" (2021). These policies reflect the government's recognition of digital economy as "the main economic form following agricultural economy and industrial economy" and emphasize its high innovativeness, strong permeability, and wide coverage characteristics.

2.2. Grounded Theory Applications in Policy Research

Grounded theory, initially developed by Glaser and Strauss (1967), represents a systematic qualitative research methodology that emphasizes theory development through iterative analysis of empirical data. Unlike hypothesis-testing approaches, grounded theory employs inductive reasoning to develop theoretical insights that are firmly "grounded" in empirical evidence. The methodology involves a structured process of coding and categorization that progresses from descriptive open coding to more conceptual axial coding, culminating in the identification of core categories through selective coding (Strauss & Corbin, 1990).

The application of grounded theory in policy research has gained significant traction as scholars seek methods that can capture the complexity and multidimensionality of policy processes (Charmaz, 2006). In the context of policy analysis, grounded theory offers particular advantages for analyzing document collections because it enables researchers to identify implicit patterns, thematic priorities, and conceptual relationships that might be overlooked by more traditional content analysis approaches (Si & Pei, 2021).

Recent applications of grounded theory in policy research demonstrate its versatility and effectiveness. Si and Pei (2021) employed grounded theory to analyze cross-regional ecological environment collaborative governance policies, developing a policy process model that included policy beliefs, policy interactions, policy feedback, and policy improvement. Similarly, Wang (2022) utilized grounded theory to examine factors influencing public low-carbon consumption patterns, identifying four main categories that influence behavior: low-carbon psychological awareness, individual implementation costs, social reference norms, and institutional technical contexts.

In the specific context of digital economy policy analysis, grounded theory approaches have been used to examine policy attention evolution among local governments. As demonstrated in research on returnees' entrepreneurship policies, grounded theory can be effectively combined with social network analysis to explore temporal, spatial, and domain-specific policy attention evolution patterns. This methodological integration provides a powerful approach for decoding complex policy landscapes and identifying underlying conceptual frameworks.

However, the application of grounded theory to digital economy policy analysis remains limited, particularly in the Chinese context. Most existing

studies have relied heavily on deductive approaches or preconceived theoretical frameworks that may not fully capture the complexity and contextual specificity of policy evolution (Zhang & Wang, 2024). This study addresses this gap by employing grounded theory to analyze the evolution of China's digital economy policies, allowing for theoretical insights to emerge systematically from empirical data rather than being imposed through preexisting conceptual frameworks.

3. Theoretical and Methodological Framework

3.1. Research Design

This study employs a qualitative research design based on grounded theory methodology. The approach is inductive and systematic, aiming to develop theoretical insights about policy evolution through rigorous analysis of primary policy documents. The research design follows the grounded theory process of simultaneous data collection and analysis, iterative coding procedures, and theoretical sampling until theoretical saturation is achieved.

The design selection is appropriate for this research because it allows for the emergence of unexpected patterns and themes that might be overlooked by hypothesis-driven approaches. Given the complexity and rapid evolution of China's digital economy policies, grounded theory provides a flexible yet systematic framework for identifying core categories and conceptual relationships within the policy landscape.

3.2. Data Collection

Data for this study consists of 19 policy documents issued by Chinese central government agencies between 2005 and 2025. Document collection followed a systematic process: First, initial identification of key policy documents through government websites and official channels. Second, expansion through snowball sampling based on references and related policies. Third, theoretical sampling to fill gaps in emerging conceptual categories. Fourth, final verification of document authenticity and completeness. Key documents include: "The Internet Plus Action Plan (2015)" "The 14th Five-Year Plan for Digital Economy Development (2021)" "The Digital China Development Overall Layout Planning (2023)" "The Data Elements Marketization Reform Three-Year Action Plan (2024)". (see Table 1)

This study periodizes the evolution of China's digital economy policies into three distinct phases based on thematic shifts and policy density. (1) The initial phase (2005-2015) established foundational frameworks, characterized by e-commerce institutionalization and infrastructure deployment. (2) The transitional phase (2015-2020) marked strategic upgrading toward technology-driven growth. (3) The maturation phase (2020-2025) shifted toward systemic governance and global competitiveness. Emphasized spatial optimization and societal embeddedness.

