SH-RFID

SH-RFID

SHANGHAI RFID INTELLIGENCE DIGITAL TECHNOLOGY CORPORATION LIMITED

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DIGITAL CULTURE COMPREHENSIVE SERVICE PROVIDER

SMART LIBRARY
BROCHURE

SHANGHAI RFID INTELLIGENCE DIGITAL TECHNOLOGY CORPORATION LIMITED

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COMPANY
INTRODUCTION

Shanghai RFID Intelligence Digital Technology Co., Ltd. is a leading enterprise in the digital cultural industry and a leading enterprise in smart library industry. Shanghai RFID is committed to providing comprehensive service solutions in the digital cultural industry, and has achieved remarkable results in cultural centers, museums, art galleries, science museums, and other fields. Shanghai RFID has successfully developed intelligent ASRS System, intelligent robots and other smart library series products, and has formed a full chain business portfolio covering A-LSP, intelligent terminal systems, digital resource service systems, and library operation services. It has provided professional intelligent system solutions to more than 5000 customers nationwide in China.

Shanghai RFID is driven by technology and guided by research and development. We deeply integrates cutting-edge digital technologies such as the Internet of Things, big data, cloud computing, artificial intelligence, and block-chain, always adhering to the concept of customer first, continuously mastering core technologies, adhering to an international perspective, and providing full process operation and maintenance support. Shanghai RFID is a "high-tech enterprise" and a "specialized, refined, and innovative" enterprise recognized by the Shanghai Municipal Government.

Honors & Qualifications

◎ **Independent intellectual property rights for a full range of RFID library products**

"High and new tech"enterprises certification

Invention patent certification

(ISO24001) Certification

FCC Certification

(ISO27001) Certification

(ISO9001) Certification

◎ **Invention patent 23**   ◎ **Appearance design 82**
◎ **Utility model 73**   ◎ **Copyright 257**

Brand Philosophy

Customize

We are customer oriented. Through in-depth research, service schemes are customized according to customer needs.

Leading

We have a leading market share in the whole industry for many years.

Guiding

We take intelligent digital technology as the core, independently develop and continuously innovate to ensure the stable and efficient operation of products.

Efficient

We have a localized operation and maintenance service team to respond to customer needs at the first time.

Library is the propeller of cultural confidence. In the context of the country's continued improvement of cultural soft power, Shanghai RFID smart Library solutions, with A-LSP as the core, digital technology products as the media, and with the help of cloud computing, big data and other new technological advantages in the "Internet plus" era, create a new model of "library+" applications and services, including seven scenarios of self-service borrowing, City study, smart multimedia experience, children's reading, intelligent security system, mobile terminal, and in-house services. Through various efficient self-service smart terminals, Shanghai RFID smart library solution helps libraries transform from traditional libraries to smart libraries, and maximize efficiency. This is a real smart space for the interconnection of things, and improve the use of social public cultural resources, forming a nationwide reading promotion service system by 2026.

