



The Interplay between Authentic Leadership, Institutional Framing, Stakeholder Engagement and Physical Asset Management: Insights from Uganda

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ABSTRACT

Physical asset management (PAM) success is critical to creating value for the public. To create a value-for-money pool in the physical assets, PAM employs effective approaches in Uganda. This study shed light on this issue by examining the effects of stakeholder involvement, institutional framing, and authentic leadership on the PAM of Uganda's local government (LG) sector. For instance, 263 LG employees received survey surveys. The methods used for data analysis included multiple linear regression analyses. The results showed a statistically significant positive correlation between authentic leadership and PAM, indicating that the hypothesis was supported ($\beta = 0.64$, $t = 21.50$, $p = .00$). Furthermore, the hypothesis was supported by the data, which indicated a significant positive association between institutional framing and PAM ($\beta = 0.65$, $t = 21.90$, $p = .00$). Additionally, stakeholder engagement maintained the hypothesis ($\beta = 0.64$, $t = 21.34$, $p = .00$) by having a positive and significant impact on PAM. The relative significance of genuine leadership, institutional framing, and stakeholder engagement boosting PAM was discovered by this study overall. The results could help government organization practitioners with strategy, planning, and policy establishment. In addition to including more variables impacting the PAM in the prediction equation, future research may examine the effects of various sectors and entities. To enhance the necessary understanding, further regulating and mediating mechanisms might be required.

Keywords: Authentic leadership, Institutional framing, Stakeholder engagement, Physical asset management, Uganda

INTRODUCTION

The decades-long role of PAM is gaining new significance as it transitions from the boiler room to the boardroom and from a small toolkit to a major tool for organizational strategy [1]. A fresh viewpoint on an organization and a foundation for creative organizational development are offered by PAM. Adopting this perspective has numerous benefits for organizations and it can set them apart during times of resource scarcity. Today, PAM, service delivery, and governance make up the three main responsibilities of local government. The growth of best practice PAM concepts and practices is essential to an LG's survival, as PAM neglect is seen as the biggest danger to the sustainability of African LGs.

PAM-related issues that the industry is currently facing are also covered in the literature that is currently in publication [2,3]. Those difficulties are the requirement to allow for ongoing expansion to support the country's social and economic progress; a sizable portion of physical assets are getting older and closer to the end of their economically productive lives. The significant expenditures of renewal and replacement cannot be supported by the current financing commitments, which are either insufficient or have not yet been determined; the political and

planning procedures in place do not offer the required long-term focus; in certain important regions, only a limited amount of physical asset information is available and the ongoing process of integrating economic systems, such as through increased globalization and commerce in products, services and information.

Unwisely, poorly designed or dilapidated physical assets affect the confidence of the public services and the spirits of all those who must utilize them. Contrarily, it has been demonstrated that physical assets that are attractive, accessible, effective and long-lasting increase well-being and productivity in addition to lowering operating expenses. The technical complexity and logistical challenges of government organizations, particularly those of the LGs, are increasing [4-6]. This exposes LGs' operations to progressively more complicated leadership crises. Hence, the conventional technical approaches, frameworks and models [7], which are extensively employed as a foundation for performance analysis, significantly restrict LGs' capacity to institutionalize [8,9] and address stakeholder concerns [10] during look-ahead PAM implementation. These approaches have long been held accountable for the shortcomings of interactive HOFs and modeling, such as their incapacity to handle superiority HOFs that are not time-related and their intricacy in assessing and translating dependency at the daily operational levels [11].

To ensure a functional PAM in LGs amidst complexity, a deeper knowledge of human-organizational factors (HOFs) in the PAM implementation is necessary, as is an integrated approach to identifying and modeling HOFs [12,13]. Any organization's ability to support effective PAM depends on having first-rate physical assets [14,15]. Furthermore, maintaining physical assets throughout their life cycle is a major financial investment to maintain their quality [16]. Therefore, value creation setbacks must be avoided while incurring financial expenses for managing physical assets [17,18] to obtain suitability in the areas of cost, condition, value, income, sufficiency, functionality and client satisfaction. When all the necessary elements are present, including HOFs [13], this is feasible [11].

In their study, Bernardes [19] examined the connections between authentic leadership qualities, quality improvement domains and hierarchical and flexible organizational culture in Canadian health facilities. In Alberta, Canada, an observational cross-sectional study was carried out. A questionnaire on verified metrics of organizational culture, quality improvement, and authentic leadership was filled out by nurse managers (n = 226). Descriptive statistics, the Chi-squared test ($p < 0.05$), and Spearman's correlation coefficient were used to examine the data. Organizational culture and genuine leadership are linked to quality improvement through accreditation. There was a tendency for those who stated they worked in a more accommodating environment to also report using quality improvement and real leadership techniques more frequently.

