Exploring Optimization Strategies for University Library Resource Development under the Strategy for Building a Powerful Education Nation: An Analysis of Domestic and International Cases

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Abstract

The Education Powerhouse Strategy has presented new challenges and opportunities for resource development in Chinese university libraries. Employing literature research and case analysis methods, this study surveys relevant research findings domestically and internationally, uncovering challenges including diversified resource demands, digital transformation dilemmas, and funding and talent shortages, alongside opportunities arising from policy support, educational paradigm shifts, and information technology advancements. By examining resource development practices of exemplary university libraries worldwide, such as Harvard University and Tsinghua University, to extract reference models, it proposes that university libraries must enhance their efforts across multiple dimensions—including resource structure optimization, technological application innovation, collaborative sharing expansion, and talent team development—to propel the optimization and upgrading of library resource development, thereby better serving the Education Powerhouse Strategy and meeting the demands of higher education instruction and scientific and technological innovation in China' s new era.

Full Text

Preamble

Exploration of Optimization Strategies for University Library Resource Construction Driven by the Education Powerhouse Strategy—Based on Domestic and International Cases

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Abstract: The education powerhouse strategy brings new challenges and opportunities to university library resource construction in China. Through literature research and case analysis, this paper reviews relevant research findings at home and abroad, revealing that university library resource construction faces challenges such as diversified resource demands, digital transformation dilemmas, and shortages of funds and talent, while also embracing opportunities from policy support, transformation of educational concepts, and advances in information technology. By analyzing the resource construction practices of typical university libraries such as Harvard University and Tsinghua University, this paper seeks reference points and proposes that university libraries need to improve in multiple aspects, including resource structure optimization, technological application innovation, expanded cooperation and sharing, and talent team building, to promote the optimization and upgrading of university library resource construction, better serve the education powerhouse strategy, and meet the demands of higher education teaching and scientific and technological innovation in China' s new era.

Keywords: Education powerhouse; University library; Resource construction; Optimization strategies

2. Research Overview at Home and Abroad

This paper is a research outcome of the 2024-2026 Beijing University Library Research Fund Key Project "Research on the Practice and Exploration of Future Learning Center Construction Driven by New Quality Models" (Project No.: BGT2024004) and the 2023 Beijing Institute of Technology Education and Teaching Reform Key Project "Student-Centered Exploration and Practice of Future Learning Centers" (Project No.: 2023CGJG018). Author: He Cong, Ph.D., Associate Research Librarian, engaged in research on higher education and information resource management, Email: 275227067@qq.com. International research on university library resource construction started early and has yielded fruitful results. Analyses of strategic plans for world-class university libraries [3-4] indicate that foreign institutions emphasize research data management and utilization, highlight the development of distinctive collections, prioritize long-term preservation and digitization of resources, and attach importance to resource accessibility and collaborative exchange. In China, research on university library resource construction has increasingly attracted attention. Shao Min [5] introduced the practices and reflections of Tsinghua University Library in supporting first-class undergraduate education and talent cultivation from the perspective of resource construction, emphasizing the importance of library resource construction for undergraduate education and talent development. Sun Xingmin et al. [6] conducted a comparative analysis of the current status of disciplinary resource construction in Chinese and foreign university libraries, finding that domestic libraries lag behind foreign libraries in terms of resource specialization and disciplinarity, global resource guarantee, the number of course guides, and the practicality of guide content, and proposed correspond-

ing improvement strategies. Overall, research on university library resource construction at home and abroad has achieved certain results in resource digitization, specialization, and cooperative exchange; however, under the background of the education powerhouse strategy, how to systematically plan and further optimize university library resource construction in combination with the goals of the education powerhouse strategy to better serve talent cultivation and scientific and technological innovation remains to be deeply studied.

3.1 Connotation and Goal Analysis of the Education Powerhouse Strategy

The education powerhouse strategy is a major strategic decision proposed by China in the new era to achieve the great rejuvenation of the Chinese nation. Its connotation is rich and profound, covering all levels and fields of education [7-9]. The strategy aims to transform China from a large education country to a powerful education country through measures such as improving education quality, optimizing education structure, and promoting education equity. This strategy closely links education with national development, cultivating a large number of high-quality talents with innovative spirit, practical ability, and social responsibility through education, providing solid intellectual support and talent guarantee for national development in economy, science and technology, culture, and other fields. In terms of talent cultivation, its goal is to cultivate socialist builders and successors with all-round development of morality, intelligence, physique, aesthetics, and labor. In terms of scientific and technological innovation, it is committed to promoting breakthroughs in key core technology fields and achieving high-level scientific and technological self-reliance.

