Research on the Graduate Education Model for Archival Science in the Digital Era: Postprint

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Abstract

[Purpose/Significance] Developing a novel paradigm for graduate education in archival science within the digital era facilitates optimization of educational philosophies, pathways, modalities, and methodologies, thereby enhancing the competitiveness of archival science graduate students and better fulfilling the construction and development requirements of the national archival enterprise in the digital age. [Method/Process] This study analyzes emerging transformations in archival practice during the digital era and the novel circumstances and challenges confronting graduate education in archival science; it investigates the development and optimization of graduate cultivation paradigms from the dimensions of conceptual frameworks, institutional structures, and procedural modalities. [Results/Conclusion] The study proposes innovative pathways for graduate education paradigms in archival science grounded in the digital era, encompassing the renewal of educational objectives, realignment of specialization tracks, optimization of knowledge architectures, and innovation of pedagogical approaches.

Full Text

Preamble

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Research on the Training Model of Graduate Students Majoring in Archival Science in the Digital Age

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Abstract

[**Purpose/Significance**] Constructing a new training model for graduate students majoring in archival science in the digital age is conducive to optimizing the training concepts, approaches, methods, and techniques for archival science graduate students, thereby enhancing their competitiveness in the digital era and better meeting the national archival cause's construction and development needs in the digital age. [**Method/Process**] This paper analyzes the new changes in archival work in the digital age and the new environment and problems faced by graduate education in archival science. From the perspectives of ideological concepts, institutional mechanisms, and process methods, it discusses the construction and optimization of graduate training models for archival science majors in the digital age. [**Result/Conclusion**] The paper proposes innovative paths for graduate training models in archival science based on the digital age, including updating training objectives, adjusting training directions, optimizing knowledge structures, and innovating training methods.

Keywords: digital age; archival science; graduate students; training model
Classification Number: G270

Introduction

Since the third industrial revolution, the rapid development and widespread application of emerging information technologies such as computers, the Internet, cloud computing, big data, and artificial intelligence have given rise to a brand-new digital age—an era in which the existence of information is increasingly tending toward digital forms and operating under digital technology rules. The digital age has gradually replaced physical objects that previously relied on direct perceptibility or actual existence with non-directly perceptible electronic signals or digital codes, continuously expanding human cognitive capabilities regarding the real world [1]. The advent of the digital age has led to fundamental changes in how information is generated, exists, operates, and is managed, posing significant challenges to traditional archival work and archivists. How to conduct archival work effectively in the digital age has become a new proposition facing archival management institutions and practitioners. The *National Archival Development "13th Five-Year" Plan Outline* proposes new requirements for archival education and research institutions, namely that based on various changes in the digital age and their demands on archival work, we must continuously optimize the training concepts, institutional mechanisms, approaches, methods, and techniques for archival science graduate students to enhance their competitiveness in the digital age, thereby better meeting the national archival cause's construction and development needs in the digital era. This has become an unavoidable practical issue in current archival science education and reform.

Existing research includes macro-level studies on the overall development trends of archival science education and talent cultivation in China, focusing on development stages, current status, existing problems, and challenges [3-6]; studies

proposing innovation strategies for archival talent cultivation and educational reform from the perspectives of big data and "Internet Plus" [7-9]; research offering insights for China's archival talent education from international perspectives such as iSchools [10-12]; and discussions on interdisciplinary training models, joint training models, educational reform directions, and development strategies based on interdisciplinary approaches, archival practice, and social needs [13-16]. These studies have pointed out that information technology development has pushed archives to an important position in government governance and public services. In this environment, how to adapt to current information technology development has become a major challenge for China's archival work under new circumstances, particularly in strengthening electronic records management and building a composite talent team adapted to modern management. To achieve the goal of "initially realizing archive management modernization centered on informatization by 2020," we must "innovate and accelerate the construction of archival curricula and teaching material systems, gradually forming a relatively complete curriculum and teaching material system" [2]. This poses new requirements for archival education and research institutions that cultivate high-level archival talent.

These research findings analyze and examine various problems and countermeasures in archival science education and talent cultivation from macro, meso, and micro perspectives, providing certain references for this study. However, these studies are relatively limited regarding the macro information background—the digital age and its environment's impact on archival science graduate education. Specifically, there are few specialized studies on graduate training models for archival science based on the digital age, leaving space for further in-depth exploration. Therefore, whether based on the implementation of national archival education policies, the practical needs of archival work development, or the supplementation and improvement of existing research findings, this paper hopes to contribute to this discussion on the foundation of previous research.

