

Risk Management Strategies and Performance of Public Universities in Kenya

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ABSTRACT

Performance of Universities is paramount to academic and global entity. Risk encompasses any factor potentially hindering the attainment of goals and objectives of universities. As key educational institutions in Kenya, public universities face a range of risks that affect their overall performance. This study determines the influence of risk management strategies on the performance of public universities in Kenya. It focuses on proactive risk management, and internal risk control strategies on university performance. Balanced Scorecard (BSC) Model is used as the anchor theory. A cross-sectional research design was adopted. Primary data were collected using semi-structured questionnaires administered to 200 University Management officials, including Deputy Vice-Chancellors and Directors from Finance, Academics, HRM, and Quality Assurance departments across 10 public universities in Kenya. Secondary data on performance indicators, including research excellence, staff retention, student retention, and revenue generation, were obtained from University Annual reports covering 2019 to 2023. Data was analyzed using descriptive and inferential statistics with SPSS Version 27. A valid response rate of 81.5% (n=163) was obtained. Descriptive findings revealed that proactive risk management scored the highest average (M=3.52), followed by internal risk management (M=3.81), relationship risk management (M=3.76). This implies that while Kenyan public universities have robust information-sharing mechanisms and a relatively strong foundation in integrated and internal risk management, the comparatively lower score for proactive risk management suggests a potential strategic vulnerability, indicating that risk practices may be more reactive than forward-looking. The Correlation analysis showed strong positive relationships between proactive risk management and university performance ($r=0.863$, $p<0.01$), as well as between internal risk control ($r=0.817$, $p<0.01$) and performance. Regression analysis indicated that these strategies jointly explained 86.2% of the variance in performance ($R^2=0.862$). Proactive risk management ($\beta=0.400$, $p=0.000$) emerged as the most influential predictor, while moderated regression revealed that information sharing significantly enhanced this relationship, increasing explained variance to 87.8% ($R^2=0.878$). The study concluded that robust risk management frameworks, reinforced by timely and structured information sharing, are pivotal to enhancing performance in Kenya's public universities. It recommended that university leadership should embrace proactive risk practices and sustain institutional competitiveness.

INTRODUCTION

Background

Organizations, irrespective of their sector, consistently confront risks originating from operational, financial, and strategic compliance environments (Botha, 2019). Each operational activity within an organization requires a careful assessment and management of risks that may interfere with achieving performance and strategic goals. As Siddiq (2022) observes, higher education institutions (HEIs) are also vulnerable to various disruptions and experience growing pressure from government bodies, the public, and their internal communities to handle these risks effectively. Traditionally, HEIs have delegated risk management responsibilities to individual units within the institution (Smith, 2021). Yet, this decentralized method often proves inadequate as a unified approach for managing risks institution-wide. White and Robinson (2020) argue that an absence of a cohesive risk management plan results in inconsistent risk tolerance, inefficient allocation of resources for risk mitigation, and insufficient insight into how risks impact the HEI's performance targets. Power (2007) adds that the field of risk

management has largely overlooked the potential of knowledge management capabilities to enhance risk management strategies.

A comprehensive understanding of the scope, likelihood, and type of risks faced by universities is essential to enable staff to devise institutional risk management frameworks and prepare necessary resources to mitigate risks for students and the institution (Effeney, 2020). These Risks Management Strategies can be classified, according to Fleming & Hay (2021) as Risks Avoidance, when it is not allowed to occur at all. This measure is most suitable when there is foresight on the organizational structure, on what could be the likely threat to the organizations. Usually, it has heavy impact on the organization, that is why it should be taken as a very serious issue, especially by the experts in such fields of particular interest, like the universities. These types of strategy should be adopted when there is tendency of bad situations to come, as envisaged in the organization.

Risk management within WIL contexts remains a critical concern for universities, given their strategic importance. Risk transfer, or the delegation of responsibility via insurance, waivers, and contracts, contradicts the shared responsibility model (Moloi, 2016). The multitude of risks faced by universities worldwide has underscored the need for deploying risk management strategies to reduce, monitor, control, and limit the probability or impact of disruptions (Aven, 2016). As Hopkin (2018) notes, effective implementation of a risk management strategy can maximize the benefits of managing risk while minimizing associated losses.

When universities maintain active stakeholder engagement while listening to feedback and responding to concerns they create more supportive environments. When stakeholders express high satisfaction levels it leads to both improved institutional reputation and extended operational sustainability. Research by Taylor and Hall (2022) shows that educational institutions with comprehensive risk management systems maintain better readiness to tackle academic program challenges alongside student success obstacles. The preservation of academic excellence at universities depends on their anticipatory approach towards risks that affect curriculum transformations faculty recruitment strategy and accreditation requirements. According to Johnson's 2019 findings 80% of universities faced budget deficits while 63% reduced programs and services because of decreasing funding sources.

Furthermore, Mitchell and Young (2020) emphasize the role of risk management strategies have focus on building strong relationships among stakeholders to enhance their overall performance and reputation. Looking ahead, recent discussions in the field, exemplified by the work of Chang and Wu (2023), underline the necessity for universities to adapt their risk management practices to emerging threats, such as cybersecurity risks and global health crises. Additionally, the ongoing digital transformation of education and the evolving student demographic present new challenges that require innovative risk management strategies to maintain and enhance university performance.

