

Research on the Development Strategies of Digital Reading Against the Background of National Reading: A Knowledge Mapping Analysis Based on CiteSpace

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Abstract

The Regulations on the Promotion of National Reading came into force on February 1, 2026, marking China's national reading has entered a legalized and systematic stage. As a core carrier of modern knowledge dissemination, digital reading is shifting from scale expansion to value cultivation. Based on 281 core journal articles from CNKI (2015–2025), this study uses CiteSpace 6.3.R1 to conduct keyword co-occurrence, clustering, timeline and burst detection analysis. Results show that research focuses on digital reading, national reading and reading promotion, forming four dimensions: policy and public services, infrastructure equalization, technology empowerment and user-centered content innovation. The field has experienced popularization and high-quality development stages, with current frontiers concentrating on artificial intelligence, service systems, in-depth reading and digital divide. Faced with contradictions such as mismatched content supply and demand, superficial technology application and unequal public services, this paper constructs a trinity development strategy of infrastructure reconstruction, in-depth technology empowerment and institutional improvement, providing theoretical support and practical guidance for the high-quality development of digital reading.

Keywords

National reading; Digital reading; CiteSpace; Knowledge mapping; Development strategy; Artificial intelligence

1. Introduction

1.1. Research Background

Constructing a nation of readers has become a key part of national cultural governance. The implementation of The Regulations on the Promotion of National Reading in 2026 has promoted national reading from policy advocacy to legal

guarantee, and redefined digital reading infrastructure and content construction requirements. Driven by AI, big data and other technologies, digital reading has formed a multi-modal interactive ecosystem.

In recent years, China's digital reading industry has achieved large-scale growth, with 670 million users and a market revenue of 66.141 billion yuan in 2024. However, structural contradictions still exist: content supply and demand are mismatched, technology application is superficial, in-depth reading is insufficient, and the urban-rural digital divide is obvious. Existing studies mostly adopt qualitative analysis and lack quantitative empirical support. Therefore, this paper uses CiteSpace knowledge mapping to quantitatively analyze the research hotspots, evolution and frontiers of digital reading development strategies, and puts forward targeted solutions.

1.2. Research Significance

1.2.1. Theoretical Significance

This study uses knowledge mapping to display the knowledge network and evolution path of digital reading research, clarifies the logical relationship between core themes, improves the theoretical framework of digital reading research, and provides empirical support for subsequent studies.

1.2.2. Practical Significance

Combined with the Regulations orientation and industrial pain points, this paper constructs an operable trinity development strategy, which can provide references for government public service optimization, enterprise technology and content upgrading, and promote the transformation of digital reading to high-quality development.

1.3. Research Ideas

This paper takes the Regulations as the policy basis, uses CiteSpace to carry out bibliometric analysis, identifies the structural contradictions in digital reading development, and constructs an infrastructure-technology-institution trinity strategy system, and finally puts forward conclusions and prospects.

2. Research Design

2.1. Data Sources

The data comes from CNKI core journal database (PKU core, CSSCI, CSCD). The retrieval formula is: Topic = (digital reading) AND (national reading) AND (development strategy), with a time span of 2015–2025. After screening, 281 valid articles are obtained, covering the main fields of digital reading research and objectively reflecting the research status of this field.

2.2. Research Methods

This study adopts bibliometrics and CiteSpace visual analysis. Bibliometrics is used to quantify keyword frequency and centrality; CiteSpace 6.3.R1 is used to generate keyword co-occurrence, clustering, timeline and burst detection maps, so as to systematically reveal the knowledge structure, hotspots evolution and frontier trends of digital reading strategy research.

3. Knowledge Mapping Analysis of Digital Reading Development Strategies

3.1. High-Frequency Keywords and Co-Occurrence Network

High-frequency keywords statistics show that digital reading (114 times), national reading (65 times) and reading promotion (56 times) are the core research themes. The keyword co-occurrence network has 251 nodes and 546 connections, with a close thematic connection. The centrality of artificial intelligence and intelligent reading has increased significantly, indicating that technology empowerment has become a research focus. At the same time, digital divide, in-depth reading and service system reflect the key problems to be solved in industrial development.

