

IMPLEMENTATION OF THE INTERNAL CONTROL SYSTEM ON THE EFFECTIVENESS OF ASSET MANAGEMENT AT THE UNIVERSITY OF NORTH SUMATRA WITH LEADERSHIP COMMITMENT AS A MODERATING VARIABLE

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ABSTRACT

Asset management aims to ensure that assets are used optimally according to organisational needs, in order to increase efficiency and productivity. To ensure that assets are used optimally, it is necessary to implement an organisation's internal control system. This study aims to analyse the effect of the internal control system consisting of the control environment, risk assessment, control activities, information and communication, and monitoring on the effectiveness of asset management at the University of North Sumatra, with leadership commitment as a moderating variable. This research is motivated by the importance of asset management at Legal Entity State Universities (PTN-BH) such as USU which has autonomy in managing its assets, as well as findings of weaknesses in recording and competence of human resources managing assets. This research uses a quantitative approach with a survey method through distributing questionnaires to academic units and administrative units within USU. The results showed that all elements of the internal control system had a positive and significant effect on asset management. However, leadership commitment only plays a significant moderating role in the relationship between monitoring and asset management, while in other variable relationships it is not significant.

Keywords: Leadership Commitment, Asset Management, Internal Control System, USU, Moderating Variables

Introduction

Asset management is a scientific and technological discipline that aims to organise, design, obtain, record, review legal aspects, evaluate, operate, maintain, and update asset needs or asset disposal processes so that they can be managed optimally and transferred efficiently (Nabella et al., 2022). Its function is to provide information related to all assets owned, including the amount, cost, utilisation, condition, maintenance, and storage location. The purpose of asset management is to ensure that assets can be used optimally and in accordance with the needs of the organisation, so as to increase overall efficiency and productivity. Effective asset management is very important because it can help reduce losses due to asset loss, lower maintenance costs, and increase the use of existing assets (Almeida et al., 2022). With good asset management, organisations can ensure that assets are used optimally to support operational activities and achieve set goals.

To ensure that assets are used optimally, it is necessary to implement an organisation's internal control system (Astini, 2018). This system includes policies, procedures, and control mechanisms designed to protect organisational assets, improve

the reliability of financial information, and ensure compliance with applicable regulations. This system can help ensure that assets are used efficiently, through a clear separation of duties, periodic transaction checks, and the implementation of strict monitoring mechanisms. With an integrated system, the risk of fraud and violations in asset management, such as embezzlement or abuse of authority, can be minimised. With a strong internal control system in place, the organisation can achieve its goals optimally. In addition, this system also plays a role in creating transparency and accountability in asset management, which is a key element in good governance.

The elements in the internal control system are control environment, risk assessment, control activities, information and communication, monitoring. As a novelty in research and differentiation from other previous studies, researchers added a moderating variable, namely leadership commitment. Leadership commitment in the organisation refers to the willingness and determination of an organisational leader to lead, direct, and demonstrate belief in the goals and values of the organisation. Leadership commitment is needed to ensure that the internal control system is consistently implemented and closely monitored. Leaders need to ensure that the organisation's staff understand the importance of the internal control system and are able to apply it properly in every aspect of asset management. Thus, commitment from leaders can help minimise the risk of asset misuse and ensure that assets are used effectively and efficiently.

As a higher education institution in Indonesia, USU has various types of assets that need to be managed in order to support the academic and non-academic activities that take place on campus. However, in reality, there are still some challenges in asset management that can affect the performance and effectiveness of administrative and academic activities within the University of North Sumatra.

Based on the results of an interview with one of the asset managers, it was found that there was a disorderly recording of assets such as recording assets that were not in accordance with university budget items and the low quality of Human Resources (HR) in asset management at the University of North Sumatra (USU). This is a serious obstacle that has the potential to hamper the effectiveness of asset management. Although various socialisation has been carried out, the results have not been optimal because they have not been fully supported by system strengthening and continuous improvement of employee competence. In this case, the Internal Control System (ICC) plays an important role as a management tool to ensure that the entire asset management process runs according to the principles of effectiveness, efficiency and accountability. However, the effectiveness of SPI implementation cannot stand alone, but is strongly influenced by the commitment of the leadership as a key factor in creating a conducive control environment. USU leaders have a strategic role in encouraging employee discipline, providing support for asset management policies, and ensuring follow-up on the results of internal evaluation and supervision. Leadership commitment acts as a moderating variable that strengthens the relationship between SPI implementation and asset management effectiveness. In other words, no matter how strong the system is implemented, without

real support from the leadership, the goal of achieving effective asset management will be difficult to realise.

