Research on the Construction of University Fund Settlement Center Based on Internet Platform

Sun Na
Zaozhuang University, Planning Finance Branch, Zaozhuang Shandong 277160, China

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Abstract: The traditional university fund settlement center has the defect of low efficiency, so this paper puts forward the research on the construction of university fund settlement center based on internet platform. This paper uses Internet platform to collect university fund data, classifies and integrates the above-mentioned collected university fund data by clustering method, checks the classification results by query and verification method of internet platform, completes the optimal allocation of fund data, and uses electronic payment means included in internet platform to settle university fund, in order to ensure fund settlement. Accuracy, supervision of the process of fund settlement, prevention of fund risk, the construction of university fund settlement center based on internet platform. The experimental results show that the settlement efficiency of the fund settlement center in colleges and universities is 31.2% higher than that of the traditional center, which fully shows that the fund settlement center in colleges and universities has better performance and can provide better service for colleges and universities.

1. Introduction

With the deepening of China's education reform, the number of schools and students is also increasing, which leads to more complex financial exchanges among universities, and the requirement for the construction of fund settlement center is also increasing. Capital settlement center is a common mode of capital management in colleges and universities. The main purpose is to introduce the bank's fund management model into the school. Through the unified settlement, collection and transfer of the following departments'funds and idle funds, the efficiency of fund operation is improved from the overall level of the university, and the financial risk of the university is reduced.

In recent years, with the rapid development of internet technology in China, the application rate of internet platform is also increasing year by year [1]. The main core technology of internet platform is to collect and integrate data, publish and share information using internet technology, and guarantee the security and personalization of information. From the technical point of view, the internet platform has a very high commercial value, it can process data quickly and speed up the efficiency of work. Traditional university fund settlement centers have the shortcomings of low efficiency, which can not meet the needs of the current society for university fund settlement centers. Therefore, this paper puts forward the research on the construction of university fund settlement centers based on internet platform.
2. Construction of University Capital Settlement Center Based on Internet Platform

The university fund settlement center mainly collects, integrates, settles and manages the fund exchanges and idle funds in universities. Therefore, the construction of university fund settlement center is mainly divided into three parts: optimizing the allocation of fund data, formulating the method of fund settlement, generating the amount of fund settlement, monitoring and controlling the fund settlement and preventing the fund risk.

2.1 Optimal Allocation of Capital Data

The optimal allocation of funds data in colleges and universities can be divided into two aspects: one is to collect funds data; the other is to classify and integrate funds data.

The university fund settlement center mainly includes fund settlement laws and regulations, fund settlement system, financial institutions, payment tools, etc. Its main fund settlement business is divided into three aspects: first, students' payment, mainly including tuition and accommodation fees and other miscellaneous fees payment business; second, the recharge of "campus card"; third, reimbursement, mainly including students and accommodation fees; third, reimbursement. Teachers' daily reimbursement business, student scholarship issuance business and labor fee settlement business, etc.[2].

Among them, students pay fees mainly by the way of bank deduction. In addition, students can also pay tuition and accommodation fees by means of on-site card swiping and cash payment. If students do not pay tuition fees and accommodation fees within the prescribed time, they need to make up the payment. At this time, the educational departments of colleges and universities need to issue a certificate, and students send it to the fund settlement center for record. The fund settlement center records, integrates, settles and manages according to the corresponding bills; the "campus one-card" is mainly settled through windows or funds. The center pays fees; and the reimbursement business mainly adopts the way of appointment reimbursement. Firstly, reimbursers need to make an appointment on the internet platform, and then submit the reimbursement form to the financial department. The financial department needs to deal with the reimbursement form according to the appointment time. If there are problems in the process, the financial personnel should provide the materials with the agent. Check and process again to ensure the accuracy of the reimbursement process.

With the continuous development of the internet, the way of fund settlement in colleges and universities is also changing. Nowadays, most of the universities adopt the "cash-free" fund settlement method based on the internet platform. Therefore, the collection of fund data is also based on the internet platform. The program of fund data collection is installed on the internet platform, and it is applied to colleges and universities. Funds exchanges and idle funds data are collected. The specific collection methods are as follows:

$$\phi = \prod_{i=1}^{X_i}$$ (1)

In the formula, $X_i$ represents the $i$th collection of capital data.