PAM has not been thoroughly investigated in the Ugandan setting. Given that PAM has been shown to boost public value creation, this knowledge can serve as a strong foundation for developing strategies to lessen PAM neglect at LG, which makes it possible for government entities to fulfill their goals and raise public value creation. While technological factors and their effects have been highlighted in previous studies in promoting effective PAM, in Uganda, the reasons behind the induction of HOFs for effective PAM have not been investigated. The current study aimed to investigate HOFs as the primary cause of producing effective PAM in the public sector LGs. Modern, decentralized organizational structures characterize Uganda's governmental sector. Since HOFs impact PAM, this industry frequently sees engaged stakeholders, institutional setup, and leadership. This research effort aims to investigate the present variables in the PAM sector. Due to varying employee perceptions, the impact of leadership, institutions and stakeholders on PAM is also examined in this study.

The main goals of the current investigation were to examine the nexus between authentic leadership, institutional framing, and stakeholder engagement with PAM among LG's employees. An additional goal was to investigate the relationship between the study factors and demographic characteristics including age, gender, work experience, educational attainment and income disparities. Thus; the objectives of the study were; i) to ascertain the connection between authentic leadership and PAM in Ugandan LGs; ii) to investigate how institutional framing and PAM relate

to one another in Uganda's LGs; iii) to ascertain how stakeholder engagement and PAM relate to each other in Uganda's LGs.

LITERATURE REVIEW

Conceptual review

Authentic leadership

A leadership style that is impacted by reality is known as authentic leadership [20]. Separate from one's true self in day-to-day existence is the process that determines what reality means [21]. When someone is real, they will be able to relate to others impartially and truly, understand themselves and accept their strengths and faults, and have concepts, a philosophy, and values that align with their behavior [22]. Authentic leaders possess a profound sensory sense of guidance for their leadership [23]. Their actions consistently embody their fundamental principles. They see themselves as the environment's defenders. Building enduring organizations frequently requires leaders and servants to lead with both their hearts and their minds. Studies on authentic leadership have focused mostly on the value of authentic leadership in an organization or team with the traits and behaviors that followers find appealing. Authentic leadership is associated with several favorable results, such as psychological health [24], engagement at work, and job satisfaction [25].

Institutional framing

The process through which institutions, including businesses, governments or societal structures, mold and sway people's opinions, actions and choices is known as institutional framing. Rules and regulations, conventions and expectations, cultural values and beliefs, power relationships and authority, messaging and communication and cultural values and beliefs can all contribute to it. The implications of institutional framing can be seen in many facets of life and is a potent concept for examining and resolving complicated social challenges. Three distinct characteristics make up an institution's framing: normative, regulative, and cognitive/cultural. These institutional features are outlined in Scott's [26] well-known "pillars of institutions". He argues one of the key elements of institutional arrangement is the regulative pillar. The institution's emphasis on upholding the rule of law and legal principles for all stakeholders is sometimes characterized as regulatory. Institutions depend on normality because it allows employees to take chances without worrying about unfair consequences for failure [27]. Adams [28] asserts that fresh thoughts come to mind more readily in areas with strong cognition. Moreover, social interactions create an atmosphere where employees have such high levels of trust in one another that it solidifies into norms, values and beliefs that are held in common. This is how culture is observed to evolve.

Stakeholder engagement

Stakeholder engagement is the process of locating, comprehending and incorporating people or organizations with a stake in an organization, project, or endeavor. The goals of successful stakeholder engagement are to establish relationships based on trust, comprehend requirements and expectations, handle problems and complaints, encourage cooperation and support and guarantee accountability and openness. Identifying internal and external stakeholders, creating engagement strategies, communicating, forming alliances and collaborations and tracking and assessing engagement are all part of it. Through stakeholder engagement, organizations may guarantee that their decisions and actions are well-informed, accountable and considerate of the requirements of all parties concerned. Vigor, determination and absorption are the three types of stakeholder engagement that anyone can discern. Vigor is the high degree of energy and mental toughness required to complete a task [29]. Be it for the benefit of the organization or the individual, vigorous participation has been demonstrated to be advantageous for successful performance. The reason for this is that one's resilience must be the source of agreement with work performance. On the other hand, determination refers to the attribute that motivates a person to perform in a way that advances the organization's success- a spirit of excitement, significance and pride [30]. A lack of resolve might impede work dedication, which lowers the organization's success in the process. For this reason, a person must be committed to completing the task at hand carefully and without compromising. Positive performance may be hampered by absorption if there is an unsatisfactory level of engagement and focus on one's work [30]. A crucial factor in

guaranteeing that an organization's performance may be deemed positive is an involvement that forces an individual to decide.