Table 1. High-Frequency Keyword Statistics

No.	Keyword	Frequency	Betweenness Centrality	First Appearance Year
1	Digital reading	114	1.01	2015
2	National reading	65	0.52	2015
3	Reading promotion	56	0.26	2016
4	Library	31	0.12	2015
5	Current situation	8	0.05	2017
6	Strategy	8	0.02	2018
7	Artificial intelligence	8	0.07	2020
8	College students	8	0.00	2015
9	Promotion strategy	7	0.01	2017
10	Digital publishing	6	0.05	2017
11	New media	6	0.01	2017
12	Knowledge mapping	5	0.01	2017
13	Intelligent reading	5	0.06	2020
14	Development strategy	4	0.00	2018

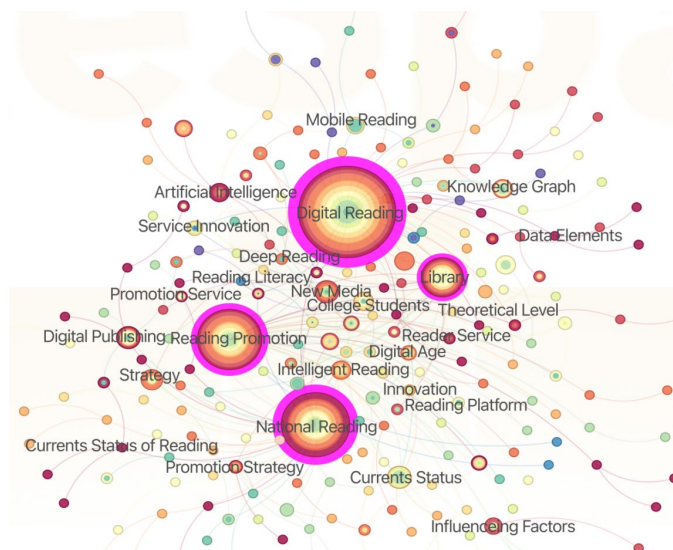


Figure 1. Keyword co-occurrence map

3.2. Keyword Clustering Analysis: Research Dimensions and Infrastructure Equalization

Keyword clustering analysis yields 11 stable clusters (modularity $Q = 0.5565$, silhouette coefficient = 0.8536), which are integrated into four research dimensions: policy and public services, infrastructure and equalization, technology empowerment, user and content innovation.

Clustering results highlight the problems of unbalanced resource allocation and insufficient digital transformation of public facilities. Accordingly, this paper puts forward an infrastructure reconstruction strategy: upgrade offline reading spaces such as libraries and rural bookstores to digital experience terminals; promote the digital upgrading of rural reading rooms and realize accurate resource supply; carry out age-friendly and barrier-free transformation of digital products; build a national unified digital reading service platform to break resource barriers.

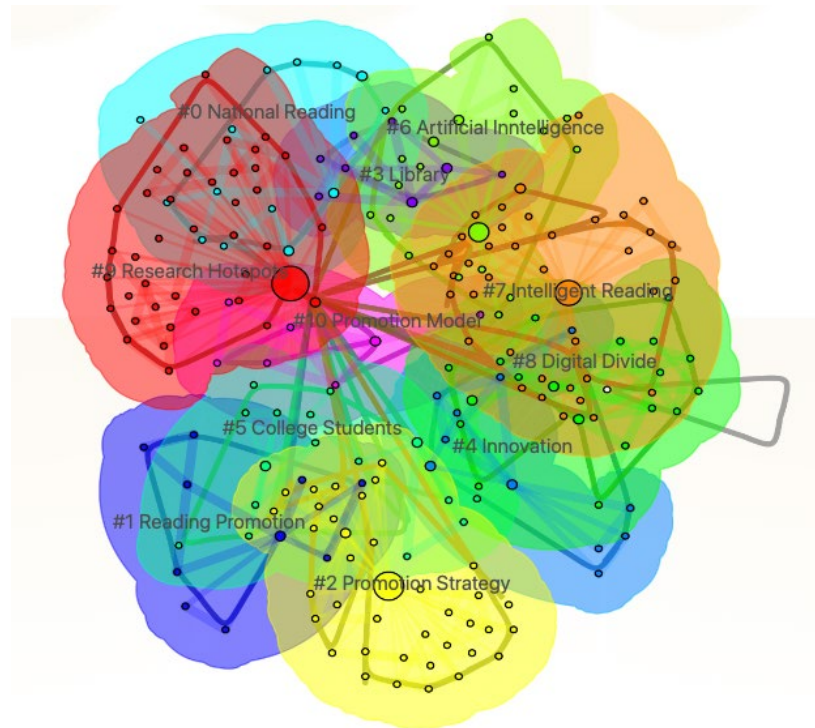


Figure 2. Keyword clustering map

3.3. Keyword Timeline Analysis: Stage Evolution and In-Depth Technology Empowerment

The timeline map divides the research into two stages:

2015–2019: Basic popularization stage: Research focuses on mobile reading, new media and user behavior, corresponding to the scale expansion of the industry.

2020–2025: High-quality development stage: Research turns to AI, in-depth reading and service system optimization, matching the industry's value-oriented transformation.

