

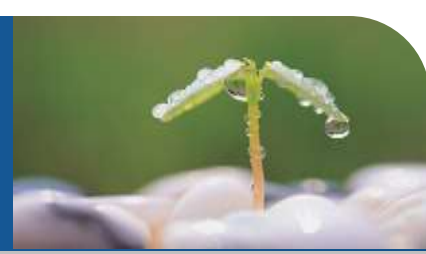
Research and Discussion on the Construction Planning of the Intelligent Campus



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23 JUNE, 2015

Contents



1

Project description

2

Main functions and key technologies of the project

3

The shortage of project and the need to expand the direction

Project description



❖ Project requirements

After many years of information construction, the construction of campus backbone network is completed at present. Has completed some application system construction, the construction of these information in the school has achieved many good practical application effect, but also for the school's information construction provides a good environment. The traditional information construction has the following problems:

1. Information isolated island
2. Lack of campus information technology focused application and display platform
3. Information systems of a single department (such as educational administration, library management, asset management, etc.), it is difficult to stand on their own this information set, the entire school's comprehensive information query and decision analysis

Project description



❖ Project requirements

1. One stop service demand

The existing application of heavy management of light services is a serious phenomenon, the information service provided by the teachers and students is not comprehensive enough.

2. Standardization demand

Lack of unified technical system standards and detailed overall construction plan, is not conducive to long-term development

3. Open demand

Business system development and maintenance model is not uniform, update and maintenance difficulties

4. Demand for data sharing

Lack of data standards, data is difficult to share between business systems, to bring the various departments of collaborative business difficulties

Project description



❖ **Project description**

- ❖ The project started construction in the year 2012, has been initially completed. The project team has a total of sixteen people, I am responsible for the general framework of project, feasibility studies and project development, and the preparation, reserve of new technology.
- ❖ (1) Wuxi City College of intelligent design and realization of the three-dimensional virtual campus (supported by the key subject of The Department of education of Jiangsu);
- ❖ (2) the intelligent Campus information system (project supported by WuXi city college of vocational technology),The two topic is the kind of the intelligent information application system.

Main functions key technologies



- **Construction scheme**

- **1.Design idea**

- Through the idea of "management + service" to help the school to realize the traditional application system to manage as the core, to the front end to serve as the core. To achieve the integration and configuration of various resources of the school, improve the management level and efficiency of the school, so that the application of information technology in Colleges and universities to achieve a high level.