The data set of university funds is as follows:

$$X_i = \{x_1, x_2, \cdots, x_n\}$$ (2)

Because of the difference of fund business, the fund data of colleges and universities have various attributes, so it is very easy to cause miscalculation in the process of fund settlement. Therefore, it is necessary to deal with the fund data collected above accordingly. This paper mainly
uses clustering method to classify and integrate the above-mentioned collection of university funds data sets \[3\]. The specific process is shown below.

According to the needs of the fund exchange business in colleges and universities, the fund data are mainly divided into four types, namely, student payment business, campus card business, reimbursement business and idle funds. The results of clustering are as follows:

\[ X_i = \frac{\alpha^{-1}}{\omega} \{x_1, x_2, x_3, x_4\} \]  \hspace{1cm} (3)

In the formula, \( \alpha \) represents the parameters of the clustering method; \( \omega \) represents the number of factors in the classification process.

In order to avoid errors in the process of classification, we use the query function of the internet platform to query and verify the classified data, so as to ensure the accuracy of the classification of funds data, thus speeding up the efficiency of fund settlement. The steps of query and validation of funds data are shown in Table 1.

<table>
<thead>
<tr>
<th>Step</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td>Query on internet platform according to the attributes of a certain kind of capital data</td>
</tr>
<tr>
<td>Step 2</td>
<td>Determining the category of capital data attribution</td>
</tr>
<tr>
<td>Step 3</td>
<td>Query the total number of funds in this category</td>
</tr>
<tr>
<td>Step 4</td>
<td>Compare total number with query proficiency</td>
</tr>
<tr>
<td>Step 5</td>
<td>If it is consistent, it means that there is no classification error; if it is inconsistent, it is necessary to initialize the clustering method to re-classify and integrate it.</td>
</tr>
</tbody>
</table>

Through the above-mentioned process, the optimal allocation of funds data in colleges and universities is realized, which can provide data support for the following fund settlement methods and indirectly improve the efficiency of the fund settlement center.

2.2 Establishment of Fund Settlement Method and Generation of Fund Settlement Amount

According to the classification and integration results of the above-mentioned capital data, we choose the settlement function of the internet platform for fund settlement \[4\].

With the rapid development of internet platform in recent years, the electronic settlement of funds has gradually become. Traditional settlement of funds requires individuals or corporate entities to go to the bank or the payee to conduct transactions in person. With the development of internet platform, a large number of third-party payment platforms have emerged, banks are no longer the only way to settle funds. The emergence of WeChat, alipay and other capital clearing platforms has completely changed the way of cash settlement. Banks also use the internet platform to open online banking. People can operate business and settle funds on their software. It is not only convenient and fast, but also greatly improves the efficiency of fund settlement.

The fund settlement method of the internet platform mainly relies on the electronic payment means to settle the funds accordingly. It not only can overcome the limitations of time and place, but also greatly compensates for the shortage of traditional fund settlement methods and reduces the workload of the personnel of the fund settlement center. The efficiency of fund settlement has been improved, and a more convenient way of fund settlement has been provided for the university fund settlement center. Internet platform fund settlement mode can also achieve real-time fund settlement,
not only can guarantee the security of funds, but also promote the innovation of cash-free fund settlement mode.

The process of fund settlement for internet platform is as follows: login to the financial reservation and reporting system→enter information on capital transactions→save it and print it out→report to finance department→financial staff receives and distributes receipts according to the appointment time→audit bills→examination passed→accountants conduct audits and make bills→check again→the cashier audits again and settles the accounts→verify and print receipts to complete fund settlement.

Through the above process, the settlement of funds has been realized. However, because there are many links in the process design of the settlement of funds, if there are problems in one link, it will lead to mistakes in the settlement of funds. Therefore, it is necessary to manage and supervise every link in the process of the settlement of funds.

2.3 Capital Settlement Monitoring and Capital Risk Prevention

This part mainly preserves and manages the capital data, and at the same time supervises the process of capital settlement to ensure the accuracy of capital settlement. The module is mainly divided into three parts: audit supervision, audit supervision and cashier supervision [5].

