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Postprint: Research Review of China's Document Information Resource Assurance System

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Abstract

[Purpose/Significance] The importance of literature information resource guarantee systems has attracted increasing attention from the academic community; however, there is currently a lack of systematic review of research findings. This paper provides a comprehensive review of research related to literature information resource guarantee systems in China, pointing out directions for further research.

[Method/Process] Using grounded theory research methods, this study conducts coding analysis on the research content of original literature to explore research progress on literature information resource guarantee systems in China under the background of the new era. A total of 129 primary codes and 14 categories were obtained, from which 4 research themes were extracted. The paper discusses deficiencies in research on literature information resource guarantee systems and proposes feasible directions for future research.

[Results/Conclusions] Research on the macro-environment dimension should incorporate characteristics of the current new era, and there is a need to strengthen research on the main entities in literature information resource construction. Research on system construction and structural models needs to discuss the flow and transmission of literature information among various guarantee levels, and provide relevant technical parameter standards to achieve co-construction and sharing of literature information resources. In terms of resource construction and services, it is necessary to solve problems of long-term preservation and perpetual utilization, and to guide and promote literature consumption by users through technical means.

Full Text

A Review of Research on China's Document Information Resource Guarantee System

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Abstract: [Purpose/Significance] The importance of document information resource guarantee systems has attracted increasing attention from the academic community, yet a systematic review of research findings is currently lacking. This paper provides a comprehensive review of relevant research on China's document information resource guarantee system to identify directions for future research. [Method/Process] Using grounded theory methodology, this study conducts coding analysis of original literature to explore research progress on China's document information resource guarantee system in the new era. A total of 129 primary codes and 14 categories were obtained, from which 4 research themes were extracted. The paper discusses deficiencies in current research and proposes feasible future research directions. [Result/Conclusion] Research on the macro-environmental dimension should incorporate characteristics of the current new era, with strengthened focus on the main bodies of document information resource construction. Studies on system construction and structural models need to examine the flow and transmission of document information among different guarantee levels and provide relevant technical parameter standards to achieve co-construction and sharing of document information resources. Regarding resource construction and services, solutions for long-term preservation and sustainable utilization must be addressed, while technical means should be employed to guide and promote document consumption among users.

Keywords: document information resources; guarantee system; grounded theory; research framework

Document information resource guarantee systems have long provided crucial support for China's economic development and technological advancement. In the new era of socialism with Chinese characteristics, the strategic significance of document information resources has undergone profound changes. As competition in cutting-edge technology intensifies and international exchanges become more frequent, the role of document information resources has evolved from traditional scientific literature services to implementing innovation-driven development strategies, making the establishment of efficient document information resource guarantee systems particularly important. However, existing research on these systems has primarily been conducted under traditional historical contexts and cannot effectively guide the construction of China's document information resource guarantee systems in the new era. Although scholars have discussed foundational theories related to document information resource guarantee systems, current research generally emphasizes practical exploration over

theoretical investigation, resulting in relatively weak basic theoretical foundations in this field. Moreover, document information resource guarantee systems are constantly evolving, with their connotations, elements, structures, and functions exhibiting era-specific characteristics that existing research has not timely enriched or expanded. Therefore, systematically investigating and analyzing research on document information resource guarantee systems holds significant value for domestic research and innovative perspectives. This paper employs classic grounded theory coding methods to conduct content coding and synthesis of relevant literature, clarifying research trajectories from different dimensions and discussing existing deficiencies and future research prospects to provide reference for subsequent studies.