Physical Asset Management

In any organization, physical assets serve essential functions. A physical asset is everything that adds, maintains or can add value. Examples of such things include personnel, inventory, infrastructure, equipment and treasures. The present study defines PAM as the collection of tasks related to determining the necessary assets, determining the financial requirements, procuring assets, and offering logistical and maintenance support systems for assets that are being replaced or disposed off. Thus, PAM is a response to the broader resource constraints that LG is facing. It is an evolution from more traditional maintenance management and signifies a more strategic focus on property as a valuable resource. It has also required a shift towards a more entrepreneurial culture. To meet the strategic objectives of LGs, PAM is a methodical procedure that aims to guarantee the highest return on investment. This activity aims to match the public value creation aims and objectives of the LG with the physical asset base. It makes sure an LG's physical asset base is put up in the greatest possible way to serve the general welfare. Developed countries have reconstructed public sector PAM as a proactive measure to address these recurring issues because of the importance of PAM. Usage, maintenance, renewal and disposal are the four PAM dimensions that are looked at in this study.

Hypotheses Development

Authentic leadership and physical asset management

The impact of organizational culture, leadership philosophies, asset management information systems, organizational structure and human resource quality on asset management in the Malacca District Government is examined and analyzed by Leky [31]. Methods of quantitative research are used in this study. 114 employees are chosen as samples using the purposive sampling approach, with all government servants in the Malacca District serving as the population. The Partial Least Square (PLS) software version 6.0 is utilized for the Structural Equation Model (SEM) hypothesis testing in this investigation. The findings indicate that organizational culture, quality of human resources, and the Asset Management Information System (AMIS) all positively impact asset management. Moreover, asset management is independent of leadership style and organizational structure.

The research conducted by Johnson and Lloyd [32] examined the relationship between leadership style and organizational culture and how this relationship can be used to improve the way asset management practices and attitudes are developed. Utilizing data from studies on leadership and organizational culture, it offers a culture management approach that has been extensively used to support enhancements in the alignment of organizational culture with business goals. In conclusion, the fundamentals of building a culture that supports the kinds of long-term thinking, functional integration, information sharing, and decision-making that are hallmarks of effective asset management are reviewed, along with the part that business leaders play in this process. Why would some organizations then fail to gain traction in their asset management (AM) efforts and officers complain they get no support from above? In this paper, Kellick [33] posits that the missing AM ingredient in many organizations is leadership. To be competitive in local government-integrated planning, AM needs strong leadership, and this paper will make the case for better leadership in AM.

Shinde [34] investigated how a leader's authentic leadership affected the well-being of their subordinates. To evaluate the hypotheses, the current study used a survey method. Three hundred and fifteen members of the Petroleum Industry organization's sample provided the data. The research's transparency and credibility were preserved by using the Statistical Package for the Social Sciences (SPSS) version 20 to support the analysis of both quantitative and qualitative data. The findings demonstrated a strong relationship between subordinate well-being in the petroleum industry and leaders' authentic leadership. It is suggested that; H1: PAM and authentic leadership in Uganda's LGs will positively relate to one another.

Institutional framing and physical asset management

Every nation or region is constantly changing its PAM practices, especially with the introduction of new "hard controls"-laws, regulations, policies, and rules-across a range of industries. It is anticipated that they will offer the framework required for asset management as well as the essential basis for safety, effectiveness, and other performance requirements. The complexity of organizational contexts and a variety of other factors have made compliance efforts in the modern positions of technical and operational managers an overwhelming undertaking.

Mardiasmo and Liyanage [35] provide accurate information regarding the asset reformation process, especially about its viability and adoption. A study conducted on 76 regional government officers who served as state asset managers in twelve provinces and district governments in Indonesia corroborated this claim through empirical research. The study revealed that regional governments exhibit a significant degree of uncertainty, ambiguity, inconsistency, and non-compliance with asset management practices, even in the face of a full set of laws, regulations, and technical recommendations.

The effect of legal audits, control and supervision on optimizing fixed asset management is examined by Hasanah and Sutisna [36]. Employees made up the study's population. Using instruments in the form of 97 questionnaires, judgment sampling procedures were used in this non-probability sample design study. Using Smart-PLS software, the structural equation model (SEM)-PLS analysis was the data analysis method used in this study. Research findings indicate that control and supervision, along with legal audits, can affect how successfully land and building fixed asset management is optimized.

The focus of Mulyasari [37] was on the continued operation of the Lebak Regency's Department of Transportation's asset management practices. Has the management process operated as intended by the mechanism or has it been reasonable in light of the established rule? This study is qualitative and descriptive. This primary data-gathering method includes observation, interviews, and documentation; on the other hand, secondary data collection methods and sources of further secondary data are provided. The investigation's findings demonstrate that the Lebak Regency's Department of Transportation still oversees asset management, albeit with less efficiency these days. Due to numerous issues arise at this stage of the asset's management process, such as the uniaxiality of optimally implemented terminal assets, the missing and broken legal vehicle assets, the infrastructure of secure assets that are still lacking, and the renewal of physical asset labeling and coding that hasn't been changed.