3.2 Scope and Traditional Model of University Library Resource Construction

University library resource construction is a comprehensive concept covering book and document resources, physical resources, digital resources, and characteristic resources. Among them, document resource construction is the foundation, including both printed literature such as paper books, journals, and newspapers, and electronic literature such as e-books, e-journals, and databases. Physical resource construction includes specimens, models, and cultural relics, which can provide intuitive materials for teaching and research and enrich students'learning experience. Digital resource construction includes digital libraries, online courses, and academic videos, which can break through time and space limitations and enable teachers and students to access knowledge more conveniently. Characteristic resource construction combines the university' s disciplinary characteristics, regional culture, and unique collections to create distinctive resources, such as university scholar databases, local literature databases, and special collection databases, which help enhance the university' s academic influence and cultural inheritance capacity.

3.3 New Requirements for University Library Resource Construction Under the Education Powerhouse Strategy

With the advancement of the education powerhouse strategy, university library resource construction faces new requirements. In terms of resource type richness and diversity, it is necessary to further expand the scope of resources, with greater emphasis on interdisciplinary resources, frontier disciplinary resources, and resources related to emerging technologies to meet the needs of disciplinary cross-integration and innovative development. It is essential to increase the collection and preservation of research datasets and include open access resources as an important component of library resource construction, enabling teachers and students to access the latest research findings in a timely manner and promoting academic exchange and sharing. Regarding resource quality, greater attention must be paid to academic value and authority, with strict evaluation of database inclusion quality, disciplinary coverage, and data update frequency to ensure that resources meet the high-level research and learning needs of teachers and students. In terms of service quality, it is necessary to be teacher-student-centered, strengthen demand research and analysis, utilize intelligent recommendation systems to provide personalized and precise resource services, and use information technology to improve resource acquisition efficiency and utilization effectiveness. Simultaneously, it is necessary to strengthen resource open sharing, promote resource circulation and cooperation among universities, regions, and even internationally, broaden teachers' and students' international perspectives, and promote the integration of China' s university library undertakings with international standards.

4.1.1 Diversified Resource Demands and Imbalanced Existing Resource Structure

With the deepening of education and teaching reform and the diversification of disciplinary development, students' and teachers' demands for library resources have shown diversified characteristics. They need not only classic literature and frontier research results in their own disciplines but also strongly demand interdisciplinary knowledge, practical case resources, and other materials. However, the current resource structure of university libraries exhibits imbalances in disciplinary distribution, with excessive concentration of resources in some popular disciplines while resources in emerging and interdisciplinary fields are relatively scarce. In terms of resource types, the ratio of paper resources to digital resources is also unreasonable, and the integration and utilization of digital resources need improvement.

4.1.2 Rapid Technological Development and Library Digital Transformation Dilemma

The rapid development of information technology has brought new opportunities to library resource construction but has also placed libraries in a digital transfor-

mation dilemma. On the one hand, the application of new technologies such as big data, artificial intelligence, and blockchain in library resource management and services is still in the exploratory stage, with problems such as high technology application costs and shortage of technical talents. On the other hand, issues such as digital resource copyright management, long-term preservation, and compatibility with existing systems also constrain the progress of library digital transformation.

4.1.3 Funding and Talent Shortages Constraining Resource Construction Progress

Library resource construction requires continuous and stable funding to ensure resource procurement, updating, and upgrading of technical equipment. However, many university libraries currently face funding shortages, and limited budgets cannot meet the growing needs of resource construction. At the same time, the construction of professional talent teams is relatively lagging, with a scarcity of compound talents who understand both library business and are familiar with information technology and disciplinary expertise, affecting the innovation and development of resource construction.

4.2.1 Potential Growth in Policy Support and Funding Investment

The implementation of the education powerhouse strategy has prompted the state to increase policy support and funding investment in the education field. Governments at all levels have issued a series of policy documents encouraging the development of university libraries, providing policy guarantees for library resource construction. At the same time, with increased emphasis on education, universities are expected to receive more special funding support for library resource construction, providing a financial foundation for resource optimization and innovative development.

