# The Information Construction of State-owned Assets Management in Colleges and Universities in the Big Data Era

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*Keywords:* The Information Construction, Colleges And Universities, State-Owned Assets Management

Abstract: In order to conform to the "Internet" mode, the management mode of higher education needs epoch-making reform and innovation. This paper analyzes the existing situation and problems of college assets management, put forward the construction of information platform of integrated asset management and comprehensive regulation demand goal, in order to achieve scientific, standardized and the management of state-owned assets in institutions of higher security, and effectively improve asset utilization, for college talent training and scientific research and innovation to provide strong support and guarantee.

#### 1. Introduction

With the publication of the outline of the national informatization development strategy, the guiding opinions on actively promoting the "Internet plus" action, the platform for the development of big data, and other relevant policy documents, informatization has become a national strategy. Information has greatly expanded people's access to knowledge and means to traditional education model, especially the idea of higher education, teaching model, management system, has brought unprecedented impact.

#### 2. The current situation of asset management in colleges and universities

#### 2.1 The consciousness of state-owned assets is not strong.

Colleges and universities focus on personnel training, teaching and research, and have little awareness of the management of state-owned assets. The phenomenon of "heavy purchase, light management" is quite common, resulting in a large number of

equipment and furniture repeated purchase and idle waste [1]. Many teachers to the asset management business processes are not familiar with, which is not standard, such as scrap assets directly discarded, fails to perform the disposal procedures, personnel changes after retirement or not timely recovery of assets, over budget or no budget to purchase and so on, gradually cause accounts and physical objects do not match, accounts and accounts do not match, discrepancy, the low efficiency, create difficulties to standardized management.

#### 2.2 The independent asset information just like islands.

There are many categories of state-owned assets, including fixed assets, current assets, intangible assets and projects under construction, among which the fixed assets are divided into equipment, furniture, houses, land, books and materials, and cultural relics [2]. Huge asset system in colleges and universities generally respectively by the finance and assets, books, scientific research, etc to manage different department, each department based on the characteristics of their respective assets manage development, using a single software system, data structure, business process, low level of integration, resulting in the asset information island phenomenon is serious, can't do data sharing, docking between each system Lack of inter-departmental linkage, it is difficult to achieve real-time dynamic supervision of all kinds of assets.

#### 2.3 The inadequate asset information construction.

Most colleges and universities give priority to the needs of teaching and scientific research, but do not pay enough attention to asset management. Although many colleges and universities put forward the construction of "digital campus" the slogan of "intelligent campus", but most financial resources, manpower and material resources to improve school conditions, to build scientific research platform, such as direction, use in asset management information system development funds is relatively less. In addition, due to the low level of asset management personnel, it is unable to effectively promote the development, operation, management and maintenance of asset information system.

## 2.4 The difficult beyond the multi-campus school-running cause asset management.

With the expansion of colleges and universities and regional restrictions, many schools adopt the mode of running schools in many places and multiple campuses. All kinds of assets are scattered in different campuses, or even in different cities, which brings great difficulties to the statistics and allocation of assets [3]. The traditional management mode may lead to the phenomenon of multi-head management and division of all parts, and the centralized management department of assets and the user department shirk each other, which is easy to cause regulatory loopholes, and it is difficult to achieve all-round and non-dead end coverage.

#### 3. The necessity of assets informatization construction

#### 3.1 Standardize the operation process.

As higher authorities such as the Ministry of Finance and the Ministry of Education have stricter requirements for asset management, asset use, disposal and all kinds of asset statements have to be submitted through online systems, therefore, the construction of Asset Management Information System in colleges and universities has become particularly important [4]. Through the construction of Asset Management Information System, the responsibility and authority can be realized to people, and the whole life cycle management can be realized from budget, procurement, configuration, use, maintenance and obsolescence, each business process has a pre-set operating specification and approval process in the system.

#### 3.2 Enhancing efficiency.

The asset management information system is service-oriented, standardizing data standards, unifying identity authentication, unifying portal website, and constructing "one-stop" online service platform. Users only need to operate according to the system prompts, application, approval, progress of the query can be completed from the online, to achieve "let the data more run, less people run errands", can effectively enhance the teachers and students information service experience and satisfaction.

#### 3.3 Improving the efficiency in the use of assets.

The Asset Management Information System (AMIS) integrates all kinds of previously dispersed asset systems, breaks down the information barrier, and can easily extract the classified statistical data of the stock and increment of various types of assets through the system, provide data support and on-line analysis for responsible department to allocate assets reasonably [5]. The system can set up a function module to realize the functions of asset transfer, open shared reservation, performance appraisal, and so on, so as to effectively improve the use efficiency of assets.

#### 3.4 real-time and dynamic regulation.

Through the reengineering of the assets management process in the system, the examination and approval authority of the key links should be set reasonably, and the economic activities and its internal control process should be embedded into the information management system for implementation. Through the system operation, you can achieve real-time dynamic monitoring of business data, to ensure that the accounts, accounts match. Strengthening data sharing, business linkage and mutual supervision of relevant business departments can effectively control the risks of economic activities and prevent the loss of state-owned assets.

#### 4. The goal of the construction of assets informatization

First, strengthen the construction of information infrastructure, strengthen the integration and sharing of information systems, and integrate the management information resources of state-owned assets in colleges and universities, we will share

information on fixed assets, current assets, projects under construction, intangible asset, foreign investment and other assets, and optimize asset allocation. Second, the integration of state-owned assets and fine management, all kinds of asset data can be real-time statistics and analysis [6]. Optimize the management process of information construction business operations, the entire life cycle of all types of assets dynamic supervision, evaluation of the effectiveness of effective prevention of management loopholes. Third, the stock and increment of assets are analyzed and evaluated regularly, which provides decision-making basis for colleges and universities to add and allocate assets, and is more closely combined with budget management. Fourth, the establishment of regular economic activity risk assessment mechanism, the key links of the business process for real-time monitoring and risk alert. Fifth, Build on-line transfer and open sharing platform, activate idle assets, improve the efficiency of asset use.