This research is also still very limited to Higher Education. Research with this title usually only focuses on corporate environments, government institutions or banks. Some of the existing research in Higher Education includes Wahidah and Nurhazana (2023) at Politeknik Negeri Bengkalis, Manullang (2021) at Medan Area University, Sabirin and Ikhsan, S (2020) at 11 (eleven) Legal Entity Universities. The moderating role of leadership commitment in the relationship between the internal control system and asset management has also not been widely studied. This is what makes researchers interested in developing this research.

Based on the background explanation which includes phenomena, previous research results, and existing research gaps, the research with the title "Implementation of the Internal Control System on the Effectiveness of Asset Management at the University of North Sumatra with Leadership Commitment as a Moderating Variable" is interesting to do.

Research Method

The type of research conducted is causal associative research. Causal associative research is research that aims to determine the causal relationship between various variables. In this study, there are independent variables (variables that affect the dependent variable) and the dependent variable (variables affected by the independent variable), as well as moderating variables that can strengthen or weaken the effect of the independent variable on the dependent variable.

This study uses independent variables, namely the control environment (X1), risk assessment (X2), control activities (X3), information and communication (X4) and monitoring (X5). The moderating variable used is leadership commitment (Z). While the dependent variable used is asset management (Y).

Research Results

Validity test

1. Based on the results of convergent validity testing, all indicators have an outer loading value > 0.70 , meaning that convergent validity has been fulfilled.
2. Average Variance Extracted (AVE) test results, each variable > 0.50 , with the thought that all indicators are valid.
3. Based on the results of testing the HTMT value, it is known that the HTMT value < 0.90 , thus all constructs are declared discriminantly valid.
4. Based on the results of testing the value of the fornell lacker value, it is known that the fornell lacker value < 0.90 , thus all constructs are declared discriminantly valid.

Reliability test

Based on the results of testing construct validity and reliability, it is obtained that the composite reliability value and Cornbach's alpha of all constructs > 0.70, thus fulfilling the reliability requirements (reliable data / constructs).

Hypothesis testing

The adjusted R-Square value or R² on the asset management variable is 0.82, this value explains that the control environment (X₁), risk assessment (X₂), control activities (X₃), information and communication (X₄), monitoring (X₅) are able to influence asset management by 82% while the remaining 18% is influenced by other factors outside the study.

The results of hypothesis testing are as follows:

	Original sample	Sample mean	Standard deviation	T statistics	P values	Hypothesis
Control Environment -> Asset Management	0.187	0.176	0.063	2.963	0.003	Accepted
Risk Assessment -> Asset Management	0.26	0.249	0.075	3.455	0.001	Accepted
Control Activities -> Asset Management	0.205	0.195	0.07	2.931	0.003	Accepted
Information and Communication -> Asset Management	0.193	0.18	0.064	3.019	0.003	Accepted
Monitoring -> Asset Management	0.168	0.153	0.055	3.072	0.002	Accepted
Leadership Commitment x Control Environment -> Asset Management	0.05	0.053	0.058	0.864	0.388	Rejected
Leadership Commitment x Risk Assessment -> Asset Management	0.02	0.028	0.06	0.33	0,742	Rejected
Leadership Commitment x Control Activities -> Asset Management	0.057	0.066	0.057	1.007	0.314	Rejected
Leadership Commitment x Information and Communication -> Asset Management	0.095	0.105	0.05	1.885	0.059	Rejected
Leadership Commitment x Monitoring -> Asset Management	0.103	0.116	0.046	2.239	0.025	Accepted

Discussion

Control Environment Has a Positive and Significant Effect on Asset Management

Based on the results of this study, it is revealed that the level of quality of the control environment has a positive and significant effect on asset management. The University of North Sumatra has taken various steps to create a conducive control

environment. Supported by respondents' answers explaining that real efforts can be seen in the relatively clear division of tasks both at the faculty leadership level and between employees. Every job done is evaluated based on measurable work results, complete with the provision of performance value weights that apply to leaders and staff in the USU environment. When violations occur, the university has a sanction mechanism that is consistently implemented. In addition, the internal supervisory apparatus regularly provides briefings to ensure that all elements of the university comply with existing regulations. This condition fosters collective awareness of the importance of responsibility in managing state assets entrusted to these higher education institutions.