2. Changes in Archival Work and Graduate Education in Archival Science in the Digital Age

2.1 Rapid Changes in the Archival Work Environment in the Digital Age Necessitate Timely Adjustment of Graduate Training Objectives

In the digital age, information primarily exists in the form of digital codes and electronic symbols, with digital technology becoming the rule for maintaining these non-directly perceptible existences. The arrival of the digital age has fundamentally transformed the generation, existence, and management environment of various social information resources. Against this backdrop, archives—as objects of archival science research—and archival management activities, as well as archival information systems as components of social information systems, are undergoing changes along with the digital age. These changes have profoundly impacted the archival work environment, as the digital age has made

various physical archival business management activities that previously relied on the physical environment more dynamic and complex. In this environment, the form of archives is gradually shifting from traditional to digital archives; preservation methods are moving from centralized unified custody to distributed custody; management content is transitioning from physical management to logical management; development of archival information resources is shifting from fragmented approaches to information integration; the focus of archival services is moving from physical transfer to information transfer; preservation priorities are shifting from protecting archival carriers to protecting archival information; and document and archival management methods are transitioning from two-stage management to integrated document-archives management [17]. Against this background, the traditional training objectives for archival science graduate students urgently require adjustment. Specifically, in terms of training objectives, we must shift from training qualified archival workers to cultivating outstanding archival managers, information managers, and knowledge managers. In terms of training positioning, we must transform from training archival talents who understand traditional archival management to cultivating composite archival talents who understand modern information management and technology.

2.2 The Increasingly Rich Objects of Archival Management in the Digital Age Compel Timely Optimization of Graduate Training Content

The advent of the digital age has caused the objects of archival management to gradually shift from tangible physical entities to virtual digital existences, exhibiting characteristics such as diverse sources, varied types, rich content, exponentially increasing quantities, and technological complexity—markedly different from traditional archival management objects. From the perspective of archival carriers, human society has successively experienced transitions from knot-tying and inscription records to oracle bone, metal-stone, silk, and bamboo slip archives. From Cai Lun's invention of paper in 105 CE in the Eastern Han Dynasty to 404 CE when Huan Xuan of the powerful aristocratic clan issued an edict to stop using bamboo slips, stating: "In ancient times there was no paper, so bamboo slips were used, not for the sake of sovereignty or respect. Now all who use bamboo slips shall replace them with yellow paper." At this point, paper finally completely replaced bamboo slips as the official writing material for state documents, giving rise to paper archives [18]. During this 300-year transition from bamboo to paper, letters and books first adopted paper, with the transition completed by the late Eastern Han Dynasty, while official documents transitioned more slowly, not completed until the Eastern Jin Dynasty. Among them, case documents and register documents transitioned during the Western Jin and Eastern Jin periods, respectively. In the digital age, we will face a new transition where digital recording carriers replace traditional paper carriers. This directly leads to a shift in archival management objects from paper archives to electronic records. In the current environment where infor-

mation technology is increasingly sophisticated and widely embedded in government and social activities, "electronic records are growing daily, document management is more closely connected with business activities, and ensuring their authenticity has become more complex. Electronic records management must simultaneously satisfy the dual requirements of administrative management, production management, and business management process control, as well as permanent preservation of authentic memory" [19]. These practical changes directly 倒逼 (compel) reform in the content of archival science graduate education and training, requiring the integration of more electronic records management and informatization construction content into traditional archival teaching. From the perspective of current archival work practice, the reform and enrichment of training content for archival science graduate students has become urgent.

2.3 The Evolution of Archival Resource Management Methods in the Digital Age Requires Graduate Education to Update Training Concepts

Changes in archival management objects in the digital age determine changes in archival resource management methods. From the perspective of archival work, archival resource management includes collection, preservation, and development/utilization of archival resources. In the digital age, archival resources primarily exist in digital form, which, compared to paper archives, are easier to copy, migrate, share, and disseminate. Therefore, archival resource management methods in the digital age will inevitably differ significantly from traditional paper-based archival resource management methods. For instance, archival resources are shifting from simple arrangement to deep processing and value-added services, from traditional periodic disposal to real-time dynamic management, and from traditional compilation to deep resource mining [7]. The most obvious change is the transition of archival management theory from the records life cycle theory to the records continuum theory. As early as 2001, Renmin University of China hosted the first Chinese Archival Science Doctoral Forum in Beijing with the theme "Social Memory in the 21st Century," where managing newborn electronic files in the network environment was one of the main topics [20]. More than ten years have passed, and the digital age has become a reality. Digital archival resources and digitized traditional paper archival resources now occupy a larger proportion of society's total information resources than before and have become important foundations for governance and social services. In 2014, the *Opinions on Strengthening and Improving Archival Work under New Circumstances* clearly proposed establishing an archival resource management framework led by archival administrative departments, with close cooperation from industry supervisory departments and centralized unified management by archives (rooms), to scientifically integrate archival information resources and further promote scientific allocation and efficient utilization of archival resources [21]. These measures primarily aim to adjust and optimize archival resource management and development methods. Today, with society's growing demand