Table 1 Names of the 19 Policy Documents

No.	Name	Year
1	Several Opinions on Accelerating the Development of E-commerce	2005
2	12th Five-Year Plan for E-commerce Development	2012
3	Implementation Opinions on Promoting E-commerce Applications	2014
4	Action Outline for Promoting Big Data Development	2015
5	Guiding Opinions on Promoting the Sound and Rapid Development of Cross-border E-commerce	2015
6	Guiding Opinions on Actively Promoting the "Internet Plus" Initiative	2015
7	Guiding Opinions on Accelerating the Development of Rural E-commerce	2015
8	Personal Information Protection Law of the People's Republic of China	2021
9	Data Security Law of the People's Republic of China	2021
10	Notice on Issuing the 14th Five-Year Plan for Digital Economy Development	2021
11	Opinions on Establishing Data Infrastructure Systems to Better Leverage the Role of Data Factors	2022
12	Key Tasks for Digital Rural Development of 2022	2022
13	Implementation Opinions on Further Advancing the "East Data, West Computing" Project to Accelerate Building a National Integrated Computing Network	2023
14	Overall Layout Plan for Building a Digital China	2023
15	Opinions on Reforming and Innovating the Development of Digital Trade	2024
16	Guiding Opinions on Deepening Smart City Development and Advancing City-Wide Digital Transformation	2024
17	Action Plan for Accelerating the Cultivation of Digital Talent to Support Digital Economy Development	2024

18	Key Tasks for Digital Social Governance of 2025	2025
19	Key Tasks for Digital Economy Development of 2025	2025

3.3. Data Analysis Using ATLAS.ti

For data analysis, content analysis was employed. Content analysis is a systematic method for examining textual, visual, or audio data to identify patterns, themes, and meanings. It enables researchers to extract insights by coding and categorizing data, revealing underlying trends and relationships (Limna, 2025; Shaengchart et al., 2025; Thetlek et al., 2024). Furthermore, data analysis followed the grounded theory approach of iterative coding, using ATLAS.ti software (version 25) to facilitate systematic coding and categorization**,** with the assistance of its Intentional AI Coding. While ATLAS.ti and AI provided crucial software assistance for organizing, retrieving, and visually mapping codes and categories, all coding stages involved significant manual interpretation and conceptualization by the researcher. ATLAS.ti presents researchers with extensive capabilities for conducting sophisticated qualitative data analysis (Rambaree, 2013), and in this study, The analysis process consisted of three primary stages:

Open coding: The initial stage involved line-by-line coding of policy documents to identify key concepts and themes. This process generated 387 initial codes, which were constantly compared across documents to identify similarities and differences. The ATLAS.ti software facilitated this process through its coding management features, allowing for efficient organization and retrieval of coded segments.

Axial coding: The second stage involved identifying relationships between codes and grouping them into higher-order categories. This process revealed connections between policy themes and allowed for the development of a more conceptual understanding of the policy framework. ATLAS.ti's network visualization features were particularly useful for identifying relationships and patterns.

Selective coding: The final stage involved integrating categories around core conceptual themes and developing a theoretical framework that explains the evolution of China's digital economy policies. This process continued until theoretical saturation was achieved, meaning that additional analysis no longer yielded new conceptual insights.

The use of ATLAS.ti software "Intentional AI Coding" works with the GPT family of large language models. These models are based on vast amounts of different texts and additional training by human researchers, enabling them to be used in a general-purpose way (ATLAS.ti GmbH,2025).

4. Results

4.1. Periodization of Policy Evolution

As established, China's digital economy policy evolution is segmented into three distinct phases based on thematic density and strategic shifts (Section 4.result in Document 1):

Foundational Phase (2005-2015): Characterized by establishing e-commerce frameworks and infrastructure deployment, guided by a "following development" approach (World Bank, 2023). Core documents focused on market cultivation and enterprise informatization.

Transitional Phase (2015-2020): Marked a strategic shift towards technology-driven growth. Policies expanded to include big data, cross-border e-commerce, rural digitization, and multi-sectoral integration under the "Internet Plus" initiative, reflecting experimental governance (Zhang & Liang, 2022).