Furthermore, USU has also organised its organisational structure well to support asset governance. This is reflected in the existence of special units under the asset bureau that specifically handle the administration, inventory, control, and write-off of assets. The support of faculty leaders is also realised through the appointment of the person in charge of assets in each unit, who periodically reports on the condition and maintenance needs of assets. With this working pattern, the asset management process becomes more coordinated and directed.

The findings of this study strengthen the understanding that the control environment that has been built at USU, starting from the internalisation of integrity values, a supportive organisational structure, the appointment of personnel in charge of assets, to the application of information systems, actually encourages the creation of more orderly and accountable asset management. In the future, with a stronger culture of disciplined work and a transparent control system, asset management within the university is believed to be able to support the effectiveness of higher education services optimally.

Risk Assessment Has a Positive and Significant Effect on Asset Management

Based on the findings of this study, it can be concluded that the level of risk assessment capability has a positive and significant influence on asset management practices. Risk assessment enables organisations to identify potential threats to their assets, as well as assess the likelihood and impact of these risks. Thus, this process not only helps organisations anticipate disruptions, but also provides an important basis for allocating resources more appropriately, effectively, and efficiently to mitigate identified risks. In addition, the implementation of a mature risk assessment contributes greatly to strengthening the overall asset security system.

In the context of the University of North Sumatra, the direction of the institution's goals that have been aligned with the operational strategy is a strong foundation in building awareness of the importance of risk assessment. Both leaders and employees clearly understand the specific objectives of each task they are responsible for. This is supported by respondents' statements in routine identification efforts of asset conditions, which are carried out to minimise various possibilities such as loss, damage, and discrepancies in recording data. In recent years, USU has also begun to implement an asset condition reporting format sent by each faculty and work unit to the asset bureau. This

step clearly facilitates the monitoring process, minimises the potential for human error in recording, and ensures that information about asset conditions is always updated.

Not only that, the implementation of increasingly disciplined security standards also shows USU's seriousness in anticipating asset risks. Giving a unique inventory number to each asset, grouping assets based on risk categories, to borrowing and use procedures that are now more strictly regulated, are concrete examples of organisational policies that are oriented towards risk mitigation. This indicates that the University of North Sumatra does not merely carry out administrative procedures, but has also internalised the importance of anticipating risks in order to maintain the quality of asset governance on an ongoing basis.

Control Activities Have a Positive and Significant Effect on Asset Management

Based on the findings of this study, evidence is obtained that the level of control activities has a positive and significant effect on asset management. Control activities include a series of concrete actions designed to reduce risk, including setting authorisation for assets, supervising the implementation of work procedures, and controlling compliance with established policies and regulations. One of the concrete manifestations of control activities is the restriction of access to assets, so that only parties who have the authority can manage or utilise these assets.

The implementation of control activities at the University of North Sumatra shows that this institution has tried to build a control system that works well. Supported by the answers of respondents who explained that every work of leaders and employees is always evaluated regularly to ensure the achievement of predetermined targets. All activities related to asset management are systematically recorded and compiled in the form of reports which then become evaluation material for the asset bureau and university leaders. Supervision is carried out not only at the administrative level, but also at the operational level in the field, both for faculty leaders and employees. Every transaction related to the procurement and disposal of assets must go through the leadership approval process first, so that the risk of decision-making errors can be minimised.

The structure of control activities built with a comprehensive approach like this has contributed significantly to the creation of more orderly and accountable asset management within USU. With an effective control system, the university can ensure that all assets owned are managed optimally in supporting the implementation of the tridharma of higher education.

In the daily phenomenon at USU, control activities are also seen in asset administration practices which are now increasingly well documented. Administrative staff in faculties and work units have become accustomed to making regular records and reporting asset conditions to the asset bureau. This facilitates the data reconciliation process when SPI conducts an inspection. This meticulous administrative culture is not only born due to bureaucratic demands, but also formed from the awareness that the

assets managed are state property, which must be maintained so that they can continue to be used in supporting academic activities, research, and community service.