for high-quality information in the digital age, higher requirements have been placed on the deep development and utilization of archival information resources and their social sharing. On the one hand, the digital age requires archival resource management to move from closed to open, accelerating the establishment of archival resource systems covering the people and utilization systems convenient for the people, shifting from government-oriented to society-oriented services to maximize the social value of archival resources, such as through urban memory projects, archival treasure exhibitions, and cultural and creative product development based on archives. On the other hand, the digital age requires strengthening informatization construction, making the development and utilization of archival information resources to participate in national economic construction and development, and assisting in the modernization of the Party and government's governance capabilities and systems a new trend. For example, against the background of the national "streamlining administration and delegating power" reform, archival resources have played a fundamental role in Zhejiang Province's "Maximum One Visit" and Shanghai's "One-Network-All-Services" initiatives. Changes in archival resource management methods in the digital age have posed new requirements for the training concepts of archival science graduate education, demanding that it analyze and study the strategic position of archival science in national economic and social development according to its development in the digital age, to ensure that graduate education in archival science maximally meets national economic and social development needs for archival professionals.

2.4 Diverse Demands for Archival Talent Quality in the Digital Age Require Reasonable Adjustment of Graduate Training Programs

Due to changes in the archival work environment, management objects, and management methods and technologies, society's demand for archival professionals has also changed, with growing demand for high-level, composite, innovative, and application-oriented talents, and increasing demand for archival science graduate students. Archives are original records of any business activity, and archival management activities in the digital age have been widely integrated into the business management processes of government and enterprises, becoming an inseparable part of their business management workflows. However, different industries have different needs for archival talent. Based on the author's national social science key project "Research on the Training Model of Innovative Talents in Archival Science in China," a survey of typical employers including 26 provincial archives bureaus, 20 party and government organs, and 23 large state-owned enterprises found that archives bureaus most need research-oriented and composite talents, party and government organs most need skilled and composite talents, and enterprises most need composite and application-oriented talents. In addition, employers have requirements for archival professionals' work capabilities, in order of importance: confidentiality awareness and archival professional ethics, archival business guidance ability, teamwork and communication skills, overall work planning ability, theoretical level in archival

science, operational skills in archival management, learning ability, and innovation ability [22]. The demand from the archival cause and social development is the fundamental starting point for determining graduate training objectives, directly related to whether scientific and reasonable training plans, curriculum systems, and evaluation index systems can be established. As early as 1998, to meet social development needs, the Ministry of Education transferred archival science from history to management, placing it alongside library and information science. Today, determining graduate training directions and curriculum systems according to the construction of Library, Information, and Archival Management as a first-level discipline has become an important choice for many universities. Therefore, to adapt to digital age social development and disciplinary adjustment requirements and ensure and improve the quality of archival science graduate training, it is necessary to re-examine the diverse needs of employers for archival talent, as well as the archival science education system, disciplinary system, and theoretical framework, and adjust graduate training programs accordingly.

3. Construction and Optimization of Graduate Training Models for Archival Science in the Digital Age

In the digital age, we must adapt to development changes and reshape the graduate training model for archival science. The so-called graduate training model for archival science refers to a complete set of educational and teaching ideologies, management systems and mechanisms, and processes and methods that reflect the laws of talent training for archival science graduate students. This can be expressed by the formula: Graduate Training Model for Archival Science = Ideological Concepts + Institutional Mechanisms + Process Methods. Faced with changes in archival work in the digital age and the urgent need for highly educated and high-quality archival talent, constructing and optimizing graduate training models for archival science is particularly necessary.

