Party Building Management Information System

Ming Ouyang[1], Jingyi Chen[1, *], Yiyan Zhuang[1], Hualong Cai[1, 2, *]

[1]*College of Civil Engineering, Jiaying University, Meizhou, Guangdong, China*
[2]*College of Water Resources and Hydropower, Wuhan University, Wuhan, Hubei, China*
[*]*Corresponding author's email: whucad@whu.edu.cn*

Abstract
Party construction always leads the whole process of engineering construction. Party building work as an important driving force to promote the construction of the project It plays an irreplaceable role in all aspects of engineering construction. However, At the present stage of China's engineering construction industry there are still many engineering quality defects and insufficient safety awareness and other problems. Therefore, Our country must further develop the positive role of party building for engineering construction. However, Traditional party building work has outstanding problems such as poor information mobility, asymmetric information of the audience and low work efficiency. Unable to adapt to the new situation of party building work for the requirements of engineering and construction personnel. Therefore, This paper designs and develops the party building management information system based on the fast developing computer application technology. It realizes the information of party building management, breaks through the difficulties existing in the traditional party building mode and creates a new party building work mode. This party construction management information system enables China's engineering construction enterprises to better carry out party construction work, publicize party policies and guidelines, thoroughly implement party policies and systems, effectively improve the engineering responsibility of engineering construction personnel, ensure that engineering construction is completed with high quality, and truly convert party construction into a deep motivation to lead the high-quality construction of China's engineering.

Keywords: *Party building; engineering construction; engineering responsibility; management information system*

1. Introduction

Grasping good party building is grasping good productivity, and party building provides a strong impetus for the smooth progress of engineering construction. Party construction plays the role of guarantee, service and cohesion in engineering construction. Party construction work takes the development of party members' pioneering role as an important grasp, leading engineering construction personnel to carry out engineering construction work actively, proactively and creatively. However, at the present stage in China's engineering construction industry, the traditional party building work still suffers from the significant defects of low information dissemination efficiency, deviation in accuracy and lack of effectiveness and innovation, which cannot meet the personalized requirements of party members for party building knowledge learning and the internal information needs of the organization [1]. In order to establish a new image of party members in the new era, we must change the traditional party building work model. Only by seeking progress in change and keeping pace with the times can we keep our party's advanced nature forever.

Therefore, this paper designs and develops a party building management information system based on the fast-developing computer application technology to create an information-based party building management, improve the efficiency and transparency of party building work, and promote scientific, portable and service-oriented party building work. The platform is conducive to the party organization to gather strong organizational force for the engineering construction of the enterprise, actively play the leading role of party construction on engineering construction, so that the party construction work can adapt to the development requirements of the new era [2].

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2. System Components and Functions

The party building management information system based on computer application technology contains four modules, which are information management query module, learning and education module for party members and workers, activity promotion module and interactive communication module. (**Figure 1**).

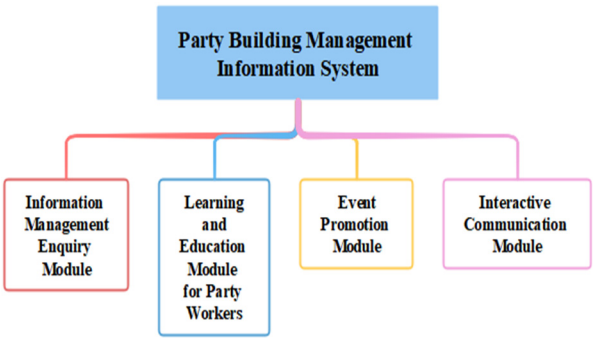

Figure 1 Composition of Party Building Management Information Syste

2.1. Information Management Query Module

In the information management query module, managers can classify information by entering party organization information, party employee information and daily work information, and can also classify and modify the added information to ensure the dynamic service function of the system. The system can meet various application needs of party organizations for data update, daily management and maintenance of party member information. In addition, the system also provides powerful query functions, which can query all the entered information data, and can realize the functions of statistical report summary, historical statistical report management and custom report management, etc. Users can directly generate report data according to the collected basic information, and provide a variety of presentation forms, such as scatter plots and bar charts [3].

2.2. Learning and Education Module for Party Members and Workers

The learning and education module for party members and workers opens a learning garden about party history and national history, party rules and regulations, and laws and regulations, providing various forms of learning options such as text, pictures, audio and video resources for party members and workers to watch and learn online. Among them, the system also uses VR technology to build a virtual classroom for teaching party history and national history, showing 3D graphic scenes that users can intuitively feel and learn by clicking on the corresponding icons, creating a sense of immersive experience [4].