Furthermore, internal audits carried out by the Internal Supervisory Unit (SPI) of Universitas Sumatera Utara become an important instrument in order to strengthen this control activity. Through audits that are routinely carried out, the suitability between the physical condition of assets and administrative reports can be thoroughly checked. If any discrepancies or irregularities are found, corrective measures are immediately taken to restore data accuracy and minimise greater risks in the future. This audit also serves as a collective reminder for all work units to remain disciplined in carrying out asset management procedures. This is in line with research conducted by Kurniadi et al. (2021) and Pratami & Rufaedah (2020) also show similar results, namely that control activities have a significant effect on organisational asset management.

Information and Communication Has a Positive and Significant Effect on Asset Management

Based on the results of this study, it can be concluded that the level of quality of information and communication has a positive and significant effect on asset management. In order for the asset management process to run effectively, organisations must ensure that asset-related information is always available in an accurate, relevant, and easily accessible form for all parties involved. The implementation of an orderly recording and reporting system not only helps in the monitoring and evaluation process, but also becomes an important tool in ensuring transparency and accountability to stakeholders. In addition, good communication between work units also ensures alignment of goals and strategies, so that the process of identifying and managing assets can be carried out thoroughly. With harmonious integration between information provision and communication mechanisms, decision making can be done quickly and accurately, which in turn will increase efficiency and effectiveness in asset management.

At the University of North Sumatra, the implementation of a computer-based information system has become an important foundation in recording and reporting assets. The system is called Si-Kalista (Integrated Fixed Asset and Logistics Management Information System). With this system, the process of sending data from work units to the general bureau can be carried out more quickly and structured. Each faculty, study programme, and supporting unit routinely input data on asset conditions, which are then recapitulated by the asset bureau as material for periodic reports to the university leadership level. Through this approach, the orderliness of asset administration is more guaranteed, as well as facilitating the audit process carried out by both internal and external parties.

Communication between units at USU is also getting better. This can be seen from the frequent coordination meetings that discuss asset data collection, needs planning, as well as maintenance and write-off procedures. These meetings are an important discussion space for faculty leaders and heads of work units to equalise perceptions as

well as convey the obstacles faced in the field. Not infrequently, university leaders directly provide direction so that all asset management procedures can run according to standards. Supporting answers from respondents also explained that leaders convey important information, so that both faculty leaders and employees can receive information related to their work in a timely manner.

In addition, the existence of manuals and technical guidelines for asset management prepared by the asset bureau and distributed to all work units is one form of USU's seriousness in ensuring the smooth flow of information. These documents contain detailed steps on how recording, reporting, and asset disposal procedures should be carried out. Thus, employees have a written reference that helps them understand and comply with applicable procedures, without having to always wait for verbal instructions from superiors.

Monitoring Has a Positive and Significant Effect on Asset Management

Based on the results of this study, it can be concluded that the quality of monitoring implementation has a positive and significant effect on asset management practices. Monitoring is one of the important components in the internal control system framework which aims to assess the extent to which the effectiveness of control activities has been implemented.

Within the University of North Sumatra, monitoring activities are realised through the implementation of audits and evaluations carried out by internal and external parties. This is supported by the respondents' answers with the statement that there is an examination or assessment from internal or external parties related to control. One example is the examination that is routinely carried out by the Internal Audit Agency (BPI) which has a similar function to the Internal Supervisory Unit (SPI). This evaluation is not just an annual administrative procedure, but is carried out in several stages periodically throughout the year to ensure that each work unit carries out asset management according to applicable regulations. This audit examines the conformity between administrative records and the physical condition of assets in the field, so that any discrepancies can be immediately identified and corrected before they become a bigger problem.

In addition to audits by BPI, several times in a certain period USU is also the object of examination by external institutions such as the Supreme Audit Agency (BPK) and the Inspectorate General of the relevant ministries. This process spurs the asset bureau and work units on campus to be more thorough in managing assets, both in terms of recording, reporting, and physical supervision at the location. Each inspection finding will be discussed in a coordination meeting to ensure immediate follow-up. This approach also creates a work culture that increasingly realises the importance of accountability in managing state assets.