4.2.2 Educational Concept Transformation Driving Resource Construction Innovation

The transformation of educational concepts centered on students and focusing on cultivating innovative and practical abilities has brought innovative opportunities to university library resource construction. Libraries can adjust their resource construction direction around new educational concepts, strengthen the construction of practical teaching resources and innovation and entrepreneurship resources, create distinctive learning spaces and resource service models, and meet students' needs for personalized learning and innovative development.

4.2.3 Information Technology Progress Providing New Means for Resource Construction

The progress of information technologies such as big data and artificial intelligence provides new means for library resource construction. Big data analysis can help libraries accurately understand teachers' and students' resource needs and optimize resource procurement decisions; artificial intelligence technology can realize intelligent classification, intelligent recommendation, and virtual reference consultation functions, improving the efficiency and quality of resource management and services; blockchain technology applications can provide new solutions for resource copyright protection and sharing.

5.1.1 Characteristics and Effectiveness of Harvard University Library Resource Construction

Harvard University Library, as the oldest and largest university library in the United States, has unique characteristics and remarkable effectiveness in resource construction [10-14]. Its collection resources are rich and diverse, accumulated over centuries, covering 73 branch libraries, gathering approximately 20 million books, 400 million manuscripts, massive photos, and rare maps [13], with comprehensive disciplinary coverage and long time spans, laying a solid foundation for research in various fields. The Harvard-Yenching Library' s East Asian literature collection exceeds 1.4 million volumes [11], among which Chinese ancient rare books have extremely high academic value, becoming a shining pearl in characteristic resource construction and strongly promoting cross-cultural research. Its integrated storage model is scientific and efficient, with significant achievements in the central-branch library structure reform, where the central library coordinates uniformly and each branch library collaborates, effectively integrating resources, reducing duplicate procurement, and improving resource utilization efficiency. In terms of storage, using collection analysis software for precise screening and jointly building an off-site cooperative storage library (ReCAP) with multiple universities to centrally store low-utilization collections optimizes collection space while ensuring resource security [12,14]. The digital resource preservation and access service technology system is complete, building its own data model and metadata scheme based on PREMIS and METS standards to achieve effective management and long-term preservation of multi-format resources. Its submission and ingestion layer handles automated processing, the management and storage layer is secure and reliable, the delivery and access layer has diverse functions, and the discovery and location layer coordinates multiple systems, with all links cooperating closely. It has built over 9 million digital objects, with massive data storage (total copy storage exceeding 1.5PB) [10], strongly supporting online academic research and knowledge dissemination, adapting to the trend of educational informatization, and comprehensively assisting Harvard University' s teaching, research, and cultural inheritance.

5.1.2 Cambridge University Library' s Resource Construction Strategies for Educational Reform

In the wave of global higher education transformation, Cambridge University Library has actively adjusted its resource construction strategies [15-20], providing valuable experience for university library development. It attaches great importance to the formulation and updating of collection development policies, which cover extensive areas including legal deposit, characteristic resource construction, digital resource construction, and inter-library cooperation and sharing, and are revised in a timely manner according to changes of the times to ensure accurate reflection and satisfaction of user needs, providing a solid guiding framework for resource construction that makes resource development orderly and coherent and avoids blindness and randomness [15,17-18]. In terms of resource types, characteristic collection construction has achieved remarkable results, with rich and diverse manuscripts, rare books, Cambridge-related special collections, and modern second-hand literature. For example, Cambridge-related special collections comprehensively include literature related to Cambridge, highlighting regional and academic characteristics and becoming key support for cultural inheritance and academic research, enhancing the library' s resource advantages and academic appeal in specific fields. Digital resource construction is also vigorously pursued, with strong efforts in building multimedia collections, electronic publications, audio-visual documents, and other resources, integrating resources and providing open access through the Cambridge Digital Library to meet teachers' and students' digital teaching and research needs, conforming to the trend of educational informatization and improving the convenience and timeliness of resource acquisition [18]. Funding allocation and resource acquisition methods are continuously optimized, with funding tilting toward electronic resources and 60% of the main library' s procurement budget used for electronic books [19], adapting to the trend of resource digitization. In resource acquisition, it actively utilizes the legal deposit system to obtain abundant resources while actively negotiating with publishers and leveraging third-party forces such as JISC (Joint Information Systems Committee) to gain advantageous positions in open access resource negotiations, ensuring sustainable resource growth and reasonable cost control to provide sufficient and high-quality resources for teachers and students during educational reform.

