

Research on Sustainable Optimization Path of Financial Informatization Construction in Colleges and Universities under Network Environment in China

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Abstract

In the era of network universality and integration and intelligent application, the development of colleges and universities is facing a new historical opportunity. In order to meet the requirements of proactive, timely, flexible and standardized financial management, colleges and universities must increase efforts to promote the continuous optimization of financial information construction. This paper examines the problems to be solved in the construction of financial informatization in colleges and universities under the network environment based on the goals to deepen the reform of the financial informatization. As a result, countermeasures and suggestions are put forward about how to improve accounting personnel work efficiency, enhance the level of financial management of specific path, explores the search for effective solutions in order to promote the deepening of financial informatization construction.

Keywords

Network; University Finance; Informatization Construction; Optimization Path.

1. Introduction

The ubiquitous and integration and intelligent network environment create favorable conditions for the construction of financial informatization in colleges and universities, can promote the continuous reform of traditional financial management mode in colleges and universities, and promote the continuous optimization of financial informatization construction. Objectively, many colleges and universities in China have been widely carried out financial informatization construction, set up financial information management and service system, but there are still some problems restricting the sustainable development of colleges and universities financial services, such as financial management and service is ubiquitous, do not have a high level of integration, intelligence, and accounting practitioners networked application level is limited. The technical standards of financial work cannot meet the needs of colleges and universities in this era. Therefore, colleges and universities should keep up with the environmental challenges, actively improve the financial management network service platform by using the ubiquitous, integrated, and intelligent means of the network, improve the comprehensive skills of employees, and explore the sustainable optimization path of the construction of financial information in colleges and universities. On this basis, colleges and universities should provide solid financial management and service support for them to realize connotative high-quality development.

2. The Impact of Network Environment on Financial Activities of Colleges and Universities

2.1. Easier to Store and Transfer Financial Data

In the traditional financial management mode of colleges and universities, financial personnel will convert most of the data into file data, but also abandon some data due to the limitation of storage space. However, in the modern network environment, the development and application of big data, cloud computing, and blockchain technology have effectively solved this problem. Big data provides efficient and convenient means for searching, crawling, mining, and processing financial data. Cloud computing provides efficient storage platforms and tools for the financial management of colleges and universities and fundamentally improves the storage capacity of financial data, and enables the financial data information of colleges and universities to be stored and transmitted effectively through public cloud, private cloud, and other tools. Blockchain technology provides a powerful guarantee for data security. In this case, financial data information is no longer limited by region and time, and financial personnel can extract effective data more efficiently and quickly, which greatly facilitates the storage and communication of financial data information and effectively improves the work efficiency of college finance.

2.2. More Flat and Flexible Management Systems

Colleges and universities can construct the financial information management mode based on the application of network universality and integration and intelligence, which can realize the efficient docking and communication of internal units across the financial department, ensure the smooth transmission of data information and feedback, and improve the efficiency of financial management. Ubiquitous, integration, intelligent network data can be unified standard and caliber, office for cooperation among various units of colleges and universities. This pattern can make the financial management model of colleges and universities expand from "association" to "fusion" management mode, to ensure the real-time exchange of data and risk avoidance, reduce the repeated processing and manual screening of data, and further improve the efficiency of financial information collection, processing, feedback, and utilization. Based on a flat financial management structure, the financial management department of colleges and universities can also make use of modern network technology to create a comprehensive service platform for financial data and implement fine management of budget preparation, approval, execution, supervision, and evaluation. As a result, more flat and flexible management systems can optimize the allocation of resources of colleges and universities.

2.3. More Standardized and Accurate Management Procedures

Under the background of ubiquitous and integrated and intelligent networks, the focus of financial management in colleges and universities is in the screening, processing, and communication of financial information, which provides information support for decision-making in colleges and universities. In the process of financial work, financial personnel make use of big data, the Internet of things, cloud computing, blockchain, artificial intelligence, and other technologies to effectively process and manage financial information based on modern information networks, and then form networked management procedures to meet the development needs of the era of information network convergence. These measures provide solid technical support and path guarantee for effectively solving the information asymmetry caused by the independent information system, independent management mode, and independent database among various departments of colleges and universities. On the one hand, network information technology can intelligently summarize, analyze and share the data of various departments in colleges and universities, which not only meets the needs of classification and query, but also meets the requirements of various departments for data

analysis according to their needs. On the other hand, financial personnel can quickly propose "customized" information from the mass of financial accounting information, which not only greatly reduces the workload of staff, but also ensures the standardization and accuracy of information. The analysis and evaluation of financial accounting activities based on the development needs of colleges and universities can provide more accurate and timely financial accounting data and information for the decision-making level of colleges and universities.

