

# A Brief Discussion on Innovations in Student Fee Management Systems in Higher Education Institutions Under the Network Environment

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**Abstract:** As the reform of the higher education system in China continues to deepen, the scale of institutions expands, and the channels for fee collection diversify, the types and quantities of invoices have also seen rapid growth. The application of student fee management systems in universities enhances the accuracy of fee management, showcasing advantages in intelligence, precise record-keeping, and statistical capabilities—qualities that traditional manual fee collection cannot match. However, several issues remain unresolved in practice. In traditional student fee management processes, the systems used are often isolated, preventing effective data sharing. Various problems have surfaced in student fee management, and addressing these issues is crucial for ensuring timely and full fee collection, which is key to promoting the rapid development of higher education.

**Keywords:** Student Fee Management Systems; Higher Education Institutions; Network Environment.

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## 1. Existing Problems in Student Fee Management in Higher Education Institutions

### 1.1. Multiple Payment Channels and Difficulties in Financial Reconciliation

The lack of a unified payment channel—cash, POS card swiping, bank transfers, app payments, and WeChat payments—results in data organization errors and a lack of real-time fee data, complicating financial reconciliation.

### 1.2. Inability to Share Fee Information Across Platforms

Establishing an accurate student information database is critical for the financial department to charge fees correctly. Changes in fee structures and student enrollment require information sharing among relevant departments. Currently, effective interaction models among departments have yet to be established, leading to a lack of mechanisms for following up on various outstanding fees. Most financial management systems in universities lack a comprehensive network design, resulting in inconsistent data across finance, admissions, academic affairs, and student housing management departments. This lack of data sharing and control complicates data verification and cross-departmental collaboration, increasing communication costs. Inefficient fee management mechanisms lead to incomplete fee statistics in financial accounting, failing to provide timely feedback on collected fees, which may result in a disconnect between fee management and financial accounting. Some students' outstanding fees may not be reflected in accounting processes, leading to a lack of thorough review and supervision mechanisms, and neglecting outstanding funds can further result in financial losses.

### 1.3. Insufficient Internal Control Systems in Student Fee Management

Establishing an integrated system that combines financial accounting and fee management is essential for advancing fee

collection work in universities. A scientific management system that combines fee management with financial budgeting can accurately reflect detailed data on student payments. By utilizing compatible systems, it becomes possible to efficiently and accurately verify accounts while ensuring symmetric and reciprocal feedback on fee information. This further minimizes financial oversights and losses, enhancing the quality and efficiency of fee management and accurately reflecting the financial status of the institution. The internal control of financial management currently relies on a combination of computer controls and manual processes. Most universities in China have yet to establish strict and standardized internal control systems, making it difficult to align with the rapidly evolving big data era, thus compromising the security and confidentiality of information[2].

### 1.4. Inadequate Automation of Student Fee Management Systems

While student fee management systems have many functional designs, numerous operations still require manual offline processing, which reduces the efficiency and service quality of financial management. For instance, generating accounts receivable in the past required financial personnel to input student information into the fee management system based on data provided by the academic office, entering it into an Excel spreadsheet according to "department code," "major code," and "class code." This process is labor-intensive and prone to omissions, despite the system offering methods for batch processing based on fee standards, single-item or multi-item processing, and importing receivables. Due to variations in student demographics across institutions, financial personnel often resort to offline templates for generating receivables, which ultimately adds to their workload.