1 Related Research

As early as 1991, Yang Peichao et al. [1] defined document resource construction as “the entire set of activities within a certain scope where libraries, documentation centers, and other document information institutions conduct planned accumulation and rational layout of document resources to meet and guarantee the needs of social development and national construction.” Building upon this, Xiao Ximing [2] viewed the document information resource guarantee system as a social system integrating collection, storage, revelation, transmission, and utilization of documents, where document information institutions accumulate and rationally layout document resources to satisfy and guarantee societal development and national construction needs [3]. Subsequently, numerous scholars conducted research on the elements, functions, structural models, and construction content of document information resource guarantee systems. Current research more or less touches upon certain system elements, such as macro-control institutions, market mechanisms, policies and regulations, standard business systems, and rational resource networks [4-5]. Regarding structural models, scholars have proposed different classification systems based on China’s construction status and various criteria, including a three-level network structure comprising regional, area, and national levels [2,4], and a four-level guarantee structure ranging from single-library to multi-library, local to global, and physical to virtual collections [6-7]. For different structural models, the construction content of document information resource guarantee systems also varies, requiring separate development from national, provincial, regional, institutional, and industry perspectives, all ultimately aiming to maximally satisfy users’ extensive document needs.

A review of domestic research reveals a lack of systematic summary and synthesis of document information resource guarantee system studies, particularly from macro-theoretical perspectives and forward-looking viewpoints. There is an urgent need to develop a theoretical research framework for document information resource guarantee systems adapted to the new era. To address this, this paper first collects existing relevant literature, codes its content, and, based on coding results, identifies different research dimensions of document information

resource guarantee systems, analyzes them, points out existing problems under current era conditions, and finally proposes feasible future research directions.

2 Research Design

This study's data originates from relevant topic papers, employing grounded theory methodology to code selected papers. Grounded theory is a qualitative research method that builds theory through systematic collection of empirical data [9], primarily comprising three schools: classic, procedural, and constructivist versions, with differences mainly reflected in data coding methods and theoretical interpretation perspectives. This paper adopts open coding and selective coding methods from classic grounded theory's substantive coding to identify core categories and summarize research on document information resource guarantee systems.

2.1 Data Collection

To comprehensively cover the theme of document information resource guarantee systems, the literature screening process considered broad, narrow, related, and polysemous terms for "document information resource guarantee." Therefore, "guarantee capability, guarantee level, guarantee rate, satisfaction rate, coverage rate" were selected as search themes, combined with "document, document resource, document information." The search scope was based on the CSSCI source journal directory published by the Chinese Social Sciences Research Evaluation Center at Nanjing University, with searches conducted in CNKI, Wanfang, and VIP databases. To reduce literature bias, articles with low topic relevance were excluded by reviewing titles and abstracts, and backward searches were performed on references in the results. The retrieval was completed between September 12-30, 2020, yielding 1,248 relevant documents. Subsequently, literature was screened based on abstracts: first, documents had to be research papers rather than review articles; second, they had to be academic papers rather than conference minutes or non-academic papers; finally, they needed to demonstrate innovation rather than merely restating existing viewpoints. Based on these principles, 532 initial documents were selected.

2.2 Data Coding and Refinement

In the specific coding analysis process, open coding was conducted first. Open coding involves using concepts to label data from original materials line by line. Research on document information resource guarantee systems involves construction status comparisons, strategic thinking, application practices, case studies, and other content. This paper adopts localized coding to conduct sentence-by-sentence coding of data analysis results and explanatory conclusions. During coding, this primarily includes original coding of explanatory conclusions from the literature and conceptual coding of phenomena described in the literature. Functions, structures, objectives, principles, construction, and services related

to document information resource guarantee systems mentioned in the literature were coded as closely as possible to the original text. For example, when literature mentioned that “subject librarians should conduct document information push services, i.e., provide timely and efficient selective dissemination of information services to users through networks, obtaining information from the internet according to technical standards or protocols, and processing and integrating widely distributed, random, and dynamically disordered information into ordered, stable, and transmissible information,” this was coded as “conducting specialized document services.”

Second, conceptual coding was applied to phenomena described in the literature. For instance, when literature stated that “the phenomenon of imbalanced total distribution of document information resources across different regions and systems is relatively serious, and in some economically underdeveloped areas and systems with weak financial support, resources cannot meet the needs of researchers conducting scientific research,” this was coded as “regional development differences leading to uneven distribution of document information resources.” Additionally, identical descriptions mentioned multiple times in the same document were coded only once, ultimately yielding 129 primary codes. Due to the large number of documents, initial concepts exhibited some overlap and repetition. This paper selected a repetition frequency of 5 as the threshold to categorize initial concepts appearing more than 5 times.

