

Research on the Path of Standardized Management for Fixed Assets in Universities

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ABSTRACT

Fixed assets in universities constitute the material foundation for ensuring the normal operation of teaching, research, and administrative work. Their management level directly impacts resource utilization efficiency and the quality of university development. Currently, the management of university fixed assets is at a critical stage of transitioning from extensive to refined and standardized management. This paper adopts the perspective of standardized management to systematically review the current status of fixed asset management in universities, analyze major existing problems, and explore feasible paths for establishing standardized management from aspects such as system construction, process optimization, information system development, responsibility mechanisms, and resource integration. It proposes countermeasures and suggestions including strengthening top-level design, improving management systems, optimizing system platforms, and enhancing assessment mechanisms. The aim is to elevate the scientific, standardized, and intelligent level of fixed asset management in universities and promote the maximization of resource allocation efficiency.

KEYWORDS

University management; Fixed assets; Standardization; Informatization; Performance assessment

1 Introduction

With the rapid development of China's higher education and the continuous expansion of university operations, fixed assets occupy an increasingly important position in the asset structure of universities. Fixed assets are not only the fundamental guarantee for teaching, research, and administrative activities but also crucial resources for universities to achieve sustainable development.

Against this backdrop, traditional fixed asset management methods can no longer meet the practical needs of modern university management. Problems such as inadequate management mechanisms, unclear division of responsibilities, lack of unified standards in systems, and low asset utilization efficiency are prevalent. These issues severely constrain the rational allocation and effective use of university resources and urgently require improvement through standardized management paths.

As an important tool in modern organizational governance, standardized management emphasizes guiding and constraining management behaviors through unified standards and norms. This paper focuses on researching the "Path of Standardized Management for Fixed Assets in Universities." It systematically analyzes the current management status and existing problems, explores feasible optimization strategies, aiming to provide replicable and scalable experience for university management practice.

2 Analysis of the current status of fixed asset management in universities

2.1 Diverse types of fixed assets and management complexity

University fixed assets cover a wide variety of categories, including teaching instruments, research equipment, office furniture, vehicles, library resources, buildings, etc. They are characterized by high value, long usage cycles, and involvement of numerous departments. Their management involves multiple entities, with long chains and numerous links, making information asymmetry and management blind spots prone to occur.

2.2 Fragmentation and limitations in management systems

Although most universities have established basic fixed asset management systems, such as "Fixed Assets Management Measures" and "Asset Disposal Management Measures," there is a lack of systematic integration and unified standards among these systems. Different departments implement inconsistent standards, and the coverage of systems is incomplete, making it difficult to form a closed-loop management system.

2.3 Widespread application but insufficient integration of informatization tools

Universities have generally established asset management information systems (AMIS) to record the entire lifecycle of

assets from procurement to disposal. However, the phenomenon of "compartmentalization" among systems is severe. The asset system often lacks effective data interfaces with financial, procurement, human resources, and auditing systems, forming "information silos."

2.4 Inadequate asset utilization performance evaluation mechanism

Most universities have not yet established a scientific performance assessment system for asset utilization. There is a lack of quantitative evaluation for aspects like asset utilization efficiency, sharing rate, and maintenance costs, leading to phenomena such as "emphasizing acquisition over management" and "emphasizing allocation over utilization." Some high-value instruments and equipment suffer from long-term idleness, redundant procurement, and inability to be shared, resulting in resource wastage.

3 Major problems facing university fixed asset management

3.1 Unclear management responsibilities and lack of coordination mechanisms

Fixed asset management involves multiple departments, often leading to issues like mismatched authority and responsibility, and poor communication. For instance, the centralized asset management department is responsible for asset registration and accounting, but user units lack motivation for maintenance and management. This results in "managers unaware of usage, users unclear about processes," leading to inadequate responsibility fulfillment.

3.2 Inconsistent system standards and difficulty in implementation

University asset management systems suffer from problems like varying standards, inconsistent formats, and untimely updates during formulation, affecting implementation efficiency. Some management system contents are outdated and fail to adapt promptly to policy changes or management needs, leading to frequent "patchwork" adjustments during execution, which undermines management authority.

3.3 Poor asset data quality and lagging information updates

Problems such as excessive manual operations and weak review mechanisms during asset data collection, entry, and maintenance affect data accuracy and completeness. Some universities experience discrepancies between accounts and physical assets, duplicate registrations, and information delays, severely constraining dynamic supervision and scientific decision-making.

3.4 Lack of effective performance orientation and incentive mechanisms

Fixed asset management lacks scientific performance evaluation systems and incentive-constraint mechanisms. Asset user units lack motivation for economical use and optimized allocation. Especially, the utilization rate of shared platforms for research assets is low, leading to inefficient resource allocation and imbalance in management incentives.

