

Strategies for National Library Enterprise Information Services in the Context of National Innovation Capacity Building: A Postprint

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Abstract

[Purpose/Significance] This study examines the enterprise information services of national libraries from the perspective of national innovation capacity building, exploring their role in supporting national innovation development. [Method/Process] Employing literature survey, web survey, case analysis, and interview methods, this study first analyzes the information service demands driven by national innovation capacity building based on the national innovation capacity evaluation system, secondly investigates the enterprise information service model of the British Library in supporting national innovation capacity building, then surveys the practical progress of China's national libraries in supporting national innovation capacity building, and finally proposes strategies for enterprise information services to support national innovation capacity building. [Results/Conclusion] The enterprise information service strategies for China's national libraries to support national innovation capacity building include conducting research on the innovation and entrepreneurship knowledge center service model, exploring enterprise information service models that support innovation and entrepreneurship, and promoting information service models that support regional innovation development across various regions.

Full Text

Preamble

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Abstract

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2. Information Services Driven by National Innovation Capacity Building

Innovation strategies drive innovation entities to continuously deepen existing information service demands or propose new ones. Libraries must closely align with the information needs of innovation entities to support innovation development and innovation information services. In the process of implementing innovation strategies and promoting innovation development, a series of national innovation capacity evaluation systems have been formed both domestically and internationally, with relatively stable evaluation frameworks and indicators. Analyzing information service demands driven by national innovation capacity building based on these systems is highly feasible.

2.1 Framework and Indicators of National Innovation Capacity Evaluation Systems

In terms of continuity and stability, three major evaluation systems currently have significant influence. First, the European Union's *European Innovation Scoreboard* (EIS) was established at the request of the European Council to compare and analyze the innovation performance of EU countries, other European nations, and neighboring countries, evaluating the relative strengths and weaknesses of national innovation systems. The EIS began trial use in 2000, with the official version released in 2001, and is published annually. Second, the United States' *Science & Engineering Indicators* (SEI) is a project guided by the National Science Foundation (NSF). Before 2002, it primarily focused on U.S. developments in science and engineering fields, but since 2004, it has covered global trends in knowledge-intensive economies and increasing global cooperation and competition. The SEI published its first report, *Science Indicators* (SI),

in 1973, was renamed SEI in 1987, and is published biennially. Third, China's *National Innovation Index* (NII) was developed according to the "Work Plan for Establishing a National Innovation Survey System" and the "Implementation Measures for the National Innovation Survey System" approved by the State Council in 2017. The NII is part of the national innovation survey system series and represents the national-level innovation capacity evaluation report. The "National Medium- and Long-Term Science and Technology Development Plan Outline (2006-2020)" explicitly proposed that China should enter the ranks of innovative countries by 2020. To monitor and evaluate this process, systematic research on national innovation evaluation indicators began in 2006. The *NII 2010* was first publicly released in 2011 and published annually, with English versions released simultaneously since 2013.

The latest versions of these three systems—EIS 2018, SEI 2018, and NII 2016-2017—show that national innovation capacity evaluation indicators involve six first-level indicators, sixteen second-level indicators, and thirty-six third-level indicators. The first- and second-level indicators are: (1) Innovation Resources (reflecting the supply capacity of innovative human resources and education/training capacity), including human resources and learning resources; (2) Innovation Environment (reflecting the external software and hardware environment for innovation activities), including facilities, industry, economy, and policy environments; (3) Innovation Investment (reflecting resource investment in innovation activities), divided into enterprise and non-enterprise categories; (4) Innovation Assets (reflecting scientific research output capacity and knowledge dissemination capacity), including scientific research output and knowledge assets; (5) Innovation Activities (reflecting enterprise innovation activities), divided into external linkages and enterprise innovation; and (6) Innovation Performance (reflecting the effects and impacts of innovation activities), including sales, employment, and energy consumption. There are some differences in the specific third-level indicators, as detailed in Table 1 .

