

## Management and Use of Campus Card

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**Keywords:** Campus Card; Management; Use

**Abstract:** The development of campus informationization, especially the concept of digital campus and intelligent campus, urges schools, especially colleges and universities, to be in the forefront of the times in the field of informationization. Modern schools are inseparable from the intelligent management of information, and school fee management, teaching services, logistics services are also facing reform. Based on this, the campus card management system came into being. Students can eat through the campus card, enter the library, open the dormitory entrance guard and so on, which provides great convenience for students' life. The campus card system is based on the support of high-tech means. How financial management workers use these methods to improve the quality of accounting and financial management is the fundamental purpose and significance of using campus cards. However, it can be seen from the current situation of the operation and use of the school "campus card" that there are still many problems in the use and operation of the "campus card". The school must analyze the causes of the problems in detail and take timely adjustment measures against the existing problems.

### 1. Introduction

With the development of digital technology and the practical needs of various applications, a complete system often needs to be composed of multiple computer terminals, and there is a certain distance between these computer terminals, which must solve the problem of multi-terminal and long-distance communication [1]. Modern schools are inseparable from the intelligent management of information, and school fee management, teaching services, logistics services are also facing reform. Based on this, the campus card management system came into being [2]. In order to speed up the pace of information construction in China and improve the overall competitiveness and economic status of our country, the state has issued a series of economic policies and measures to encourage and support the development of information industry, which provides a relaxed and favorable development opportunity for the development of smart card industry [3]. Realize the digitization and networking of the identity files of students and faculty, and realize the global sharing of identity data on campus through identity public information management. The traditional campus card system design can make a campus card use multiple application systems, which greatly facilitates the use of teachers and students. However, with the further advancement of digital campus construction, it is necessary to give campus cards a broader connotation [4].

Campus card is a smart card as the information carrier, which combines many high-tech technologies, such as microelectronics, single chip technology, computer network technology and database technology [5]. Advanced information management of campus is put in front of many schools. The use of campus computer network and IC card technology is an important means to promote and improve the school information management. At present, campus card management has become an inevitable trend of the development of campus management informationization, and an important part of the construction of university cultural identity [6]. To implement the overall plan of school informatization construction, we should emphasize the characteristics of software management service on the basis of adherence to standardization, advancement, security, reliability and openness, and emphasizing practicality, science, economy and rationality [7]. The account management of the account opening account and the book borrowing information management, student consumption information can be automatically generated and stored by high-level languages and external devices, can be used for student query needs. Converged into the corresponding access

system, the campus card synchronizes the card information to the docking system, and the docking system completes the identity authentication through the card. After completing the transaction, the transaction information data is synchronized to the campus card system to complete the accounting and settlement. This paper has carried out research on the management and use of campus cards [8].

## 2. Current Situation of Campus Card

### 2.1. Basic functions of campus card

From the extensive use of campus card, it can be seen that it provides many conveniences for the work, study and life of teachers and students, improves the efficiency of the work of various departments, and is applied to payment places such as campus canteens, supermarkets and venues, mainly including subsidies, transfer, recharge, consumption deductions, data collection, report statistics and other functions. With perfect card information, record information and log information, it provides modern management means for financial management, which is welcomed by consumers and affirmed by school leaders. Because this part of the fund circulation is stable. The centralized management of schools is conducive to enhancing the school's ability to control funds. The basic personal data of students can be stored on campus cards, such as names, gender, age, departments, majors and grades. Realize all identification functions on campus, such as the identification of teachers, students and faculty members in daily teaching operations. User-friendly user-friendly management divides the modules of the program, and associates the modules according to object-oriented analysis and design methods, making it a powerful overall system to meet the needs of daily business, applying campus card advantages such as Table 1 shows.

Table 1 Advantages of campus card

	Perfect	Service
Reducing human cost	17.08	18.62
Simplifying School Procedures	21.32	19.04
Improvement of management	20.72	17.31

### 2.2. Development of campus informatization

Campus card software system can integrate with service portal, and connect with other business management information systems of the school. It can realize the functions of query, statistics, analysis, data sharing and exchange of all kinds of information in the whole basic data of the campus. In the process of promoting the construction of information technology, most colleges and universities pay attention to the construction, that is, to apply advanced information technology to the construction of information technology in schools. Campus information system is very different from other information systems, and it has certain particularity. The information systems in each of the major parts are independent of each other, and many of the information has strong secrecy. Centralized management of students' information. However, there are many problems in the use and operation of campus card. These problems must be paid attention to by schools. Schools need to analyze the causes of these problems in detail and constantly adjust and optimize them. If necessary, the processing results must be submitted to the data layer for storage and logic checking, information retrieval, and so on. The business logic layer is the most critical part of the whole system, including the listening process, processing process and database operation process.