The daily phenomenon seen at USU also shows that the monitoring process does not only run *top-down*, but has begun to grow in the work awareness of employees. Some faculties,

for example, independently check their inventory, then submit reports on repairs or asset replacement needs before being requested by the asset bureau. This reflects a good sense of ownership, where employees no longer view assets as mere office inventory items, but as state facilities that must be maintained to support the education process. This is supported by the results of research conducted by Kurniadi et al., 2021 showing that monitoring is proven to have a significant influence on asset management.

Leadership Commitment is Not Able to Moderate the Effect of the Control Environment on Asset Management

Based on the findings of this study, it is known that leadership commitment does not have the ability to significantly moderate the relationship between the control environment and asset management at the University of North Sumatra. This result indicates that although the control environment is proven to make a positive contribution to asset governance, the level of leadership commitment is not strong enough to strengthen or weaken the relationship. In the perspective of organisational governance, leadership commitment should play an important role in strengthening the influence of the control environment on asset management, considering that leaders are key figures in setting an example, enforcing a culture of compliance, and ensuring that all policies and procedures are on track.

Ideally, the role of leaders includes strengthening integrity norms, controlling risks through strategic direction, and consistent supervision of the implementation of asset management policies. However, the phenomenon identified at the University of North Sumatra shows a different condition. In various strategic forums, the discussion agenda is mostly directed at the achievement of Key Performance Indicators (KPIs) such as increasing study programme accreditation, international publications, and global cooperation achievements. The issue of internal control of assets is rarely a top priority in strategic meetings at the leadership level. Although the university has policies related to ethics and integrity as outlined in the integrity pact, its implementation in the context of asset management does not appear to receive direct supervision from the highest leadership. As a result, the implementation of internal control practices relies heavily on the awareness of each work unit, which creates potential inconsistencies in recording procedures and asset maintenance.

Another phenomenon that reinforces this conclusion is the respondents' answers, which explain that the university's efforts in identifying employee needs in each strategic position related to asset management are less than optimal. The placement of human resources has not fully considered technical competence in asset administration and management. In some cases, asset inventory officers in faculties or work units only consider recording as a formal routine, not as an important part of a sustainable internal control system. This condition risks causing data mismatches, either in the form of assets that are recorded but not physically present, or assets that are available but have not been

officially registered. Things like this are certainly a serious vulnerability for efforts to maintain accountability for state asset management.

Leadership Commitment Is Not Able to Moderate the Effect of Risk Assessment on Asset Management

This study also reveals that leadership commitment does not have a significant effect in moderating the relationship between risk assessment and asset management. This finding shows that although risk assessment is proven to have a positive direct impact on asset management practices, the presence of leadership commitment has not been able to strengthen or weaken the relationship significantly. Within the framework of internal control theory, this should be an important concern because ideally, leadership involvement will strengthen the risk assessment process, which in turn optimises asset management within the organisation.

As is known, risk assessment is one of the crucial elements in the internal control system that serves to help organisations identify potential events that could hinder the achievement of goals. This process should not only be done at the administrative level, but also involve the leadership so that risks can be reviewed from a strategic perspective. However, the phenomenon observed at the University of North Sumatra shows that risk assessment activities are still mostly carried out at the operational technical level, run by the asset bureau or equipment unit, and lack intensive supervision from university leaders. As a result, the risks identified are more routine administrative in nature, not yet touching strategic risks.

This is supported by the results of the questionnaire, which indicate that there are employees who do not consider internal and external risks when carrying out their daily tasks. This is shown by the tendency of employees to only focus on completing procedural tasks without linking them to wider potential risks. For example, when processing requests for the use of assets or handling the write-off of goods, some employees do not conduct further risk analysis related to potential recording errors or the risk of losing asset data. In addition, some employees also admitted that they rarely consider in depth the impact of risks before making decisions, especially if it is considered routine administrative work. This situation shows the importance of leaders to directly intervene in guiding the risk assessment process so that it does not stop at the technical level.

Leadership Commitment Is Not Able to Moderate the Effect of Control Activities on Asset Management

This study also reveals that leadership commitment does not significantly moderate the relationship between control activities and asset management. Even though conceptually, control activities such as transaction authorisation, document inspection, and physical supervision of assets are the main instruments to ensure that assets are used as intended and maintained.