The open coding and selective coding processes were conducted independently by two researchers who wrote memos. After completing each tenth of the coding, the research team discussed the coding results and consulted expert opinions on different coding outcomes to ensure consistency. Throughout the coding process, inter-coder consistency reached over 80%. To test the comprehensiveness and completeness of the coding process and results, a theoretical saturation test was conducted on one-quarter of the total sample, performed separately by the two researchers. No new initial concepts or categories emerged during the test, indicating that the conceptual categories from this grounded coding had reached saturation. Initial codes were categorized based on similarity in content and nature descriptions, resulting in 14 main categories and 4 research dimensions: macro-environment, system construction, structural model, and resource construction and service dimensions of document information resource guarantee systems. The coding results are shown in Table 1 .

3 Summary and Analysis of Different Research Dimensions

3.1 Macro-Environment Research on Document Information Resource Guarantee Systems

Research on the macro-environment of China’s document information resource guarantee systems primarily focuses on three aspects: geographical distribution, policy environment, and social development level, with the research framework shown in Figure 1 [Figure 1: see original paper]. Current macro-environment

research identifies three main problems: (1) Due to the wide geographical distribution of documents [10], document transmission faces significant difficulties, and various regions show low emphasis on local characteristic documents [11]; (2) The system lacks institutional guarantees for document information resources, with neither legal safeguards nor relevant management systems for guarantee work [12-13]; (3) Due to unbalanced socioeconomic, cultural, and technological development across China, significant differences exist in document information resource guarantee system construction [14].

3.1.1 Geographical Distribution The geographical distribution of document resources and institutions affects document guarantee through uneven distribution caused by geography and local culture, as well as insufficient construction of characteristic documents, ultimately resulting in abundant but scattered resources. Unreasonable layout and scattered distribution of document information resources constitute primary reasons affecting guarantee rates and utilization efficiency, with imbalanced distribution characterized by multiple carriers, large temporal and spatial spans, and regional features. Zhong Jianfa [15] noted that due to varying disciplinary emphases in universities in recent years, excessive investment in key disciplines often leads to neglect of literature procurement for less popular majors, causing document shortages. Hu Lingxia et al. [16] argued that most libraries still focus on traditional borrowing services without building characteristic collections based on their own holdings and users' actual needs, resulting in poor construction awareness and difficulty showcasing local cultural advantages and resource characteristics. Xue Xiaojie et al. [17] pointed out that regional document guarantee research represents an important direction for future library document resource construction. For example, initiatives like the "Belt and Road" require establishing resource co-construction and sharing alliances and exploring region-centered methods for guaranteeing document resource construction.

3.1.2 Policy Environment Policies and regulations affect the management system of document information resource guarantee systems. Currently, China's document guarantee system lacks comprehensive policy and legal support, resulting in a fragmented management structure with multiple leadership authorities. Laws and regulations can guide and constrain document information resource construction work, but no legal mechanism for regulating document resource sharing has been formed, making it difficult to guarantee smooth implementation of document information resource co-construction and sharing through legal means. Luo Huiqun [12] argued that current legislation needs to address how to expand the scope of document information resource dissemination and use while protecting copyright holders' interests. Regarding management systems, Ye Jiyuan [8] believed that excessive administrative dominance in information resource guarantee system construction leads to lack of vitality in system operation. Yang Qin [18] noted that document information resource sharing organizations suffer from management system deficiencies, reflected in

the absence of authoritative coordinating bodies for overall planning and specific coordination among document guarantee institutions, resulting in serious document duplication.