The probability of behavioral biases among professional investors is examined by Ahmad [38], who also address the significance of behavioral bias governance in the asset management sector. The Delphi technique is used to validate opinions and collect data, while the survey method is used to collect data. Research indicates that behavioral biases may influence the fund manager's decision-making, thinking, and investing approaches. A major worry is that the fund management governance framework has overlooked the necessity of controlling behavioral biases.

Mastroinani [39] investigated how disaster damage in the MENA area might be lessened through infrastructure asset management. To find transferable asset management best practices, twelve interviews with specialists in disaster risk reduction and asset management from the MENA area and Australia were done. As a strategy for disaster risk reduction, asset management practices can be improved regionally, according to a qualitative analysis of interview data. The four main conclusions were: (1) asset management practices can serve as a proactive disaster policy; (2) asset management policies at appropriate levels are necessary in the MENA region; (3) asset prioritization enhances risk management effectiveness and decision-making; and (4) whole of life consideration facilitates effective planning for asset management practices.

Andersson and Buser [40] examined how various waste management stakeholders should work together to change current practices to better meet the evolving legal requirements and advance the circular economy. Utilizing qualitative research techniques, we gathered empirical data via thirty-one semi-structured interviews, meeting observations, and site visits. Our findings indicate that while there has been some improvement in fraction sorting and a slight decrease in waste output,

institutional effort has not been done to adequately translate sustainability into new economic values.

Using empirical data from three infrastructure delivery firms in Spain, Hetemi [41] examined the conflicts that arise between participants throughout the adoption and application of BIM. To contextualize the BIM approach within the (inter-)organizational framework of infrastructure delivery, the paper employed an institutional analysis. Large-scale infrastructure projects were found to be sociotechnical undertakings immersed in intricate institutional frameworks; as a result, institutional norms, practices, and logic play a crucial role in them. Thus, it is proposed; H2: PAM in Uganda's LGs will have a favorable link with institutional framing.

Stakeholder engagement and physical asset management

Agyekum [42] investigated the obstacles that impede stakeholder engagement in sustainable public procurement (SPP) projects. Seven procurement experts verified a survey that was conducted with 104 respondents from eight academic institutions in Ghana. The data was submitted to Principal Component Analysis (PCA) to identify the important barriers, following the completion of all required tests about sample size and survey instrument reliability. The study's findings suggest that there are three groups of obstacles preventing stakeholders from participating in SPP works. These include knowledge-driven elements and organizational structures, as well as stakeholder fatigue and attitudes, relationships, and information-sharing procedures.

The research conducted by Gunawan [43] examines and analyzes the relationship between organizational commitment, competence, and governance and employee performance and quality asset management at the regional work units (SKPD) of The Makassar city government. This study is an explanatory one, and it uses total sampling as a sampling technique. The data analysis tool used is Analysis of Structural Equation Model (SEM) through Analysis of Moment Structures (AMOS) Ver. 18. The results of hypothesis testing show that competent leadership, organizational dedication and excellent governance significantly and favorably affect employee performance. The quality of asset management is significantly and negatively impacted by organizational commitments. The disparate outcomes regarding skill, sound governance, and worker performance have a favorable and noteworthy impact on local governments' quality asset management. The quality asset management of local governments is significantly impacted by organizational dedication and skill, albeit indirectly.

Brunetto [44] created a path model to investigate how leader-member exchange and perceived organizational support affect organizational culture in Australian asset management companies. A route from corporate culture to employee engagement was also looked at. A partial least squares model was utilized to assess the survey responses from ninety technical and engineering workers working in asset management businesses. The findings confirm that employee engagement was favorably and significantly correlated with organizational culture, and that perceived organizational support and leader-member interchange were positively and strongly correlated with organizational culture.

In their study, Prebani and Vukomanović [45] seek to understand how practitioners view stakeholder engagement, who and how they carry out related activities and processes, what organizational factors affect the process and how infrastructure projects succeed. Eight seasoned specialists with a history of working on numerous, intricate infrastructure projects were interviewed for this study, which used a qualitative method. Stakeholder engagement success factors were categorized into three levels. These included involvement mechanisms and associated success criteria at the operational project management level (e.g., time performance); engagement mechanisms and associated success criteria at the customer organization level (e.g., ease of use and customer satisfaction); and engagement mechanisms and associated success criteria at the institutional and governance level (e.g., system-wide benefits).