4 Constructing the path for standardized management of university fixed assets

To effectively address the above problems, it is necessary to systematically plan the management path from a "standardization" perspective, achieving a transformation of asset management from "fragmentation" to "systematization," and from "rule-by-person management" to "rule-by-system" and "information-based management."

4.1 Build a system standard framework to promote systematization

The primary prerequisite for standardized fixed asset management is establishing a systematic, unified, and standardized institutional framework. Current systems in many universities suffer from overlap, gaps, and outdated content. There is an urgent need to use system integration as a starting point to establish a top-level institutional architecture of "one central guideline, multiple subsidiary regulations."

Led by the university's State-owned Assets Management Committee, uniformly formulate the "General Principles for Standardized Management of Fixed Assets in Universities," clarifying management principles, classification standards, management processes, and division of responsibilities. Develop specialized management measures for each stage of the asset lifecycle: procurement, acceptance, registration, use, transfer, disposal, evaluation, scrapping, sharing, etc., achieving

full lifecycle coverage. Establish a system review and revision cycle mechanism, such as conducting a system evaluation every two years, adjusting relevant content promptly based on national policies and university development needs to ensure timeliness and adaptability of the systems.

Through systematic institutional design, the fragmented situation of "whoever manages sets the rules" can be broken, forming a unified pattern of standards, norms, and execution.

4.2 Optimize business process standards to enhance execution efficiency

Standardized processes are the key link for system implementation. Universities should map out various operational processes for fixed assets, clarify nodes, standardize operations, and reduce approval times and human intervention.

Create unified flowcharts and operation manuals with clear hierarchies and illustrations for each type of asset operation (e.g., addition, transfer, disposal), facilitating execution across departments. For non-high-value or non-major-decision asset matters, set up "green channels" or "simplified procedures" to improve processing efficiency and avoid inefficient cycles of "multi-level approvals." Embed process visualization modules in the information system to enable real-time tracking of process node status, ensuring clear responsibility, process traceability, and data traceability. Introduce third-party or internal audit mechanisms to conduct regular sampling and evaluation of key processes, promptly adjusting deviations in process execution.

Process standardization is not only a guarantee at the execution level but also a key support for efficiency improvement, holding significant importance for universities in establishing an efficient and collaborative asset management system.

4.3 Promote integration and intelligent upgrade of asset management information systems

Although most universities have initially established asset management systems, problems such as system isolation, fragmented functions, and poor interoperability remain prominent. There is a need to advance deep system integration and intelligent upgrades.

Integrate multiple platforms such as financial systems, procurement systems, budgeting systems, and human resources systems to achieve data interoperability, permission integration, and business linkage, forming a unified big data center for assets. Utilize asset QR code tags and RFID technology to bind physical assets to information, enhancing inventory efficiency, real-time supervision, and automatic identification capabilities, reducing manual errors. Simultaneously, embed analysis modules within the system for indicators like asset utilization rate, failure rate, and maintenance cycle. The system should automatically generate charts and risk warnings to assist in decision optimization.

Through the integration and upgrade of information systems, universities can achieve a collaborative model of "human management + data management + intelligent management," promoting the transformation of asset management towards modern governance driven by data and intelligent decision-making.

4.4 Improve the responsibility system and performance assessment mechanism

Standardized management cannot function without clear responsibility mechanisms and effective assessment constraints. A closed-loop performance responsibility system should be established based on the principle of "clear responsibilities -- quantifiable tasks -- evidence-based assessment -- effective rewards and penalties":

- (1) The University (Centralized Asset Department) bears overall coordination responsibility.
- (2) Colleges/Schools (User Units) bear management responsibility.
- (3) Specific users bear responsibility for usage and maintenance.

This forms a management responsibility chain with matching authority and responsibility, transmitted level by level.

Establish quantitative indicators from dimensions such as asset integrity rate, shared utilization rate, fault repair response rate, and annual inspection pass rate. Evaluate management and utilization performance quarterly or annually. Incorporate asset management performance results into the annual comprehensive assessment of colleges, research platforms, or laboratories, serving as an important basis for awards, commendations, and resource allocation. Provide incentives like funding preference and award recommendations to units with outstanding management performance. Criticize, demand rectification within a time limit, or even impose budget deductions on units with poor management or long-term idle equipment.

Through the organic linkage of responsibility and performance, the standardization and execution capability of university asset management can be effectively enhanced, fostering a management atmosphere of "high performance rewarded, negligence held accountable."