In-house service

Mobile scenario

A-LSP activity management platform mobile end

Wechat official account end

Mobile accreditation   Reservation   Verification

Intelligent multi-media

阿法迪 SHANGHAI RFID

Children's reading

City study

Self-service borrowing

Intelligent security system
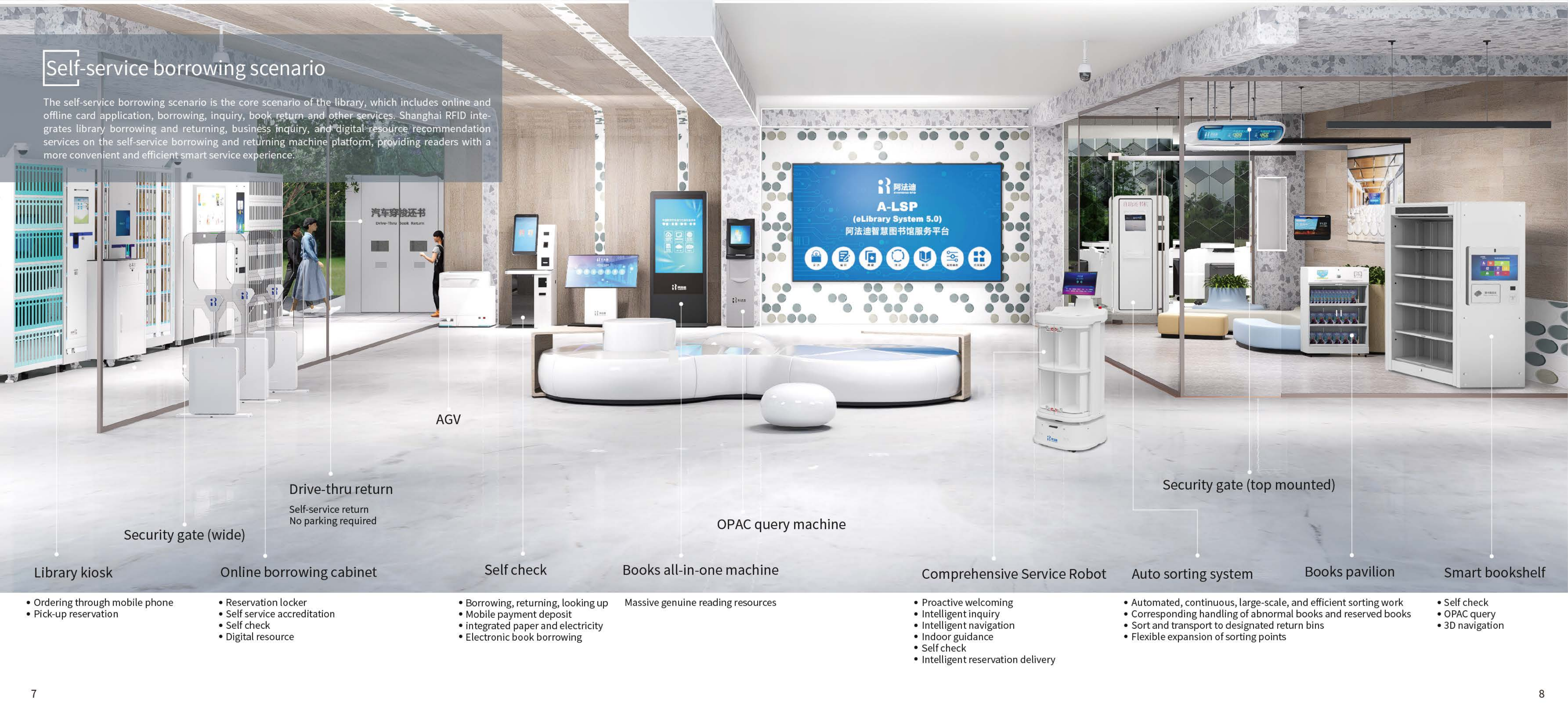
Drive-thru book return

Self-service borrowing scenario

The self-service borrowing scenario is the core scenario of the library, which includes online and offline card application, borrowing, inquiry, book return and other services. Shanghai RFID integrates library borrowing and returning, business inquiry, and digital-resource recommendation services on the self-service borrowing and returning machine platform, providing readers with a more convenient and efficient smart service experience.

A-LSP
(eLibrary System 5.0)
阿法迪智慧图书馆服务平台

汽车穿投还书
Drive-Thru Book Return

AGV

Drive-thru return
Self-service return
No parking required

Security gate (top mounted)

OPAC query machine

Security gate (wide)

Library kiosk	Online borrowing cabinet	Self check	Books all-in-one machine	Comprehensive Service Robot	Auto sorting system	Books pavilion	Smart bookshelf
• Ordering through mobile phone • Pick-up reservation	• Reservation locker • Self service accreditation • Self check • Digital resource	• Borrowing, returning, looking up • Mobile payment deposit • integrated paper and electricity • Electronic book borrowing	Massive genuine reading resources	• Proactive welcoming • Intelligent inquiry • Intelligent navigation • Indoor guidance • Self check • Intelligent reservation delivery	• Automated, continuous, large-scale, and efficient sorting work • Corresponding handling of abnormal books and reserved books • Sort and transport to designated return bins • Flexible expansion of sorting points		• Self check • OPAC query • 3D navigation

Intelligent multimedia experience area

Massive customized resources slowly fall from the top of the screen, flowing out dynamically like a waterfall, giving people a strong visual shock. The digital resource service system is applied to new intelligent terminal devices, which can scan codes and play online, and can also be read through download clients, suitable for different scenarios and different groups of people. Shanghai RFID Yuedu APP provides lightweight reading application services. The large screen full range platform, immersive VR Cube, ecological interactive experience, etc. integrate multiple interactive methods, enrich application scenarios, empower library space reconstruction, and bring immersive interactive experience to readers.

DIGITAL CULTURE COMPREHENSIVE SERVICE PROVIDER

Ecological interactive experience cabin

Audio and video all-in-one machine
- Lightweight reading and listening application services
- Digital Resource Services
- Personalized reading experience

Shanghai RFID Yuedu

VR riding

Comprehensive Service Robot
- Horizontal HD display
- Book return & delivery
- Hidden-design silent roller   Built-in ambient light
- Proactive welcoming   Intelligent inquiry
- Intelligent navigation   Indoor guidance
- Self check   Intelligent reservation delivery
- LLM integrated

Immersive interactive projection
- Highly immersive virtual demonstration environment
- Roaming freely in a 'real' virtual environment

Books all-in-one machine
- VR headset electronic screen and leisure cabin integrated
- Immersive virtual reality interactive experience