2.2 Information Service Demands Driven by National Innovation Capacity Building

Based on these comprehensive evaluation systems, the information service demands driven by national innovation capacity building are mainly reflected in the following aspects: (1) Information service demands for innovation resource development: services needed to complete higher education, conduct scientific research, and participate in lifelong learning. Lifelong learning involves various forms of education or training, including both classroom learning and self-directed learning, general interest courses and specialized courses, pre-employment and on-the-job education, and both offline seminars and online remote learning. (2) Information service demands for innovation environment construction: services supporting information technology infrastructure and macroeconomic, industrial development, and government policy environ-

ments for enterprises or individuals engaged in innovation and entrepreneurship. (3) Information service demands for obtaining innovation investment: information and consulting services for enterprises to obtain innovation investment from different sources during their establishment and development. (4) Information service demands for obtaining and innovating knowledge: scientific research output and innovation assets themselves are information resources, and enterprises need to utilize relevant information resources to drive knowledge innovation. (5) Information service demands for conducting innovation activities: relevant information resources and services needed by enterprises in external linkages and achieving innovation. (6) Information service demands for improving innovation performance: relevant information resources and service support needed by enterprises to achieve and enhance innovation performance.

3. Analysis of the British Library's Business Information Service Model Supporting National Innovation Capacity Building

Among national libraries, the British Library is the most representative in supporting national innovation development. Since its establishment, it has defined its mission as promoting global scientific research, academia, and enterprise innovation, and has demonstrated through practice the important role of libraries in supporting enterprises and technological innovation. From the perspective of business model theory and key elements, its business information services have established a clear service positioning, explored successful service models, formed a stable client base, operated systematic service content, obtained stable funding sources, and achieved significant service results.

3.1 Direct Establishment of Service Departments Supporting National Innovation Capacity Building

Strategic planning, organizational structure adjustment, and business content innovation are three complementary aspects that collaboratively drive library innovation development. The British Library regularly analyzes its external development environment and evaluates existing services, determines strategic priorities based on its mission and vision, and formulates strategic plans to guide and promote library transformation and innovation. It also adjusts business content and reforms organizational structures according to development needs to achieve organizational goals and serve social development. Over the past decade, the British Library has consistently focused on the strategic positioning of “promoting national innovation development,” not only exploring enterprise and intellectual property information service models itself but also promoting mature service models nationwide.

3.1.1 Establishment of Business and Intellectual Property Center Under National Policy Promotion As a public institution under the Department for Digital, Culture, Media and Sport (DCMS), the British Library's

strategic planning and development direction are largely guided by national policies. Driven by new national science and technology development policies, the British Library's contribution to national development, particularly its role in supporting small and medium-sized enterprises (SMEs) through scientific and engineering information resources, has become increasingly prominent. With government support, it has gradually evolved into a gathering place for entrepreneurs, inventors, and small businesses. In May 2004, the British Library consolidated all its enterprise-related services and launched the Business & IP Centre (BIPC) project. In July 2004, the UK government's first medium- and long-term science and technology plan proposed strengthening investment in knowledge infrastructure, more effective knowledge transfer, and public service innovation to make Britain a global center for knowledge integration and diffusion, a hub for scientific and technological discovery, and a world leader in converting knowledge into new products and services, specifically mentioning the indispensable role of the British Library in building the national electronic infrastructure for research support.

Due to its successful trial operation, the BIPC project received long-term funding from the London Development Agency (LDA) in the 2005/06 fiscal year to provide world-class business and intellectual property resources for SMEs. The BIPC portal website launched in 2005, and the new BIPC center officially opened in March 2006. In 2007, it received additional LDA funding for exceeding its targets. In the 2009/10 fiscal year, to adapt to internet development, it upgraded to an interactive portal website (www.bl.uk/bipc).

3.1.2 Development of Branch Center Service Model Supporting Regional Enterprise Innovation Generally, national libraries bear the responsibility of guiding library business work nationwide. With support from government departments and partners, the British Library collaborated with public libraries to explore the BIPC branch center service model to jointly support regional enterprise innovation development. The London branch center serves as the hub of the BIPC network, responsible for developing branding and operational guidelines, guiding training programs, establishing review meeting mechanisms, and providing local training, brand building, and promotion support services for branch centers. Other branch centers carry out relevant services based on local conditions while sharing some resources and services with the London center.