This study also confirms that leadership commitment does not have a significant effect in moderating the relationship between control activities and asset management at the University of North Sumatra. When viewed from the theoretical concept, control activities are an important component in the internal control system, which includes various mechanisms ranging from transaction authorisation, checking supporting documents, to direct supervision of the physical condition of assets. All of these procedures are basically aimed at ensuring that assets are used in accordance with their designation, are not misused, and their physical existence is well maintained. Strong leadership involvement should be able to strengthen the implementation of these control activities, so that asset management can be carried out more accountably.

However, the phenomenon revealed from this research shows something different. Based on the answers to the questionnaire statements, it was identified that several performance indicators used in asset management at USU have not been regularly updated. This condition causes the assessment of the effectiveness of control activities to be not optimal because the evaluation reference used does not always reflect the development of organisational needs or dynamic potential risks. Some respondents also stated that periodic evaluations to ensure that the control system is running optimally are still rarely carried out. This indicates a gap in the monitoring process, which should be a shared responsibility between the work unit and the leadership.

Furthermore, other findings show that there are still employees who do not fully understand the procedures that must be taken in the event of damage or loss of assets. This shows that the socialisation of procedures for handling problematic assets has not been evenly distributed across all work units. On the other hand, some respondents also said that leaders were less directly involved in the policy formulation process and in monitoring the implementation of the policy.

Leadership Commitment is Not Able to Moderate the Effect of Information and Communication on Asset Management

This study also indicates that leadership commitment does not have a significant effect in moderating the relationship between information and communication with asset management at the University of North Sumatra. This finding shows that although good information and communication channels have been proven to directly affect the quality of asset management, the presence of leadership commitment has not succeeded in strengthening this relationship in the context of this university. The role of leaders is not the key to building an effective information system, because leaders are expected to facilitate two-way communication and ensure that information distribution runs smoothly throughout the organisation.

The facts found at the University of North Sumatra show that the flow of information related to assets is more often one-way, namely from the work unit to the asset bureau. Data is sent in the form of periodic reports which are then recapitulated at

the bureau level without a forum that allows cross-unit discussions led directly by university leaders. In fact, the information system is not only a channel for delivering static data, but also an interactive medium that facilitates information exchange and quick follow-up if obstacles are found in asset management. This condition indicates a lack of leadership support in encouraging constructive two-way communication.

In addition, most of the asset information systems used at USU have not been regularly updated so that the data presented does not always reflect the latest conditions. The results of respondents' answers also indicate that not all staff in work units have equal access to various communication channels, whether in the form of invitations to coordination meetings, internal memos, or digital instructions that are usually sent through the campus online platform. This causes some important information to be circulated only to certain circles, resulting in uneven understanding of procedures or follow-up on asset handling.

On several occasions, asset bureau staff complained that reports from work units came in a non-uniform format, while there was no special coordination forum facilitated by the leadership to equalise reporting formats or discuss technical obstacles. As a result, the asset bureau had to clarify one by one to each work unit, which slowed down the process of consolidating the university's asset data as a whole. This situation can be overcome by direct intervention from university leaders who instruct uniform reporting standards as well as supervise work unit compliance in preparing reports.

Leadership Commitment Is Able to Moderate the Effect of Monitoring on Asset Management

The results of this study indicate that leadership commitment is proven to moderate the relationship between monitoring and asset management at the University of North Sumatra. This finding indicates that the presence of high leadership commitment is able to strengthen the influence of monitoring on the quality of asset management in the university environment. In recent years, university leaders have even instructed that the re-inventory report is not only received in the form of a document, but also presented by the faculty leader in a coordination forum attended by university leaders. This practice shows that there is a monitoring path that is not only administrative, but also strategic because it is directly under the attention of the highest leadership.

In addition, the internal audit conducted by the USU Internal Supervisory Agency (BPI) is not just a formality. BPI routinely carries out asset checks, including validation of mutation reports, condition of goods, and write-off procedures. This is supported by the respondents' answers which state that there is a routine inspection from internal parties. Every finding made by BPI is immediately followed up by the leadership by instructing the relevant work unit to make corrections and report improvements. The involvement of the leadership in this process shows a real commitment to ensure that the monitoring results really have an impact on improving asset management.