Earphone forest

Waterfall flow
- Customize distinctive cultural elements
- Information exhibition, video and graphic display
- Scan code for online play Download the client to read

Idiom Competition VR Interactive Machine
- Combining Idiom Learning with VR
- Integrating education with entertainment
- Inspire children's interest in learning

City Study

The 24-hour self-service public library is a new way of reading and a new model of public cultural services that has emerged in response to the needs of the times. By relying on big data analysis, multidimensional reports, and open platforms, data processing and communication technologies are achieved, integrating paper and data resources, reading services, and convenient services. The no-disturb night vision mode, remote control, and high-precision sensors enable automatic control of equipment through a central control system, achieving a perfect combination of intelligent digital technology, composite space, and traditional libraries.

Highlights: 24-hour reading, 15 minute reading circle

Smart bookshelf
Self check kiosk
Facial recognition entrance
Security gates
Library kiosk
Large screen display
Books and journals all-in-one machine
Party building all-in-one machine
Earphone Forest

Security gate (top mounted)

Self check

Reader's all-in-one machine

Intelligent control system

Earphone forest

Children's reading area

The children's reading space has a distinct appearance, cartoon like image, and a design that perfectly conforms to ergonomics. Books that can be played with, stories that can be drawn, and knowledge that can be easily gained; Let the children and their parents harvest happiness and hope, wisdom and courage together.

Desktop holographic display table

AR display table

Immersive interactive projection

Idiom competition VR interactive machine

Ecological interactive experience cabin

Book pavilion

Children's book all-in-one machine

Intelligent service robot

Children's self check kiosk

Book sanitizer

Sterilizer robot

Facial recognition entry system

Central monitoring platform

Comprehensive service robot

Online borrowing cabinet

Intelligent security scenario

Utilizing facial recognition entry system, appointment registration, flow control, creating a safe and secured environment. Book sterilizer, sterilizer robot and contactless interactive screen gives people a full sense of security.

Highlights: Smart protection, seamless interaction

Mobile phone scenario

◎ Ink screen seat reservation

Refresh quickly	Cost saving	Energy saving	LED functions	Multi-color display	High quality display screen	Excellent user experience	Long life expectancy
Timely data updates, real-time display data can be updated according to backend instructions, with the characteristics of accuracy, speed, flexibility, and efficiency. Within 15 minutes, 10000 screens can be refreshed.	Eliminate the manual operation of frequently updating seat data, display automatic management, further save human resources, and reduce human losses.	Paperless operation throughout the entire process, saving material costs; Energy consumption control and display technology - Multi protocol base station control.	Red, yellow, and green LED lights for easy display of different reservation statuses.	Supporting diversified content, using high-quality electronic paper screens with multiple colors to choose from, customizable formatting, and support for multiple languages; The font is smooth and clear, not limited by language.	Screen viewing angle light no reflection, friendly display close to paper, screen viewing angle approaching 180 degrees, superior display effect.	QR codes and barcodes enable online and offline interaction, providing readers with a better reading experience; Low power consumption, based on low-power Bluetooth 5.0 technology, while using ultra-low power electronic paper screens, almost zero power consumption for static operation.	Powered by button batteries, the voltage is stable, the power is long-lasting, with a refresh rate of 5 times a day. The battery can be used for 2 years and can be replaced to conserve electricity.

▌Silent cabin

Features

· Acoustic aluminum honeycomb panel

· Polymer soundproof material

· High density polyester sound-absorbing board

· Natural light illumination

· Healthy fresh air system

· Green and environmentally friendly power supply

Sound isolation
Sound insulation level: 35dB   Reverberation time: 0.25s
The use of 38mm thick double-layer aluminum honeycomb panels and high-density damping soundproofing felt has met the soundproofing requirements, and the interior is matched with advanced materials to achieve the sound environment standards.

Illumination
Standard 4000K natural light color temperature LED central lighting system, standard 150LSX lighting to meet normal usage needs. Preinstalled expandable power supply in the cabin, customizable lighting for different scenarios.

Fresh air system
Adopting a multi sound barrier sound insulation design, changing the direction of sound propagation and extending the distance of sound propagation, while greatly reducing the noise of the fresh air system and minimizing sound interaction inside and outside the cabin, the cabin air can be completely refreshed every two minutes.

Power supply 220V
Suitable for 100—240V/50—60Hz and 12V-USB power supply systems, compatible with mainstream equipment and energy environments inside and outside the cabin. Three control switches control one lighting lamp and two exhaust fans respectively.

