Comparative Analysis of Library Knowledge Services and Publishing Knowledge Services: Postprint

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Abstract

[Purpose/Significance]Knowledge service represents both the core capability and key trend for libraries, as well as a focal content and business direction for publishing institutions. In the digital intelligence era, investigating the similarities and differences between knowledge services in libraries and publishing organizations constitutes a strategic imperative for mutual influence, learning, support, and integration between these two domains. [Research Design/Methods] Employing literature review, bibliometric analysis, and comparative analysis, this study investigates and synthesizes relevant domestic and international literature. Based on the actual development status of knowledge services in both fields, it analyzes the similarities and differences between library knowledge services and publishing knowledge services across six dimensions: research hotspots, transformation background, service subjects and objects, service models, service content, and service products. [Conclusions/Findings] Library knowledge services emerged earlier, while publishing knowledge services have developed more rapidly. The two will not replace each other, but will continuously innovate their knowledge service models through market coopetition, strengthen their respective advantages, and achieve win-win collaboration. [Innovation/Value] By utilizing bibliometric methods to analyze the similarities, differences, and future research trends of library and publishing knowledge services, this study offers reflections and recommendations to provide references for accelerating the collaborative development of both fields.

Full Text

Comparative Analysis of Library Knowledge Service and Publishing Knowledge Service

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Abstract

[**Purpose/Significance**] Knowledge service represents both the core capability and key trend for libraries, while also constituting a major focus and business direction for publishing institutions. In the digital intelligence era, exploring the similarities and differences between knowledge services in libraries and publishing organizations is a strategic necessity for mutual influence, learning, support, and integration between these two fields.

[**Research Design/Methodology**] This study employs literature investigation, bibliometric analysis, and comparative analysis to examine relevant domestic and international literature, summarizing findings based on the actual development of knowledge services in both domains. The analysis compares library knowledge service and publishing knowledge service across six dimensions: research hotspots, transformation background, service subjects and objects, service models, service content, and service products.

[**Findings/Conclusion**] Library knowledge service started earlier, while publishing knowledge service has developed more rapidly. The two will not replace each other but will instead continuously innovate knowledge service models through market competition and cooperation, strengthening their respective advantages to achieve win-win outcomes.

[**Innovation/Value**] Using bibliometric methods to analyze the similarities, differences, and future research trends of library and publishing knowledge services, this paper offers reflections and recommendations to provide reference for accelerating collaborative development between the two fields.

Keywords: Library; Publishing field; Knowledge service; Research hotspots; Development trends

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1. Introduction

Both libraries and publishing institutions belong to knowledge-intensive service industries and represent important centers for cultural and knowledge aggregation. They need to play greater roles in national innovation development,

with knowledge service serving as the primary vehicle for this expanded impact. The Outline of the 14th Five-Year Plan for National Economic and Social Development and Long-Range Objectives Through 2035 proposes adhering to innovation-driven development, improving public cultural service levels, and advancing cultural inheritance and publication of Chinese classics. In this context, libraries and publishing organizations must transform from internal document processing workflows to user-oriented knowledge service provision.

Driven by AI technology, natural language processing, and big data, new knowledge service models integrating content creation, production, dissemination, and application have become core businesses for new-generation libraries and publishing institutions, demonstrating a natural convergence between the two fields. However, their understanding and practice of knowledge service exhibit both commonalities and differences. Currently, domestic research on knowledge service primarily concentrates in the library and information science domain (referred to as "library knowledge service"), though the publishing field also attaches great importance to "knowledge service" (termed "publishing knowledge service").

This study examines literature from the past decade (January 1, 2011–August 10, 2021) on both library knowledge service and publishing knowledge service in CNKI's core journal database. After removing articles clearly unrelated to the research theme, 599 relevant records were retrieved and analyzed using bibliometric visualization methods.

2. Concept Definition and Research Hotspot Analysis

2.1 Library Knowledge Service With continuous development in computer, network, and AI technologies, libraries are leveraging big data, cloud computing, ontologies, IoT, and artificial intelligence to advance services toward automation, integration, intelligence, visualization, and ecological development. Service content has shifted from simple document provision to delivering information, data, knowledge, and wisdom. Service models have evolved from traditional literature services, information services, and intelligence services toward data services, think tank services, and smart services. Libraries are transitioning from basic literature services to new knowledge services, including embedded subject services, knowledge consulting, intelligence analysis and research, data management and services, library publishing and publishing services, think tank research and services, and intelligent and smart services. These services directly address user needs and processes, representing value-added services with knowledge and creativity, collectively termed "library knowledge service."