5.2.1 Tsinghua University Library Resource Construction Practices and Experience

Tsinghua University Library has closely focused on the school' s "Double First-Class" construction goals in resource construction, emphasizing resource quality, structure, and disciplinary balance [5,21-25]. For example, to address the gap in humanities resources, it has continuously allocated funding to supplement large book sets and humanities and social sciences databases, enhancing the competitiveness of humanities resources. To meet the needs of innovative talent cultivation, it timely introduced the "Innovation Tree" database to stimulate

students' innovative thinking [5]. In terms of textbook and teaching reference resource guarantee, the electronic teaching reference service platform and the shared electronic teaching reference service of the Ministry of Education' s Foreign Textbook Center play important roles. During the pandemic, the number of electronic teaching references increased significantly, strongly supporting online teaching. The Foreign Textbook Center project has accumulated a large number of high-quality foreign textbooks, achieving resource co-construction and sharing [5,22,24]. Characteristic resource construction and utilization are quite distinctive, such as purchasing high-fidelity paintings for the Art Library for teaching purposes, repairing and utilizing historical documents while integrating them into student cultivation projects, and rapidly processing Western art history special collections to prioritize meeting teachers' and students' usage needs [5,21-22]. The integration of resource management and services has achieved remarkable results, with the introduction of the ALMA system to achieve integrated management of all-media resources, upgrading the "Shuimu Search" to improve resource discovery and acquisition capabilities, and building the "Tsinghua University Student Excellent Works Database"to inherit academic achievements and academic atmosphere [5,22]. In addition, Tsinghua Library actively responds to the trend of open science, participates in open access initiatives, and builds a public welfare academic resource service platform (OpenSign) to promote academic resource sharing [21]. In the resource construction process, it also emphasizes cooperation with departments for co-construction, optimizes resource allocation through research on teachers' and students' needs, and continuously improves the resource evaluation system to adjust resource construction strategies based on evaluation results [5,21-22].

5.2.1 Shanghai Jiao Tong University Library Resource Construction Measures and Effectiveness

Shanghai Jiao Tong University Library has actively innovated in resource construction, promoting optimization and upgrading through multiple approaches [26-29]. In disciplinary resource construction, through position setting reform and organizational structure adjustment, it has established resource construction-oriented subject librarian positions and formed disciplinary resource construction working groups to strengthen human resource guarantee and overall management of disciplinary resource construction. Focusing on classic books, core journals, and professional databases, it has carried out disciplinary resource sorting from multiple dimensions to provide decision-making references for resource construction. Using data mining technology, it has conducted disciplinary resource comparison work, comparing the library' s collection with benchmark institutions to clarify resource construction direction. Through practice, these measures have improved the guarantee level of disciplinary resources and promoted disciplinary development [29]. In foreign book construction, it has formulated procurement strategies based on citation analysis, locating highly cited books and high-impact publishers by analyzing citations of academic books indexed in the Scopus abstract database

to provide basis for procurement. In procurement models, it adopts multiple combined methods, such as implementing simultaneous print and electronic growth and prioritizing e-book procurement in e-book purchasing, covering perpetual purchase, rental, and demand-driven acquisition models. This has significantly improved the quantity and quality of accessible foreign books, meeting teachers' and students' teaching and research needs [28]. In addition, in exploring services for future learning needs, it has built a "large resource" construction model. Among them, basic resource construction focuses on talent cultivation, connecting with the school' s course selection system to provide real-time and precise teaching reference resources while emphasizing general literacy and ability cultivation. Disciplinary resources create an academic resource guarantee ecosystem for different disciplinary characteristics to promote interdisciplinary integration. "Transdisciplinary" resources focus on data mining and academic innovation, launching relevant databases to assist academic research. Taking the all-media resource center construction as an example, it integrates multi-modal learning resources to achieve one-stop discovery and cross-modal retrieval, enhancing the digital empowerment level of resource supply [27]. These resource construction measures have enabled Shanghai Jiao Tong University Library to play an important role in serving the school' s teaching and research, supporting disciplinary development, and meeting teachers' and students' needs.