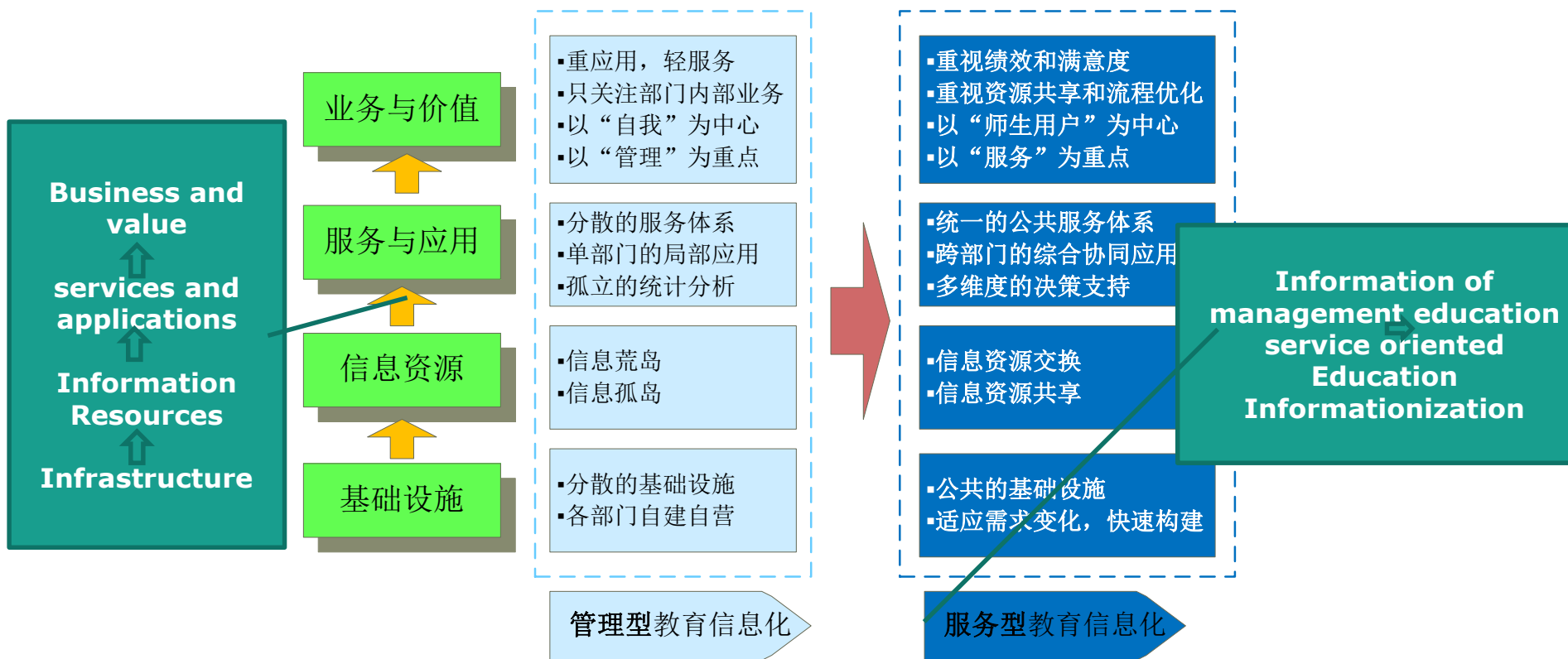
Main functions key technologies



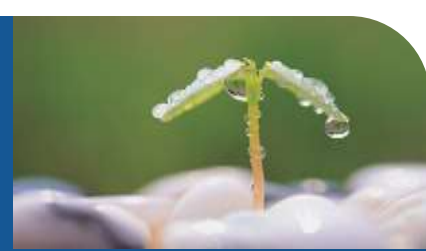
•1.Design idea

Standard Specification + security system + unified platform + application service integration

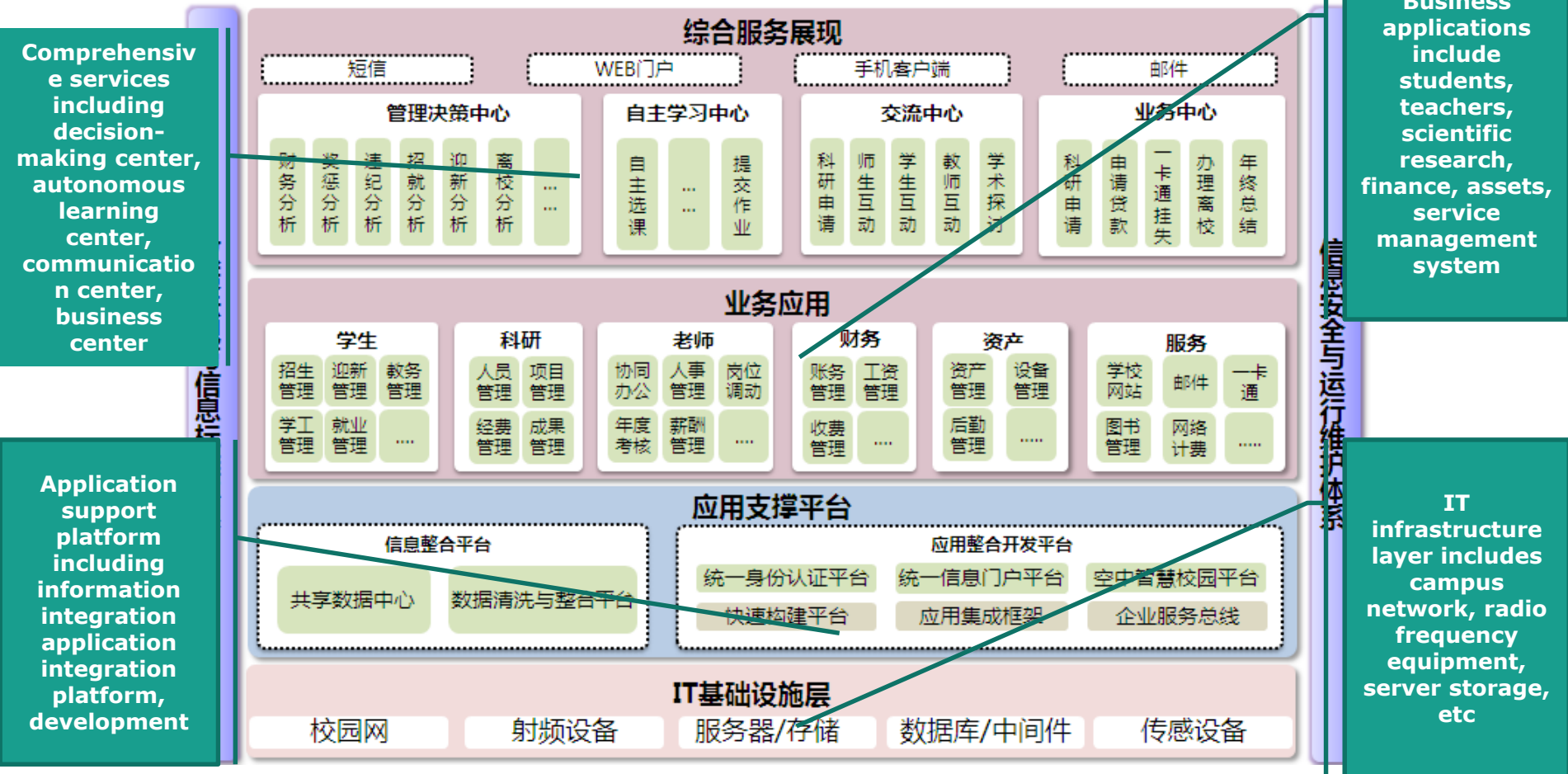
标准规范 + 安全保障体系 + 统一平台 + 应用服务集成



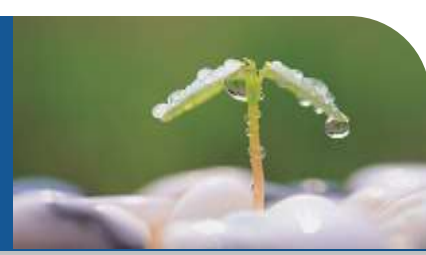
Main functions key technologies



• 2. Overall architecture ['ɑ:kɪtektʃə(r)]