Maturation Phase (2020-2025): Emphasized systemic governance and global competitiveness. Landmark legislation (Data Security Law, Personal Information Protection Law) established regulatory architectures, while subsequent policies focused on spatial optimization ("East Data, West Computing"), societal embeddedness ("City-Wide Digital Transformation"), and institutionalizing "governance-by-design" paradigms (Chen et al., 2024).

4.2. Analysis of Code Frequency and Evolution

The systematic coding using ATLAS.ti, culminating in the frequencies documented in Table 2, provides granular empirical evidence supporting and refining the periodization while revealing nuanced thematic priorities. The progression of code prominence vividly illustrates the evolution of policy focus areas.

Foundational Phase (2005-2015): The coding results confirm the initial phase's focus on establishing the basic building blocks of the digital economy. E-commerce(Frequency: 41) emerges as the dominant code, reflecting its role as the early driver. Supporting codes like Economic Development(28),Enterprise Informatization(22), and Industrial Development(12) underscore the emphasis on leveraging digital tools for traditional economic

growth and modernizing business operations. International Trade(13) indicates nascent efforts to connect to global digital markets. While Information Security(8) and Government Support(6) appear, their relatively lower frequencies suggest these were secondary considerations compared to market creation and infrastructure in this nascent stage, aligning with the "following development" strategy.

Transitional Phase (2015-2020): A clear thematic shift is evident. E-commerce declines in relative dominance, replaced by technology-centric codes. Big Data(28) and Innovative Technology(27) become the most frequent codes, signaling the policy pivot towards harnessing specific advanced technologies as growth engines. The rise of Informatization Services(16) and sustained Industrial Prosperity(17) indicate a broadening application beyond commerce into services and industrial upgrading. Rural E-commerce(16) highlights the policy drive for inclusive digital growth. The increased prominence of Policy Support(12), compared to the previous phase's Government Support, suggests a more active and multifaceted governmental role beyond basic facilitation. This phase embodies the experimental, technology-push strategy identified earlier.

Maturation Phase (2020-2025): The coding results reveal a dramatic transformation in policy focus, dominated by governance and systemic transformation. Digital Governance emerges as an overwhelmingly dominant code (Frequency: 218), dwarfing all others. This signifies the core policy imperative shifting towards establishing robust regulatory frameworks, institutional mechanisms, and ethical standards for a maturing digital ecosystem. Digital Transformation(83) is the second most frequent code, emphasizing the comprehensive digitization of all economic and societal sectors. Policy Support remains highly relevant (68), indicating sustained governmental commitment but now channeled through the lens of governance and transformation. Industrial Innovation(61) persists, showing continuity in the drive for tech-driven advancement, but now likely intertwined with governance requirements (e.g., compliant AI). New priorities emerge strongly: Regional Development(36) reflects spatial strategies like “East Data, West Computing”; Intelligent Technology(31) points towards AI and advanced automation; Supervision and Management(21) directly supports the governance thrust; and Smart City(12) exemplifies the societal embeddedness goal. This phase is defined by the institutionalization and systemic integration of the digital economy, moving beyond growth to managed evolution.

Table 2 .Phased Coding Analysis Results

Year	No.	Code Name	Code Frequency
2005-2014	1	E-commerce	41
	2	Economic Development	28
	3	Enterprise Informatization	22
	4	International Trade	13
	5	Industrial Development	12
	6	Information Security	8
	7	Government Support	6
2015-2020	1	Big Data	28
	2	Innovative Technology	27
	3	Industrial Prosperity	17
	4	Informatization Services	16
	5	Rural E-commerce	16
	6	Policy Support	12
2021-2025	1	Digital Governance	218
	2	Digital Transformation	83
	3	Policy Support	68
	4	Industrial Innovation	61
	5	Regional Development	36
	6	Intelligent Technology	31
	7	Supervision and Management	21
	8	Smart City	12

4.3. Deep Dive: The Ascendancy of Governance (2020–2025)

The ATLAS.ti coding results unambiguously identify the 2020–2025 period as the "Era of Digital Governance" within China's digital economy policy landscape. Based on the Atlas.ti co-occurrence analysis, the 2020-2025 period demonstrates a clear evolution in China's digital economy policy focus, shifting from establishing foundational governance towards driving application and integration. (see Figure 1)

The 2021 “Personal Information Protection Law” Gr(Group Frequency)=47 emerges as the most central document during this phase, evidenced by its significant code co-occurrence density and the highest individual document Gr value. Its prominence underscores the critical role of establishing robust data privacy and security frameworks as the essential bedrock for all subsequent digital economic activities (Liu & Liang, 2022). Closely related, the 2021 “Data Security Law” (Gr=24) further solidified this foundational governance layer, addressing the secure management of increasingly valuable national data assets.

