

A Comparative Analysis of Reference Alliances in Domestic and International Library Communities

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Abstract: Reference is one of the basic core services of libraries, and numerous reference alliances have been established in the library community at home and abroad to better promote the service development. Based on the basic objectives and actual scope of work of reference alliances, this paper divides them into three types of literature sharing, librarian sharing, and intelligence sharing, makes a detailed elaboration and comparative analysis of typical alliances of each type, and puts forward thoughts and suggestions for the subsequent development of domestic reference alliances.

1. Introduction

With the development and popularization of the Internet, digitization, and smart libraries, there is a growing contradiction between the exponential increase in the volume of scholarly information and the difficulty for readers to access precise information. This presents higher demands for library reference and consulting services. In the information age, as the demand for reader information consultation continues to grow, it is challenging for any single library institution to shoulder this tremendous workload. Moreover, the development of reference and consulting services in public libraries across the country is highly uneven, with significant disparities between different institutions.

To address the aforementioned contradiction, it is crucial to fully leverage the leading and exemplary roles of libraries with distinct advantages and core functions. They should make full use of their own resources and service features and, based on this foundation, engage in collaboration within the industry. Establishing an alliance for library reference and consulting services would enhance the sharing of document resources, librarian resources, intelligence resources. Through these efforts, continuous improvement of their professional competence and service quality can be achieved, ensuring that the overall level of reference and consulting services keeps pace with the times.

2. The Significance of Reference and Consulting Services for Libraries

Samuel Green depicted the initial concept of library reference and consulting in 1876, which involved assisting readers with their inquiries and guiding them in utilizing library resources.

Currently, within the academic community, the definition of reference and consulting services that enjoys high acceptance in China is articulated by Qi Zhifen in his work "Reference Work and Reference Tools" as follows: "Reference work is a service provided by the library to readers. It takes objective social needs as its impetus, uses literature as its bond, and through various means, collects, stores, retrieves, reveals, and disseminates information for readers." [1]

Reference and consulting services are one of the core functions of libraries, aiming to provide consultation services to readers through effectively and systematically revealing literature information, recommending information resources, and resolving contradictions in library collections. Initially, this service heavily relied on the personal experience and knowledge of librarians. However, with the development of the library profession, the scope of reference and consulting services has continuously expanded, evolving into a specialized mode of reader service and assuming an increasingly important position in the field of reader services. I.G. Mudge, a renowned American librarian, pointed out that reference and consulting services have a significant impact on the reputation and social value of libraries. By meeting readers' needs for information and knowledge acquisition, improving service quality, and enhancing user satisfaction, this service contributes to elevating the library's image and reputation in society. Therefore, reference and consulting services have become one of the hallmarks of modern libraries and have garnered ample attention from the library community and society at large.

3. Reference Alliances in Domestic and International Library Communities

This article categorizes successful and influential library reference and consulting alliances, both domestic and international, into three major types based on three dimensions: document resources, librarian resources, and intelligence resources. It provides a detailed exposition and comparative analysis of these categories.

3.1. Document Resource Sharing-Focusing on literature, with the aim of resource co-construction and sharing

The earliest reference and consulting alliances, both domestic and international, were primarily established with the goal of co-constructing and sharing document resources. The objective was to maximize resource utilization, achieve equality in terms of resource availability, and alleviate the constraints posed by limited resources, which hindered the improvement of service levels.

3.1.1. CALIS (China Academic Library & Information System)

CALIS was established in 1999 under the leadership of the Ministry of Education and approved by the State Council. It is one of the three public service systems in China's higher education "211 Project", "Ninth Five-Year Plan", and "Tenth Five-Year Plan". CALIS assists university libraries in transitioning from individual development to a model of "collaboration and overall support" in terms of document resource construction. It aims to establish an integrated system for the joint provision of educational literature, with the Chinese Higher Education Digital Library at its core. The goal is to achieve collaborative construction, shared knowledge, and resource sharing. CALIS has become one of the most important document support systems in the library field [2]. Based on this foundation, various regions have established regional document support systems, such as BALIS (Beijing Area Libraries Information System) and TALIS (Tianjin Academic Library & Information System), among others.

