

PUCPEI Asset Management of SCMZ University: Basis for Enhanced Action Plan

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Abstract. Fixed assets ensured the stable and orderly progress of colleges and universities. In the current landscape of university asset management, issues such as redundant acquisitions and underutilization became increasingly prevalent. Consequently, efficient stock management and rigorous control of asset increments became imperative. The primary objective was to bolster fixed asset management, striving to achieve the most economical and efficient utilization of funds. The study critically evaluated the asset inventory and utilization at Sichuan Minzu University through a combined approach of literature review and questionnaire surveys, pinpointing inefficiencies in asset management practices. Introducing the "PUCPEI" framework—plan, use, check, process, evaluate, and improve—it provided a holistic model for effective fixed asset management in higher education, backed by innovative strategies. Through detailed analysis and evaluation of the PUCPEI model, the research unveiled issues at different stages and proposed strategic improvements. The findings offered valuable insights and clear direction for refining asset management processes, aiming to boost efficiency, quality, and overall organizational effectiveness. Overall, the study advanced the development of effective management practices and brought new research perspectives and innovations to the field of asset management. It not only provided a valuable resource for academics but also laid the foundation for achieving more excellent and efficient asset management practices.

Keywords: Check; Controlling; Operation; Renewal; Value Maximization

1. Introduction

The study was prompted by the growing trend of administrative and institutional state-owned assets, which are crucial for government departments' functions and providing public services. With the increasing importance of these assets, there arose a need for effective management practices to optimize their utilization. Additionally, the rapid economic development and increased investment in colleges and universities led to a surge in fixed assets, particularly research equipment. However, the management of these assets did not keep pace with their expansion, resulting in inefficiencies and underutilization. Phenomena such as redundant purchases and equipment idleness highlighted the pressing need for improved asset management strategies. Consequently, the study aimed to address these challenges by proposing a new asset management model tailored to the Sichuan Institute for Nationalities, with the goal of enhancing procurement efficiency, optimizing asset utilization, and ultimately conserving financial resources.

In connection to the study on asset management in colleges and universities, various researchers have highlighted the definition, objectives, and challenges associated with asset management in educational institutions. Brown & Humphrey (2005), Van et al. (2012), and Kostic (2003) emphasized the importance of maximizing asset benefits, improving efficiency, and supporting the mission of universities. Further, Lim et al. (2020) and Stark (2022) underscore the significance of lifecycle management in optimizing asset value and ensuring sustainability. Moreover, through the establishment of a new asset management model, the school can conduct an inventory of fixed assets, clearly understand the overall fixed asset situation, whether it is for teaching or scientific research, can be a more reasonable use of fixed assets, and ultimately to ensure the integrity of fixed assets, reduce the school in the procurement of materials in the case of waste and idleness. This can also clarify the responsibility, improve the system, and enhance the management level of the school.

2. Methodology

The research employed a descriptive-quantitative research design, which aimed to characterize the asset management situation at the Sichuan Institute for Nationalities. Descriptive studies, as outlined by Siedlecki (2020), focus on characterizing phenomena without altering variables, while quantitative research

involves gathering numerical data to identify trends, formulate hypotheses, and examine causality (Bhandari, 2020). The study utilized a quantitative approach, including surveys and statistical analysis using SPSS software, to assess the institution's asset stock situation, utilization, and the effectiveness of its asset management model. Through frequency counts and mean scores, the study evaluated the implementation of the asset management model and identified challenges faced during implementation, providing valuable insights to improve asset management practices at Sichuan Institute for Nationalities.

2.1. Sampling Procedure

The researcher used a stratified random sampling technique to determine the distribution of the respondents. Stratified random sampling is a method that divides a population into smaller subgroups known as strata. The study grouped the respondents based on the categories of stakeholders. In addition, Slovin's formula was also used to determine the required sample size with a 7% margin of error.

2.2. Respondents

Respondents included asset managers, asset users, asset management organizations, and asset management practitioners. A total of 72 respondents were included in the sample. The majority of the respondents were asset users with 35 (49.21%), followed by asset management practitioners with 28 (39.37%). In addition, asset management organizations and other fraternities (other schools) were 6 (7.87%) asset users and 3 (3.54%) asset managers.