Papagiannakis [46] contend that an organization's level of interaction with suppliers, customers and the local community determines the relationship between environmental management systems and EPI. They find empirical evidence supporting our hypothesis for all three types of stakeholders using a sample of 1,314 manufacturing enterprises between 2003 and 2014.

Subsequent investigation demonstrates that involvement with local communities becomes a crucial requirement for businesses having prior expertise with quality management systems. It is envisaged, thus; H3: PAM in Uganda's LGs will have a favorable correlation with stakeholder engagement.

METHODOLOGY

Sampling Frame and Sampling Technique

For my research, which was carried out in Acolil and, Uganda, I chose to gather data from 135 district LGs that are mentioned in the directory of LGs in Uganda. For this study, the respondents were chosen using a multi-stage sampling procedure. The population was first divided into smaller groups according to their geographic location, such as North, East, Central and West, using the area sampling technique. Choosing specifically the north, I took the samples at random by region. The number of respondents from the chosen districts was ascertained in the second stage when I employed a stratified sampling technique to choose the LGs. The respondents from each district were chosen in the third step by the use of simple random sampling.

Response Rate

Four months were dedicated to the data collection process. Of the 263 survey questions that were self-administered and delivered by hand, 262 were received. As a result, one was eliminated because the respondent gave an incorrect response (for example a tendency to agree no matter what the issue, preferred extreme opposites or collected answers in the middle of the response range). 262 surveys were ultimately used as a result. A 99.9% response rate was obtained for this investigation.

Data Collection Process

Initially, to gather data, the Gulu, Kitgum, Pader and Amuru LG authorities were approached. The potential respondents, who worked for the chosen LGs, filled out printed questionnaires on their own. A briefing on the goal of the study was given to the responders. These included an explanation of the rating procedure for every questionnaire. An announcement about the privacy of their answers were distributed to the employees. I distributed 263 questionnaires, of which 262 I used for analysis and one I rejected.

Measures

Authentic Leadership Questionnaire (ALQ)

By evaluating four aspects of the process- self-awareness, internalized moral perspective, balanced processing and relational transparency of authentic leadership- Walumbwa [47] created this self-assessment questionnaire to measure authentic leadership. The overall score, or authentic leadership score, can be interpreted using the following guidelines: low=32-38, high=48-64, very low=16-32 and vert high =64.80. Greater authentic leadership is indicated by scores in the upper ranges, whereas less authentic leadership is indicated by scores in the lower levels. The ALQ has been validated by Sierpiska [48] and its reliability score is .80. In this study, alpha reliabilities for the current scale were determined to be .70.

Institutional framing tool

I used the five questions from Ntayi [49] for the regulative pillar, three for the normative pillar and four for the cognitive/cultural pillar. The words were changed to better represent the LGs' affairs rather than the entrepreneurial setting in which they were used.

Stakeholder engagement tool

The Utrecht Work Engagement scale [30] was used to measure stakeholder engagement. Subscales of scale three include vigor, dedication and absorption. Nine items total- three for each subscale. The work's engagement scale's alpha reliability was determined to be .88. The results showed that the scale reliabilities were .62 for absorption, .83 for dedication and .83 for vigor. This study scale had a .90 reliability rating.

Physical asset management scale

I used 10, 10 and 11-item instruments developed by Maletić [12] to measure the utilization, renewal and disposal of PAM considering their properties. I used six of the Brunetto [44] tool's components to measure maintenance. Every one of these items addresses a PAM feature that was being measured in this study.

For all the instruments, I employed the five-point Likert scale type with 1 denoting strongly disagree and 5 denoting strongly agree to measure them.

Reliability and Validity Tests

Barlett's test of sphericity and Kaiser-Meyer-Olkin (KMO) tests were used to determine validity, whereas Cronbach's alpha value of more than 60, the total variables values were dependable, and the KMO and Barlett's test values were correct, both with a value of .904 (Tables 1 & 2).

Table 1. Alpha Test for Cronbach's.

Variables	Number of items	Cronbach's alpha value
Authentic leadership	16	0.96
Institutional framing	12	0.95
Stakeholder engagement	20	0.93
Physical asset management	37	0.97

Table 2. Barlett's Sphericity Test and Kaiser-Meyer-Olkin (KMO).

Kaiser-Meyer-Olkin Sampling Adequacy Measure; 0.967		
Bartlett's Test of Sphericity	Approx. Chi-Square	37230.85
	Df	2472
	Sig.	0.00

Data Analysis

Every data analysis was performed using SPSS version 24.0. Data on frequency, percentage, mean and standard deviations in the demographic domain were analyzed using descriptive statistics. In this study, the effects of the components (authentic leadership, institutional framing and stakeholder engagement) on PAM were predicted using multiple regression analysis, which was used to test the hypotheses. To assess whether the hypotheses were accepted or denied, the results showed up as ρ -value, t-test, R and R².