3.1.2. NSTL (National Science and Technology Library)

NSTL is a non-profit scientific and technological literature information service institution established on June 12, 2000, with the support of six ministries, including the Ministry of Science and Technology and the Ministry of Finance. It operates on a network-based, nationwide platform. Following the principles of "unified procurement, standardized processing, collaborative networking, and resource sharing," NSTL acquires, collects, and develops scientific and technological literature resources in various disciplines such as science, engineering, agriculture, and medicine. It provides scientific and technological literature information services nationwide, promoting the collaborative construction and sharing of scientific and technological literature information across the country [3].

3.1.3. OCLC (Online Computer Library Center)

Founded in 1967, OCLC is one of the largest library consortia in the world. Comprised of over 30,000 member libraries from more than 100 countries, OCLC is dedicated to facilitating library connections, resource sharing, and collaborative development to enhance the accessibility and usability of information. OCLC's products are designed to enable data sharing and streamline workflows. For example, the WorldShare system automates interlibrary loan borrowing and lending, allowing libraries to efficiently handle interlibrary loan requests. Additionally, the FirstSearch retrieval system provides access to over 70 databases, covering a wide range of subjects and disciplines that span various aspects of social life. Currently, OCLC processes over 40,000,000 search requests daily, demonstrating its extensive influence and significance on a global scale [4]. OCLC's products and services have elevated service levels and user satisfaction in libraries worldwide, while fostering cooperation and the sharing of information resources among libraries.

3.2. Librarian Resources Sharing-Serving Readers through Online Collaborative Consultation

Based on literature research, the development of the internet has facilitated the emergence of online reference consultation. However, this has also led to the increasing contradiction between the multitude of online consultations and the insufficient number of librarians, their limited expertise, and inadequate access to literature resources. The online reference consultation services provided by different libraries possess complementary advantages, allowing them to learn from each other, share experiences and resources, thereby enhancing service levels and user experiences. In order to achieve resource sharing and provide comprehensive services, various regions across the country have created collaborative digital reference service platforms (CDRS) with distinctive features.

The CDRS platform is a reference consultation service platform jointly maintained and used by multiple libraries. It offers services such as literature retrieval, remote document delivery, and knowledge consultation. Users can submit consultation requests through the CDRS online platform, and professional personnel engaged in reference consultation from alliance libraries provide the services. CDRS enables high-level sharing of information resources, technological equipment, and human resources, aiming to construct a more comprehensive and efficient reference consultation service platform. Additionally, CDRS provides a wider range of reference consultation service formats, better catering to the diverse needs of users [5].

3.2.1. Online Collaborative Knowledge Navigation Platform

In 2001, Shanghai Library launched the first CDRS platform in China as an innovative initiative to promote and implement library reference consultation services in the digital age. To construct

this platform, Shanghai Library collaborated with experienced experts from local public, scientific research, university, and some overseas libraries to jointly develop the reference consultation service system. This system revolves around subject experts with professional backgrounds, aiming to provide high-quality professional reference and knowledge navigation services to professionals, technical experts, and researchers. These services include specialized consultations, detailed knowledge inquiries, research topic assistance, and decision-making consultations. Within this system, users can submit consultation requests and receive services from professional personnel engaged in reference consultation from alliance libraries.

Shanghai Library's CDRS platform not only harnesses the expert resources within the library community but also collaborates with experts from society, resulting in complementary advantages in terms of resources and expertise. It has gained wide recognition and positive feedback from users and the community, serving as a successful case in library reference consultation services [6].

3.2.2. National Library Reference Consultation Alliance

The predecessor of the National Library Reference Consultation Alliance was the "United Reference Consultation Network," initiated by Guangdong Provincial Zhongshan Library in 2005. It took the lead in establishing collaborations with over 40 public libraries from 16 provinces and cities, including Fujian, Guangxi, Tianjin, Changchun, Shandong, and more. The platform has built the first unified catalog covering library resources of various types nationwide. It possesses the largest-scale Chinese digital resource pool in the country, with a metadata total of 760 million items (volumes) and 360 member libraries, including public, educational, and research libraries. Over 1,200 consulting librarians actively participate, making it a truly free and efficient document resource service platform serving the entire society. The platform supports multiple consultation methods, such as online form inquiries, real-time online consultations, and telephone consultations, primarily focusing on document delivery services [7]. By the end of 2020, it had answered over 21 million inquiries of various types and delivered over 24 million documents, receiving wide acclaim and praise from readers and library colleagues alike [8].