2.4. Richer and More Diversified Financial Functions

Under the influence of network universality, integration, and intelligent application, the functions of financial management in colleges and universities have been greatly enriched, and the boundary of financial management functions has also been greatly expanded to accelerate the transformation of financial management in colleges and universities from long-term "accounting accounting" to "management accounting". Objectively, many colleges and universities are not only traditional teaching-oriented or teaching-research oriented, but also vigorously transform into scientific research-oriented colleges and universities while expanding their scale and upgrading their levels. Therefore, the amount of information of financial data of colleges and universities is increasingly large, and the traditional financial statements cannot fully reflect the balance of income and expenditure, assets and liabilities, investment, and operation of colleges and universities. Under the new situation, financial statements should not only reflect the effect of financial activities of each unit inside the school, but also reflect the financial performance of various external project activities. The ubiquitous, integrated, and intelligent application of the network provides strong support for solving the aforementioned problems, and lays a solid foundation for realizing more sophisticated financial management and services. These changes can promote the expansion and enrichment of financial functions, and realize the standardization and fine management of financial work in colleges and universities.

3. The Problems Existing in the Construction of Financial Informatization in Colleges and Universities

3.1. Low Degree of Modern Financial Information Network

At present, the application of network ubiquity, integration, and intelligence in colleges and universities is not comprehensive and perfect, and the financial management of many colleges still stays in the stage of financial informatization transformation 10 years ago, but also more rely on the traditional manual management and service forms. Therefore, the work efficiency in many colleges is not high. Enrichment of college finance management and service content depends on the network in ubiquity. Only by breaking the network boundaries between departments and units can financial work achieve organic integration with other functional work to the maximum extent. The intelligent financial system can most effectively improve the efficiency of financial activities, improve the effectiveness of work, provide timely and accurate financial management support for managers, and provide the best service quality and feeling for individual schools. It is because of the lack of depth and breadth of financial information construction in many colleges and universities that the accuracy and fineness of financial work are not enough, which is not conducive to the efficient management of financial activities in colleges and universities. In addition, modern information network technology has a great overall impact on colleges and universities. However, the construction of financial informatization needs a long-term process for colleges and universities. At present, the thoughts and concepts of the relevant financial staff in colleges and universities are not in line with the thinking of the network era, which restricts the optimized development of financial management and accounting informatization. Some financial personnel in colleges and

universities have not established the ideological concept of the modern information network era, and lack the guidance of network thinking in practical application. They are still facing the efficiency and risk problems of financial management.

3.2. Low-security Financial Information-sharing Platform

Universities must build and make good use of the resource-sharing platform to promote the sustainable development of financial information. Although the Internet can meet the requirements of the rapid development of financial informatization, the carrier of the network still has great security risks. During resource sharing, some information may be leaked or maliciously modified. Due to the security of the network itself needs to be improved and strictly managed, the development process of financial informatization is susceptible to the influence of multiple network factors, resulting in the untrue and unscientific dissemination of financial accounting information. At present, some colleges and universities have insufficient understanding of network security and a lack of regular security protection training for managers. These problems hinder the sustainable development of financial accounting Information-sharing resources and lead to the lack of security of financial information network construction. In addition, application of the chain, cloud computing, big data blocks, and other modern information network technology in many colleges is insufficient, leading to the low-reliability level of network resource sharing platform of safety protection measures, safety factors, running stability. That is to say, sustainability is not enough, financial systems are easy to get attacked by a malicious program. Therefore, the financial and accounting information resource-sharing platform reliability should be improved continuously.

3.3. Inadequate Modern Information Network Skilled Financial Personnel

Modern information network technology has brought systematic and far-reaching influence on financial accounting work, and put forward new requirements for the quality and skills of the staff of financial functional departments in colleges and universities. Financial staff not only need to master financial accounting business processing skills, but also need to master certain information network technology application skills. Moreover; they also need to master the comprehensive skills of financial management services that underpin the innovation and development of colleges and universities. At present, financial informatization in many colleges and universities lags behind social development in terms of network universality, integration, and intelligent application. For example, some colleges have a low degree of development and application of financial accounting network integration business systems, which is not conducive to the effective training of compound and innovative financial accounting talents. In addition, the strength of the financial management team in colleges and universities is limited by the constraints of capital investment and resource allocation to cultivate innovative and compound teams with financial information management. They need more time to build a firmer foundation and accumulate more resources. In addition, the financial accounting business processing methods and procedures between Chinese universities and enterprises are significantly different, which leads to the lack of close cooperation between universities and enterprises and affects the improvement of the practical level of financial informatization in universities. Some universities have not been able to quickly develop a financial information network that meets the requirements of financial management in colleges and universities and has the characteristics of universality, integration, and intelligence.