RESULT

Sociodemographic variables

The sample is composed of 283 LG employees from 97 LGs in the mid-northern Ugandan districts of Gulu, Kitgum, Pader and Amuru. The respondents were selected using purposive, simple random and census sampling techniques. Participants in the study were split almost evenly between men (59.9%) and women (40.1%). The age range of the respondents was 20 to 65. Of these, the population over 65 made up 1.6%, followed by the age group of those over 42 and 53 (46.6%) and those over 41 (34.0%). The most frequent educational credentials were a postgraduate diploma (42%) followed by a bachelor's degree (28%) and a master's degree (17%). 42.6% of the respondents, or nearly half of them, had worked for the LG for 12 to 16 years. With 48.6% of the respondents, the majority had worked for the current local governments for six to eleven years. Among the respondents, 41% had held their current position for the longest.

To ascertain the respondents' degree of authentic leadership, institutional framing, stakeholder engagement and PAM, the mean and standard deviation were noted. From Table 3, it shows the

respondents have high levels of authentic leadership, institutional framing, stakeholder engagement and PAM.

Table 3. Variable Scores' Mean and Standard Deviation.

Variables	X	SD	Levels
Physical asset management	3.83	0.80	High
Authentic leadership	3.92	0.79	High
Institutional framing	3.97	0.85	High
Stakeholder engagement	3.93	0.71	High

Hypothesis testing

H₁: Authentic leadership and PAM in Uganda' LGs will positively relate to one another was the first hypothesis tested in this study. Based on **Table 4**, multiple regression analysis showed that authentic leadership had a positive association with PAM forecasting, with a substantial degree of significance ($\alpha=0.05$). This relationship may account for approximately 41% of the variance in PAM. An equation was provided to predict the parameters that affected PAM and the correlation coefficient was equivalent to .64 authentic leadership or $PAM=1.53 + .62$ (authentic leadership). From **Table 5** the results of the Multiple Linear Regression analysis show that authentic leadership and PAM are positively correlated.

Table 4. Multiple Linear Regression analysis for Hypothesis 1.

Variable	B	S.E.	Beta	t	Sig.
Authentic leadership	0.62	0.04	0.64	21.50	0.00
Constant	1.53	0.12		13.557	0.00

$R = .65, R^2 = .41, R^2 \text{ adj} = .41, F = 461.47, \text{Sig. of } F = .00, p < .05$

Table 5. Multiple Linear Regression analysis for Hypothesis 2.

Variable	B	S.E.	Beta	t	Sig.
Institutional framing	0.74	0.03	0.65	21.90	0.00
Constant	0.98	0.14		7.403	0.00

$R = .65, R^2 = .42, R^2 \text{ adj} = .42, F = 479.59, \text{Sig. of } F = .00, p < .05$

I tested the relationship between institutional framing and PAM in hypothesis two, thus; H₂: Institutional framing in Uganda's LGs will have a favorable link with PAM. Multiple Linear Regression analysis from **Table 5** revealed a positive relationship direction of institutional framing to forecast PAM, which could predict the variance in PAM around 42%. A correlation coefficient equal to .64 gave an equation to predict factors that impacted PAM as follows: $PAM=.98 + .74$ (institutional framing). The results of the institutional framing Multiple Linear Regression analysis show a positive relationship with PAM.

Hypothesis 3 determined the relationship between stakeholder engagement and PAM for which I set the hypothesis, thus; H₃: Stakeholder engagement in Uganda's LGs will have a favorable correlation with PAM. Multiple Linear Regression analysis results from **Table 6** showed a positive association between stakeholder engagement and PAM forecasting with a significant level ($\alpha=0.05$) required. This relationship might account for 41% of the variance in PAM. A correlation coefficient of .63 was found, providing an equation to predict the following factors that affect PAM: $PAM= 1.10 + .71$ (stakeholder engagement). **Table 6** shows that stakeholder engagement has a positive correlation with PAM based on results from Multiple Linear Regression analysis.

Table 6. Multiple Linear Regression analysis of Hypothesis 3.

Variable	B	S.E.	Beta	t	Sig.
Stakeholder engagement	0.71	0.04	0.64	21.34	0.00
Constant	1.10	0.13		8.250	0.00

$$R = .64, R^2 = .41, R^2 \text{ adj} = .41, F = 455.27, \text{Sig. of } F = .00, p < .05$$

Building blocks for intentional stakeholder engagement are provided by van Aalderen [50], who offer a conceptual examination and an analysis of three asset management instances in the Netherlands. These factors, along with the mission, local context, and time available, lead the process. This study creates a synthesis between the literature on stakeholder engagement and asset management, using the everyday experiences of asset managers as a guide. It demonstrates the importance of carefully considering both relational and material factors at every stage of an asset management project.