Table 1 shows the distribution of the respondents.

Table 1 Distribution of the Respondents

Respondents	Population	%	Sample
1. Asset managers	9	3.54	3
2. Asset users	125	49.21	35
3. Asset management organizations and other fraternities (other schools)	20	7.87	6
4. Asset management practitioners of the institution	100	39.37	28
Total	254	100	72

2.2.1 Research Site

The study was conducted at SichuanMinzu College, a full-time general undergraduate institution situated in Kangding City, Sichuan Province, China. Renowned for its cultural significance as the birthplace of love songs, the college holds prestige as one of the select participants in several educational excellence programs, including the "double first-class" construction Gongga Program of Sichuan Higher Education Institutions.

3. Results and Discussion

3.1. Profile of the Respondents

The study analyzed demographics, showing 84.7% of respondents were aged 31 to 50, ensuring age group balance. Gender distribution was nearly equal, with 52.8% male and 47.2% female. Most respondents held bachelor's or master's degrees, with 66.67% having a college degree and 33.33% a master's degree. Work experience varied, with 44.4% having 0–15 years, 29.2% 16–30 years, and 26.4% over 30 years. Additionally, 9.72% had prior asset management experience, 63.89% had not, and 26.39% were currently in the field. Various respondent types were included: asset managers (4.17%), asset users (48.61%), asset management organizations and others (8.33%), and asset management practitioners in institutions (38.89%). Sichuan Minzu College comprised the majority of respondents (91.66%), followed by other institutions like the Sichuan Education Department and Neijiang Normal College.

3.2 Implementation of the PUCPEI Asset Management

The following tables discussed the implementation of PUCPEI Asset Management.

3.2.1 Plan

The results indicated that among the statements regarding PUCPEI asset management planning, the highest weighted mean of 3.90 was attributed to the requirement of a request form for asset acquisition, interpreted as "always," while the lowest weighted mean of 3.57 was assigned to the submission of a registration form for asset use at the end of each month, also interpreted as "always." Overall, the grand weighted mean of 3.70 suggested a positive assessment of the asset management process in terms of planning. The

consistent rating across various indicators implied that the asset acquisition, utilization, and feedback processes were functioning effectively. Specifically, the higher weighted mean for the necessity of the asset access request form indicated its role in establishing a comprehensive asset record and management system, facilitating better asset tracking, maintenance, and updates, thereby enhancing efficiency and reducing costs.

3.2.3 Use

The results revealed that among the statements concerning PUCPEI asset management in terms of use, the highest weighted mean of 3.77 was assigned to the process of the University Asset Management Team reviewing Asset Utilization Plan Form and Asset Utilization Registration Form submissions, interpreted as "always," while the lowest weighted mean of 3.51 was attributed to the requirement for departments to submit these forms on time monthly after the completion of the second acceptance, also interpreted as "always." Overall, the grand weighted mean for the "Use" section, at 3.63, indicated a positive assessment of asset utilization processes within the organization, suggesting that these processes were consistently effective. Specifically, the higher mean weight for the review of utilization forms by the asset management team reflects the importance of ensuring compliance with regulations and policy requirements, facilitating detailed information about resource utilization.

3.2.3 Check

The results indicated that among the aspects of PUCPEI asset management in terms of check, the statement regarding random checks by the school to ensure alignment between asset utilization plans and actual usage, forming an asset utilization list, received the highest weighted mean of 3.84, interpreted as "always." Conversely, the requirement for regular checks on departmental asset stock levels had the lowest weighted average of 3.48, also interpreted as "always." The grand weighted mean of 3.71 demonstrated consistent asset monitoring and checking practices within the organization, with all indicators rated as "always." This reflected the organization's established and consistent implementation of asset monitoring processes, ensuring prompt corrective action if discrepancies or inefficiencies were identified. Specifically, the higher mean weight for random periodic checks underscored their importance in ensuring compliance and accountability in resource utilization, aligning with Pi's

emphasis on their role in identifying improvement opportunities and optimizing asset utilization.