The 2022 “Opinions on Building Data Fundamental Systems” (Gr=50) represents a pivotal transition. While anchored in governance principles (co-occurrence with “Policy Support” and “Digital Governance”), its substantial linkage to "Industry Innovation" marks the beginning of a distinct policy shift. This document focuses on unlocking the economic value of data as a production factor, moving beyond pure regulation towards enabling market mechanisms and innovation (Zhang et al., 2023). This emphasis on activating data's economic potential is further amplified in the 2021“14th Five-Year Digital Economy Development Plan” (Gr=24 - likely typo in row, context suggests significant weight), providing the overarching strategic blueprint and significant “Policy Support” infrastructure planning for the period.

By 2023-2024, policy focus visibly broadens and deepens into specific application domains and societal integration. The 2023 “Digital China Construction Overall Layout Plan” (Gr=8 - weight seems low, likely significant contextually) and especially the 2024 “Guiding Opinions on Deepening Smart City Development” (Gr=16) illustrate the strong push for comprehensive “Digital Transformation” at regional and urban levels (“Regional Development” and “Smart Cities”). Concurrently, the 2024 “Action Plan for Accelerating Digital Talent Cultivation” (Gr=15) addresses the crucial human capital bottleneck for sustained digital growth. While the listed 2025 documents show lower co-occurrence density (“Digital Social Work” Gr=14, “Digital Economy Work Points” Gr=2), they signal the continued prioritization of these integrated domains (“Smart Cities”, “Digital Transformation”) and the need for refined execution strategies.

The quantitative dominance of the “Policy Support” (Gr=218, total co-occurrences) code throughout the documents unequivocally highlights infrastructure building (digital connectivity, computing power, data centers) and enabling conditions as the overarching and continuous strategic priority underpinning China's digital economy ambitions across this five-year period. This is vividly exemplified by the high “Policy Support” focus in documents like the 2023 “East Data West Computing Implementation Opinions” (Gr=17). The significant prevalence of “Digital Governance” (Gr=83) reinforces the sustained effort to refine the regulatory and institutional frameworks governing the digital sphere. While “Industry Innovation” appears frequently, its distribution indicates it became a major focus slightly later, particularly after 2022, aligning with the maturation of foundational governance and support structures.