Main functions key technologies



•2.Overall architecture

The wisdom of the campus is built on the basis of the existing IT infrastructure, the construction of the application support layer. Through the integration of the data of "business application", the sharing and exchange of the digital campus information resources is realized. And the support of digital campus application integration and development based on the integration of information, to achieve web portal, mobile client, SMS, e-mail and other digital campus information "integrated service show". At the same time, the need to build digital campus information standards and safety operation and maintenance system"

Main functions key technologies



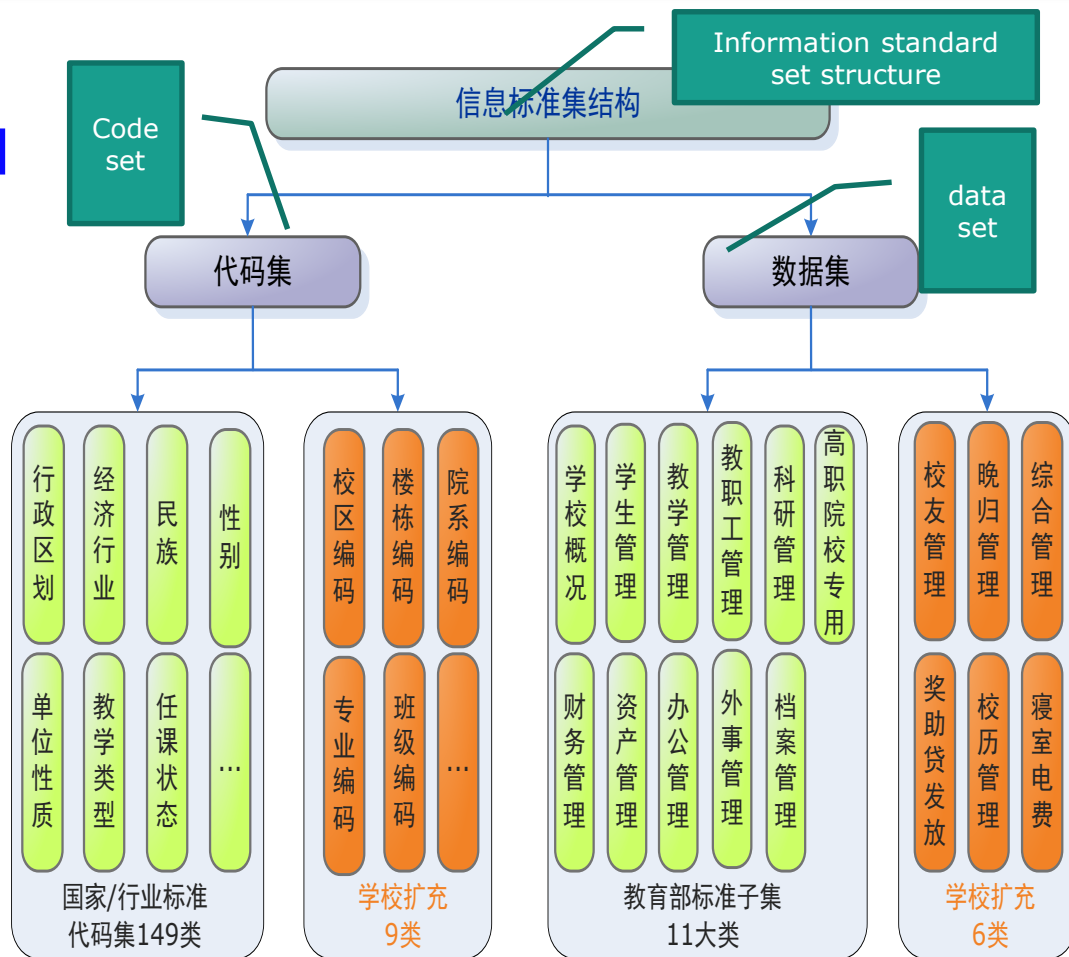
- **Construction content**
 - **1.Information standard**
 - Information standard construction is one of the emphases of the construction of digital campus, which is of great significance to promote the construction of digital campus, guarantee the exchange and sharing of information.

Main functions key technologies



- **Construction content**
 - **1. Information standard**

After the completion of the university information standards have the following, as shown in figure:



Main functions key technologies



- **Construction content**
 - **2.Shared data center platform**

Shared data center platform is a unified data resource and exchange application service platform system, which is a platform for unified management of all kinds of structured data in digital campus.