A thorough analysis of the methods used to date to ensure that stakeholders are effectively involved in facilities management is given by Sedhom [51]. A total of forty journal publications from 2012 to 2021 were examined. The scholarly articles included in this article are primarily in the fields of engineering, construction, and decision-making. In addition to pointing out research gaps and possible future initiatives, it looks at research trends. It was discovered that facility managers' lack of participation with stakeholders causes problems. Furthermore, it was discovered that the stakeholders' needed level of participation was not specified, and the structure for involvement was unclear.

The impact of early public involvement on an infrastructure project's success-which is correlated with its value creation-is examined by Wojewnik-Filipkowska [52]. An examination of the case study allowed for the observation of the role that stakeholders play and how relationships, viewpoints, expectations, risks and other soft issues continue to impact initiatives. Conducting interviews and thoroughly reviewing project documentation were necessary for the case study. Direct questionnaire surveys were utilized in conjunction with semi-structured and focused group interviews to complement the data collection methods. The study offers proof that early public involvement can raise the value of infrastructure projects in terms of their efficacy, sustainability, and utility.

DISCUSSION

The purpose of this study was to investigate the connections between authentic leadership, institutional framing, stakeholder engagement and PAM in Uganda's LGs. When a leader acts with integrity, passion, purpose and values, it is known as authentic leadership. The method through which an organization shapes and influences an individual's behavior is institutional framing, whereas the employees' state of mind relating to their employment is stakeholder engagement. These were all put to the test against PAM though separately. The initial hypothesis posited that there would be a positive correlation between authentic leadership and PAM. The current study's findings demonstrated a strong correlation between authentic leadership and PAM. The results of my investigation are identical to Bish [53].

Shinde [34] investigated how a leader's authentic leadership affects the welfare of their subordinates. A survey approach was used in this study to examine the hypotheses. The findings demonstrated a strong relationship between subordinate well-being in the petroleum industry and leaders' authentic leadership.

The results of a recurrent maturity measurement based on the infrastructure management Maturity (IM3) at the Dutch public infrastructure organization Rijkswaterstaat are presented by Volker [54]. The asset management dimensions identified by the IM³ are as follows: information management, market approach, risk management, processes & roles, internal coordination, external coordination, and culture & leadership. The maturity levels are classified from ad hoc to

optimized. The findings indicate that the organization has made substantial progress in all areas and that asset management is widely understood and continues to be learned.

Syaifudin [55] examined how well asset management works and how that affects how fairly assets are shown on the balance sheet of the LG. The goods management apparatus at 27 local government entities in the province of West Java served as the responders for this 2019 study. The goods management apparatus used the Google Form application to distribute and collect 172 completed questionnaires. Using numerous linear regression equation models and SPSS software, this research methodology employs quantitative techniques. The study findings suggest that several factors, including the dedication of leadership, the proficiency of goods management staff, internal controls, and the utilization of regional asset management information systems, might impact the efficacy of asset management performance.

The second hypothesis of the study was that institutional framing and PAM would positively relate to one another. The findings of the study demonstrated a strong positive correlation between the variables with a substantial and positive correlation ($\beta=.70$, $t=21.33$, $\rho=0.00$). The link between institutional framing and PAM is evident in the literature [1,12].

In their study, Diaswati [56] state that further knowledge about the integrated governance and asset management approach is provided by state asset management reform, specifically by the conceptualization of governance principles within state asset management laws, policies and implementation guidelines.

Azhar [57] investigated how information systems and legislation affect asset management in the East Aceh District Government. The East Aceh District Government Offices' commodities sector personnel were the subjects of the study. All respondents were given questionnaires as part of the original data-gathering process. The census method was utilized to determine the study's sample size, which included 44 individuals in total. The findings demonstrated a strong correlation between information systems for asset management and regulation. This is demonstrated by the coefficient of determination (R^2) of 0.773, which shows that information systems and regulations affect asset management to the tune of 77% with other factors outside the purview of this study influencing the remaining 23%.

Andersson and Buser [40] examined how various waste management stakeholders should work together to change current procedures to better meet the evolving legal requirements and advance the circular economy (CE). They gathered empirical data through 31 semi-structured interviews, meeting observations and site visits by utilizing qualitative research methods. The findings indicate that although there has been some improvement in fraction sorting and a slight decrease in waste output, institutional work is still needed to convert sustainability into new economic values.