In addition, the module also features special training and question-answer functions. Special training has different network special training courses according to the demand of party building work, and the corresponding training assessment is set according to the training content, and party workers can obtain the corresponding certificate after completing the training tasks and passing the assessment [5]. In the answer module, users can conduct self-study, self-answer and self-examination, and can view the question bank and the analysis of corresponding answers.

Users can mark key points and record notes at any time during the learning process, and can also collect and manage knowledge points, articles or videos for easy knowledge review. This module provides real-time data statistics and displays the learning situation of party members and workers through data visualization technology, so that managers can obtain the latest learning situation of party members and workers in a timely manner and provide decision-making assistance for organizational management.

2.3. Activity Promotion Module

The module has a "Party Building" column, which publishes real-time information and updates on party-related laws and regulations, rules and regulations, policies and guidelines, party building work, and announces related matters and progress. At the same time, the module has an "anti-corruption" column and a "project supervision" column to promote typical cases. The module offers a series of activities, such as "Building People's Satisfaction Project", "Stories of Party Members Around" and "Promoting Party Building+", to publicize the effectiveness, contents and advanced models of the activities. In addition, the module also displays a series of outstanding party members and advanced workers' representatives, introducing their excellent examples and good character, which users can view in detail by clicking.

2.4. Interactive Communication Module

The interactive communication module has a party member exchange forum, party committee mailbox and online consultation services to directly listen to the views of party members and answer questions in a timely manner. Users can also directly express their opinions or suggestions in the suggestion box, and the management will also regularly check and reply. In addition, the module also provides a rapid feedback function for problems, users can upload specific problems affecting the safety and quality progress of the project to the system platform in a timely manner, the system will notify the management and the party committee in the form of SMS to quickly solve the problem, which strongly enhances the penetration of the implementation of the deployment of the higher party organizations.

3. System Architecture

3.1. Software Architecture System

The system software architecture system is divided into five layers: user layer, application layer, service layer, data layer and foundation layer. The user level is divided into senior authority users such as Party Committee and Party Work Committee and other authority users. The application layer includes information query, information statistics, and information analysis. The service layer includes information management query module, learning and education module for party members and workers, activity promotion module and interactive communication module. The data layer includes the core database, the short version database and the SQL database. The application of SQL database can enhance the connection between various sub-modules and make information finding more efficient. The base layer includes computational resource pool, storage resource pool and network resource layer, etc. All levels collaborate with each other and are supported by a security and standards system, while relying on the operation and management system to ensure the good operation of the system. **(Figure 2)**

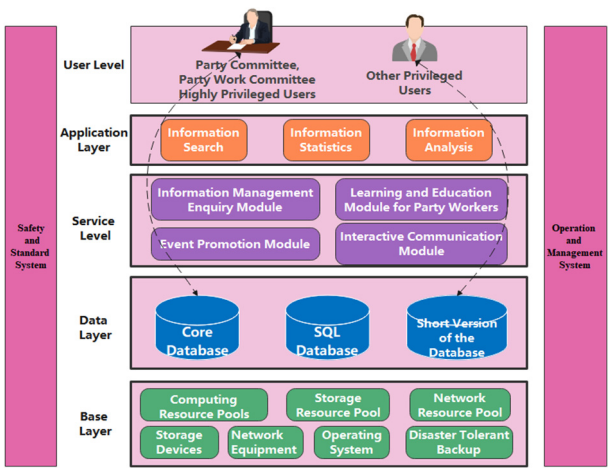

Figure 2 Schematic Diagram of the Software Architecture System

3.2. Hardware Architecture System

The hardware architecture system of the party management information system is based on cloud services, which stores all relevant information and data in the cloud server, making it easy for managers and users to retrieve information. The system makes full use of existing network equipment, lines and bandwidth resources, and deploys a gigabit security isolation network to isolate the WEB server from the database server, blocking illegal access to the database by users and protecting the core data of the database. **(Figure 3)**