In the 2010/11 fiscal year, BIPC first sought partnerships in the Newcastle area. In 2011, it collaborated with intellectual property-related departments and public libraries to explore the branch center service model. In 2013, it received support from the UK government and foundations for the "Enterprising Libraries" (EL) program. Branch centers generally operate for one year before officially opening. In the 2013/14 fiscal year, the first branch center began operations. By the 2014/15 fiscal year, six branch centers were operational, representing the first-stage success of the national library-city library cooperation model. Since

then, new regional branch centers have opened each year—two in 2016/17, two in 2017/18, and three in 2018/19. As of October 2018, 13 branch centers had been established.

3.2 Multi-Party Support for Services Safeguarding National Innovation Capacity Building

The British Library's business information service model has greatly met user needs and achieved good development, thus continuously obtaining funding from government and regional funding organizations while also receiving support from different channels of partners.

3.2.1 Government Departments as Primary Funding Sources From a funding perspective, government departments provide major professional financial support for the overall development of BIPC and, based on successful service experience, obtain continuous funding. Some institutions specifically support particular projects, such as HSBC, Barclays, and the European Regional Development Fund (ERDF). In terms of funding methods, the 2010/11 fiscal year was a “watershed year” for BIPC to explore different funding sources and cooperation methods. Phase One: From project launch and center construction, government departments provided substantial funding with good results. The 2004/05 fiscal year was invested in and operated by the British Library; from 2005/06 to 2006/07, it received LDA awards to support the purchase of enterprise service equipment and information; from 2007/08 to 2010/11, it continued to receive LDA funding due to good results achieved. Phase Two: The BIPC London center model expanded to other regions, using seed funding to leverage and combine with other funding sources to support service expansion. Starting in 2010/11, it sought different partners to jointly explore the branch center model. Phase One of the EL program from 2011/12 to 2014/15 received seed funding from the Intellectual Property Office (IPO), the Department for Communities and Local Government (DCLG), and Arts Council England (ACE). Phase Two of the EL program from 2015/16 to present receives joint investment from DCLG, ACE, and libraries.

3.2.2 Partner Support for Strategic Development and Service Promotion The British Library positioned BIPC as a collaborative project from its establishment. On one hand, it sought well-known enterprise support organizations, companies, and institutions as partners to support service promotion. On the other hand, it sought cooperation with regional city libraries to jointly explore the BIPC branch center service model. Before formal service launch, it obtained strong partner support, such as the Patent Office for project information release, ideas21, Business Plan Service for expanding user types, OneLondon, Dynamic Asian Women's Network for introducing and showcasing library resources to local enterprises, and Centa. Current partners are mainly divided into three categories: promotion cooperation such as Enterprise Europe Network created through international cooperation to promote economic growth

strategies; strategic cooperation such as Innovate UK operated by the UK Innovation Agency's Technology Strategy Board; and network cooperation such as the Institute for Small Business & Entrepreneurship (ISBE). While cooperating with the British Library, BIPC branch centers also actively collaborate with local governments, universities, funding agencies, and enterprise organizations.

3.3 Systematic Planning of Service Content Supporting National Innovation Capacity Building

Based on existing service foundations and driven by both information demands and national policies, the British Library's business information services leverage long-accumulated rich information resources and strong expert skills. They primarily target SMEs, entrepreneurs, and inventors seeking development, and jointly provide information services with regional branch centers.

3.3.1 Support Services for Innovation Resource Development and Innovation Environment Construction

Innovation resource development and innovation environment construction are basic conditions for national innovation capacity building. Libraries support innovation resource development by providing information services needed for users to complete education, conduct research, and engage in lifelong learning. As a world-renowned research library, the British Library uses its rich collections and professional skills to provide various basic support services. BIPC specifically provides information services supporting individual development: (1) Services to enhance personal employment and vocational capabilities, including university general and specialized courses, adult education applicable to service institutions, general learning courses from public service institutions, intermediate and advanced professional training applicable to different industries and professions, and information on funding channels for learning, as well as language learning such as IELTS; (2) Services to enhance personal employment information literacy, including job seeking and employment such as resume writing, job searching, interview skills, and psychological testing, and work opportunities such as professional apprenticeships, volunteering, overseas job seeking, and school management positions.