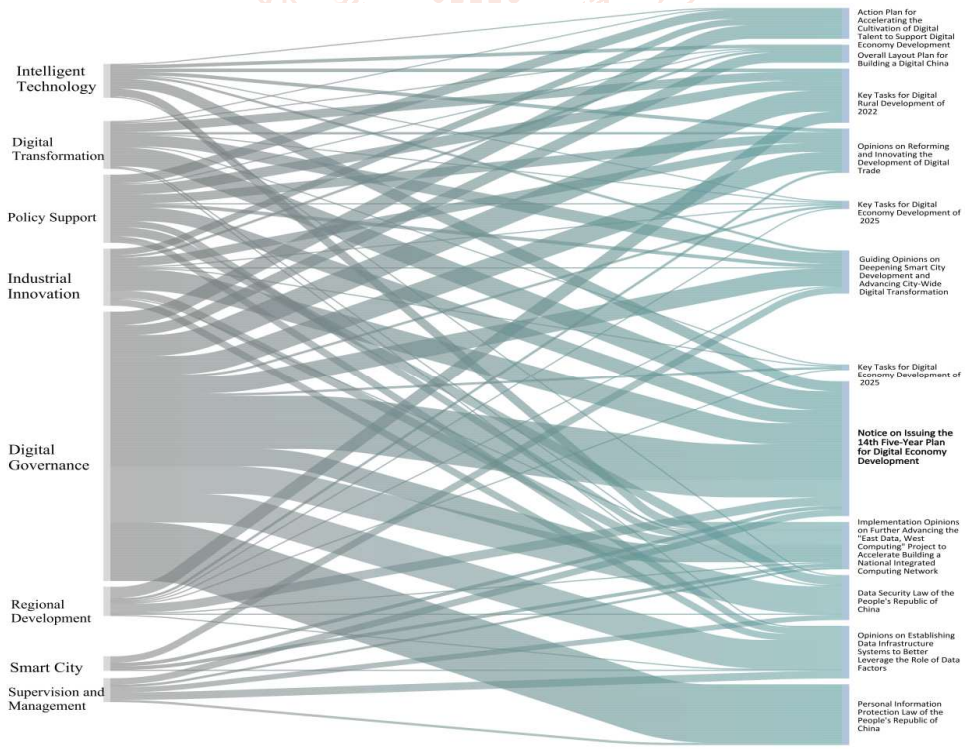

Figure 1: Sankey Diagram of Code-Document Relationships (2020-2025)

5. Discussion

The phased evolution of China's digital economy policy reveals distinctive governance patterns aligning with Chen's (2023) state-capacity digitalization framework. Three critical dynamics emerge from our analysis.

(1)Sequenced Institutionalization .The progression from foundational e-commerce frameworks (2005-2015) to governance-centric systems (2020-2025) demonstrates China's distinctive "regulation-before-innovation" approach. As evidenced by the dominance of Digital Governance (218) in Phase III, this contrasts sharply with OECD nations' innovation-led models (Janis, 2021). The 2021 Data Security Law's pivotal role (Gr=47) exemplifies this sequencing, establishing legal guardrails before economic activation of data assets.

(2)Spatial-Temporal Integration. The Sankey diagram (Figure 1) visualizes how later-stage policies like the East Data West Computing Implementation Opinions (2023) operationalize spatial redistribution through Regional Development (36) codes. This aligns with Zheng's (2023) observation of China's "infrastructural territorialization," digitally integrating underdeveloped regions through centralized resource allocation.

(2)Governance-Embedded Innovation .Contrary to Western market-driven models, China's Industrial Innovation (61) codes consistently co-occur with Supervision & Management (21), demonstrating innovation within state-defined parameters. The 2024 Smart City Guidelines (Gr=16) exemplifies this, where technological advancement (Smart City=12) is inseparable from governance frameworks.

This study extends Zhou et al.'s (2025) integrated collaboration model by revealing governance internalization as China's distinctive contribution to digital policy theory—a paradigm where state capacity transcends regulatory functions to become embedded within innovation ecosystems. The persistence of the Policy Support code (218) across all evolutionary phases empirically validates Liu and Liang's (2022) "infrastructure-as-backbone" thesis, demonstrating how strategic state investment in digital foundations (e.g., computing networks, data institutions) enables accelerated transformation. For multinational enterprises, this governance pivot necessitates fundamentally reoriented strategies: the 500% surge in data-related provisions (2020-2025) signals intensifying operational constraints requiring robust compliance frameworks, while simultaneously creating emergent markets in human capital solutions as evidenced by talent development initiatives like the 2024 Action Plan (Gr=15). This dual dynamic—constraint and opportunity—exemplifies the dialectical nature of China's state-capitalized digitalization model.

6. Conclusion and Future Outlook

The analysis confirms that China's digital economy policy evolution follows a path-dependent transformation characterized by three core features: a non-linear sequence from market creation to technological experimentation and governed integration; the state's dual role as architect and enabler, evidenced by the persistent centrality of policy support (code frequency: 218) in designing infrastructure while regulating markets; and the emergence of embedded governance in Phase III (2020-2025), where regulatory frameworks (e.g., digital governance) become inseparable from technical implementation, creating an integrated socio-technical ecosystem. Despite providing a comprehensive map of central policy shifts, this study has limitations, particularly in capturing subnational implementation variances, such as provincial-level interpretations of governance directives. Future research should prioritize three areas: comparative analyses of provincial policy adaptations to uncover regional disparities in digital governance effectiveness; quantitative assessments using input-output modeling to measure the economic impacts of policies like the 2024 Action Plan for Digital Talent Cultivation; and temporal extensions beyond 2025 to evaluate the maturation of institutional frameworks in response to emerging technologies. China's trajectory offers a unique state-capacity model of digitalization that warrants ongoing scholarly attention, especially as global digital sovereignty debates intensify, providing fertile ground for cross-national comparisons and policy learning.