3.1.3 Social Development Level During rapid economic development, deep integration between the internet and social life has significantly changed social information needs. Xiao Ximing [19] argued that the objective of document information resource guarantee system construction should shift from resource ownership to guarantee capability improvement. Economic development differences affect document information resource construction. The ultimate goal of document information resource guarantee systems is to satisfy users' document needs, yet some libraries still serve narrow user groups, with limited coverage of interlibrary loan services reducing effective resource utilization and public satisfaction. Zhang Haizheng et al. [20] believed that digital resources, through open co-construction and sharing, have overcome spatial and temporal barriers in document information resource exchange, narrowing gaps in guarantee levels caused by regional development differences. However, Sun Tan et al. [21] argued that China's document information resource guarantee system lacks adequate response strategies for rapidly developing new digital resources such as digital publishing, open access, and new media short videos.

3.2 Research on Document Information Resource Guarantee System Construction

This dimension focuses on four aspects: construction principles, institutional development, technical support, and organizational guarantee, which simultaneously constitute prerequisites for building document information resource guarantee systems.

3.2.1 Key Construction Principles Constructing a document information resource guarantee system is a complex social project requiring adherence to certain principles to achieve its objectives. As early as 1991, Yang Wenxiang [22] systematically proposed a principle system including comprehensiveness, regional differences, professionalism, hierarchy, and integrity. Subsequently, Xiao Ximing [2] proposed another representative principle system comprising suitability for national conditions, demand orientation, efficiency, and development focus. With disciplinary development and increasing social information needs, document information resource construction has shifted from quantitative to qualitative improvement. Taking user needs as the starting point and endpoint, understanding disciplinary construction and program setup, and grasping users' reading tendencies and document demand levels constitute important principles for building a rational protection system [23].

3.2.2 Institutional Development Institutional development research includes funding guarantees, strengthening document resource construction in

resource-poor areas, formulating relevant policies and regulations for guarantee work, and emphasizing intellectual property issues. For example, Cao Zhen [24] pointed out that management systems of regional document guarantee and service systems should be reformed to fully leverage university libraries' roles in regional document resource guarantee and service systems. Sun Wei et al. [25] believed that many Chinese libraries still lack initiative and motivation in document resource co-construction and sharing, with diversified administrative management systems making unified allocation of human, material, and financial resources difficult. The state should improve resource sharing policies and legal systems, establishing constraint mechanisms for inter-institutional document circulation and sharing.

3.2.3 Technical Support Regarding specific technical applications, numerous domestic scholars and practitioners have conducted relevant research and discussions. Xiao Ximing [2] identified key technologies in document information resource guarantee systems as information transmission technology centered on electronic computers and telecommunications, information storage technology combining databases and optical storage, and information retrieval technology represented by database networks and online searching. Zhao Wei et al. [26] introduced practical applications of specific technologies, such as Z39.50 technology in interlibrary loan, public retrieval, and centralized cataloging functions within document information resource co-construction and sharing. Ma Dachuan et al. [27] achieved information resource integration through application system integration, resource database consolidation, talent integration, information resource security management, and standardization of resource integration, thereby maximizing resource sharing.

3.2.4 Organizational Guarantee Organizational guarantee includes professional talent cultivation, funding adjustment, government support acquisition, and establishment of unified leadership and coordination bodies. For instance, Xu Liwen [28] summarized Hubei Province's series of measures for constructing a document resource co-construction and sharing guarantee system, including improving various co-construction and sharing organization management structures, establishing off-campus service points, actively conducting book delivery to rural areas and interlibrary loans, and jointly compiling union catalogs.

3.3 Research on Structural Models of Document Information Resource Guarantee Systems

To meet construction needs, guarantee systems should have rational and efficient organizational structures. Structural research primarily includes center-based guarantee principles within levels and vertical/horizontal collaboration across guarantee system levels, with the research framework shown in Figure 2 [Figure 2: see original paper].