As important institutions in material and spiritual civilization, libraries have achieved coordinated development in concepts, technologies, equipment, and professional skills to meet new-era social demands. Driven by emerging information technologies and new user needs, libraries are shifting from literature information services to higher-level knowledge services. Corresponding to docu-

ment services, library knowledge service provides users with knowledge solutions integrated into frontline work and embedded in processes—a new service model relying on librarians' intellectual labor to deliver value-added services for researchers and institutions in the new era.

Research Hotspots and Trends: Bibliometric analysis reveals 19 keywords from 2011–2021. The strongest burst word is "smart library" (strength = 3.15, beginning 2019). Following the big data surge in 2015, libraries rapidly advanced toward "intelligent transformation." Research hotspots evolved from knowledge management and service capabilities (since 2012) to subject-specific knowledge services. Application scenarios like "smart libraries" and "public libraries" are becoming popular, indicating the transition from theory to multi-dimensional practice.

2.2 Publishing Knowledge Service Luo Zichu defined publishing as the process of mass-replicating refined knowledge information products on physical carriers for wide dissemination. In traditional print publishing, scholars transferred manuscript rights to publishers for editing, design, typesetting, printing, and distribution. However, the digital era has fundamentally transformed publishing operations, with internet development empowering the field further. Research on publishing knowledge service has grown exponentially since 2011.

Publishing knowledge service is user-demand-oriented, employing information technologies and analytical tools to conduct granular indexing of digital publications. It associates, mines, and analyzes stored knowledge content at the knowledge unit level to provide in-depth, value-added solutions meeting users' intrinsic needs. This study focuses on academic publishing knowledge services provided by academic publishing institutions.

Research Hotspots and Trends: Keyword clustering analysis of 2011–2021 literature reveals three main areas: background and status research, application and technology research, and development and trend research. Background studies focus on "knowledge-intensive service industries,""digital publishing services," and "industrial structure." Application and technology research centers on digital publishing and academic publishing, with high-frequency terms including "educational publishing," "digital publishing platforms," and "publishing mechanisms." Development and trend research emphasizes publishing transformation and integration, with future shifts focusing on scenario-based and personalized services.

3. Comparative Analysis of Library and Publishing Knowledge Services

3.1 Transformation Background The transformation backgrounds of libraries and publishing institutions exhibit both differences and similarities:

Mutual Influence: Library transformation is closely related to publishing model changes. Digital publishing challenges libraries while creating opportuni-

ties for them to extend into academic publishing. Libraries have evolved from physical to digital, from print to digital resources, from in-person to network services, and from resource capacity to service capacity. Conversely, library transformation pressures publishers to focus not only on publishing capacity but also dissemination, service, and reader satisfaction.

Internal Development: Libraries must move from basic to new services, directly addressing user needs and research processes with knowledge-based, creative, value-added services. Publishing institutions, whose work is essentially knowledge service, must grasp knowledge service as the core of industry transformation and profit generation.

Transformation Purpose: Both sectors aim to survive and thrive in new environments. Libraries seek to demonstrate value through new service effects, while publishers, as profit-oriented entities, prioritize benefits and efficiency. Open access has blurred boundaries between libraries and publishers, making both key stakeholders in "open publishing."

3.2 Service Subjects and Objects **Library Knowledge Service:** Institutional subjects include university and academic libraries. Individual subjects are librarians—highly educated, expert professionals who serve as partners rather than mere intermediaries, transforming into subject librarians, intelligence analysts, publishing librarians, and think tank experts. Collaborative subjects (also objects) include readers, authors, publishing personnel, publishing institutions, government, enterprises, and in universities, teaching staff, researchers, and administrators.

Publishing Knowledge Service: Institutional subjects are publishing organizations. Individual subjects include publishers, directors, editors-in-chief, editorial board members, and editors who leverage funding, technology, and resources to provide print publishing services and, in digital environments, online services. Collaborative subjects (also objects) include readers, authors, librarians, libraries, government, and enterprises.