Library services supporting innovation environment construction mainly provide users with information technology infrastructure and economic and policy information resources to create an entrepreneurial environment. BIPC provides space services for individual entrepreneurship, including innovation maker spaces such as private laboratories and free office spaces such as meeting rooms. The Devon BIPC branch center has established a private laboratory providing 3D printers, laser cutters, CNC milling machines, vinyl cutters, digital embroidery machines, heat presses, printers, and other equipment, allowing users to utilize open-source community resources for digital fabrication and prototyping. Exeter Library provides free office space equipped with free WiFi, meeting rooms, bookable meeting rooms, and round rooms, while Barnstaple Library's meeting rooms also provide projectors and tea preparation areas. BIPC's eco-

conomic information services mainly include macro-level enterprise environment and market information resources, meso-level industry information resources, and micro-level company operation and management information resources. Policy information services mainly focus on intellectual property information resources and consulting regarding patents, trademarks, copyrights, and registered designs.

3.3.2 Information Acquisition and Consulting Services for Innovation Investment and Innovation Assets Innovation investment and innovation assets are important guarantees for sustainable development in national innovation capacity building. Libraries support information acquisition by organizing and managing information resources related to innovation investment. The British Library's BIPC provides information on funding sources supporting enterprise development, such as the GrantAdvisor database of funding sources from government and charitable institutions, the Northcote investment tool, and the Financial Times. It also provides organizational information supporting enterprise establishment and development, such as the Prince's Trust foundation, the New Enterprise Allowance scheme, and local business support centers like Heart of the Southwest Business Support and investment groups.

In supporting innovation assets, libraries mainly provide information resource services and consulting for scientific research output and various intellectual property-related knowledge assets. Providing scientific research output information services is a basic service of the British Library. In terms of intellectual property information services, BIPC provides free intellectual property guides, including information resources and retrieval services for registered designs, copyrights, trademarks, and patents, as well as expert consulting services generally provided by patent attorneys for innovators or service institutions and experts in trademarks, designs, and copyrights. Additionally, BIPC provides intellectual property-related consulting services to policymakers and other stakeholders. Against the backdrop of knowledge products in creative industries becoming a globally important issue, it submitted reports on new media and creative industries to the House of Commons Culture, Media and Sport Committee, and reports on digital rights management to the All Party Parliamentary Internet Group, recommending revisions to copyright in the digital age. In 2017, it also cooperated with DCMS to recommend adding content on "providing intellectual property office guides and training to cultural experts through the network" in the "Culture is Digital" policy white paper.

3.3.3 Information Services for Innovation Activities and Innovation Performance Improvement In national innovation capacity building, technological innovation is the core, and enterprise innovation activities and performance improvement are important driving forces. Libraries provide various resources, spaces, lectures, consulting, and other services to support enterprise innovation development. The British Library's support for enterprise innovation development can be traced back to the National Lending Library for Science and

Technology (NLLST), an important component at its establishment, which provided scientific literature delivery services and opened international academic journal lending services to enterprises in 1962 to support company laboratory research. It has long provided high R&D industries, professional service personnel, small and medium-sized technology enterprises, science parks, creative and media industries with expert searches, reading, document delivery, online catalogs and databases, training, literature, database licensing, on-demand photography of reference materials, and comprehensive searches and analysis of patents, technology, and enterprise literature. After 2004, the BIPC project focused on providing databases, research reports, information skills, and practical skills services for SMEs, entrepreneurs, and inventors to support new business creation, new product design, and new market development. In 2006, BIPC began providing services throughout the entire process from business plan conception to successful business creation and development. From a service target perspective, BIPC serves individuals at the conceptual stage, enterprises in preparation, and enterprises seeking development, providing a series of services for business creation, idea protection, and business development. From a service type perspective, it includes business and intellectual property resource lectures or seminars and free or low-cost consulting services. Current enterprise information resources mainly include: (1) Business and management digital reports and publications, covering business environment, market promotion, enterprise operations, leadership, personnel management, and management thinkers; (2) Free industry guides covering company creation information for various industries, small business help guides, market research and statistical databases and reports, company and industry contact guides, and web resource links.