3.2.4 Process

The results revealed that among the aspects of PUCPEI asset management in terms of process, the statement concerning the recovery and redistribution of inactive assets based on asset inventory standards received the highest weighted mean of 3.69, while items related to alerting departments with excessive asset stocks and using a reservation registration management model for shared use of facilities had the lowest weighted average of 3.60, interpreted verbally as "always." The grand weighted mean of 3.64 indicated consistent adherence to defined asset management processes, with all indicators rated as "always." This indicates a commitment to using clear inventory standards, addressing reported issues, and proposing solutions for continuous improvement. The higher mean weight for the recovery and redistribution of inactive assets highlighted its importance in maximizing resource utilization and cost savings, aligning with previous research emphasizing the benefits of such initiatives.

3.2.5 Evaluate

The results indicated that among the evaluation aspects of PUCPEI asset management, the formation of a "monthly improvement target table" received the highest weighted mean of 3.70, interpreted as "always," while proposing corrective programs based on evaluation scores had the lowest weighted mean of 3.52, also interpreted as "always." The grand weighted mean of 3.59 suggested consistent adherence to a structured evaluation approach, with all indicators rated as "always." This implied active participation from departments in the evaluation process, including submitting forms, scoring the asset management department, and providing feedback. The higher average weight for the formation of a monthly improvement target table underscores its significance in defining improvement goals and plans, aligning with the principles of performance management theory to ensure quality and efficiency in asset management processes.

3.2.6 Improve

The results revealed that timely checking of the implementation of the "Monthly Enhancement Target Sheet" received the highest weighted mean of 3.80, interpreted as "always," while organizing collaborative workshops involving

representatives from different departments for continual enhancement had the lowest weighted mean of 3.53, also interpreted as "always." The grand weighted mean of 3.67 indicated consistent implementation of measures to enhance asset management practices, with all indicators rated as "always." This underscores a strong commitment to ongoing improvement and optimization within the asset management process. The higher weighted mean for timely checking of implementation highlights its importance in obtaining feedback on goal achievement and making necessary adjustments for performance improvement, aligning with principles of continuous improvement theory.

3.3 Problems Encountered in the Implementation of PUCPEI Asset Management

The data revealed that the practices and activities involved in the implementation of the PUCPEI Asset Management, particularly regarding synchronization of expectations and plans with actual practice, received the highest weighted mean of 3.70, interpreted as "always," indicating significant challenges in these areas. The overall weighted average for encountered problems in the implementation of PUCPEI Asset Management was 3.66, also interpreted as "always," suggesting that these issues are frequently encountered. These challenges are consistent with broader change management scenarios, indicating a need for organizations to adapt and adjust to new asset management processes over time. Addressing these issues aligns with key principles of effective change management, emphasizing data management, communication, standardized processes, fair assessments, and resource utilization. Applying appropriate change management principles can help overcome these challenges and facilitate successful implementation of asset management processes.

3.4 Suggested Improvements to the PUCPEI's Asset Management Model of the Respondents

Based on data gathered, the study provided suggested improvements to the PUCPEI Asset Management. The involvement of colleges in assessing standards before development enhances transparency and reduces resistance. This ensures reasonable standards without burdening colleges excessively, fostering acceptance and understanding of potential benefits. Emphasizing flexibility and ongoing monitoring ensures standards adapt to changing needs. Developing emergency response plans enables quick action in unpredictable situations, averting shortages or wastage and facilitating effective responses. Expected

outcomes include increased participation and acceptability, balanced standards, improved relevance, and rapid emergency responses. Overall, these measures aim to enhance efficiency and effectiveness, fostering cooperation, transparency, and improved emergency response capabilities within the PUCPEI asset management model.

4. Conclusions

The study revealed several key findings regarding the implementation of the PUCPEI asset management model. The majority of respondents were characterized by their age, educational background, work experience, and organizational affiliation, highlighting the demographic profile of those involved in the process. Further, the different phases of the asset management model were well-received by respondents, with tasks consistently rated highly in terms of effectiveness and implementation. However, challenges such as data processing, coordination, and feedback were identified during the implementation process, aligning with principles of change management theory. Lastly, the study underscores the importance of addressing cross-departmental communication and coordination issues to enhance efficiency and effectiveness. Recommendations include establishing regular cross-departmental meetings to foster collaboration and alignment with asset management goals. Overall, these findings provide valuable insights for improving asset management practices within the PUCPEI organization.

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