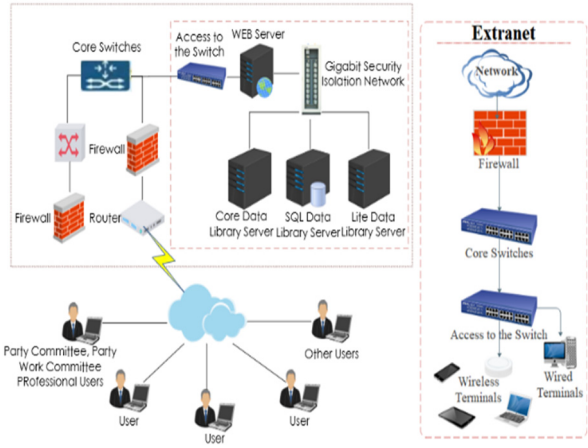

Figure 3 Network Topology Diagram

4. System Implementation

4.1. System Platform Interface

The management of Party Management Information System is divided into two parts, one is account management and the other is authority management. The management of these two parts enables the modification of MIS privileges and the creation of roles. Users can register their accounts by name and ID number, and then log in after the management has approved them. When logging in, the system automatically identifies the identity and level of the user. The top of the main interface of the Party Building Management Information System is the entrance of the subsystem, and the home page interface shows a series of content information such as special reports, current affairs hotspots and leadership speeches. The interface diagram of the Party Building Management Information System platform is shown in **Figure 4**.

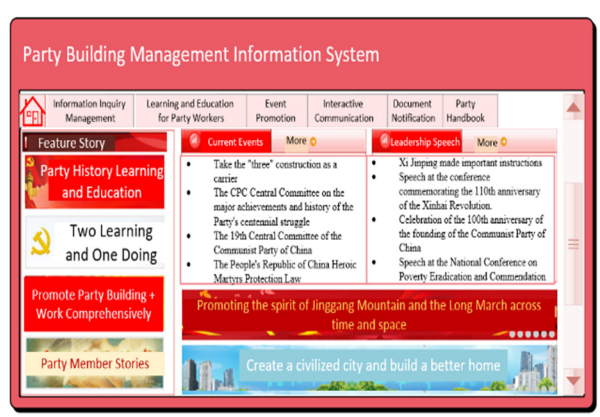

Figure 4 Party Building Management Information System Platform Interface

4.2. System-related Interfaces

The learning and education module for party workers displays users' personal information, including study notes, answer records, favorites and training courses. The

module also provides functions such as learning garden, special training and online question and answer, users can click on the corresponding content to watch and learn. In addition, users can search for the learning content they are looking for by entering keywords. The interface diagram of the learning and education module for party workers is shown in **Figure 5**.

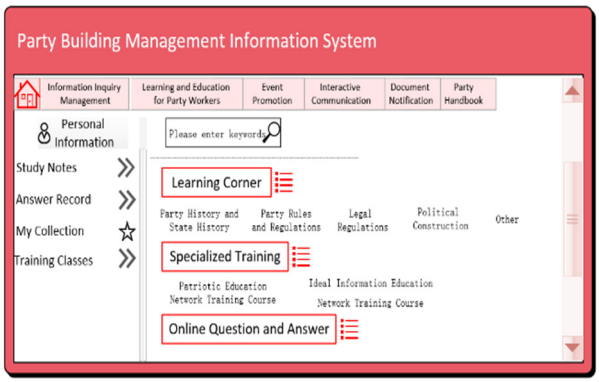

Figure 5 Interface Diagram of the Learning and Education Module for Party Members and Workers

4.3. System Part Code

The system adopts B/S structure, SQL database system and C language for architecture, and uses core database and short version database as resource support to design and develop party management information system, of which some codes are shown as follows.

```
//Display Party workers information
void Party workers Massage::Display()
{ Party workers *p ;
for(p = Head->next ; p ! = End ; p = p->next)
p->show() ;
getch() ; }
//Statistics
int Party workers Massage::Count()
{ Party workers *p ;    int x ,count = 0 ;
if(!Head)
{ cout<<"\n\t\t has no data to count!" <<endl ;
return 0 ; }
```

5. Conclusion and Outlook

This paper uses computer application technology to design and develop an information-based party building management information system to realize the integrated construction of party building information, education, management and service functions, so that the party building management information system becomes an important platform for party members and party workers to understand party building information, exchange party building experience and discuss party building theory. By establishing this system platform to preserve and utilize the information resources of party building management, it makes the party building management more orderly, efficient and scientific, and helps to improve the level and efficiency of party building management.

With the further development of computer application technology and the continuous improvement of the level of information technology, in the future, the party building management information system will also continue to innovate and improve, keeping pace with the times, constantly enriching the content of party building services and innovating the form of party building services. The application of the system is conducive to continuously improving the cohesion and fighting power of the party organization, allowing party building work to lead the engineering construction, ensuring the smooth progress of engineering construction, and promoting the continuous progress of China's engineering construction in high-quality development.

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