By setting up the basic data and forming the common parameter database, the integrity and consistency of the common data of the system can be guaranteed, the parameterization of the key information of the program can be realized, the amount of data input can be greatly reduced, the operation efficiency of the system can be improved, and the maintainability of the system can be enhanced. Make full use of the advantages of campus card, such as its powerful function and ability to trade offline. We should adopt modularization and component design idea, so that the functional modules of each subsystem can be combined at will, so as to meet the needs of users, and tailor the clothes according to users, which ensures the realization of all functions. Management of campus

cards, loss of card management, division of responsibility for card damage, and recycling of cards. At the beginning of the system construction, the life of the card is fully considered, and the campus card is lost. When the old card is lost and the new card is replaced, the information on the campus card is completely transferred from the old card to the new card, and the old card cannot be used to ensure the life of the card. The cardholder's life in the campus is consistent. The campus card platform's own characteristics, which means that "management improvement" has a decisive impact on the use of the system. In other words, the construction or upgrading of the campus card platform should be considered more to improve the school management work, so that the platform can have better application results.

### **3. Construction and Management of Campus Card System**

#### **3.1. System management should be perfect**

"Campus Card" system can be divided into different plates, as long as the login once can operate each plate, simplify the various steps in the system. For the lack of detailed consumption in the "campus card" system, we should classify the "campus card" system financially. We should consider the security of the operation of financial data, especially the amount of consumption data; and the closed operation of the financial network, especially the connection between the campus card network and the banking network, and how to prevent the intrusion of illegal users (hackers); in the process of building or upgrading the campus card platform, we should take into account the security of the operation of the financial data. More attention should be paid to simplifying the school's work flow, using more terminals such as laptop instead of manual labor, reducing labor costs, so as to obtain better user experience and use effect. Certain measures need to be taken to improve the professional quality of computer technicians to enhance the stability of the campus card system, can introduce more professional computer talents to build the system.

#### **3.2. Campus card security mechanism**

In order to ensure the safe operation of the system, card management stations and servers in the network should be dedicated. The serial number (card number) of contactless IC cards is unique. The manufacturer has fixed the serial number in the chip before leaving the factory. In the design and manufacture of contactless IC card reader, mutual checking has been considered, and some algorithms have been adopted to encrypt the data to ensure that the data on the card is not illegally modified. The accuracy and consistency of transactions can be maintained by checking and repairing inconsistent accounts through an automatic reconciliation system. The reconciliation generally adopts the checking mechanism of the flow list documents of transactions within the accounting day. The system supports automatic reconciliation and manual initiation of the specified account reconciliation two ways. There will be problems, so the combination of manual and automatic processing should be adopted. According to the actual situation, it is necessary to deal with the imbalance between the card and the library. If the data cannot be uploaded in time, the data in the data center will be incomplete, resulting in reconciliation. Certain difficulties. This requires each department's data administrator to make the necessary prompts for the consumer outlet operators under their jurisdiction, and do the data uploading work before the daily checkout.

Campus card system as the basic environment and supporting platform of digital campus, its structure is completely subject to the overall planning of digital campus construction, and has become an organic and important part of digital campus. This paper classifies all parts of the campus information system, carries out data statistics and automatic updating measures, separates the information that can be used, and then integrates it effectively to avoid the problems caused by the instability of the information system. The system provides flexible basic data and system management settings. Basic data and code settings are the basic data codes used by the system and their corresponding basic information. The system will not be re-adjusted by technological transformation or the increase (expansion) of the institutional network. The scalability design should also pay attention to the overall planning of the card. With the continuous expansion of

business and the enhancement of functions, the structure design and selection of the card reserve the space needed for future expansion. The campus card management system will not be too far away in colleges and universities. Colleges and universities can choose different campus card management systems according to their actual conditions, and develop more functions to meet the needs of building a digital campus and meet the needs of scientific development Meet the needs of regulatory management.

#### 4. Conclusion

This paper studies the management and use of campus card. In the current era of the Internet, computer technology has also been very rapid development, which in the campus card has been very effective application. The scale and degree of development and application of campus card management system are closely related to the development and application of school management information system. Campus card management system is the key project of information construction in Chinese universities. Campus card can also improve the data basis for school financial management, reduce the cost of school operation and management, and improve the school's social status and competitiveness. In addition, schools can manage teacher information and standardize teacher behavior through the "campus card". The use of digital management will also bring campus information management to a new level. When necessary, faculty and staff can also use the campus card to integrate the entire school management into the computer network system, greatly improving administrative efficiency. Establish a "campus card" operation and use management specification, so that it has rules and rules to follow in daily operation and management, so that the "campus card" system can be operated and used more perfectly, greatly improving school management, teaching and life. And the level of service. Emphasis is placed on various operations on the database, actual measurement of various performance of the system, and testing to meet design requirements. Through the operation and testing at this stage, it is possible to verify whether the database system design is reasonable and whether the operation is safe and efficient. Taking the campus card system as the entry point, the overall planning of the "digital campus" network structure, the initial construction of the campus internal office network, network access platform, network security platform.

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