Space reservation management system

Centralized management of space resource platform to comprehensively understand the utilization rate of space resources. Support multi-channel appointment methods, user permission management, unified identity authentication login, custom system usage permissions, comprehensive graphical reports, comprehensive data analysis basis, map guidance, quick search for spatial location, support WeChat message push, integrated visitor system function, based on cloud technology architecture research and development, industry standard data interface, using AI facial recognition authentication for fast authentication, improving user experience.

eLibrary admission reservation librarian backend management PC end

eLibrary activity reservation librarian backend management PC end

Wechat official account reservation librarian backend management PC end

Reservation backend management
Mobile phone borrowing APP
Credit binding

Book search
Seat reservation
Virtual navigation

阿法迪智慧空间

无感通道

A-LSP
(eLibrary System 5.0)
阿法迪智慧图书馆服务平台

Grab-n-go Gate

Waterfall flow

Security gate (wide)

Comprehensive service robot

Indoor intelligent service scenario

Robots undertake tasks such as navigation, consultation, and guidance, interact with readers and audiences in a friendly manner, and provide readers with comprehensive services. Robots accompany readers to achieve seat reservations, science popularization training, conference services, and reading newspapers and books. Robots connect to cloud based big data and provide services in a more "smart" way through voice conversations, helping people make decisions. The new generation of libraries is bringing innovative experiences to readers in a completely new way.

Highlight: High end, precise service

# Shanghai RFID intelligent library structure

Cloud platform
Multi tenant mode, hard isolation of different buildings
Micro service structure

Data center
Establish a data center for the entire library to achieve a data-driven smart library system

Business Platform
Build a management platform, service platform, IOT platform, and innovative application platform to comprehensively create a smart library architecture system
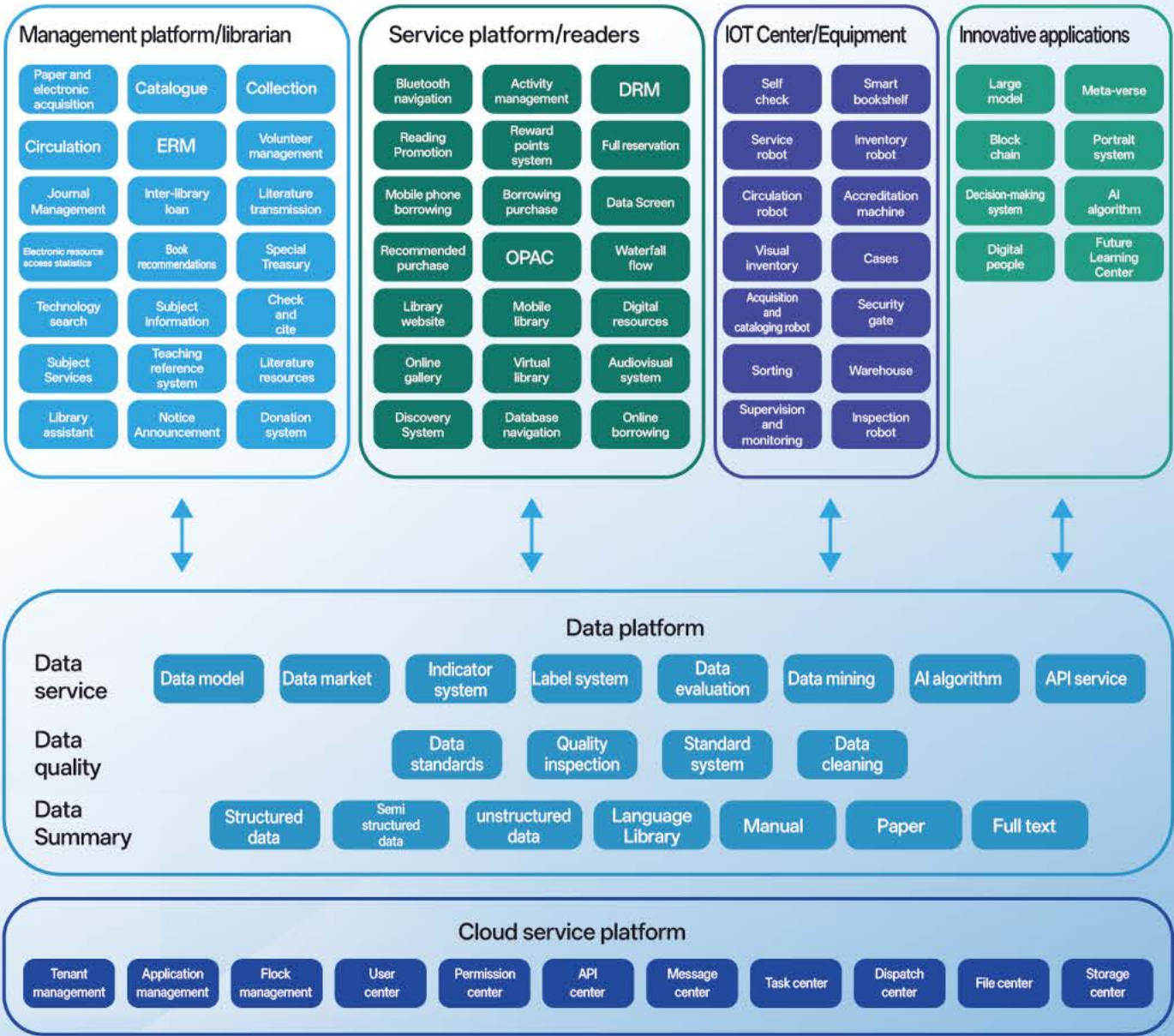
A-LSP (eLibrary system 5.0) overview   SH-RFID | A × deepseek