3.3.1 Vertical and Horizontal Inter-level Guarantee Research on vertical and horizontal collaboration across document information resource guarantee system levels includes three aspects: administrative region-based horizontal guarantee, professional system-based vertical guarantee, and multi-level networks combining vertical and horizontal dimensions. Administrative region-based horizontal guarantee connects geographically proximate document institutions to improve guarantee efficiency. Wu Weici et al. [29] proposed constructing regional document information resource guarantee systems based on regional library alliances. Xiao Ximing [2] proposed a three-level network structure comprising regional, area, and national document resource networks. Professional system-based vertical guarantee connects document institutions within the same professional or industry system to reduce redundancy, overload, and repetitive construction in document resource development. From a national perspective, both geographical and professional system dimensions should be combined to construct China's vertical and horizontal collaborative document information resource guarantee network. Wang Cuiping et al. [6] proposed forming multi-level networks through national horizontal collaboration networks, professional system vertical collaboration networks, and regional horizontal collaboration networks. The vertical and horizontal inter-level guarantee model enables inter-level flow of document resources, avoids duplication and waste, and improves utilization efficiency.

3.3.2 Center-Based Guarantee Structure This research clarifies the management model where document guarantee centers serve as management bodies to uniformly manage document guarantee institutions, as well as the rights, responsibilities, and functions of guarantee centers and institutions. Document guarantee centers uniformly establish cataloging standards and coordinate resource allocation and sharing. Yang Peichao [30] believed that various libraries, information, and archival societies at different levels should first be united to establish cross-system academic research and collaboration institutions at different levels, thereby creating necessary organizational guarantee bodies. Lin Zheng et al. [31] argued for establishing a national macro-guidance center for document resource guarantee services to accelerate integrated construction of national document information guarantee and services. In the structural model of document information resource guarantee systems, document guarantee institutions and guarantee centers undertake different functions and roles.

3.4 Research on Resource Construction and Services of Document Information Resource Guarantee Systems

Document information resource construction and services constitute the core content of guarantee systems. This research dimension primarily includes five key components: document institution collaboration, document resource procurement, document resource storage, document resource organization, and document resource services. Document guarantee institutions and guarantee centers, as the most important system components, play significant roles in re-

source acquisition, organization, and storage stages, ultimately providing guarantee functions to users. The specific research framework is shown in Figure 3 [Figure 3: see original paper].

3.4.1 Document Information Resource Construction Document information resource construction revolves around acquisition, organization, and long-term preservation. At each stage, document guarantee institutions and guarantee centers undertake different functions and roles. Document institution collaboration represents an important manifestation of the center-based guarantee principle. Establishing interlibrary loan, co-construction and sharing, and inter-institutional collaboration mechanisms constitutes the core of document institution collaboration, emphasizing improved efficiency in document resource construction and utilization through strengthened disciplinary collection layout and coordinated construction, and rational resource allocation to promote sharing.

In document acquisition, scholars have proposed general acquisition standards based on document information resource characteristics, including user demand, resource content, convenience of use, operating environment, cost-effectiveness, and follow-up services [32-33]. They also noted that guarantee centers need to formulate overall document resource layout plans and unified procurement coordination plans, while guarantee institutions should focus on key discipline construction and characteristic document procurement. In recent years, monopolies by foreign data providers have become prominent, posing significant challenges to China's document information resource guarantee. Li Mingli [34] argued that libraries should unite to increase integration and utilization of open access resources, strengthen interlibrary cooperation, build worldwide library alliance service systems, and reduce excessive dependence on database products.

In document resource organization, establishing unified co-construction and sharing, retrieval, and navigation platforms is crucial. Developing standardized cataloging formats and building characteristic resource databases are key construction tasks for both guarantee centers and institutions, with improving document resource revelation quality and strengthening resource integration becoming recent research priorities. Wei Min [35] noted that rapid internet development will drive continuous innovation in document resource organization methods, with document information resource organization rapidly developing toward interdisciplinary integration and intelligent semantic organization. With the dramatic increase in network information, technology plays a critical role in large-scale resource organization, requiring new network information organization methods such as ontology, integration and fusion, and information architecture to meet users' increasingly personalized and specialized retrieval needs.