3.1 Training Concepts for Archival Science Graduate Students

With the development of informatization and new social demands for archival information resource management and development, the content and scope of modern archival work have greatly expanded compared to traditional archival work, requiring corresponding adjustments to the training concepts for archival science graduate students. From a practical development perspective, training concepts mainly involve researching national economic construction and social development needs, particularly the demand for archival science graduate students, the talent positioning of archival science graduate students, the theoretical models for training archival science graduate students, and the core concepts of graduate training. For instance, in the digital age, facing the integration of different disciplines, the contradiction between the expansion of archival disciplinary content and the maintenance of disciplinary characteristics has become more prominent. Records and archives management are increas-

ingly integrated with e-government and e-commerce systems, with related research permeating each other. How to maintain and develop the disciplinary characteristics of archival science while conducting integrated education is an issue requiring urgent attention. Moreover, with the increase and development of electronic records in the digital age, archival work is no longer limited to electronic records and archives information management itself but needs to focus on the original records of various management data retained by business systems and related tacit knowledge when documents flow in electronic environments. The scope of archival work will extend beyond "archives management" after records are filed, with research tentacles reaching back to the initial formation of documents, integrating the entire process of records and archives movement and its management into the archival work domain. These are all issues that urgently need consideration at the conceptual level of archival science graduate training.

3.2 Management Systems and Mechanisms for Archival Science Graduate Training

The management system and mechanisms for graduate training primarily feature service and support, emphasizing service-oriented management that integrates management into service, focusing on creating a relaxed and optimized environmental atmosphere for archival science graduate training rather than excessive constraints and control. In the digital age, the education and training environment for archival science graduate students has changed. In this new environment, the construction of management systems and mechanisms must change past constraint-based training methods, be based on modern educational theory, take the transformation of archival work in the digital age as an opportunity, and be guided by the diverse needs of modern society for highly educated and high-quality archival talent. We must increase support for basic theoretical research in archival science, continuously optimize the archival science disciplinary system, strengthen faculty construction, and deepen educational and teaching reforms in archival science graduate training. Greater emphasis should be placed on service functions in graduate training. Through the optimization of training systems and mechanisms, we should provide better faculty, more learning opportunities, better learning exchange platforms, expanded future career spaces, and a better learning atmosphere for archival science graduate training, thereby providing and creating a better environment for cultivating excellent archival professionals with high education and quality who meet digital age needs.

3.3 Training Process and Methods for Archival Science Graduate Students

Archival science is an applied discipline formed to meet the needs of scientific management of documents and archives in human society development, and documents, as tools for various business activities, have always been insepara-

ble from the management activities of various institutions [19]. In the digital age, from the demand side of archival talent, user entities such as state organs, enterprises, public institutions, archives, and the public have different emphases on the knowledge, quality, and abilities of high-level archival professionals. From the supply side of archival talent, due to students' different characteristics, interests, and hobbies, the types of archival talents suitable for cultivation also vary. For example, some are suitable for cultivation as archival academic research talents, while others are suitable as archival management practice talents [23]. Thus, both the demand and supply sides for archival science graduate students differ in the digital age. Therefore, combining the supply side of archival talent, especially the demand side, it is necessary to timely optimize the training process and methods for archival science graduate students, specifically involving the setting of training quality standards, design of training programs, planning of curriculum systems, design of teaching content, selection of teaching links, reform of teaching methods, and construction and implementation of teaching quality management systems. These are all issues urgently needing optimization in the training process and methods for archival science graduate students.

4. Innovation in Graduate Training Models for Archival Science in the Digital Age

4.1 Updating Training Objectives for Archival Science Graduate Students Based on the Digital Age

The training objectives for archival science graduate students in the digital age must shift from cultivating qualified archivists to cultivating excellent archival managers, information managers, and knowledge managers. Canadian archival scholar Terry Cook, from the perspective of archival workers, proposed the "post-custodial model" theory regarding the future information development trends facing archival work. This theory represents further development and transformation of the traditional "custodial model" that has long centered on physical management, gradually gaining recognition and advocacy in the archival community. The "post-custodial model" essentially "shifts attention from physical documents to the organic connections, purposes, intentions, relationships, functions, and reliability of documents, their creators, and processes" [24]. This understanding has prompted adjustments and changes in the functions of archival managers. Additionally, due to the widespread application of emerging information technologies in archival business and management, intelligent archival management platforms have gradually freed archival managers from heavy physical management affairs, greatly simplifying work procedures and improving efficiency. Therefore, archival managers can devote more attention to the deep mining of archival information resources and the rediscovery of their value, thereby achieving value enhancement and role repositioning of their management functions. As Professor Feng Huiling stated: "This role transformation requirement leads archival personnel to shift their functional focus from physical management to information management and knowledge management. This is