In the process of exploring enterprise information services, BIPC has continuously tried to develop new projects and organize various activities, achieving considerable success and good reputation with partner support, forming important fixed service brands. These include: (1) Daily activities such as the “Inspiring Entrepreneurs” program launched in 2006, which invites well-known entrepreneurs and business leaders to share success stories and broadcasts live simultaneously across branch centers nationwide, becoming its flagship program; (2) Periodic activities such as the “Global Entrepreneurship Week” launched in 2007, which organizes series lectures and activities on hot topics like social enterprises and youth entrepreneurship, and the BIPC “Start-up Day” commemorative activity proposed in 2016, which invites people with business ideas to participate in free seminars, information sessions, and dialogues with well-known entrepreneurs to raise public awareness of libraries’ role in supporting enterprise development and as an important engine of economic development; (3) Regular funding projects such as the Innovation for Growth project funded by the ERDF fund in 2012 to create jobs for London’s economic development, including sub-projects Scale-ups for developing new businesses and Start-ups for newly established enterprises, and the Erasmus program for emerging European entrepreneurs, for which BIPC serves as the local commissioning agency responsible for applications.

4. Investigation of China's National Library Practice in Supporting National Innovation Capacity Building

Concurrent with the British Library's exploration of the BIPC enterprise information service model, China's National Library has also been actively using rich information resources and professional skills to provide information services supporting national innovation development. This section investigates the progress of China's National Library in providing enterprise and intellectual property services through literature surveys, web surveys, field investigations, and interviews. Basic information was collected via the web in June 2018, followed by field visits to reading rooms and service counters in July 2018, and interviews conducted in August 2018 and February 2019.

4.1 Service Departments Supporting National Innovation Capacity Building

China National Library's enterprise information services began in 1998, when the Newspaper and Periodical Information Consultation Group (Newspaper Clipping Service Center) under the Newspaper and Periodical Materials Department (ISSN China National Center) was responsible for providing information consulting services to domestic and foreign enterprises and institutions. In 2005, the Newspaper Clipping Service Center was changed to the Enterprise Information Service Center, formally proposing to provide information services to enterprises. Relying on its collection resources, it conducted public opinion monitoring, information consulting, and competitive intelligence services for enterprises. In 2008, enterprise services were transferred to the Reference Consulting Department, and the Newspaper and Periodical Information Consultation Group was changed to the Enterprise Service Group (Enterprise Information Service Center). In 2010, it was changed to the Competitive Intelligence Group, providing comprehensive monitoring and analysis services for information collection, organization, extraction, and analysis for institutional users from the perspective of meeting user needs and intelligence research, offering intellectual support for users' work development, planning, and strategic decision-making. The Reference Consulting Department also has business departments such as the Comprehensive Consultation Group, Social Science Consultation Group, Science and Technology Consultation Group, and Competitive Intelligence Group (as of February 2019).

Intellectual property services are an important service content of the National Library, provided by the Science and Technology Consultation Group using various intellectual property information resources such as patent retrieval tools to serve users' intellectual property work. To further promote intellectual property services, the Reference Consulting Department plans to establish a National Library Intellectual Property Information Service Center under the guidance of the National Intellectual Property Administration and the Ministry of Culture and Tourism to systematically plan and develop intellectual property information services.

4.2 Service Content Supporting National Innovation Capacity Building

In supporting innovation resource development and innovation environment construction, the National Library makes full use of information resources and professional skills to provide information services to help users complete education, training, and research work, particularly providing economic, industrial, and policy databases. Economic databases mainly include comprehensive databases developed by authoritative economic research institutions, such as the Macro Situation Analysis Support System, Macro Leadership Decision-making Information Support System, China Economic Network Statistical Database, State Council Development Research Network, China Economic Network, National Statistical Database, Beijing-Tianjin-Hebei Coordinated Development Database, and the Belt and Road Database. Science and technology databases mainly include scientific and technological information databases developed by the Ministry of Science and Technology and its subordinate institutions, such as the China Science and Technology Economic News Database and China Science and Technology Information Database (Wanfang). Industrial databases mainly include industry or industrial information databases developed by authoritative institutions or other companies, such as the China Industrial Economy Information Network.