A-LSP is a library management platform based on microservice architecture and cloud services. This platform expands the global knowledge base, matches with dispersed local resource repositories, provides integrated management tools for libraries, and offers readers a simple search and discovery interface.

By integrating and fusing all resource data, spatial data, device data, and generated behavioral data of the library, a data center based on a digital foundation is constructed. Driven by data, the library's ability to innovate applications is enhanced, and new high-tech tools are utilized to create innovative business forms in digital transformation. At present, A-LSP has been fully integrated into DeepSeek, achieving resonance between scenarios and applications.

Application environment under micro-service architecture

Paper and electronic acquisition

Booksellers/library distributors - libraries - readers, forming a one-stop service that integrates paper and electronic books; The latest published books, books purchased by our library, and books not purchased by our library are all covered; Provide high-definition book cover, table of contents, introduction, reader target, and other fields to compensate for the lack of linked table of contents. Implement book recommendations, borrowing, interviews, discoveries, online book fairs, book lists, and editing to bring books to readers.

Digital resource management

Implement database and electronic journal life-cycle management, including discovery, trial, selection, procurement, management, evaluation, and full process electronic resource management; Build a central knowledge base, optimize retrieval, provide resource navigation, and facilitate readers to quickly and accurately access electronic resources.
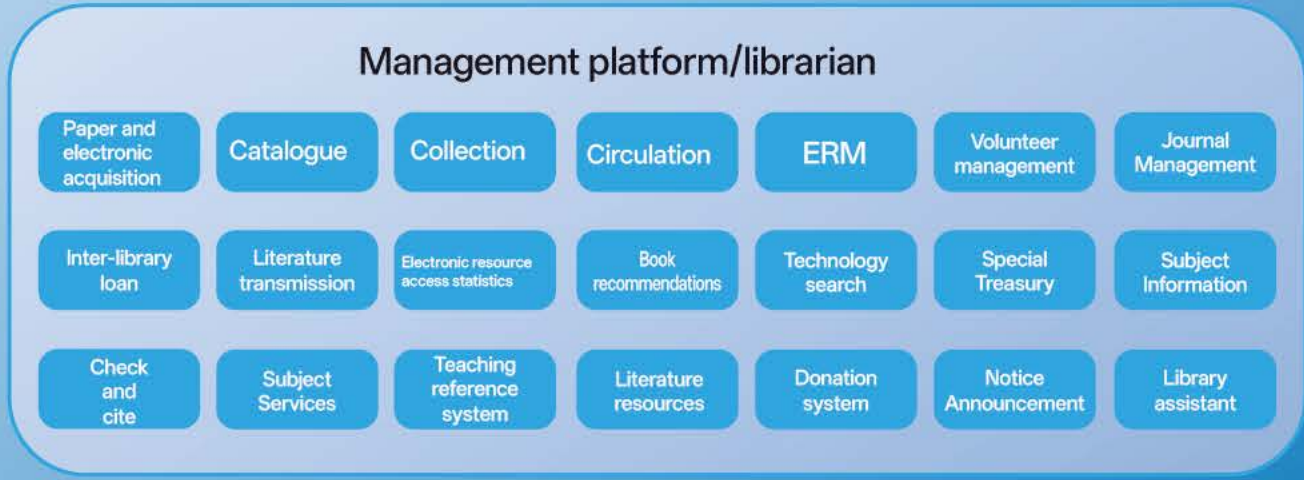
Features

01 Pre-cataloging, cataloging is transmitted with the book to shorten the time for new books to be listed

02 Standard API interface service, open sharing, library can access third-party application modules as needed

03 Data driven, capable of integrating and fusing all resource and production data within the library, driving various statistical reports and decision-making services to be more accurate and efficient

04 Module supports hot swap, providing uninterrupted library services

05 Provide a combination of cloud services and localization to share large resource information and ensure in-house data security

06 Cloud services provide a nationwide production environment that meets the requirements of comprehensive domestic production