Design by the shared data center will achieve the following objectives:

- ① To establish a school wide shared data center;
- ② To achieve a unified and consistent the information code;
- ③ Ensure no redundant data between any two business system;
- ④ Ensure "who produce, who maintain", all the data are only maintenance;
- ⑤ Ensure to provide comprehensive information to reflect the whole school;
- ⑥ Ensure required for the whole school decision support data;
- ⑦ The accumulation of data analysis for the school's future decision support system.

Main functions key technologies



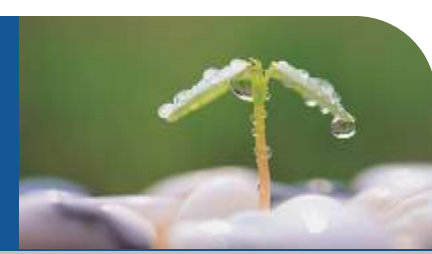
- **Construction content**
 - **2.Shared data center platform**

Platform function:

① **The management and monitoring data sharing center**

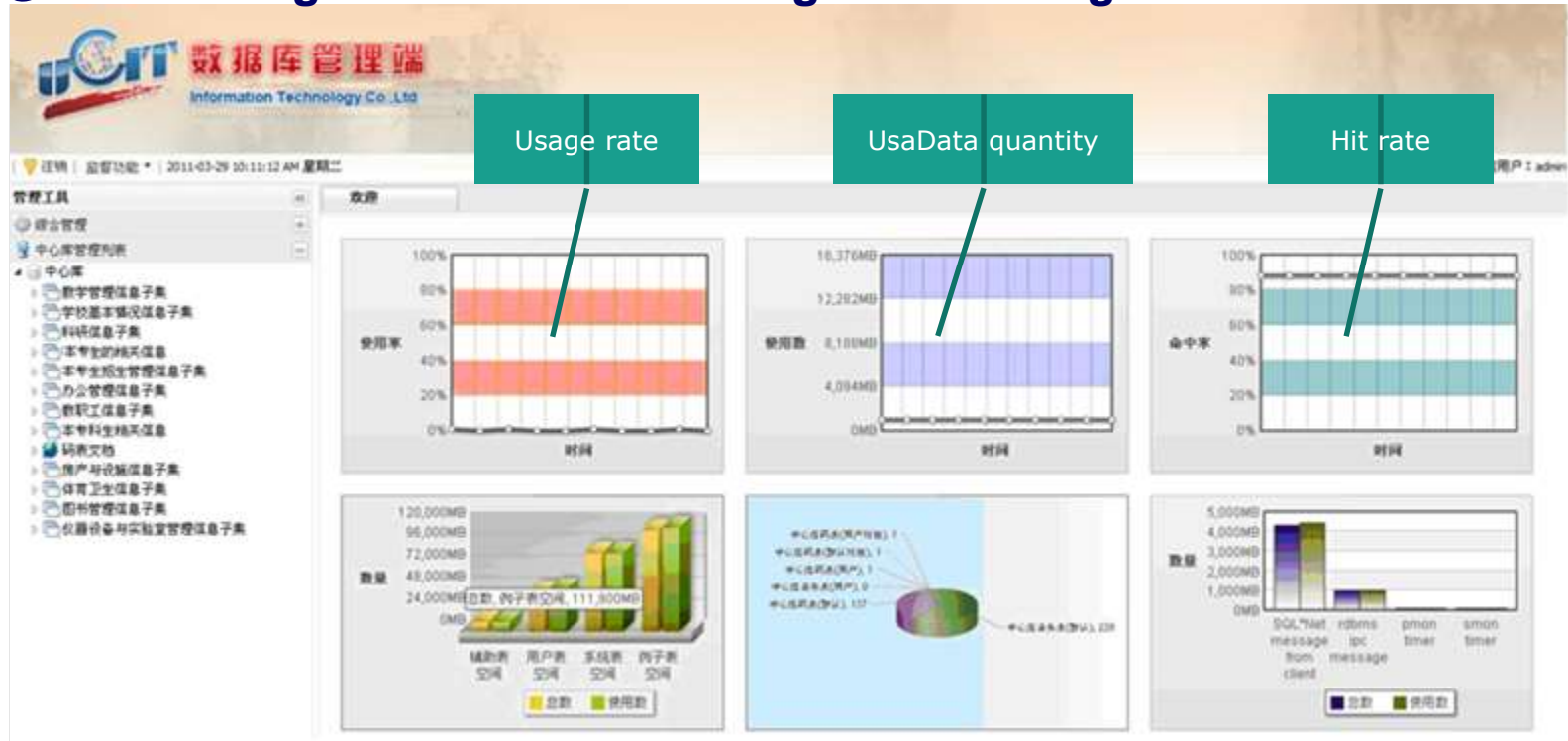
Basic to regular of strict ,management and monitoring system of sharing data center ,carrying out management of basic data and model of data and monitoring management of data center