The National Library has not yet provided information services for innovation investment. In terms of innovation asset information acquisition services, the scientific research output information resources provided by the National Library are mainly Chinese citation databases, such as the Chinese Science Citation Database from the Chinese Academy of Sciences and the Chinese Social Science Citation Index from Nanjing University. Its intellectual property information resources include both purchased resources such as internal patent retrieval and analysis tools like Derwent patent databases and Innography patent retrieval and analysis tools, and public-facing Wanfang patent technology databases and M-Trends personalized patent retrieval and analysis management platforms (Taiwan), as well as navigation to free authoritative official information websites such as the patent retrieval and service system of the National Copyright Administration. Current intellectual property information services include patent retrieval and analysis report services, retrieval certification services, literature retrieval services, and intellectual property knowledge training and counseling for users.

In supporting enterprise innovation activities and innovation performance improvement, the National Library provides services not only to enterprise users but also to scientific research institutions, universities, and individuals concerned with enterprises and intellectual property. These services include: (1) Regular products and services such as media monitoring and communication effect evaluation, public opinion analysis and characteristic judgment, decision-making reference and industry tracking, scientific and technological novelty search and business research, and patent retrieval and analysis; (2) Comprehen-

sive literature and information intelligence services oriented toward enterprise decision-making, management, and R&D innovation needs; (3) Services providing business guidance and training to public libraries. To this end, it has also developed supporting enterprise information service platforms, provides services to enterprise institutions, and offers personalized services for specific enterprise needs.

5. Strategies for China's National Library Business Information Services Supporting National Innovation Capacity Building

China's National Library has accumulated certain experience in enterprise information services, but has not yet formed a systematic enterprise service system, conducted professional resource construction for key areas, or provided professional one-to-one in-depth consulting services. It has established a Scientific Evaluation Center and is preparing to establish a National Library Intellectual Property Information Service Center, but its services and products have not yet formed a system, and service forms are relatively single. From the perspective of national innovation capacity building, China's National Library can draw on the British Library's business information service model supporting national innovation capacity building, and based on existing services, propose the following strategies.

5.1 Conduct Research on Innovation and Entrepreneurship Knowledge Center Service Models

To respond to national innovation development policies and support national innovation capacity building, the National Library proposed in its "13th Five-Year Plan" to build itself into an innovation and entrepreneurship knowledge center. The first step in building such a center is to conduct research on service models supporting innovation development. The research mainly includes: (1) Deeply summarizing the library's legislative decision-making think tank service model as the theoretical foundation for research; (2) Comprehensively analyzing enterprise information service models of other national libraries worldwide to identify referential practices; (3) Systematically investigating China's library-characteristic enterprise information services to analyze best practice cases; and (4) Actively following up on China's intellectual property information service progress to expand innovative services.

5.2 Explore Business Information Service Models Supporting Innovation and Entrepreneurship

To achieve the goal of building an innovation and entrepreneurship knowledge center, the National Library must clearly define key service targets, focus on building professional resources, and create distinctive service brands to explore

business information service models supporting innovation and entrepreneurship.

5.2.1 Define Key Service Targets Defining service targets is the primary task in developing innovation and entrepreneurship services. Enterprises, as the main body of scientific and technological innovation, are necessarily key users. It is also necessary to further clarify key service fields, industries, and enterprise types. The National Library's "13th Five-Year Plan" explicitly proposes to provide targeted services for major national strategic fields, key construction projects, and important innovation projects, as well as various services for SMEs and the public in innovation and entrepreneurship. As a national-level library, it serves all regions and industries, but due to its special geographical location, it has particular tendencies in serving regions and industries. China's "13th Five-Year Plan" proposes supporting Beijing in building a globally influential science and technology innovation center, and Beijing further proposes accelerating the construction of a national innovation strategic highland with global influence. In supporting Beijing's development, it should support both large leading enterprises and, more importantly, technology-based SMEs. In terms of selecting key service industries, cooperation and support can be provided according to the innovation development priorities of different regions.