a transformation from external to internal, from shallow to deep, from physical control to intelligent control, aimed at ensuring the integrity of social memory in the digital age and providing high-quality information and knowledge services to people" [25]. In the digital age, facing the vast and rapidly increasing volume of digital information, how to use advanced information and digital technologies to discover associations between different information resources and mine valuable information chains or knowledge chains is the core value of archival managers in the current digital age. To achieve this goal, we must change the traditional archival science training model centered on archival arrangement and preservation and build a graduate training system centered on knowledge management. Archives themselves serve as an inexhaustible information resource base. Through this training model transformation, archival managers should transform from traditional archivists to providers of archival knowledge, actively mining internal connections between archives, organizing archives into higher-value knowledge or information service products, and thereby better providing intellectual support for government decision-making and social governance activities [26].

4.2 Adjusting Training Directions for Archival Science Graduate Students Based on the Digital Age

The educational purpose of archival science is primarily to cultivate high-level composite talents who have mastered modern archival management theory and information technology and are competent in document management, archives management, information management, and knowledge management. Currently, regarding research directions, different educational levels have different training directions. At the national level, the *National Education Development "13th Five-Year" Plan* issued by the State Council proposes promoting graduate training mechanism reforms and conducting classified training for professional and academic degrees. The *Degree and Graduate Education Development "13th Five-Year" Plan* issued by the Ministry of Education and the Academic Degrees Committee of the State Council points out that we must strictly follow graduate education laws and reform selection methods and training models according to different levels and types of graduate training requirements. The archival science graduate students referred to in this study include doctoral and master's students, with master's students further divided into academic master's and professional master's students. Graduate training for archival science in the digital age can implement classified training for academic and professional degree students according to national graduate training document requirements, that is, training in different directions according to degree types. For academic degree graduate students (including doctoral students), the focus is on cultivating research and innovation abilities. We must continuously optimize the archival science disciplinary system, innovate educational and teaching content, strengthen theoretical research and methodological training in archival science, and focus on training students in modern archival management theory and information technology according to national economic and social

development needs in the digital age, especially addressing new situations and problems in archival work. We must strengthen process management and assessment to ensure training quality, ultimately meeting the needs for archival science theoretical talents and experts required by government informatization, enterprise informatization, national economic informatization, and social life informatization. For professional degree graduate students (primarily master's students), the focus is on cultivating practical abilities. We must establish joint training mechanisms with business practice departments, actively explore open training models, establish social practice credit certification systems, and accelerate the cultivation of high-level composite and application-oriented talents who can solve practical problems in archival management business activities by undertaking actual government, industry, and enterprise projects.

4.3 Optimizing the Knowledge Structure of Archival Science Graduate Students Based on the Digital Age

To meet the diverse demands for archival science professionals in the digital age, the knowledge structure of archival science graduate students needs substantial adjustment, which can be optimized according to the principles of "broad scope, solid foundation, and practical application." First, guided by "broad scope," we must cultivate students' interdisciplinary knowledge integration abilities. Archival science itself has strong comprehensiveness and can achieve deep cross-integration with multiple majors and social industries and fields to realize complementary advantages, a characteristic amplified in the digital age. The increasing diversification and complexity of archival phenomena, activities, and work in the digital environment provide a favorable external integration and optimization environment. From disciplinary characteristics to talent cultivation, archival science graduate training also needs to integrate with history, management, law, sociology, journalism, information technology, and other disciplines to broaden their knowledge structure. This organic combination of related disciplinary knowledge with archival professional knowledge meets the composite talent demands of major employers such as archives bureaus, party and government organs, and enterprises. Second, guided by "solid foundation," we must consolidate students' foundational knowledge in archival science. Under the dual background of the current digital environment and the integrated development of Library, Information, and Archival Management as a first-level discipline, archival science graduate education should take national informatization as an opportunity, pay attention to changes in social information activities and archival business needs, continue to adhere to broad-scope training in information resource management to enhance employment flexibility for archival science graduate students, and strengthen the unique characteristics of the archival profession. Regardless of how times change, the essence of archives and their management remains unchanged. Therefore, we must maintain the foundation of archival science, strengthen the unique features of the archival profession, consolidate foundational course teaching in archival science, clarify boundaries with related library and information specialties, and carry out improvements

and innovations based on the characteristics of archival work in the new era. We must reasonably set up archival information and technology course modules to promote the integration of archives and information technology, thereby further enhancing archival professionals' ability to grasp and adapt to new archival work, archival laws, archival phenomena, and related problems. Third, guided by "practical application," we must improve students' knowledge integration and application abilities. "Practical application" means enhancing the social function of archival science professional knowledge and transforming academic knowledge into applied knowledge that solves practical problems. To this end, we must pay attention to new situations and problems constantly emerging in archival work, continuously expand the depth and breadth of archival education and teaching, enrich and improve the existing graduate training system based on archival application and practice, increase case teaching in curriculum design, appropriately introduce practical and operational archival courses, and jointly build archival professional teaching practice bases with enterprise archives departments and archives. We should "move" courses such as "Document Studies" and "Modern Organizational Information Management" to practice departments, restore actual business work scenarios, and conduct archival education and knowledge transmission in a problem-oriented manner [27].