4.5 Establish resource integration and sharing mechanisms

The low sharing rate of fixed assets, especially large-scale research instruments and equipment, is one of the main reasons for low asset utilization efficiency in universities. Cross-unit resource sharing platforms should be constructed to achieve optimal resource allocation and maximize benefits:

Integrate research platforms across faculties/schools, unifying registration, booking, charging, and maintenance. Clarify sharing processes, open access rules, and service standards. Define equipment open hours, usage application procedures, management responsibilities, and data confidentiality to resolve management chaos and responsibility shirking during sharing. Establish credit or ranking mechanisms for both providers and users of shared equipment, linking them to resource input and project applications to incentivize active participation in sharing. Collaborate with nearby universities or research institutions to build regional equipment sharing platforms, coordinating the use of high-value research resources to achieve "inter-university linkage and resource interoperability."

Resource sharing is not only key to improving asset utilization efficiency but also an important way to promote collaborative innovation among universities, reduce operating costs, and enhance input-output ratios.

5 Countermeasures and suggestions for promoting standardized management of university fixed assets

Based on the path design, to ensure the orderly advancement of standardized management, effective strategic measures must be implemented in terms of management mechanisms, system promotion, and capacity building.

5.1 Strengthen top-level design and organizational leadership

A high-quality management system requires strong organizational support. Universities should attach strategic importance to the standardization of fixed asset management. Establish a dedicated task force led by a university vice president, with participation from heads of departments such as State-owned Assets, Finance, Audit, and Information Center, forming a collaborative promotion mechanism. Incorporate asset standardization management as an important component of the governance system for "Double First-Class" universities, implementing it in conjunction with university development strategies. Promote task decomposition, goal setting, and phased evaluation using a project-based approach to ensure orderly task implementation and controllable processes.

5.2 Enhance system promotion and training coverage

The value of standardized systems lies in widespread awareness and effective execution. Universities should strengthen system dissemination and training through various means. Organize system briefing sessions, inviting drafters to interpret the content and key implementation points of new systems and processes. Conduct hierarchical and categorized training, designing content specifically for administrators, heads of user units, and research equipment users to enhance relevance. Through full participation and ongoing guidance, gradually cultivate a management culture of "everyone understands the system, everything follows the process."

5.3 Increase funding investment and system operation & maintenance support

Standardization requires stable supporting funds and technical support. Universities should allocate dedicated funds in their budgets to guarantee investment in system construction and maintenance, including platform development, data maintenance, security protection, and procurement of intelligent terminals. Support the configuration of infrastructure such as asset tags and scanning tools to promote assets being "identifiable, locatable, and traceable." Establish special reform funds to provide financial incentives and technical support to pilot departments, encouraging innovative exploration. Promote government-university-enterprise cooperation, introducing third-party technology companies to participate in system construction, enhancing professionalism and operational efficiency.

Funding investment is the fundamental guarantee for management transformation. Continuous and stable financial support will facilitate the deep promotion of standardization results.

5.4 Pilot first, promote reform in stages

Considering the differences among university faculties/schools and the complexity of assets, standardization reform should adopt a gradual advancement strategy:

Prioritize pilot projects in laboratories or large instrument platforms with dense research equipment to verify the

operability and adaptability of systems and processes. Promote module construction in phases, such as implementing standardized accounting management first, then gradually expanding to transfer, disposal, sharing, and other modules.

5.5 Establish supervision, evaluation, and continuous improvement mechanisms

Standardized management is not a "once and for all" solution but a dynamic optimization process. Universities should establish supervision and feedback mechanisms to promote continuous improvement: Set up an asset management performance evaluation system, combining internal audits, third-party evaluations, faculty/student satisfaction, and other indicators to periodically assess the asset management quality of each unit. Build a data visualization supervision platform to display key indicators and issue warnings in real-time, enhancing the university leadership's macro-scheduling capability. Implement a "problem list + rectification list" system for closed-loop management of identified issues, tracking rectification progress and effectiveness. Encourage grassroots units to propose optimization suggestions, setting up a "system suggestion solicitation" channel to form a bottom-up improvement mechanism.

6 Conclusion

Fixed asset management in universities is fundamental work for optimizing resource allocation and ensuring the smooth conduct of teaching and research. Faced with the reality of vast asset quantities, diverse types, and complex management chains, traditional management models can no longer meet the demands of refined, transparent, and efficient management. Guided by standardization, systematically constructing a fixed asset management system that integrates system norms, process optimization, information support, and performance evaluation is the inevitable path for universities to improve the quality and efficiency of asset management.

In the future, universities should continuously deepen the concept of standardization, combine technological means and institutional innovation, promote the transformation and upgrading of fixed asset management, and truly achieve the shift from "managing assets" to "operating assets," providing a solid material foundation and institutional basis for the high-quality development of universities.

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