6.1.1 Balanced Allocation of Disciplinary Resources and Strengthening Characteristic Resources

University libraries should closely combine with school disciplinary development plans to achieve balanced allocation of disciplinary resources. Understanding the positioning, research direction, and development trends of various disciplines is the foundation for rational resource allocation. For key disciplines, taking physics as an example, procurement should be increased for relevant academic works, professional journals, and frontier research reports on popular directions such as quantum computing and condensed matter physics, while balancing classics and latest achievements. For emerging and interdisciplinary fields, such as the intersection of artificial intelligence and biomedicine, it is necessary to prospectively follow research trends and actively communicate with teachers and researchers in relevant disciplines to prioritize the procurement of leading resources. In strengthening characteristic resource construction, libraries should tap into the university' s disciplinary characteristics, regional culture, and historical inheritance advantages, collecting and sorting relevant literature and digitizing it. At the same time, they should strengthen the collection and sorting of the university' s academic achievements, establishing scholar academic achievement databases covering various achievements of teachers and students to provide support for academic research and enhance the university' s academic influence.

6.1.2 Coordinated Development of Print and Digital Resources

By deeply analyzing the characteristics of print and digital resources, university libraries can achieve complementary advantages of different resource types. Print resources offer unique reading experiences and stable content, suitable for in-depth reading and long-term preservation. Many scholars may prefer reading print books for academic research as they facilitate note-taking and help with deep thinking and understanding. Digital resources are convenient and timely, breaking through time and space limitations to enable rapid retrieval and acquisition, helping teachers and students quickly obtain the latest research results. During procurement, libraries should reasonably plan according to teachers' and students' needs and usage. Classic academic works, professional textbooks, and collection literature can be prioritized for print versions, while time-sensitive and frequently updated resources such as academic journals and industry reports should have increased digital resource procurement. At the resource management level, libraries should build a unified platform with integrated print and electronic resources and unified search functions to achieve integrated management. In resource space layout, areas should be reasonably divided to accommodate both characteristics and facilitate teachers' and students' search and use. In addition, promotional activities should be conducted to improve resource utilization, such as holding digital resource training lectures and carrying out print resource recommendation activities to guide teachers and students to make full use of both types of resources.

6.2.1 Application of Big Data Technology in Resource Construction

In resource demand analysis, big data technology can conduct deep mining and analysis of massive user data. By collecting data on teachers' and students' borrowing records, search behaviors, and learning time, it can accurately understand their preferences for resources in different disciplines and types. This information can provide a strong basis for libraries to timely adjust resource procurement strategies and prioritize the procurement of popular resources in relevant fields. In procurement decision-making, with big data analysis, libraries can comprehensively evaluate multi-dimensional data such as literature academic influence, publisher reputation, and resource usage frequency. This helps libraries make more scientific and reasonable procurement decisions that maximize the satisfaction of teachers' and students' needs within limited budgets. In service optimization, big data technology can promote personalized library services. Based on user historical data and behavior patterns, libraries can accurately recommend resources for each teacher and student, and can also push corresponding learning materials and reference books according to students' professional curriculum settings and learning progress, improving resource utilization and user satisfaction.

6.2.2 Artificial Intelligence Assisting Resource Management and Service Upgrading

In resource management, artificial intelligence technology can play a powerful role in intelligent resource classification and cataloging. Traditional manual classification and cataloging are time-consuming, labor-intensive, and error-prone, while AI systems can quickly and accurately classify and catalog newly acquired literature resources by analyzing titles, keywords, abstracts, and other information, improving work efficiency, reducing labor costs, and enhancing the accuracy and standardization of resource management. In intelligent recommendation, AI can accurately recommend books, journals, papers, and other resources based on multi-source data such as user interest preferences, borrowing records, and search history. For example, if a student frequently searches for physics experiment content, the system will push classic textbooks, latest achievements, and academic videos, improving resource exposure and usage rates. In reference consultation services, AI uses natural language processing technology and knowledge graphs to understand user questions, quickly retrieve accurate answers from vast knowledge resource bases, provide real-time answers, and offer convenient and efficient consultation experiences for teachers and students.

6.3.1 Construction of Inter-University Library Resource Co-Construction and Sharing Models

In the resource procurement stage, libraries can establish an inter-university joint procurement mechanism. Through joint bargaining, they can negotiate favorable prices with suppliers to reduce procurement costs. For example, multiple universities can jointly purchase expensive academic databases, sharing costs to allow teachers and students from all universities to enjoy high-quality resources and improve resource utilization efficiency. At the same time, building a unified joint catalog platform integrating collection information from all libraries can achieve one-stop retrieval and greatly improve resource search efficiency. Inter-library loan and document delivery services are important components of inter-university cooperation. University libraries should simplify inter-library loan processes, use logistics distribution to achieve rapid book circulation, and meet students' needs for borrowing scarce books. Document delivery services use digital means to quickly deliver journal papers and other materials to timely support teachers' and students' research and learning. Current inter-university co-construction and sharing models face problems such as non-uniform standards, difficult communication and coordination, and lagging resource updates. To support the education powerhouse strategy, university libraries can unify standards for resource classification and cataloging, use blockchain to guarantee data security and sharing, build intelligent coordination platforms for real-time communication, and establish dynamic update mechanisms to timely update resources according to needs and disciplinary development, improving the level of co-construction and sharing.