Main functions key technologies

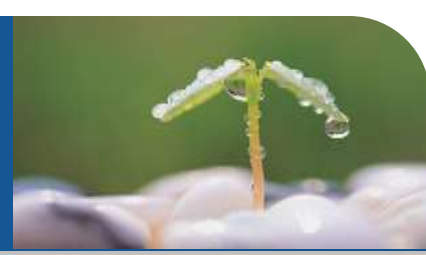


- Construction content
 - 2. Shared data center platform

① The management and monitoring data sharing center



Main functions key technologies



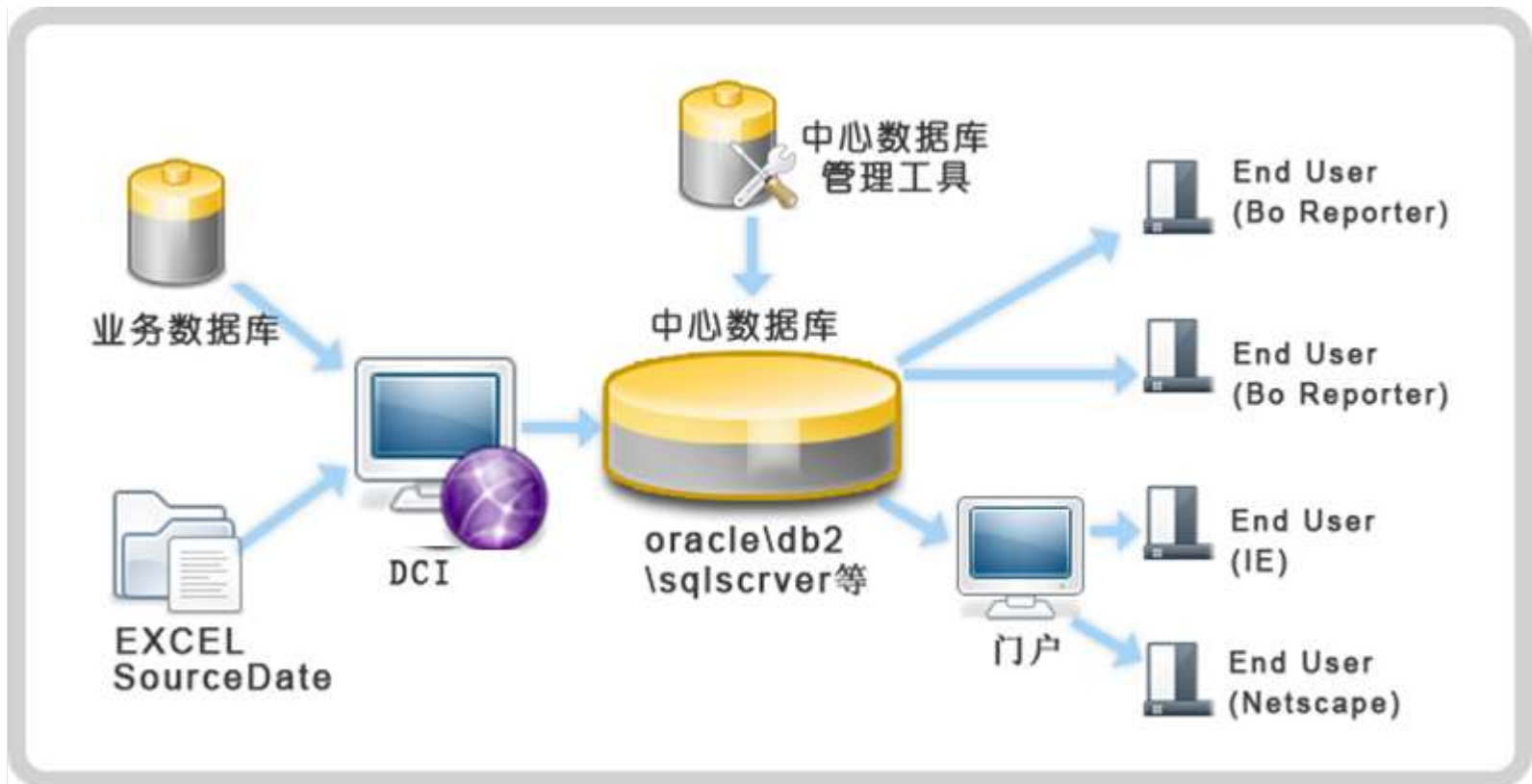
- **Construction content**
 - **3. Data cleaning and integration platform**

Data cleaning and integration platform to realize sharing data center data collection and distribution and offer to exchange information for cleaning, conversion, and inbound load such as data exchange service, namely, clean dirty data, completed the collation of data, to ensure data consistency, integrity and correctness.