4. The Optimization Path of Financial Informatization Construction in Colleges and Universities under the Network Environment

4.1. Cultivate the Financial Management Concept under the Network Environment with Concept Innovation

Under the network environment, the financial management of colleges and universities needs to change the traditional management mode of "accounting", and promote the innovation of financial management mode with ubiquitous, integrated, and intelligent network thinking. The financial management of colleges and universities should fully understand the information value of modern information networks, adopt data-driven decisions to screen, dig, process and analyze all kinds of data information in colleges and universities, use modern information network technology to control budget formulation and budget execution, and improve the output efficiency of all kinds of assets and capital. On the one hand, financial managers should comb the ubiquitous, integrated, intelligent network consciousness, use financial data information to analyze the problems and risks in the process of financial management, really become an important basis for the decision-making level of colleges and universities so that the post-accounting reflection into advance prediction analysis; On the other hand, the ubiquitous, integrated and intelligent network brings financial management convenience, but also has a high risk at the same time. So, colleges and universities should establish a sense of risk prevention, timely identification, and control of the modern information network brought by the financial risk to ensure the safety of capital and assets.

4.2. Improve the Financial Management System to Match the Network Environment with Institutional Innovation

The innovation of financial management mode in colleges and universities is inseparable from institutional innovation, and it is necessary to establish and perfect the financial management system matching the network environment. First, many colleges should improve the budget management system under the network environment. The financial departments of colleges and universities should establish a budget management data system with ubiquitous, integrated, and intelligent network application, enhance the rationality and scientificity of budget preparation and implementation, realize the information management of budget preparation, implementation, supervision, and evaluation, and continuously improve the level of budget management in colleges and universities. Colleges and universities should rely on ubiquitous, integrated, and intelligent network support to improve the cost and income accounting system. That is, this system can accurately, truly and comprehensively reflect the cost and income of teaching, scientific research and logistics of colleges and universities, and provide effective financial data information for the decision-making of colleges and universities. Third, they should perfect the financial risk management system of colleges and universities, establish a risk early-warning mechanism, rely on a modern information network technology to strengthen financial supervision and internal control, prevent the breeding and expansion of network risks, and ensure the safety of property and capital. By improving the financial management system matching the network environment, they can lay the institutional foundation for the ubiquitous, integrated, and intelligent network application.

4.3. Optimize the Network Environment by Technological Innovation and Deepen the Construction of Financial Informatization in Colleges and Universities

Ubiquitous, integrated, and intelligent networks provide technical support for the improvement of the informatization application level of financial management in colleges and universities so that colleges and universities can realize the exchange and sharing of data information

resources. At present, the application of financial informatization in colleges and universities has been more common, but its data information barriers and fragmentation phenomenon are also more common, so the finance of colleges and universities should make full use of the ubiquitous, integrated, intelligent network to improve the construction of data interconnection platform to achieve data exchange and sharing between various departments in colleges and universities. On the one hand, they should realize the interconnection and communication of internal and external data information of colleges and universities, establish a comprehensive financial platform with financial data as the core, and make the integrated development and network communication of financial data and information come true; On the other hand, the financial department can share information with other departments, such as the sharing of expenditure data of discipline construction, teaching fund, laboratory operation, and talent fund. The financial management of colleges and universities should constantly optimize the business process with the help of ubiquitous, integrated and intelligent networks, and focus on the collection, screening and analysis of financial data to improve the management function to optimize the organizational structure and improve the efficiency of the process.

4.4. Reform the Talent Training Mode and Improve the Quality of Financial Personnel with Service Innovation

The financial work of colleges and universities is an important service window of colleges and universities. Colleges and universities should adapt to the high speed and high efficiency of ubiquitous, integrated, and intelligent networks and constantly upgrade the service. Due to the rapid and wide application of modern information network technology, colleges and universities need to train a large number of professional and technical personnel with relevant professional knowledge to meet the needs of their financial management reform under the background of ubiquitous, integrated, and intelligent network. Under this background, financial management departments of colleges and universities should resort to various accounting-related training institutions, adopt the method of combination of online and offline, strengthen the training and examination of financial personnel, such as collective training, online learning, examination way to reserve professional and technical personnel for colleges and universities to meet the requirements of the ubiquitous, integrated and intelligent network. Not only that, financial management departments of colleges and universities should actively guide financial personnel, methods, and constantly learning new software technology. They should make better use of ubiquitous, integrated, and intelligent networks to improve work efficiency and performance, especially to improve the collaborative office ability with other departments in colleges and universities, and constantly improve the screening and analysis ability of financial data to promote innovation and upgrading of financial management mode.

To sum up, the ubiquitous, integrated, and intelligent development of the network in today's era has become a trend, which promotes the deepening of the financial informatization construction in colleges and universities, provides solid support for the reform and transformation of the financial management model in colleges and universities, and brings rare opportunities for the financial accounting work in colleges and universities to better serve the schools. Under the background of the ubiquitous, integrated, and intelligent development of the network, the financial informatization construction of Chinese universities is not mature enough, and there are still many problems. Therefore, colleges and universities need to analyze the construction path of financial informatization from reality and effectively respond to the challenges brought by the development of modern information network technology. Colleges and universities should give full play to the advantages of financial accounting in serving the development of colleges and universities, vigorously promote the ubiquitous, integrated and intelligent technology application of the network, build financial information security system,

constantly improve the effectiveness of financial accounting work in colleges and universities, and ensure the sustainable development of financial information construction.

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