#### 5. The goal of the construction of assets informatization

#### 5.1 Manage the basic data

Management of basic data accuracy and effectiveness of basic data is the basis of normal operation of asset information management system. Colleges and universities should carefully check and check the basic data of assets by means of assets inventory and inventory, and carry out the responsibility of information management layer by layer. Asset management departments and staff at all levels should attach great importance to the updating of asset-based data, and the purchase, distribution and disposal of assets should carry out corresponding information maintenance in a timely manner in the system, so as to lay a solid foundation for building an information-based system, avoid each link data flow is not smooth or data update is not timely.

#### 5.2 Strengthen the awareness of big data

Collection data is not only for query, statistics, calculation, more importantly, through data monitoring and analysis, to grasp the dynamic trend of assets and benefits, to provide strong support for scientific and accurate decision-making of asset management [7]. We should actively explore a new working model for the effective use of systematic resources, realize the scientific management of the stock and increment of assets, and establish a set of reasonable methods for evaluating, evaluating and managing the purchase of assets, avoid the repeated purchase of all kinds of assets and idle waste, improve the level of resource allocation and use efficiency.

#### 5.3 To raise the level of the asset manager team

The asset manager team should raise its own business level as soon as possible, adapt to the requirements of the information age, and be familiar with the various operations of the asset management system, accelerate the transition from manual

accounting to electronic operation of the whole process. In addition, asset managers should not only be able to use the asset management system for management, but should also be good at using the data in the system to analyze the use and management of assets in their own units or departments, for Teaching and research, large-scale equipment sharing management and social services to provide better protection. Schools should also pay more attention to the construction of Asset Management Team, carry out business technical training through various channels, strengthen post assessment, establish incentive mechanism, and constantly improve the business and technical level of management team through joint efforts of school and college.

#### 5.4 Layer upon layer compacting responsibility system

Build asset management information system is the general trend, but also to improve the level of asset management modernization means. Through the system dynamic real-time monitoring, you can always find out the asset recipients and storage location. When the employee moves to another position or retires, the employee can apply for the change of assets in the system [8]. The unit asset manager and Personnel Department may also inquire about the transfer of assets through the system, and for the transfer of assets that are not handled in a timely manner, they may carry out compulsory transfers or suspend the transfer and retirement processes in the system, this can avoid the process of personnel changes due to the transfer is not in place caused by the loss of assets. By reasonably setting up the examination and approval process for asset leaders, asset managers, asset managers, and so on, the authorities and responsibilities will be detailed to each level of asset managers, it can increase the sense of responsibility of asset managers at all levels, ensure more accurate and timely processing of asset data and make it easier to trace those responsible for the loss of assets.

#### 5.5 Attach great importance to the work of network security

The establishment of the network security assets information system, it can realize the assets information sharing in colleges and universities. In the management process, it also designs some key nodes, such as examination and approval authority, which must strictly prevent the information leakage. To ensure data security, it is necessary not only to upgrade the technology and improve the system, but also to strengthen the implementation through the corresponding responsibility system. Asset management units and administrators at all levels in institutions of higher learning should train the users of different authorities in their awareness of security and responsibility, and prohibit irregular acts such as sharing account passwords or allowing students to operate on their behalf, especially for the approval authority in charge of the leadership, project leaders and asset managers, we must improve the sense of responsibility and security awareness [9]. Colleges and universities should also establish a corresponding supervision mechanism, regularly check the security of the use of the asset information system, timely repair the loopholes in supervision,

seriously investigate the responsibility of the relevant personnel, to ensure the correct and standardized use of the system and the security of the asset data.

#### 5.6 Strengthen coordination and linkage among various departments

The asset cards in the Asset Information System are integrated with personnel information and storage locations, in addition to recording asset information, in order to realize the data of assets system of "assets, personnel and location", we need to rely on the support and linkage of school information department, Personnel Department, Assets Department and assets using department. Asset management departments also include equipment, furniture, books, cultural relics, financial, scientific and technological achievements and other types of asset management departments. The establishment of asset information system is a big project to integrate various kinds of resource information organically, and it is a running mechanism to connect and supervise each other's asset management business, it needs the strong coordination and cooperation of all departments in colleges and universities.

#### 6. Conclusion

In the era of big data, the network information technology has great superiority in the management of the state-owned assets of colleges and universities. It has not only reformed and innovated the management means and methods of the state-owned assets of colleges and universities, it has improved the organizational mechanism of asset management, and at the same time, it has provided time-limited data and decision-making reference for colleges and universities, which has made the management of state-owned assets in colleges and universities develop in a practical sense, to promote the value of state-owned assets of colleges and universities to carry out an effective full play. In the era of big data, the management of state-owned assets in colleges and universities is facing various challenges, such as lack of strong consciousness of data thinking, lack of technical talents, etc. In order to completely reform and improve the management level of state-owned assets in colleges and universities in the era of big data, it is necessary to establish the concept of big data thinking and strengthen the construction of big data management system, to promote the management of state-owned assets in institutions of higher learning to be sustained and stable development.

#### Acknowledgements

This work was supported by the Nanjing University of Finance and Economics 2020 Higher Education and Reform and Development Projects (NO.GJGF202024).

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