07 Data mart, providing data services, supporting and driving application development

Operation
Info management   Data statistics and analysis
User management   System management
Request management   Membership service and management
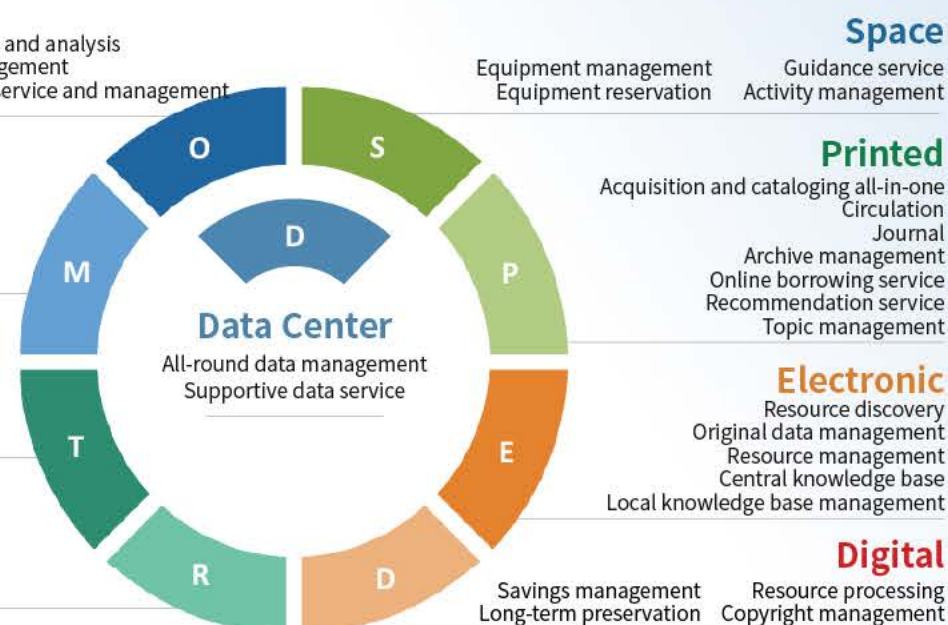
Management
Decision support
Integrated office
Assessment and evaluation

Teaching
Essay management
Teaching guidebook
Future study center

Research
Consulting service
Open-up science
Database of organizations

Space
Equipment management   Guidance service
Equipment reservation   Activity management

Printed
Acquisition and cataloging all-in-one
Circulation
Journal
Archive management
Online borrowing service
Recommendation service
Topic management

Electronic
Resource discovery
Original data management
Resource management
Central knowledge base
Local knowledge base management

Digital
Savings management   Resource processing
Long-term preservation   Copyright management

Data Center
All-round data management
Supportive data service

(O S P E D R T M D)

Features

01 Integrated management of paper and electricity, connecting booksellers, libraries, and readers to form a supply chain ecosystem

02 Micro-service architecture, highly open, multi tenant mode, application isolation, user isolation

03 Support object-oriented data and provide unified standard compatibility testing

04 Establish a unified user management system and connect all business applications

05 Enable readers and librarians to break free from spatial limitations and experience the ubiquitous nature of the library

06 Fine grained the functional modules of traditional ILS to form applications in the app store

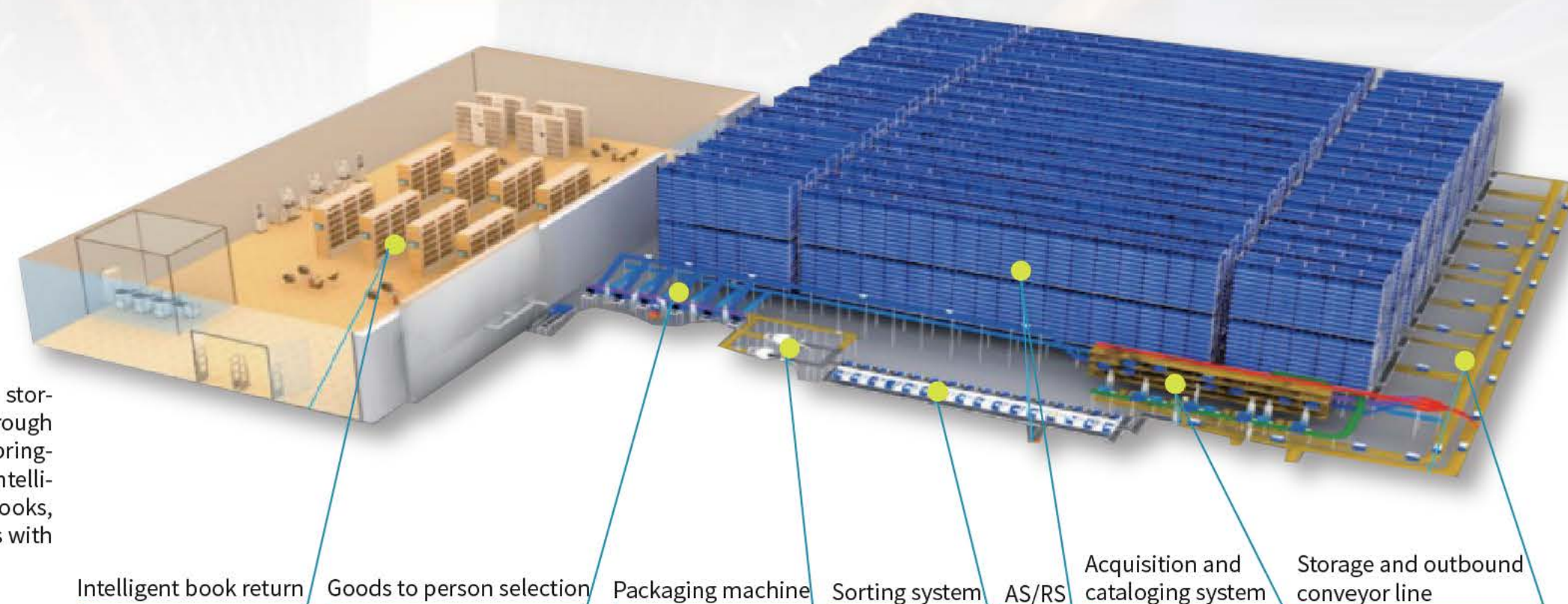07 Data driven, integrating library data to drive innovative applications