At this stage, the problem of shallow technology application is prominent. This paper proposes an in-depth technology empowerment strategy: use generative AI to organize fragmented information into systematic knowledge; optimize the recommendation algorithm to break information cocoons; let editors dominate the value orientation of intelligent systems and improve the quality of content products.

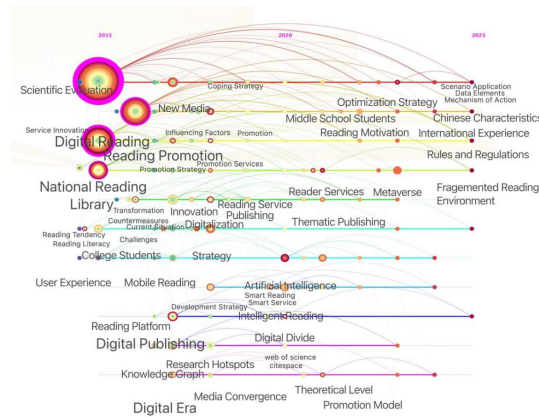


Figure 3. Keyword timeline map

3.4. Keyword Burst Analysis: Frontier Pain Points and Institutional Improvement

Burst detection identifies three frontier stages: early stage focuses on mobile reading and college students; medium stage pays attention to libraries and intelligent reading; recent stage concentrates on service system, artificial intelligence and optimization strategy.

Burst results reflect the industrial pain points such as copyright governance, ethical norms and incomplete service system. Based on this, an institutional improvement strategy is proposed: integrate digital reading into the lifelong education system and build a reading credit bank; use blockchain to strengthen digital content copyright protection; improve supporting systems and collaborative governance mechanisms to ensure the standardized and sustainable development of digital reading.

Top 19 Keywords with the Strongest Citation Bursts

Keywords	Year	Strength	Begin	End	2015 - 2025
Scientific evaluation	2015	1.3	2015	2016	
Service innovation	2015	1.21	2015	2016	
Paper reading	2015	1.17	2015	2018	
College students	2015	0.86	2015	2017	
Prospect	2017	1.32	2017	2018	
Internet+	2017	1.32	2017	2018	
Government	2017	0.88	2017	2018	
Knowledge graph	2017	0.81	2017	2018	
Current station	2017	2.28	2018	2019	
Research hotspot	2018	1.4	2018	2020	
Promotion	2019	1.5	2019	2020	
Library	2015	0.89	2019	2020	
Publishing	2019	0.81	2019	2021	
Intelligent reading	2020	1.36	2020	2023	
AI empowerment	2021	1.36	2021	2022	
Thematic publishing	2021	0.76	2021	2023	
Service system	2023	1.14	2023	2025	
New media	2017	0.76	2023	2025	
Optimization strategy	2023	0.76	2023	2025	

Figure 4. Keyword burst detection map

4. Conclusion and Prospect

This study uses CiteSpace to analyze 281 articles and finds that digital reading research has formed a stable knowledge network with four core dimensions, and has gone through two development stages. The industry is facing structural contradictions such as mismatched content supply and demand, superficial technology application and unequal public services.

This paper constructs a trinity development strategy of infrastructure reconstruction, in-depth technology empowerment and institutional improvement. In theory, it makes up for the lack of quantitative research in this field; in practice, it provides a feasible path for the high-quality development of digital reading.

In the future, with the in-depth implementation of the Regulations and the development of generative AI, digital reading will move towards legal standardization, in-depth intelligence and inclusive equality. Subsequent research can carry out international comparisons, group-specific empirical analysis and scenario tracking under new technologies, and continuously promote the construction of a digital reading ecosystem.

References

- [1] Airiti Library. (2023). The development of digital reading from the perspective of scene affordance. <https://www.airitilibrary.com/Article/Detail/P20230922001-N202310180015-00006>
- [2] Amazon Web Services. (2020). Build a Gluon-based recommendation system with Amazon SageMaker. <https://aws.amazon.com/cn/blogs/china/using-amazon-sagemaker-build-recommendation-system-based-gluon/>
- [3] Chang, Y. H. (2025). Urban–rural digital divide: Representation, causes and bridging countermeasures. *Journal of Agricultural Economics and Management*, (1), 45–54.
- [4] Chen, Q. (2024). Research progress and orientation of international communication of Chinese culture in recent 20 years: A CiteSpace-based knowledge mapping analysis. *Chinese Culture Research*, (4), 66–79.
- [5] Chen, Y., Chen, C. M., Liu, Z. Y., & Wang, D. Z. (2015). Methodological functions of CiteSpace knowledge mapping. *Studies in Science of Science*, 33(2), 242–253. <https://doi.org/10.16192/j.cnki.1003-2053.2015.02.009>
- [6] Chinese Academy of Social Sciences. (2025). 2024–2025 Annual Report on the Development of China’s Digital Publishing. http://xinwen.cssn.cn/bsdt/202507/t20250712_5886008.shtml
- [7] Editorial Office. (2026). Legislation for “reading”: Promulgation of the Regulations on the Promotion of National Reading. *New Century Library*, (1), 57.
- [8] Feng, L., & Li, D. L. (2026). Libraries as the main position for national reading: Two-decade evolution, practical effects and future paths. *Journal of Library Science in China*, 52(1), 40–56. <https://doi.org/10.13530/j.cnki.jlis.2026003>
- [9] Hou, J. H., & Hu, Z. G. (2013). Review and prospect of CiteSpace software application research. *Modern Information*, (4), 99–103.
- [10] Hou, X. N. (2026). Digital reading industry to shift from “scale growth” to “value cultivation”. <https://m.mp.oeeee.com/a/BAAFRD0000202602021518622.html> oeeee.com.
- [11] Jiang, J. G. (2026). Building a sound ecosystem for national reading through the rule of