Main functions key technologies



- Construction content
 - 3. Data cleaning and integration platform



Main functions key technologies



- **Construction content**

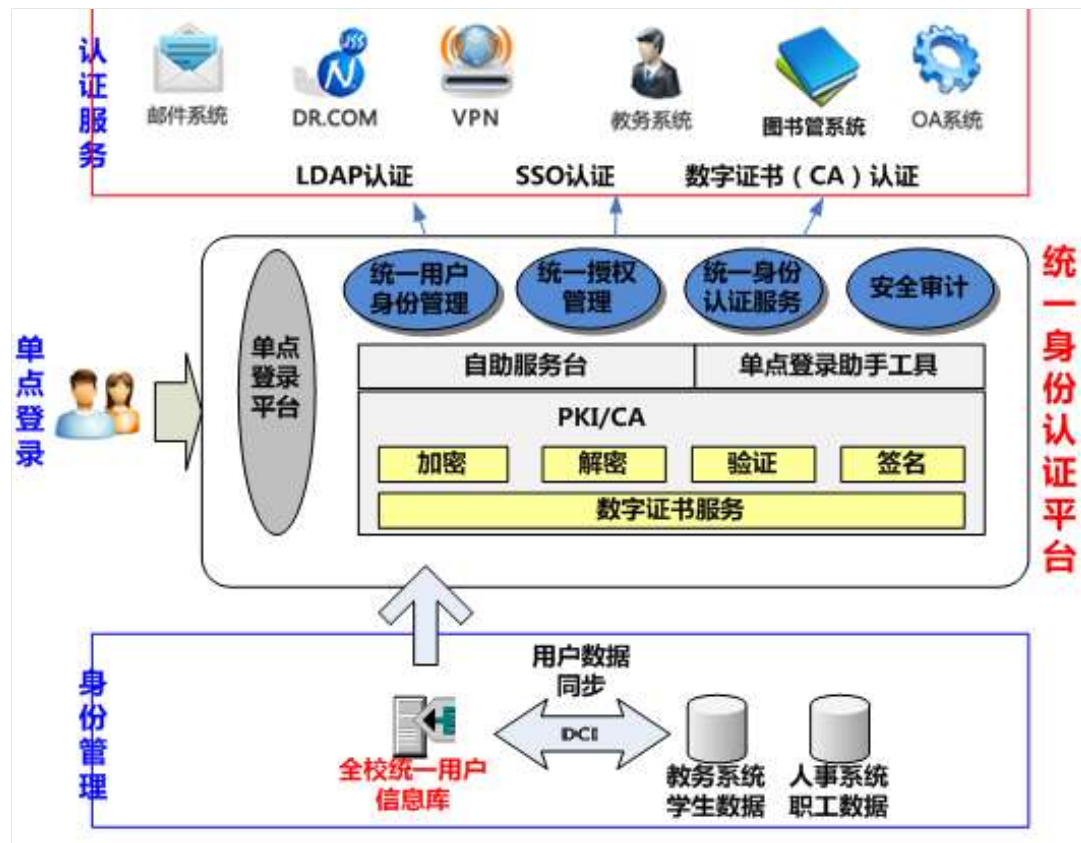
- **4. Unified identity authentication platform**

The identity authentication system will be an important part of the digital campus, and provide centralized authentication service for each application system, improve the security of digital campus application system

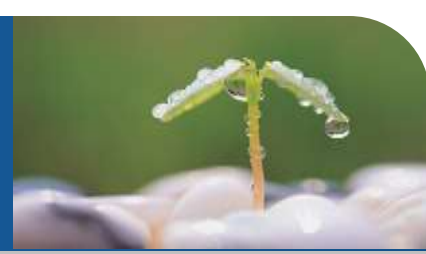
Main functions key technologies



- Construction content
 - 4. Unified identity authentication platform



Main functions key technologies



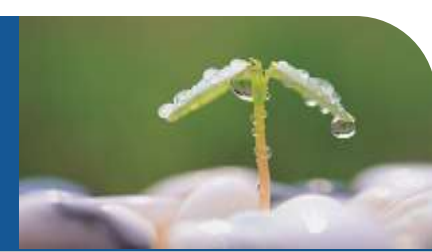
- **Construction content**

- **5. Unified information portal platform**

The platform in digital campus architecture ['ɑ:kɪtektʃə(r)] in the top, each application system of digital campus and the user's man-machine interactive service platform, is a concentrated display of digital campus information window



Main functions key technologies



- **Construction content**
 - **5. Unified information portal platform**

◆ Platform function

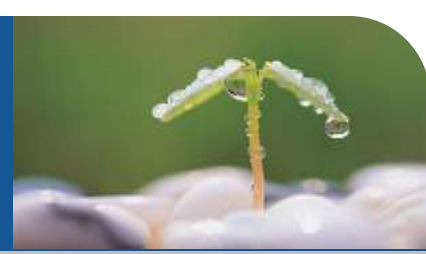
➤ Teacher portal

From the perspective of teaching staff, to provide the full information service to meet their work, life, service, etc..