Thus, the results of this study confirm the important role of leadership commitment in strengthening the relationship between monitoring and asset management. The commitment of University leaders is not only reflected in policy documents or normative statements, but also in concrete actions such as attending asset monitoring meetings, directly checking inventory reports, and following up on BPI findings.

CONCLUSIONS AND SUGGESTIONS

Conclusion

Based on the results of research that has been conducted on the influence of internal control elements and the role of leadership commitment to asset management at the University of North Sumatra, it can be concluded as follows:

- 1) The control environment is proven to have a positive and significant effect on asset management at the University of North Sumatra. A clear organisational structure, measurable division of tasks, application of integrity values, and internal supervision support have created more orderly and accountable asset governance.
- 2) Risk assessment is proven to have a positive and significant influence on asset management at USU. The practice of periodically identifying asset conditions, assigning inventory codes, grouping by risk category, and reporting asset conditions has helped minimise potential losses and ensure assets are available in good condition.
- 3) The control activity variable shows a significant positive effect on asset management. Transaction authorisation, access restrictions, regular records, performance evaluation, and internal audits are important instruments in ensuring assets are used as intended and avoid irregularities.
- 4) Information and communication at USU has a positive and significant effect on asset management. The implementation of a computer-based asset recording system, regular coordination meetings, and well-distributed technical instructions help maintain transparency and facilitate monitoring.
- 5) This study also found that monitoring has a significant positive effect on asset management. Implementation of internal and external audits on a regular basis.
- 6) Leadership commitment moderates significantly only the relationship between monitoring and asset management. This means that the presence of high leadership commitment can strengthen the positive effect of monitoring on asset management. However, in the relationship between the control environment, risk assessment, control activities, and information and communication with asset management, leadership commitment has not been proven to moderate significantly. This shows that leadership commitment at the University of North Sumatra has played an optimal role in overseeing the monitoring process, but has not consistently strengthened other elements of internal control.
- 7) This research confirms that asset management at USU has been running with a fairly good level of accountability thanks to the positive influence of the control environment, risk assessment, control activities, information and communication, and

monitoring. However, to maintain continuity and improve the quality of asset management in the future, a more tangible leadership commitment is needed to ensure that all aspects of internal control run optimally and support each other.

Suggestion

Based on the research results and conclusions that have been obtained, the authors provide several suggestions that can be considered by the University of North Sumatra in order to improve the quality of asset management, namely:

- 1) University leaders should proactively map the needs of human resources in each position, carry out routine supervision through periodic evaluations, and encourage all elements of the organisation to always consider potential risks before making decisions. In addition, it is also important to hold periodic socialisation and training for asset managers at the faculty and work unit levels, so that their technical competence and understanding of the urgency of internal control will increase. On the other hand, information systems need to be updated on an ongoing basis to ensure that asset recording and reporting processes are more accurate and reliable. The report should be integrated and contain complete information. In addition, universities can develop better physical security systems such as CCTV from various directions, direct guarding by specialised staff, etc. so that assets are maintained and protected.
- 2) University leaders can also give awards to work units that succeed in managing assets in an orderly manner, both through complete administration and the physical condition of assets that are maintained. Conversely, for work units that are less compliant with asset management procedures, warnings or administrative sanctions need to be given as a form of rule enforcement.
- 3) University leaders need to further strengthen their involvement in supporting internal control elements other than monitoring, such as the control environment, risk assessment, control activities, and information and communication systems. This can be done by being directly involved in policy development, issuing more detailed internal policies, ensuring that the values of integrity and procedural compliance are truly instilled at every level of the organisation, and being a real example and role model by complying with asset management policies.
- 4) For all employees who manage university assets, it is necessary to comply with recording procedures and update asset data regularly so that asset information is accurate, complete and accountable. All employees can strengthen communication with asset user units and planning units, so that asset management is more integrated according to organisational needs. Employees are also expected to actively participate in identifying risks, implementing control activities, and being involved in the monitoring and internal audit process.
- 5) For the asset bureau, it is necessary to conduct regular training so that HR competencies are more evenly distributed, especially in the use of asset information systems and understanding of regulations. Then it can optimise the role of monitoring

and evaluation (money), so that it does not only stop at the report level but there is continuous improvement for the weaknesses found.

- 6) For future research, it is recommended to expand the research sample to other work units at the University to obtain a broader comparison related to the implementation of internal control and leadership commitment in asset management.

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