3.3 Service Models Both emphasize user-centered, demand-oriented services based on shared knowledge resources, exhibiting integrated, personalized, professional, team-based, open, knowledge-intensive, creative, value-added, intelligent, and socialized one-stop service characteristics.

Library Models: (1) Expert knowledge service model—professional services by expert librarian teams; (2) Knowledge consulting model—extension of traditional reference services; (3) Subject-based knowledge service model—leveraging unique subject librarian systems for specialized services; (4) Collaborative innovation-driven model—partnerships with publishers and other stakeholders.

Publishing Models: Core models include platform service, knowledge payment, and value-added service models. Knowledge payment is crucial for building core competitiveness and sustainable value creation. Publishers develop ex-

cellent platforms emphasizing user interaction experience to create new revenue growth points.

3.4 Service Content Library Knowledge Service: Embedded subject services, knowledge consulting, intelligence analysis and research, data management and services, library publishing and publishing services, think tank research and services, and intelligent/smart services.

Publishing Knowledge Service: Embedded services, knowledge discovery, various publishing services (open publishing, multimedia publishing, data publishing, article-based publishing, semantic publishing), think tank research and services, and intelligent/smart services.

Both support discipline construction, research management, achievement transformation, talent development, teaching research, academic evaluation, and innovation. Content can be categorized into three levels: (1) research process-oriented services (full-spectrum from ideation to publication); (2) technology innovation-oriented services (knowledge association, mining, and fusion); (3) decision-making consulting services (trend prediction, frontier 预判, and strategic planning support).

3.5 Service Products Library Products: Conferences, research (project) reports, formal publications, knowledge repositories, and knowledge service platforms (e.g., NCBI' s biological information database, subject knowledge platforms, smart library dynamic platforms). These combine developed and purchased tools.

Publishing Products: Print books/journals, research reports (e.g., "Blue Books"), knowledge repositories, platforms, Q&A platforms, and subscription platforms (e.g., "Ultrasound Pocket Treasure" developed by Scientific and Technical Documentation Press). These emphasize proprietary technology implementation.

Both sectors have developed mobile platforms (e.g., "China Science News," "Chaoxing Learning App"), enabling anytime, anywhere access to resources and integrated services.

4. Relationship Dynamics

The two services exhibit "co-opetition" —both competition and cooperation. Publishing tools can 介入 intelligence analysis (traditionally library work), while libraries develop institutional repositories and preprint systems (traditionally publishing work). In competition, libraries must recognize 忧患意识; in cooperation, they should leverage publishers' resource foundations. Publishers' powerful resources enhance libraries' service capabilities, while libraries' organizational advantages and professional teams complement publishers' funding and copyright management strengths.

Both are essential components of the academic communication system—neither can replace the other. They should strengthen cooperation, build a community of shared destiny, enhance core capabilities, and focus on user experience and service effectiveness.

5. Thoughts and Recommendations

For Libraries: Strengthen personalized knowledge service functions by extending boundaries and enhancing visibility in the academic ecosystem. Adopt a "doctor consultation model" where experts provide scheduled consultations, with unified evaluation standards and rating systems for libraries and experts.

For Publishers: Follow a development path of "digital publishing methods —networked dissemination—intensive operations—knowledge-based platform capabilities—satisfactory user experience." Transform from editing and publishing to knowledge service as the core competence.

For Collaboration: Establish alliances like the "Science-Technology Publishing and Knowledge Service Application Alliance" to jointly develop platforms and create a knowledge service ecosystem connecting industry supply and demand sides. Libraries and publishers should integrate resources and technologies to achieve mutual benefit and collaborative innovation.

6. Conclusion

Digital revolution has fundamentally changed knowledge acquisition. Traditional libraries and publishing institutions continuously provide new service models and innovate knowledge services, which will remain their long-term focus. With organizational advantages and professional teams, libraries can embed in research processes; with resource and funding advantages, publishers can solve copyright issues and mobilize social forces. Strengthening cooperation while competing will maintain ecological balance in the knowledge service system and promote collaborative development.

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Author Contributions

Chu Jingli: Proposed research proposition, overall research framework, and revised the paper.
Ren Jiaohan: Drafted and revised the paper.
Wang Jue: Conducted literature visualization and research hotspot analysis, and revised the paper.

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