Chapter 5
The China Academic Digital Associative Library (CADAL)

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ABSTRACT

In 2000, a collaboration project called the China-America Digital Academic Library (CADAL) was launched by Chinese and U.S. computer scientists and supported by the U.S. National Science Foundation (NSF) and the Chinese Ministry of Education. The leading parties, Carnegie Mellon University and Zhejiang University, pioneered the construction of massive, digitized resources across the world. In 2002, CADAL merged with the China Academic Library and Information System into the China Academic Digital Library and Information System, emerging as one of the most important information infrastructures in the nation. In August 2009, the China Academic Digital Associative Library (new CADAL) was approved by the Ministry of Education, initiating CADAL Project Phase II. CADAL has promoted Chinese university libraries from the role of information-sharing institutions to partners of resource construction and sharing, achieving the world's largest non-profit digital library with more than 2.5 million Chinese and English e-books, a resource that has been exclusively "made in China."

THE OVERALL PROJECT GOAL

The overall goal of the CADAL Project is to accumulate millions of digitized resources for education and research purposes in order to build a multi-disciplinary, multi-category, multi-lingual, and high-tech digital academic library. It aims to attract a wide range of domestic and foreign libraries, academic organizations, and experts with various specialties, and endeavors to become an important part of Chinese innovative information infrastructures, with its scale and service capability being at the leading level both domestically and internationally (CADAL Report, 2010a).

Based on the ideas of co-constructing and co-sharing, CADAL is dedicated to integrating a variety of information resources and corresponding services from domestic universities, information service institutes and academic research institutes, as well as some complimentary information and services from international agencies. It will digitize various formats of media resources, including painting and calligraphy, architecture engineering, seal cutting, drama, and crafts, among others, and establish a digital library with multidisciplinary resources covering science, engineering, agriculture, medicine, the humanities, social science, and more. One-step, personalized knowledge services will be available online, while academic education and research services will be provided for participating universities and academic institutes.

In addition to expanding the scope of shared documents, CADAL also makes great efforts to push the sharing boundary by exploring different methods and routes for resource co-construction and co-sharing. The goal has shifted from a simple volume expansion to a more diversified sharing service system, achieving a brand new sharing model integrated with equipment, services, systems, and a basic information environment.

CADAL PROJECT CONSTRUCTION CONTENTS

CADAL continues to explore and develop new components during its construction. On one hand, the established digital resources substantially support education and research in universities. On the other hand, the build-up management and service platform dedicated to exploring the application of multimedia and virtual technology in digital libraries have promoted the Chinese digital library to be considered state-of-the-art throughout the global community, laying both the resource and technological foundations for sustainable construction and service developments in the digital library. The construction of the CADAL project has mainly been focused on five different aspects as discussed below (Huang, 2011):

Digital Library Standards and Specifications Construction

Based on the latest international developments and trends for standards and specifications in the digital library, CADAL has built its own standard system covering different elements such as digital resource processing and storage, digital objects classification and description, metadata standards and interoperability, system models and interoperability, service models, and other work fundamental for digital library construction. The aim is to follow international convention and to be synchronized with future national standards, guaranteeing the accessibility of academic digital libraries in China.

Digital Resource Construction

The goal is to build a full-text database focusing on books, electronic periodicals, and dissertations, and to construct an academic full-text repository with 2,750,000 digital resource items available, and thus to form an academic information system concentrating on digitized books and journals, and covering all key disciplines. The majority of digital resources come from the document collections in research universities around the world, where literature resources scattered among different units have been integrated into systematic digitized resources with increased academic value after digitization. CADAL has finished the first and second phases of digital resource construction, digitizing 1,650,000 academic

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