- law. Publishing Research, (1), 1.
<https://doi.org/10.19393/j.cnki.cn11-1537/g2.2026.01.032>
- [12] Li, Q. (2025). Premier Li Qiang signs decree of the State Council promulgating the Regulations on the Promotion of National Reading. http://www.scio.gov.cn/yw/lq_/202512/t20251216_942643.html
- [13] Lin, A. J., & He, Y. M. (2022). New representations and ethical reflections on digital media dependency. Southcn Theory. https://theory.southcn.com/node_203ed94b00/a571730cdc.shtml
- [14] National Reading Administration. (2025). Findings of the 22nd National Reading Survey. https://www.nationalreading.gov.cn/wzzt/2025qmyddh/cgfb/202504/t20250424_892768.html
- [15] Roland Berger. (2025). Foresight 2025: China industry trend report. https://pdf.dfcfw.com/pdf/H3_AP202501121641895896_1.pdf
- [16] Shi, Z. Z., & Li, K. (2019). Realization and significance of “leaping reading” in the post-reading era. People’s Tribune Network. <https://www.rmlt.com.cn/2019/1009/558723.shtml>
- [17] State Council of the People’s Republic of China. (2025a). Regulations on the Promotion of National Reading (Decree No. 823). Ministry of Ecology and Environment. https://www.mee.gov.cn/zcwj/gwywj/202512/t20251219_1138213.shtml
- [18] State Council of the People’s Republic of China. (2025b). Regulations on the Promotion of National Reading. <https://www.shanghaiinvest.com/cn/viewfile.php?id=21455>
- [19] Wei, J. Q., Zhang, Q., & Xue, K. D. (2026). From tacit knowledge to professional authority: Research on the mechanism of editors’ professional jurisdiction in the AI era. *Editorial Journal*, (4), 11–22.
- [20] Xia, D. Y. (2026). Innovative growth and systematic reform of China’s publishing industry from the perspective of first-launch economy. *Editorial Journal*, (1), 4–11.
- [21] Xinhua News Agency. (2025a). China’s digital reading users reach 670 million in 2024. <https://www.news.cn/politics/20250423/4fa890e26b624a97b8d0ae1001680154/c.html>
- [22] Xinhua News Agency. (2025b). China’s digital reading users hit 670 million in 2024. <http://www.news.cn/book/20250424/75b1891a7b1045ccb480a0542bb10c9/c.html>
- [23] Xmind. (2025). Top 5 best book summarizer apps for quick reading in 2025. <https://xmind.com/zh-hans/blog/book-summarizer>
- [24] Xu, W. C. (2025). Hotspots and trends of research on the communication of overseas Chinese literature: A CiteSpace analysis based on CNKI literatures. *Literature and Art Contention*, (7), 178–183.
- [25] Zhang, J. (2026). Regulations on the Promotion of National Reading takes effect, Sichuan embraces new year with scholarly atmosphere, first “National Reading Week” to kick off in April. The Cover News. [https://www.thecover.cn/news/nTawgi5JUUCH90qSdq8\]kw==](https://www.thecover.cn/news/nTawgi5JUUCH90qSdq8]kw==)
- [26] Zhang, W. Y. (2026). Rethinking the Regulations on the Promotion of National Reading under the framework of dynamic interconstruction between traditional reading and digital reading. *Editorial Journal*, (2), 4–9.
- [27] Zhu, L., & Meng, X. X. (2013). A comparative study of bibliometrics and content analysis. *Library Work and Research*, (6), 64–66.
- [28] Zhu, Y. X. (2026). The new mission of national reading in the new era [J/OL]. *Science, Technology and Publication*, 1–10. <https://doi.org/10.16510/j.cnki.kjycb.20260210.001>