Audit supervision plays an important role in fund settlement management. It should not only supervise all links in the process of fund settlement, but also prevent the risk of fund. Only by doing these two tasks well, can we supervise the fund settlement management of colleges and universities comprehensively and effectively.

Audit supervision is mainly based on the internet platform, establish the corresponding audit mechanism, and improve the management system of university fund settlement center. First of all, we must guarantee the independence, objectivity and authority of auditing; secondly, we should carry out regular and special auditing of university fund settlement business, and systematically supervise the whole process of fund settlement; finally, we should focus on monitoring the main risk points of funds, so as to prevent the crisis of university funds.

Cashier supervision is the key link in the management of fund settlement center. It requires higher business ability of cashier. Only cashier's business ability is too strong is not enough. Cashier should have an objective and fair attitude, distinguish right from wrong, abide by discipline and law, and supervise and review at the last stage of fund settlement [6].

Through the above process, the construction of university fund settlement center based on Internet platform is realized, and the efficient settlement of university funds is carried out.

3. Analysis on the Efficiency Performance of University Capital Settlement Center

The above process realizes the construction of university fund settlement center, collects, integrates, settles and manages the funds exchanges and idle funds, indirectly explains the feasibility of university fund settlement center, but the performance of university fund settlement center needs further study. Therefore, this paper designs a comparative experiment to study and analyze the performance of the university fund settlement center.

This paper mainly uses the construction of the university fund settlement center and the traditional university fund settlement center to carry out experiments, and makes a comparative analysis of the experimental results, mainly through the efficiency of the university fund settlement center to analyze its performance.

In the course of the experiment, the number of funds exchanged was set at 1000, within 60 seconds, the settlement situation of university fund settlement center is shown in Table 2.
Table 2 Settlement statement of capital settlement center within the prescribed time

<table>
<thead>
<tr>
<th>Number of experiments</th>
<th>Number of calculation in construction centers</th>
<th>Number of calculation in Traditional centers</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>956</td>
<td>710</td>
</tr>
<tr>
<td>20</td>
<td>920</td>
<td>621</td>
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<tr>
<td>30</td>
<td>891</td>
<td>532</td>
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<td>50</td>
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<td>545</td>
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<td>60</td>
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<td>468</td>
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<td>70</td>
<td>766</td>
<td>645</td>
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<td>80</td>
<td>846</td>
<td>485</td>
</tr>
<tr>
<td>90</td>
<td>900</td>
<td>460</td>
</tr>
<tr>
<td>100</td>
<td>860</td>
<td>560</td>
</tr>
</tbody>
</table>

The formula for calculating the settlement efficiency of university fund settlement centers is as follows:

\[ V = \frac{q}{q_0} \times 100\% \] (4)

In the formula, \( V \) represents the settlement efficiency of university fund settlement center; \( q \) represents the number of times the fund clearing center settles accounts; \( q_0 \) represents the total number of capital transactions.

According to the above formulas, a comparison chart of the settlement efficiency of the two fund clearing centers is obtained as shown in Fig.1.

![Fig.1 Contrast chart of settlement efficiency of capital settlement center](image)

Fig.1 Contrast chart of settlement efficiency of capital settlement center

As shown in Fig.1, the settlement efficiency of the capital settlement center in Colleges and universities is obviously higher than that of the traditional center. Among them, the settlement efficiency of the fund settlement center of the university is 95.6%, and the average is 87.3%; the settlement efficiency of the traditional college fund settlement center is 71%, the average is 56.1%, then the settlement of the university fund settlement center The average efficiency is 31.2% higher than that of the traditional center. It fully demonstrates that the university's fund settlement center has better performance and can provide better services for colleges and universities.
4. Conclusion

The construction of university fund settlement center based on internet platform greatly improves the efficiency of fund settlement, can provide higher quality service for universities, and avoid the crisis of university funds. But in the course of the experiment, because of the setting of parameters and the influence of interference factors, there will be little deviation in the experimental results. Therefore, it is necessary to further study the construction of university fund settlement center based on internet platform.

References