6.3.2 Expanding Resource Channels Through Cooperation with Social Institutions

University libraries can cooperate with social institutions in multiple ways. In resource complementarity, cooperating with museums and archives can obtain digital copies of precious historical artifacts and documents to enrich library characteristic resource databases and expand students'learning materials. In service expansion, jointly conducting training and lectures with enterprises, such as cooperating with technology companies to conduct cutting-edge technical training like artificial intelligence and big data technology for teachers and students, can improve their information literacy. In technical exchange, cooperating with research institutions to develop resource management and service technologies, utilizing their R&D capabilities to jointly develop intelligent retrieval systems and resource recommendation algorithms, can improve library resource utilization efficiency and achieve mutual expansion and optimization of resource channels. University libraries can also establish deep cooperation with publishers, where publishers regularly recommend high-quality new books to libraries to help update collections, jointly hold book sharing sessions inviting authors to exchange creative insights to stimulate teachers' and students' reading interest, and participate in textbook customization to jointly create exclusive textbooks combining teaching needs and academic frontiers, enriching teaching resources.

6.4.1 Improving the Mechanism for Professional Talent Recruitment and Cultivation

To meet the needs of university library resource construction under the education powerhouse strategy, a scientific talent recruitment plan is indispensable. Libraries need to conduct comprehensive job analysis, clarifying required professional skills and knowledge backgrounds according to links such as literature procurement and digital resource management. For example, digital resource construction positions require professionals in computer and information technology. When expanding recruitment channels, libraries should not only rely on traditional recruitment but also cooperate with relevant university majors for campus recruitment to attract fresh graduates, participate in industry job fairs to publicize position advantages to attract experienced talents, and use online recruitment platforms and social media to release information to expand recruitment scope and precision. Improving the talent cultivation mechanism is equally crucial. Regular internal training should be organized, covering library business, information technology, and disciplinary expertise, such as conducting basic business and information technology training and inviting experts to give lectures to broaden librarians' horizons. At the same time, librarians should be encouraged to participate in external training and academic exchanges, with libraries providing financial and time support to help them understand industry trends, learn advanced experiences, and enhance their professional capabilities.

6.4.2 Librarian Incentive Mechanisms and Career Development Planning

Establishing reasonable incentive mechanisms is of great significance for stimulating librarians' work enthusiasm. In performance evaluation, a scientific indicator system should be constructed, comprehensively covering work performance, service quality, and innovation ability. Work performance can be measured by the quantity and quality of resource procurement, growth in reader borrowing volume, and improvement in resource utilization rates. Service quality can be evaluated through reader satisfaction surveys and complaint handling situations. Innovation ability can be assessed from librarians' proposed innovative service projects and technology application innovations. Based on evaluation results, performance bonuses, honorary certificates, and other rewards should be given to motivate librarians to improve performance. Career development planning is also crucial for librarians' growth. Personalized plans can be formulated for librarians, providing different development paths according to their interests, abilities, and career goals. Librarians with strong technical abilities can be guided to develop into technical experts in digital resource management, with opportunities to participate in important projects. Librarians with good communication and coordination abilities can be cultivated into management talents, with management training and practical opportunities provided. At the same time, a fair and just promotion mechanism should be established, providing promotion opportunities and development space, broadening promotion channels including both administrative positions and professional technical title promotion channels, to stimulate librarians' enthusiasm and creativity and assist library development.

The education powerhouse strategy points out a new direction and puts forward new requirements for university library resource construction. In the journey toward building an education powerhouse by 2035, university libraries should actively respond to the "Education Powerhouse Construction Plan Outline (2024-2035)," achieving optimization and upgrading through paths such as optimizing resource structure, innovating technology applications, expanding cooperation and sharing, and strengthening team building. This will not only help enhance university libraries' ability to serve university education, teaching, and research but also provide strong support for cultivating socialist builders and successors with all-round development of morality, intelligence, physique, aesthetics, and labor, playing a unique and crucial role in serving Chinese-style modernization and becoming an important driving force in building an education powerhouse.

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