5.2.2 Focus on Professional Information Resources The foundation and advantage of library services are information resources. As the national repository of literature and information resources, China's National Library has incomparable advantages over other information institutions in both paper and digital resources, enabling it to play a positive leading role in supporting national innovation development and meeting the needs of strengthening national innovation capacity building from the perspective of supporting innovation resource development. Based on national innovation capacity evaluation indicators, the National Library's enterprise and intellectual property information resource construction should be carried out in the following areas: (1) Innovation resources: various types of scientific and technological information; (2) Innovation environment: industrial, economic, and legal policy information; (3) Innovation investment: public sector R&D investment and venture capital information; (4) Innovation knowledge: scientific research output such as SCI papers and highly cited papers, and knowledge assets such as patents, trademarks, and designs; (5) Innovation activities: industry information and scientific and technological frontiers in key service fields; and (6) Innovation performance: data on knowledge-intensive industries, medium-high-tech industries, sales, import/export, and employment. From the perspective of focusing on supporting scientific and technological innovation, key information resource construction should include: (1) Enterprise and management categories: macro-level enterprise environment and market information resources, meso-level industry and supplier directory information resources, and micro-level company operation and management information resources; (2) Intellectual property categories:

not only purchasing commercial resources but also strengthening the collection and integration of free authoritative intellectual property information and information from service institutions.

5.2.3 Create Distinctive Service Brands Creating service brands supporting innovation and entrepreneurship is key to quickly forming service models and strengthening service influence. Given that China is in a critical period of economic transformation, upgrading, and old-to-new kinetic energy conversion, intellectual property plays an important role in improving national independent innovation capability and core competitiveness. There is an urgent need to better leverage intellectual property's guiding role in incentivizing innovation. Therefore, the National Library should, on one hand, improve its service system and form distinctive service models based on existing enterprise information services, and on the other hand, strengthen the planning and development of intellectual property services while conducting scientific evaluation services. From the perspective of service stages and levels, it should first strengthen enterprises' intellectual property protection awareness through various promotional activities, protect innovative business ideas from the initial stage of entrepreneurship, and then guide enterprises to establish a sound intellectual property system through popular lectures and customized consulting services, establishing an efficient chain of intellectual property creation, utilization, management, and service.

5.3 Promote Information Service Models Supporting Regional Innovation Development

Innovation development is an international trend, and the innovation-driven development strategy is a national strategy. The National Library bears the responsibility of being a demonstration highland for the library industry. After deeply researching enterprise think tank services promoting economic and social development and exploring mature enterprise information service models supporting innovation and entrepreneurship, it should also promote information service models supporting innovation development nationwide to drive local economic and social development. In promoting enterprise and intellectual property services, it should fully utilize its own resources and services, industry research, and guidance advantages, and also cooperate with different types and channels of partners to quickly and effectively develop services based on local conditions. Main partners include: (1) Public libraries in various regions that have already conducted enterprise information services and have strong service capabilities; (2) Government intellectual property departments at all levels; (3) Different types of intellectual property information service institutions; (4) Different industry organizations and enterprise service social organizations; (5) Successful entrepreneurs and business people in different fields; and (6) Lawyers in enterprise and intellectual property fields.

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Wei Rui: Proposed the research idea and wrote the paper;
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Business Service Strategy of the National Library from the Perspective of National Innovation Capacity Building

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Abstract: [Purpose/significance] The business information service of the national library is studied from the perspective of national innovation capacity building, to explore its roles in supporting national innovation development. [Method/process] With the methods of literature survey, internet survey, case analysis and interview, firstly the information service demand driven by national innovation capacity building was analyzed based on the national innovation capacity evaluation system, secondly the business information service model of the British Library for promoting national innovation capacity building was analyzed, then the related practice progress of the National Library of China was investigated, finally, the business information service strategy of the Chinese National Library was put forward. [Result/conclusion] The business information service strategies of the National Library of China to support national innovation capacity building include making the study on the service model of enterprise starting and innovation knowledge center, exploring the business information service model in supporting the enterprise starting and innovation, and promoting the information service model of supporting the local innovation development.

Keywords: innovation capacity building; innovation development; National Library; business information service; intellectual property service

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

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