## **2. Innovative Measures for Student Fee Management Systems in Higher Education Institutions in the Era of Big Data**

### **2.1. Establishing a Modern Information-Based Internal Control System**

Fee collection is a significant economic activity for universities. By leveraging information from the academic affairs office, student affairs office, and other functional departments, the financial department can keep the fee collection system updated with accurate student information. This inter-departmental information sharing fosters an integrated fee management system within the institution. In accordance with internal control regulations for administrative institutions, the internal control processes and key control points for fee collection should be embedded within the information system. Strengthening the establishment of these systems and creating a unified information network platform improve the efficiency of fee management while ensuring smooth information flow between departments, thereby enhancing transparency in fee management[2]. In a network environment, utilizing modern information technology for automated fee management allows for the identification and approval of different personnel involved in various stages of the same business process. Different permissions can be assigned based on roles, preventing unauthorized access to the unified fee collection platform. By establishing specific personnel and permissions, appropriate internal checks can be created, bolstering the internal control system and ensuring the integrity and security of the fee management platform[4]. This standardizes the income and expenditure processes, eliminating various interferences and accurately reflecting detailed payment information for students. It also enables efficient verification of accounts and facilitates symmetric and reciprocal feedback on fee information, further preventing financial oversights and losses and improving the quality and efficiency of fee management.

### **2.2. Integration of Fee Systems with Student Information Data**

Integrating the student fee management system with the university's student information databases allows for tracking and managing outstanding fees based on students' academic cycles. This integration automatically generates accounts receivable management information and reviews changes in student enrollment status, leading to accurate fee management data. The academic affairs office can log into the modification module during the fee collection year to make necessary changes to student information, automatically updating fee standards and documenting the change process for future reference. This integration enhances work efficiency while ensuring data consistency and accuracy. Many universities have already implemented campus card systems, which are becoming a primary method of fee collection. The student fee management system is an integral part of the digital campus and an essential component of financial management informatization. As the digitalization and networking of university management accelerate, integrating the fee system with student information databases and linking it to the campus card system is crucial for the successful implementation of a digital campus.

### **2.3. Linking Fee Systems with Scholarship and Financial Aid Data**

The assessment of scholarships, grants, and loans is a vital task for university student affairs, requiring coordination among various departments and the financial office. The results of these assessments need to be communicated back to the financial department for disbursement. To effectively manage the distribution of scholarships and financial aid, it is important to track students' payment information. The financial department can deduct outstanding amounts from scholarships based on students' fee status. The networked fee system should facilitate the collaborative operation of multiple university departments, utilizing diverse online channels to ensure timely and transparent information about outstanding fees. This inter-departmental collaboration can create robust internal administrative control measures, enhancing the efforts of various departments in collecting outstanding fees[5,6].

### **2.4. Establishing Multiple Modules in Fee Management Systems**

In the construction of student fee management systems, it is essential to incorporate multiple modules to provide data support for the university's financial oversight system. In the context of the network environment and the era of big data, various relevant departments need real-time access to data to compile necessary reports for their superiors. By applying the diverse functionalities of software, it is possible to link query and statistical modules with the fee management system's database, thereby improving work efficiency and ensuring data timeliness. The system should categorize and sort various fee items by department, allowing for the timely generation of summary and detailed reports as needed. Additionally, it should enable real-time updates to the management system, providing accurate data and analytical reports to all departments, thereby facilitating a comprehensive understanding of fee management and offering strong data support for institutional decision-making[1,5].

Exploring a management model that combines financial fee management with online operations is an ongoing process of exploration, improvement, and enhancement. By continuously elevating management levels and improving software functionalities, universities can adapt to the evolving demands of management and financial oversight. This integration of multiple departments is expected to move away from traditional isolated task execution, achieving unified management, information sharing, and effective communication, ultimately enhancing transparency in the entire fee collection process and improving efficiency.

## **References**

- [1] Wang Yaohe. The Practice of Establishing the diversified school-running Characteristics of PUGAO [J]. Journal of Ningbo University of Education, 2013.
- [2] Wang Hong: Thinking on Internal Control of University fees under Network Environment [J]. Finance and Accounting Communication, 2015(10).
- [3] Chen Mingxue: Current university fee management problems and countermeasures. Business Economics, 2016(3).
- [4] Fang Zhouwen: Explanation of Internal Control Norms in Administrative Institutions [M]. Shanghai: Lixin Accounting Publishing House, 2013.

[5] Niu Liping. Discussion on the Optimization of Financial Management in Universities under the COVID-19 Epidemic Business Observation (2021) 22.

[6] Yang Jinrui: Innovation of College Student Fee Management under the condition of Informatization [J]. Contemporary Accounting, 2016.