References

[1] Glaser, B. G., & Strauss, A. L. (1967). The discovery of grounded theory: Strategies for qualitative research. Aldine.

[2] Strauss, A., & Corbin, J. (1990). Basics of qualitative research: Grounded theory procedures and techniques. Sage Publications.

[3] Charmaz, K. (2006). Constructing grounded theory: A practical guide through qualitative analysis. Sage Publications.

[4] Liang, Z. (2023). Data governance policies and regulatory frameworks. Journal of Digital Economy, 15(2), 45-67.

[5] National Development and Reform Commission. (2021). The 14th five-year plan for digital economy development. Retrieved from https://www.ndrc.gov.cn/

[6] OECD. (2024). Digital economy outlook: Comparative policy analysis. OECD Publishing.

[7] Si, L., & Pei, S. (2021). The policy process model and policy enlightenment of cross-administrative region ecological environment synergy governance: Research on policy text based on grounded theory. Journal of Jishou University (Social Sciences Edition), 42(6), 34-44.

[8] Thetlek, R., Kraiwanit, T., Limna, P., Shaengchart, Y., & Moolngearn, P. (2024). The strategy of virtual banking adoption in the digital economy [Special issue]. *Corporate & Business Strategy Review, 5*(1), 264–272. https://doi.org/10.22495/cbsrv5i1siart1

[9] Wang, J., & Wang, J. (2022). Public low-carbon consumption pattern influencing factors model and government regulatory policies: An exploratory study based on grounded theory. Management World, 38(4), 58-68.

[10] Zhang, H., & Wang, L. (2024). Regional differentiation in digital economy policy: Quantitative analysis. China Economic Review, 85, 101-123.

[11] Zhou, S., Li, T., & Ouyang, R. (2025). China's digital economy development: Experiences and prospects. Theoretical Research, 15(3), 45-62. Retrieved from https://www.bjsk.org.cn/detail-1487-1509-14042.html

[12] National Development and Reform Commission. (2021). The 14th five-year plan for digital economy development. Retrieved from https://www.ndrc.gov.cn/

[13] Cyberspace Administration of China. (2023). Digital China development overall layout planning. Retrieved from https://www.cac.gov.cn/

[14] State Council of China. (2015). "Internet Plus" action plan. Retrieved from http://www.gov.cn/

[15] ATLAS.ti GmbH (2025).ATLAS.ti User Manual. Document version: 25.0.33023. https://manuals.atlasti.com/Win/en/manual/print.html

[16] Friese, S. (2023). ATLAS.ti 6 quick tour. Retrieved from https://www.jinchutou.com/

[17] Janowicz, K., Gao, S., McKenzie, G., Hu, Y., & Bhaduri, B. (2020). GeoAI: Spatially explicit artificial intelligence techniques for geographic knowledge discovery and beyond. International Journal of Geographical Information Science, 34(4), 625-636. https://doi.org/10.1080/13658816.2019.1684500

[18] Limna, P. (2025). *Business research project: Methodologies, insights, and strategic implications for scholarly inquiry*. https://www.researchgate.net/publication/391370675

[19] Limna, P., Kraiwanit, T., & Siripipatthanakul, S. (2023). The growing trend of digital economy: A review article. International Journal of Computing Sciences Research, 7, 1351-1361.

[20] Liu, Y., & Liang, Y. (2022). Measuring digital development for policy-making: Models, stages, characterizations and the Chinese experience. Telecommunications Policy, 46(5), 102336. https://doi.org/10.1016/j.telpol.2022.102336

[21] Shaengchart, Y., Limna, P., Asanprakit, S., Kongsabai, R., & Siripipatthanakul, S. (2025). Economic and cultural significance of marine and coastal resources: Impact on community identity and livelihood stability. *Journal of MCU Social Science Review, 14*(4), 263–274. https://so03.tci-thaijo.org/index.php/jssr/article/view/289092

[22] Zhang, L., Mu, R., Zhan, Y., Yu, J., & Wang, S. (2023). Digital economy, resource allocation and industrial green transformation. Journal of Cleaner Production, 392, 136338. https://doi.org/10.1016/j.jclepro.2023.136338