In document resource storage, establishing long-term effective preservation mechanisms is fundamental. Chu Jingli et al. [36] pointed out that China's document information resources currently develop primarily through coexisting

print and digital resources, with priority development of digital resources being the trend. Wang Ruolin et al. [37] believed that long-term preservation of document information resources requires extensive cooperation, including developing unified cooperative preservation plans, strategic planning, and risk management, establishing a principal responsibility system, clarifying division of labor among preservation entities, conducting centralized storage and backup for characteristic key resources, and establishing specialized storage repositories for older resources.

3.4.2 Document Information Resource Services Scholars generally agree that document information resource guarantee systems should be one-stop document resource service platforms, with services including: joint online reference consultation, specialized document information services, joint retrieval and navigation and delivery, sci-tech novelty search services, and interlibrary loan [38]. Dai Longji et al. [39] noted that modern technology has greatly changed traditional service processes and methods, not only improving traditional service items but also adding new content, such as enhancing purchasing power, especially for electronic resources, through institutional collaboration, sharing costs, and jointly owning electronic database usage rights. Zhang Bin et al. [40] believed that cloud computing technology can integrate dispersed and heterogeneous information resource systems, creating cloud computing platforms to achieve resource sharing and substantially improve information service institutions' knowledge service capabilities through construction of specialized databases, domain knowledge organization systems, and data centers. Zeng Jianxun et al. [41] pointed out that the National Science and Technology Library and Documentation Center needs to shift from focusing on resource construction and document retrieval services to digital information services in the internet environment.

4 Discussion and Outlook

This paper systematically analyzed 532 documents related to document information resource guarantee systems, summarizing domestic academic research and identifying four research dimensions: macro-environment, system construction, structural model, and resource construction and services. However, the above research framework summary was developed under traditional historical contexts and cannot be fully applicable for guiding the construction of China's document information resource guarantee systems in the new era. Era development has brought numerous impacts to document information resource guarantee systems. The following sections analyze existing research deficiencies, identify directions for improvement, and highlight valuable future research directions.

4.1 Macro-Environmental Dimension of Document Information Resource Guarantee Systems

Current problems can be summarized as uneven distribution and varying guarantee capabilities of China's document information resources due to geographical and policy environmental factors, with different guarantee needs across different social development stages. China's document information resource guarantee needs have risen to national strategic importance, with new requirements proposed for document information resource guarantee systems from economic, political, cultural, and national security perspectives. For example, initiatives like the "Belt and Road," "Beijing-Tianjin-Hebei Coordinated Development," and "Yangtze River Economic Belt Development" require comprehensive support from national document information resources. Therefore, strengthening the construction of key regional document information resource guarantee main bodies is necessary. For these economic development belts, representative libraries can be selected to jointly establish regional library alliance centers that conduct overall layout and coordination, creating interlibrary cooperation mechanisms to collectively promote development progress.

At the policy research level, corresponding guarantee measures and policies for different main bodies need to be formulated. Different main bodies should be studied in a segmented manner regarding their characteristics and tasks. For example, libraries can be categorized as university libraries, primary and secondary school libraries, public libraries, and government agency reference rooms. Different document information resource carriers, such as academic journals, books, electronic documents, and databases, should undergo corresponding review and evaluation following non-profit and guiding principles to address market monopolies and uneven distribution through policy and regulation formulation. Future research should focus on incentive policies for document information resource construction and sharing, exploring industry and market self-discipline feasibility based on market demand and resource utilization effects, and discussing methods for free sharing and vitality stimulation of document information resources from macro policy perspectives.

4.2 System Construction and Structural Models of Document Information Resource Guarantee

Stable operation of document guarantee organizations relies on technical support and economic maintenance. To achieve document information resource co-construction and sharing and reduce technical barriers, research on relevant technical parameter standards must be strengthened, such as information resource upload, image processing, and data exchange. Simultaneously, research should examine supporting funds for document information resource construction and utilization, including allocation, use, and evaluation mechanisms. Given the high investment and long construction time for sci-tech literature co-construction and sharing, special funds that government should support for infrastructure construction and normal operation maintenance need evalu-

ation, exploring advantages and disadvantages of market economy and social capital introduction to achieve sustainable funding and long-term system operation.