The screenshot displays a comprehensive teacher portal interface. It is organized into several main sections:

- Personal Information:** Includes a profile picture, name, title, and contact details.
- Course Information:** Lists courses with columns for course name, course type, and status.
- Financial Statements:** A table showing transaction dates, types, and amounts.
- Personal Assets:** A table listing asset codes, descriptions, and values.
- System Announcements:** A list of recent system updates and notices.
- Quick Links:** A grid of icons for various services like OA, HR, and Finance.
- Navigation:** A top navigation bar with tabs for different user roles and a search bar.

Main functions key technologies



- **Construction content**
 - **5. Unified information portal platform**

- ◆ **Platform function**

- **Student portal**

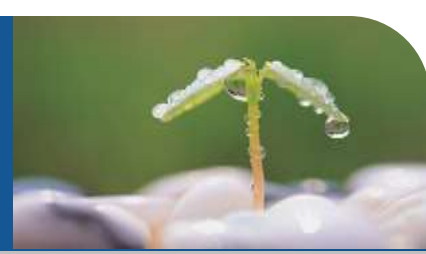
Starting from the point of view of students for students from freshmen to learn to live in the school to graduation and other various stages, to meet the personalized needs of the students information service.

The screenshot displays a comprehensive student information system interface. It is organized into several functional modules:

- 个人信息 (Personal Information):** Shows a student's profile with fields for name, gender, birthdate, and contact information.
- 消息概览 (Message Overview):** Provides a summary of recent messages and announcements.
- 交费统计 (Payment Statistics):** A table showing payment records with columns for invoice number, type, amount, and status.
- 我的课表 (My Class Schedule):** A grid-based interface for viewing and managing class schedules, including course names and room numbers.
- 信息查询 (Information Query):** A section with various search filters and options for finding specific data.
- 实践教学表 (Practical Teaching Schedule):** A detailed table for practical teaching activities, listing course names, dates, and times.
- 网上评教 (Online Evaluation):** A section for providing feedback on teaching quality, including a rating system and a text input field.
- 教工教学信息 (Faculty Teaching Information):** A list of faculty members and their associated teaching activities.

The interface is user-friendly, with clear navigation menus and a structured layout for presenting complex data.

Main functions key technologies



- **Construction content**
 - **5. Unified information portal platform**

- ◆ **Platform function**

- **Student portal**

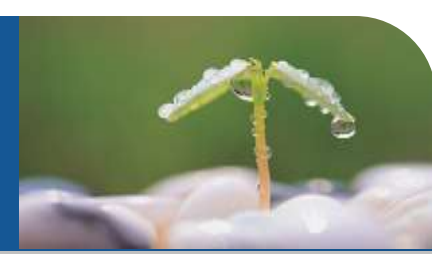
Starting from the point of view of students for students from freshmen to learn to live in the school to graduation and other various stages, to meet the personalized needs of the students information service.

The screenshot displays a comprehensive student information system interface. It is organized into several functional modules:

- 个人信息 (Personal Information):** Displays student profile details such as name, gender, birthdate, and contact information.
- 消息概览 (Message Overview):** Provides a summary of important school news and announcements.
- 交费统计 (Fee Payment Statistics):** A table showing payment records with columns for invoice number, amount, and status.
- 我的课表 (My Class Schedule):** A grid-based interface for viewing and managing class timetables.
- 信息查询 (Information Query):** Offers quick access to various school-related information.
- 实践教学表 (Practical Teaching Schedule):** A detailed table listing practical training sessions, including dates and times.
- 网上评教 (Online Teaching Evaluation):** A section for students to provide feedback on their instructors.
- 教工教学信息 (Faculty Teaching Information):** Lists faculty members and their associated teaching activities.

The interface is user-friendly, featuring clear navigation menus and data tables.

Main functions key technologies



- **Construction content**
 - **5. Unified information portal platform**

◆ Platform function

➤ Student portal

Starting from the point of view of students for students from freshmen to learn to live in the school to graduation and other various stages, to meet the personalized needs of the students information service.

The screenshot displays a comprehensive student information system interface. It is organized into several functional modules:

- 个人信息 (Personal Information):** Displays a student's profile, including a photo, name, gender, birthdate, and contact details.
- 消息概况 (Message Overview):** Provides a summary of various messages and notifications.
- 学校新闻 (School News):** Lists recent news items with dates and brief descriptions.
- 我的课程表 (My Course Schedule):** Shows a detailed weekly schedule with columns for days and times, listing specific courses.
- 信息查询 (Information Query):** Offers quick access to various data points like grades and attendance.
- 实验课表 (Experiment Class Schedule):** Details the timing and locations for laboratory sessions.
- 网上选课 (Online Course Selection):** Includes a search bar and a list of available courses for selection.
- 学工助学信息 (Student Work and Assistance Information):** Lists various support programs and their durations.

The interface is user-friendly, featuring clear navigation menus and a structured layout of information.

Main functions key technologies



- **Construction content**
 - **5. Unified information portal platform**

◆ Platform function

➤ Leading portal

Standing in the whole school level, as the university is an organic unity of the whole, based on teaching, scientific research, management, and service in various fields, for colleges and universities to provide covering the entire campus related information and intelligence services..