4.4 Innovating Training Methods for Archival Science Graduate Students Based on the Digital Age

As a comprehensive and applied management science, archival science cannot continue to emphasize only traditional archival management theory and methods in graduate training with the widespread application of information technology in archival work. Instead, it must integrate archival management theory and technical issues, paying attention to the application of advanced technologies in archival work and the theoretical and practical innovations they bring. Therefore, in training archival science graduate students, we must pay attention to the organic connection between theory and practice, academia and business, and gradually construct a "practice + research + joint training" trinity training method to meet the needs of digital age archival cause construction and development for archival talent. First, cultivate practice-oriented archival talents by enriching the practical teaching system for archival science, including business skills training systems, social practice exercise systems, and innovation ability improvement systems [28]. During graduate education and training, encourage students to participate in professional practice activities at home and abroad, intern and exercise in relevant departments such as archives, government agencies, public institutions, and enterprises, and encourage participation in archival discipline competitions and scientific and technological innovation activities oriented toward improving innovation and business abilities. Combine theoretical learning with practical exercise to cultivate students' ability to use knowledge to solve practical problems. Second, cultivate research-oriented archival talents by developing students' scientific research abilities through academic research activities. During graduate studies, encourage and support grad-

uate students to participate in academic research projects and conferences both on and off campus. In doctoral and master's courses, adopt combined teaching by multidisciplinary teachers and invite graduated doctoral or master's students to discuss and exchange experiences with current students. Improve project funding for graduate training, encourage in-depth research on archival science theories and problems, invite foreign experts to conduct professional lectures to enhance understanding of frontier issues, and appropriately increase and expand the proportion of outstanding fresh undergraduate graduates pursuing graduate degrees. Third, conduct joint training education to cultivate archival talents with broad vision. This training model refers to an educational model where two or more parties jointly cultivate graduate students. Joint training for archival science graduate students mainly involves constructing "university-archives," "university-enterprise," "university-government," and "university-university" joint training methods. Universities can sign strategic cooperation agreements with archives bureaus, enterprises, government agencies, public institutions, and other universities, establish dual-mentor systems, and other measures to jointly cultivate archival professionals. Under this training method, students can comprehensively learn and receive various archival theory and practice knowledge through different learning experiences, consolidate archival theory, enhance business skills, and meet society's demands for composite archival talents in the digital age.

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Author Contributions

Zhang Bin: Proposed the paper's theme and overall framework, wrote the paper;
Yang Wen: Collected materials, wrote the paper;
Li Zilin: Supplemented and revised the paper.

Book Announcement

The Pan-Disciplinary Service System of University Libraries, authored by Professor Chen Jin and his team, was officially published by Ocean Press in November 2018. Based on the innovative exploration and practical achievements of Shanghai Jiao Tong University Library's pan-disciplinary service system, this book provides comprehensive and systematic interpretation through summarization and refinement. Since proposing the IC^2 innovative service model in 2008, Shanghai Jiao Tong University Library has continuously explored and practiced, basically forming a pan-disciplinary service system by 2012. From reshaping service concepts and reforming organizational structures to building service systems and weaving harmonious cultures, Shanghai Jiao Tong University Library has explored a unique path of pan-disciplinary services, establishing a model for disciplinary services in Chinese universities that conforms to contemporary characteristics, possesses strategic height, and demonstrates practical significance. The pan-disciplinary service system introduced in this book, through effective new design and localized innovation, has enabled disciplinary services to truly land from the cloud, taking root and thriving in China with strong sustainability for development, rather than being a mere imported product. This book systematically explains the connotation of disciplinary services, encompassing both theory and thought, as well as specific methods and operational models for implementing disciplinary services, integrating theory and practice. It possesses strong theoretical and practical guidance, pointing out directions and

broadening paths for the development of disciplinary services. It can serve as a reference, model, or even ready-to-use guide for general university libraries.

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