Regarding structural models, current research primarily constructs organizational models from the perspectives of document guarantee centers and institutions. This paper argues that document information resource guarantee systems are dynamic equilibrium open systems that can be divided into four levels in the new era: individual document information resource guarantee level, population document information resource guarantee level, community document information resource guarantee level, and national document information resource guarantee level, each with corresponding horizontal coordination organizations, collectively forming the hierarchical structure of document information resource guarantee systems. Consequently, future research needs to examine how these main elements exchange information, documents, and value through document information resource guarantee platforms from a horizontal perspective, and how each level coordinates and jointly guarantees from a vertical perspective.

4.3 Resource Construction and Services of Document Information Resource Guarantee Systems

In document resource construction, current main problems include redundant construction, lack of long-term effective preservation mechanisms, and absence of unified standards in resource organization. For example, duplication waste exists between master's and doctoral thesis databases and CNKI, university institutions, and CALIS, with various institutions and organizations unable to unify cataloging standards, causing sharing difficulties. Existing research on document resource acquisition, organization, and storage defines document resource scope relatively narrowly, excluding living memory resources, scattered literature resources, and internet platform resources from document guarantee system construction scope. Future research should address how to cover cross-system document resource construction including internet platform resources, how to achieve large-scale collection of important cultural heritage resources such as living memory and scattered literature resources, and how to ensure reliable use and sustainable utilization of document information resources and develop unified standards for semantic integration of document resources using machine learning and artificial intelligence technologies.

In document resource services, besides traditional specialized document services, online retrieval, and interlibrary loan, personalized and intelligent services represent future development trends. Currently, interdisciplinary integration has become the primary organizational approach for modern scientific research originality innovation. Under this background, how to use technological means to deeply mine intrinsic value of document resources and provide interdisciplinary and cross-disciplinary integrated document services will become key research content. Simultaneously, attention should be paid to document information resource consumption, which represents the ultimate purpose of document infor-

mation resource guarantee. Document information resource guarantee systems should not be limited to satisfying users' document information resource needs but should also guide document information resource consumption in combination with consumption scenarios. Future research should consider how to comprehensively portray user profiles from temporal and environmental dimensions by combining situational factors where users are located, providing precise value-added document information services.

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Author Contributions:

Xia Lixin: Conceived the topic, proposed the research framework, and finalized the manuscript;

Zhou Ding: Collected and analyzed data, wrote and revised the manuscript;

Qin Xiaoqi: Processed data and revised the manuscript.

A Review on Document Information Resources Guarantee System in China

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Abstract: [Purpose/significance] The importance of the document information resource guarantee system has aroused increasing attention from the academic community, but there is currently a lack of systematic review of research results. This paper reviews the relevant research on China's document information resource guarantee system and points out the direction for further research. [Method/process] Using grounded theory research methods, this paper conducts coding analysis on the research content of original literature and explores the research progress of China's document information resource guarantee system in the new era. A total of 129 primary codes and 14 categories were obtained, and 4 research topics were extracted. The paper discusses the deficiencies in the research on document information resource guarantee systems and proposes feasible future research directions. [Result/conclusion] The study of macro-environmental dimensions should be combined with the characteristics of the current new era, and the main body of document information resource construction needs to be strengthened; the study of system construction and structural models needs to discuss the flow and transmission of document information between various guarantee levels, and provide relevant technical parameter standards to achieve the co-construction and sharing of document information resources; in terms of resource construction and services, it is necessary to solve the problems of long-term preservation and sustainable utilization, and guide and promote users' document consumption through technical means.

Keywords: document information resources; guarantee system; grounded theory; research framework

Note: Figure translations are in progress. See original paper for figures.

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