Main functions key technologies



- **Construction content**
 - **5. Unified information portal platform**

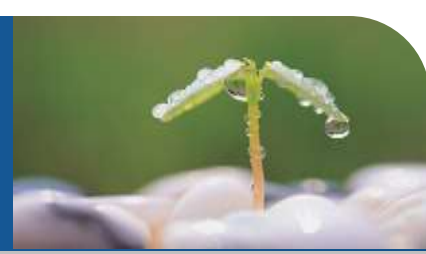
◆ Platform function

➤ Leading portal

Standing in the whole school level, as the university is an organic unity of the whole, based on teaching, scientific research, management, and service in various fields, for colleges and universities to provide covering the entire campus related information and intelligence services..



Main functions key technologies



- **Construction content**
 - **5. Air wisdom campus platform**
 - ◆ **The wisdom of campus aerial platform, is in the campus all kinds of information systems and information service integration based on, by operators of wireless communication network, 3G OR 4G network transmission. As the school faculty, students provide wireless digital campus service.**

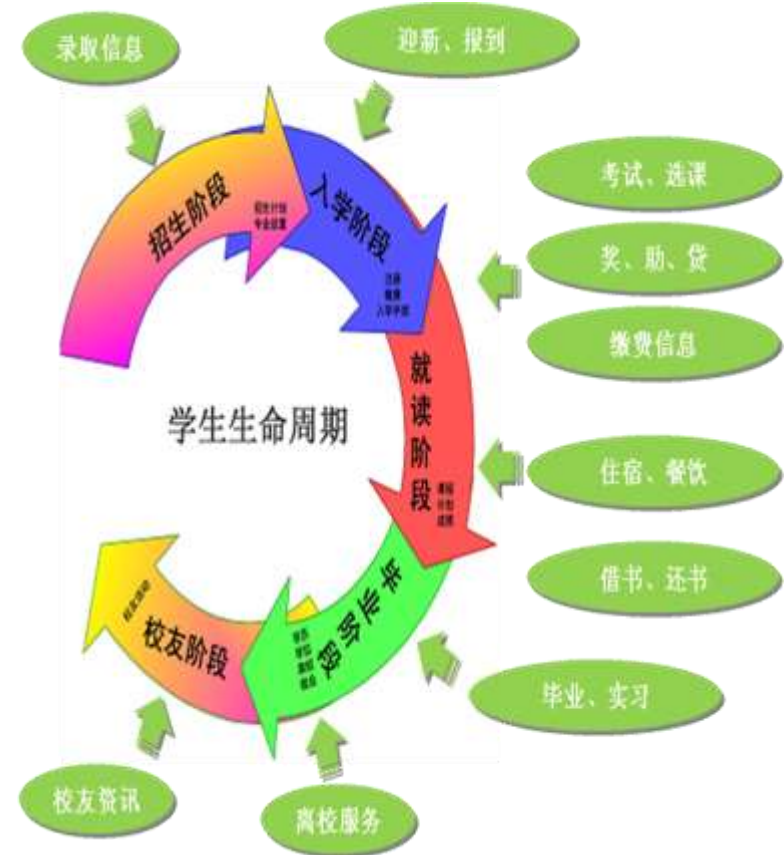
Main functions key technologies



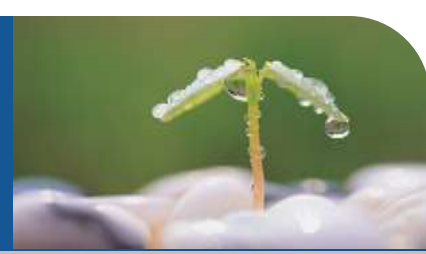
- **Construction content**
 - **5. Air wisdom campus platform**

◆ Platform function

To provide students with a full range of services by means of mobile information technology, and improve the students' use of viscosity [vɪ'skɒsəti]. The students for admission to school leavers can feel convenient. Also realized the information service, the student's full life cycle cover.



Main functions key technologies



- **Construction content**
 - **6.Comprehensive information inquiry system**
 - ◆ **Integrated information query system to school shared data center platform based, will be scattered in various departments of the data together, and to the roles of the teacher and students as the main line, cross sectoral three-dimensional personnel, teaching, learning, research, equipment assets, financial funds letter integrated information service.**

Main functions key technologies



- Construction content
 - 7. Student life cycle business system



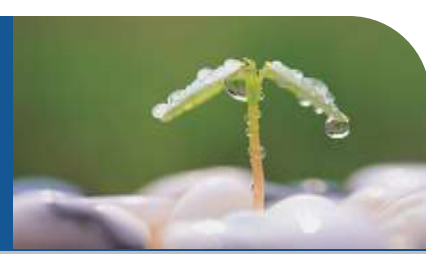
Main functions key technologies



- Construction content
 - 8. Teacher management and service system



The shortage of project and the need to expand the direction



Need to expand the function: center management decision analysis system is relatively weak, does not play a role, the hope can be combined with Middlesex university technology advantage, using the visual analysis techniques of decision analysis of new design and development.

Thank You!