Platform advantages

	Smart Library Service Platform	Traditional Library Management System
Booksellers-Library-Reader Ecological Management	✓	✗
Digital base architecture system, unified management of data throughout the library	✓	✗
Ecological design concept, stronger compatibility	✓	✗
Integrated management of paper and electronics	✓	✗
Integrated monitoring and management of terminal devices	✓	✗
The variety of intelligent terminals is rich, and they can be directly connected to management systems, with a high degree of integration	✓	✗
With rich data experience, the integrity and security of data migration are guaranteed	✓	✗
Process optimization, one click acceptance cataloging	✓	✗
Support MARC dual screen cataloging and have a third plagiarism check screen	✓	✗
Handheld terminal cataloging and circulation	✓	✗
Local after-sales teams are available in all provinces across the country for on-site service	✓	✗

Intelligent ASRS System

Shanghai RFID Intelligent ASRS System

Shanghai RFID Intelligent ASRS System achieves automatic storage, circulation, sorting, and outbound/inbound of books through efficient automation systems and warehouse management, bringing a new book collection revolution to libraries. Based on intelligent digital technology, a reading ecosystem of "readers, books, devices, and intelligent libraries" is formed, providing readers with a more massive, fast, and convenient borrowing experience.

Intelligent book return | Goods to person selection | Packaging machine | Sorting system | AS/RS | Acquisition and cataloging system | Storage and outbound conveyor line

1.Efficient utilization of the warehouse

The system integrates bin stacker cranes, four-way shuttle buses, or fully automatic sorting machines to achieve fully automatic entry and exit of books, fully saving library manpower and greatly improving the efficiency of book use and circulation.

2.Modular and scalable system design

Realize system design flexibility through modular product series. The concept of variable storage locations and intelligent IT technology help optimize storage, as well as the use of intelligent sorting machines and robots, which helps maintain system flexibility and book business management.

3.Digital twin, leading the trend

Innovative bin stacker cranes and multi-layer shuttle technology can meet various needs of libraries. In addition, the software interface can display the status of shuttle cars, elevators, and tunnels in real time and control various equipment.