The third hypothesis, H3: PAM in Uganda's LGs will have a positive connection with stakeholder engagement, examined the impact of stakeholder engagement on the significance and character of the PAM implementation process. The outcome validates the conclusions of earlier researchers regarding the enhancement of PAM through stakeholder engagement [45]. It is commonly acknowledged and emphasized how important stakeholder engagement is PAM [50].

van Aalderen [50] observe that it is commonly acknowledged and emphasized how important stakeholder engagement is to asset management. Stakeholder engagement is still, nevertheless, frequently used in asset management in an ad hoc and non-systematic manner. Their study attempts to make integrated asset management a reality by providing a way to explain the frequently overlooked factors related to stakeholder engagement. After that, they created a synthesis of the literature on asset management and stakeholder engagement, demonstrating the need for a thoughtful consideration of both relational and material factors at every stage of the asset management project.

The study conducted by Xerri [58] investigated how attitudes toward organizational change, affective commitment and psychological well-being were affected by workplace relationships (POS and LMX) among Australian asset managers, engineers and technicians who manage physical assets. An examination of 255 asset managers, asset management engineers, and asset management maintenance staff was conducted using a self-report survey, with the theoretical

framework supplied by social exchange theory. Major results from a structural equation model show that an employee's attitude toward organizational change was positively correlated with perceived organizational support and that an employee's emotional attachment to the organization was positively correlated with supervisor-subordinate relationships and perceived organizational support.

Hanis [59] list the difficulties Indonesian LGs have while implementing a public asset management framework. The method employed to accomplish the research goal was a case study in the South Sulawesi Provincial Government. Interviews and document analysis were the two methods of data collecting used in the case study. In light of the study's findings, the Indonesian LG will face several obstacles while implementing a public asset management framework. The non-profit nature of public assets, the numerous jurisdictions involved in public asset management procedures, the complexity of LG goals, the lack of data for managing public property, the lack of an institutional and legal framework to support the asset management application and the shortage of human resources are these challenges.

CONCLUSION

Following testing, analysis and discussion, it is possible to conclude that the three independent variables-authentic leadership, institutional framing and stakeholder engagement- all fully and separately have a significant impact on PAM. Put another way, these variables have the potential to raise PAM in the LGs in Acolil and Uganda. Numerous demographic factors were also investigated. Additionally, the outcomes demonstrated that each of them had as strong connection to the studied variables.

RECOMMENDATIONS

The results provide managers with specific recommendations on how to promote effective PAM in their LGs. In particular, the results show a positive relationship between PAM and authentic leadership. Hence, in addition to providing middle and upper management with training on how to be authentic leaders, top management should concentrate on authentic leadership and clearly and effectively convey the organization's goals, policies, and choices. This would facilitate the promotion of comprehension regarding the new position of the organization's leader.

Institutional framing and Stakeholder engagement are also positively affecting PAM, according to the findings of the study. Stated differently, the PAM's effectiveness is stimulated by institutional conceptualization and stakeholder engagement. Institutional framing encourages staff members to feel confident in their aptitude for handling difficult tasks and to be dedicated to completing a range of tasks to meet objectives. In addition, workers can regulate their emotions, view things positively when interpreting circumstances, and enjoy their jobs.

Stakeholder engagement- which allows employees to think as they like so they may use their knowledge to work toward their goals-should be a crucial requirement for developing an effective PAM. Additionally, opportunities for employees to show that they accept participation that benefits LG should be provided as a reward. It highlights the value of employee engagement and encourages staff members to think actively and consistently. One could argue that the way to achieve effective PAM is to identify and support strategies that improve stakeholder engagement and institutional framing, including the support of a leader who has strong leadership traits.

Thus, an LG should focus more on those aspects if it wants to advance PAM and develop into a proficient physical asset manager. To put it briefly, this well-rounded strategy would help staff members have a better comprehension of PAM effectiveness indicators and constructive expectations for PAM effectiveness, which would enable them to progress to an effective PAM in the LGs.

LIMITATIONS

A cross-sectional research design is used in this study. Admittedly, data for this study was collected at a certain moment in time. Due to its inability to determine causality, cross-sectional data can only quantify the degrees of relationships between variables. The cross-sectional type design of the study limits the extent to which cause-and-effect relationships may be inferred from

the data. Additionally, the employees' self-reporting provided the data. Workers would be best suited to report their interpretations of the factors under study; hence it was judged to be appropriate. But it's possible that the staff members weren't entirely accurate, which could have skewed the results.

FUTURE RESEARCH

This study primarily focuses on the physical assets managed by public sector workers from Uganda's LG entities. Future iterations of the research should cover other categories of organizations, such as departments, agencies, and ministries. In the prediction equation, there should also be an increase in the other construct that influences PAM. Investigating the various elements that affect PAM in addition to the distinctions between governmental and non-governmental enterprises is important. Furthermore, government organizations, central government organizations, and private organizations can all be examined. Additionally, future studies should look at the relationships that act as mediators and moderators between genuine leadership and PAM, as well as the relationships that are in place between stakeholder involvement and PAM and institutional framing.

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