3.2.3. SpringShare LibAnswers

SpringShare LibAnswers is a reference consultation service platform that evolved from Question Point, a global cooperative reference service system co-founded by the Library of Congress and OCLC [4]. Through close collaboration among member libraries, it aims to provide readers with a broader, more convenient, and higher-quality service experience. As stated on the official website of the system, "In the past we had virtual reference services scattered through different systems. LibAnswers makes it easy by putting them all one place. Even better, it allows us to collect and analyze data on all our reference services to inform decision-making [9]."

3.3. Intelligence resources sharing-aims to enhance professional competencies and capabilities within the industry

Reference librarians should be knowledgeable about resources and tools, possess advanced search techniques, and have the ability to extract and process information effectively. With the widespread adoption of the internet, digitization of literature, and data-driven approaches, the field of reference consultation faces both significant challenges and opportunities. Continuous learning and training are essential for reference librarians to improve their skills, optimize service offerings, and adapt to the evolving landscape.

Recognizing these circumstances, collaborative alliances have been established both domestically and internationally to cater to the reference consultation industry. These alliances

engage in activities such as organizing professional training, developing business guidelines, sharing intellectual achievements, and strengthening librarians' professional skills. By facilitating the rational distribution of reference consultation services among member libraries and collectively elevating the overall quality of the industry's reference consultation services, these alliances contribute to the advancement of the field.

3.3.1. RISS (Reference and Information Services Section)

The International Federation of Library Associations and Institutions (IFLA) Reference and Information Services Section, established in 2001, serves as a platform for discussing various aspects of reference consultation work in libraries worldwide. This professional group regularly develops strategic plans to enhance the global standards of reference consultation and provide assistance to reference librarians in delivering high-quality services [10].

One notable contribution of the section is the publication of the "IFLA Guidelines for Digital Reference Services." This comprehensive resource includes a chapter on "Service Management," covering topics such as rules and policies, staffing, training, interface design, and legal considerations related to digital reference services. Another chapter, "Conducting the Work," provides specific guidance on chat-based question and answer services, including content, workflows, techniques, and important considerations [11].

The guidelines are highly practical and offer valuable insights and examples for libraries worldwide engaged in digital reference services. They serve as a useful reference and demonstration of best practices, providing guidance for effective implementation and improvement of digital reference consultation services globally.

3.3.2. RUSA (Reference and User Services Association)

The American Library Association (ALA) division responsible for reference and user services is commonly known as the Reference and User Services Association (RUSA). Its primary responsibility is to facilitate and support all types of libraries in providing reference consultation and information services to diverse user groups, with a focus on enhancing the comprehensive skills of reference librarians. To effectively fulfill its mission, RUSA has developed and published numerous standardized documents that provide valuable guidance for the implementation of reference consultation services in libraries of all levels and types.

For instance, the "Professional Competencies for Reference and User Services Librarians" offers a clear definition of reference librarians and outlines seven specific competencies they should possess [12]. Each competency is described and detailed extensively. The "Guidelines for Behavioral Performance of Reference and Information Service Providers" provides specific definitions of behaviors that reference librarians should adopt during the process of delivering consultation services [13]. This guideline emphasizes five aspects: visibility/accessibility, interest, listening/inquiring, searching, and follow-up, all of which establish standards of conduct for reference librarians, aiming to enhance the quality of consultation services and improve user satisfaction. Additionally, RUSA has developed several other documents such as the "Guidelines for Implementing and Maintaining Virtual Reference Services" [14], "Guidelines for Cooperative Reference Services", and "Measuring and Assessing Reference Services and Resources: A Guide". These guidelines collectively play a vital role in guiding the implementation of reference consultation services and the assessment of their effectiveness within library settings.

3.3.3. Collaborative Reference Services (referred to as the "CRS")

CRS is a service platform established by the Reference Services Department of the National Library. It is dedicated to providing a communication platform, professional training, and service support for reference librarians in libraries across the country, using the Public Digital Cultural Project as its foundation. The goal of the Collaborative Network is to strengthen the professional skills of reference librarians nationwide, promote standardization and standardization of reference services in libraries, and foster collaboration and cooperation within the industry. By exchanging and promoting experiences in library reference services, it aims to enhance the awareness and capabilities of information services in Chinese libraries.

CRS facilitates information exchange among member institutions through its website, public accounts, and contact groups. It has also developed a systematic training framework consisting of three forms: work training, professional training, and research training. Work training aims to summarize and plan the annual work of the Collaborative Network, foster collaboration through exchange and sharing, and promote the healthy development of library reference services nationwide. Professional training is divided into three levels, targeting library directors, reference service supervisors, and experienced reference librarians. It covers various aspects of reference services, starting from an overall design and classification introduction, and progressing to specialized training, gradually deepening participants' understanding. Research training involves hands-on experience, allowing participants to provide practical solutions to specific reference queries, combining theory with practice.