河北省图书馆
石家庄市图书馆
河北大学
华北电力大学（保定）

宁夏回族自治区图书馆
宁夏大学
固原市图书馆

开封市图书馆
安阳市图书馆
新乡市图书馆
南阳市图书馆
新乡学院

陕西省图书馆
延安市图书馆
安康市图书馆

山西省图书馆
太原市图书馆
大同市图书馆
吕梁市图书馆

哈尔滨工业大学
东北林业大学
七台河市图书馆

新疆师范大学
伊犁州图书馆

鄂尔多斯市图书馆
包头市图书馆
达拉特旗图书馆

长春市图书馆
松原市图书馆

甘肃省图书馆
敦煌市图书馆

辽宁省图书馆
沈阳少年儿童图书馆
营口市图书馆

中国国家图书馆
北京市委党校
北京城市图书馆
北京理工大学
北京师范大学
北京朝阳图书馆

天津图书馆（天津市少年儿童图书馆）
天津大学
武警指挥学院

山东大学
中国石油大学
山东财经大学

金陵图书馆
无锡市图书馆
连云港市图书馆
盐城市图书馆
扬州少年儿童图书馆

安徽省图书馆
合肥市图书馆
合肥市少年儿童图书馆
六安市图书馆
马鞍山市图书馆
阜阳市图书馆

上海图书馆
上海图书馆东馆
上海市少年儿童图书馆
浦东图书馆
复旦大学
华东师范大学
上海海洋大学

西藏自治区图书馆

杭州图书馆
温州市图书馆
嘉兴市图书馆
浙江传媒学院
西湖大学

江西省图书馆
江西师范大学
井冈山大学
吉安市图书馆

重庆图书馆

温州市城市书房

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审图号：GS(2023)2767号
自然资源部 监制

青海大学
青海师范大学

成都市图书馆
宜宾市图书馆
阿坝师范学院

武汉市图书馆
武汉大学
孝感市图书馆
襄阳市图书馆
荆州市图书馆
鄂州市图书馆

云南省委党校
昆明市图书馆
玉溪市图书馆
丽江市图书馆
大理白族自治州图书馆

Overseas：

National Library Board of Singapore

贵州省图书馆
贵阳市少年儿童图书馆
遵义市图书馆
黔西南州图书馆

湖南省少年儿童图书馆
长沙市委党校
衡阳市图书馆
益阳市图书馆

广东省立中山图书馆
深圳市图书馆
佛山市图书馆
潮州市图书馆
暨南大学

中共福建省委党校
厦门市图书馆
厦门市少年儿童图书馆
泉州市图书馆
厦门大学
集美大学诚毅学院 ★

广西壮族自治区图书馆
南宁市图书馆
柳州市图书馆
玉林市图书馆

佛山市城市书房
中山市城市书房

海南省图书馆
海口市图书馆

南海诸岛
1：14 800 000

Cases

Public Libraries

Shanghai RFID is a high-tech enterprise that applies intelligent digital technologies in the library industry. Since its establishment, it has successfully provided services to institutions such as the Shanghai Library East Branch, the National Library Board of Singapore, Zikawei Library, Shaanxi Provincial Library, Guizhou Provincial Library, and Guiyang Children's Library.

National Library Board of China

National Library Board of Singapore

Shanghai Library East Branch

Shaanxi Provincial Library

Zikawei Library

Guizhou Provincial Library
Guiyang Children's Library
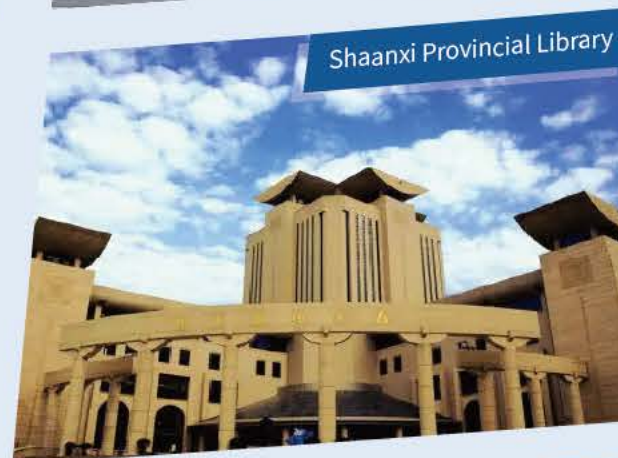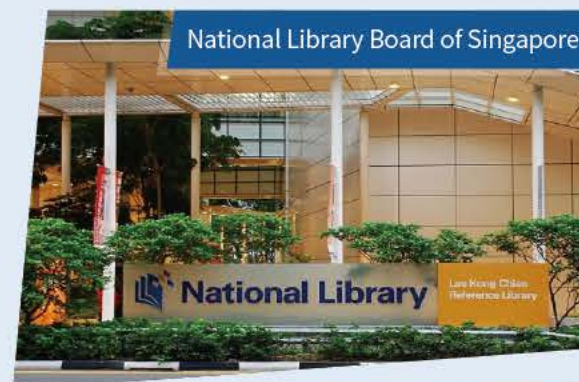
University Libraries

The attempt to apply digital technologies in the Library of Chengyi College, Jimei University in Xiamen in 2005 opened a new chapter in the smart construction of libraries in China. As a trailblazer and pioneer in new technologies, Shanghai RFID has successfully implemented smart library projects in institutions such as Fudan University, Wuhan University, Harbin Institute of Technology, and Beijing Normal University.

Primary and Secondary School Libraries

Primary and secondary education, as the foundation of basic education, is fundamental to the nation. As important reading venues in primary and secondary schools, the infrastructure construction of libraries has gradually received key attention.

Leveraging its advantages in the library field, Shanghai RFID has successfully built smart libraries for primary and secondary schools for educational institutions and schools such as Zhejiang Hailiang Education, Shanghai Minhang District Education Bureau, Shanghai Hongkou District Education Bureau, Shanghai Pudong New Area Education Bureau, Gongmei Affiliated High School, Beijing No. 35 Middle School, and Foshan Huaying School.

Shanghai Haitong Primary School

Fu Lei Primary School

Zhejiang Hailiang Education

Beijing No. 35 Middle School

*Due to space constraints, only part of the cases are displayed.