Since its establishment in 2013, CRS has been leveraging the expertise and exemplary cases of the Reference Services Department of the National Library, as well as the thematic reports from industry experts and the sharing of service practices from local libraries. It is committed to enhancing the professional skills of reference librarians in local libraries, diversifying the forms of reference services, promoting excellent reference sources and tools, and staying abreast of the latest development trends. Through these efforts, it aims to elevate the overall level of reference services in public libraries throughout China.

4. Thoughts and Suggestions

4.1. Service is narrow, requires an urgent transformation and upgrade

The current state of reference consultation services in the domestic library alliance, mainly the Chinese Digital Reference Service (CDRS), is in need of transformation and upgrade. While the platform handles a significant volume of online consultations, the majority of inquiries are still focused on document delivery. However, there is an urgent need to transition from simple literature-based consultations to knowledge-based services centered around literature content. This shift is essential to provide users with knowledge processing products, which will elevate the value and impact of reference consultation services. It is important to note that this transition will also increase the difficulty and complexity of consultations, placing higher demands on the capabilities of reference librarians.

As the leading reference consultation alliance in the country, it is crucial to actively promote the knowledge consultation services offered by the platform. This will enable the wider public to genuinely comprehend that the scope of library reference consultation extends far beyond document delivery and encompasses a diverse range of services such as specialized consultations, fact inquiries, technological research, thesis searches, citation analysis, public sentiment monitoring, and decision-making support. Furthermore, it is essential to prioritize comprehensive training programs for library staff to enhance the overall service quality of reference consultation in public libraries

across the nation. This will empower more library staff members to successfully handle the challenges associated with complex consultation services.

4.2. Building Reference Knowledge Bases through Typical Cases

Imitation is the best way to get started, and consulting case studies serve as excellent training materials. The Collaborative Reference Database (CRD) in Japan, led by the National Diet Library, is a joint database constructed based on daily reference consultation records from libraries across the country. It was implemented in April 2005 and had 567 participating libraries as of 2012. The database includes 80,622 reference examples, 7,862 usage instructions, 375 special collections, and profiles of 567 member libraries, totaling 89,426 logged data entries. The average monthly access is around 600,000 times, playing a significant role in the industry [15].

The domestic library community should learn from this experience and establish a reference consultation knowledge base based on the mature consulting case studies of the National Library and other experienced local libraries. It is crucial to encourage and attract other libraries to submit case studies and timely update the industry with service experiences, work techniques, and other valuable information (such as the selection and use of information sources and tools, communication skills with users, etc.). This will promote the sharing of cases, knowledge, and experiences within the industry.

4.3. To enhance Collaboration and improve the Cooperative System within the Alliance

To address the overall planning and organization of the domestic reference consultation alliance, it is important to explore the feasibility of integrating the existing mature systems, such as the literature resource assurance system, collaborative online consultation platform, and the national library reference consultation collaboration network. This integration aims to achieve a true fusion of literature resources, librarian expertise, and intellectual capabilities, thereby establishing a comprehensive collaborative framework. This framework will encompass literature resource co-creation and sharing, collective response to reader inquiries, synchronous enhancement of librarian skills, exchange of service experiences, and mutual learning from application systems. These efforts will further deepen the development of library reference consultation services and elevate the professional competence of reference librarians, ultimately providing readers with enhanced consultation services.

5. Summary

Currently, with the rapid advancement of smart library construction, new technologies such as text mining, big data, artificial intelligence, and knowledge graphs are shaping the future development of libraries. The digitization of literature is also becoming increasingly mature, leading to a new revolution in library literature resources. In this context, reference consultation services are facing significant challenges. Professor Huang Ruhua from the School of Information Management at Wuhan University once said that the essence of a smart library lies in the intelligentization of reference consultation services. It is crucial for every library to contemplate how to adapt to the new environment, create innovative forms of services, embrace the trends of the times, and highlight intelligent consultation services.

However, individual library institutions struggle to cope with such complex changes and evolving user demands. This calls for collaborative innovation among libraries, utilizing the power of alliances and drawing on advanced industry experience. Together, we can strengthen and expand the overall reference consultation services of public libraries nationwide.

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