In this context, comprehensive risk management strategies have gained significant attention within higher education systems worldwide. These strategies are no longer confined to financial or operational safeguards but are increasingly viewed as integral to strategic governance and performance enhancement. The core objective is to proactively identify, assess, and mitigate potential threats while also recognizing and leveraging opportunities. By doing so, institutions aim to protect their assets, ensure regulatory and accreditation compliance, maintain academic integrity, and strengthen stakeholder confidence. This global shift is reflected in the adoption of structured frameworks and international standards such as Enterprise Risk Management (ERM) and ISO 31000.

Risks Strategies used for Risks Management, especially in universities have involved a shift from mere reactive terrain of fragmentation to proactive and integrated Enterprise Risks Management (ERM) frameworks in using long term survival strategies, which involves the likely actions against threats and risks that might come up. Also, good and quality education is involved in the ERM measures at global level to mitigate risks and threats. Quality education is adequately used through pronounced academic sound ethics and guidelines, using very standard and policy measures that can boost the high standard required (Ahmad et al., 2016).

Kenyan perspectives of risks management strategies view this as a shift from historical reactive perspectives to a real proactive collaborative and specific area framework, as researched from Kenyatta University and University of Nairobi by Kinyanjui (2019). He categorized this into four (4) thematic sectors. The first is Kenyan

Vision 2030. This involves the country putting the government regulations through its performances in public sector. It is a measure by the Kenyan government to use adequate regulations, through the National Disaster Risks Management Strategies from 2025 to 2030. This government performance sometime hinders the smooth running of the universities system, which constitutes risks and threats. Also, The Commission for University Education (CUE) in Kenya, through the ERM, has effectively used Public Finance Management (PFM) system to mitigate risks in universities. National Treasury Directive, with the 3/2009 Treasury Circular, played very significant role in the risks management in Kenyan universities. The Treasury used Internal Risks Management Policy Framework (IRMPF) in 2024 to implement the regulations that assisted in risks reduction in various forms. Apart from that, the government of Kenya used the Nwongozo Code to instruct the university Councils and Vice Chancellors to be responsible for any lapses that emanate from risks that could be avoided (Kinyanjui, 2019).

Statement of Problem

In contrast, private universities have generally maintained more stable service delivery and lower student–staff ratios, although some have experienced declining enrolments due to rising competition and affordability constraints. These divergent performance trends underscore a systemic challenge in public universities, where expansion has outpaced institutional capacity, thereby heightening exposure to operational, financial, and reputational risks.

Beyond financial strain, inefficiencies in administrative processes and weak internal communication systems continue to erode university performance. Evidence shows that only about 40 percent of administrative services in Kenyan universities are delivered efficiently, contributing to poor student experiences, delayed service delivery, and declining institutional credibility (Kinya & Muthee, 2022). Ineffective information sharing between management, academic staff, and students has resulted in poor coordination, slow decision-making, and limited responsiveness to emerging risks. While private universities tend to exhibit more streamlined communication channels and faster decision cycles, public universities remain constrained by bureaucratic structures and fragmented information flows. This deficiency in information sharing not only weakens risk detection and response but also limits the ability of universities to align strategy, operations, and stakeholder expectations, thereby compromising overall performance.

Despite these persistent challenges, existing empirical studies in Kenya and the region have largely examined risk management in isolation, often using generic frameworks that do not adequately capture the complex governance, academic, and stakeholder dynamics of universities (Mutisya, 2020). Moreover, limited attention has been paid to the role of information sharing as a complementary mechanism through which risk management strategies translate into improved performance. Smith (2020) reported that reduced research funding has led to declining research output in over 70 percent of surveyed institutions, yet few studies interrogate how internal communication and information flow moderate this relationship.

Research Objectives

- i. To assess effect of proactive risks management strategies on performance of public universities in Kenya.
- ii. To determine effect of internal risk control strategies on the performance of public universities in Kenya.

Research Hypothesis

Ho1: Proactive risk management strategy has no statistically significant effect on performance of public universities in Kenya

Ho2: Internal risk control strategy has no statistically significant effect on performance of public universities in Kenya

Scope and Delimitation

This study is mainly on Risk Management Strategies and Performance of Public Universities n Kenya. The focus

is on the Commission of University accredited public universities in Kenya. Among the 38 of them, 10 public universities were chosen for this study. It is delimited to Deputy Vice Chancellors of Administration, Finance, Planning and Academic Affairs of these schools. Also, included is the records from the institutions on their performance level.

Theoretical Framework

The theoretical framework that guided this study is Balanced Scorecard (BSC) Model

The Balanced Scorecard (BSC) model offers a comprehensive approach to strategic management that goes beyond conventional financial metrics to assess an organization's overall performance. First introduced by Robert S. Kaplan and David P. Norton in the 1990s, the BSC encourages a balanced evaluation, integrating both financial and non-financial metrics to gain a well-rounded understanding of organizational effectiveness. Recent research continues to examine the BSC's utility in diverse organizational settings. Central to the BSC is the identification and measurement of key performance indicators (KPIs) across four main perspectives: financial, customer, internal processes, and learning and growth. This multi-perspective approach enables organizations to connect their strategic goals with operational activities and monitor performance holistically. Recent studies by Ittner, Larcker, and Meyer (2015) underscore the BSC's relevance, highlighting its role in driving improvements and fostering alignment with organizational strategy.

In practical application, organizations use the BSC to convert strategies into clear objectives and measurable targets. The financial perspective, typically representing the traditional focus on profit, is complemented by the customer perspective, underscoring the importance of customer satisfaction and competitive positioning. The internal processes perspective evaluates operational efficiency, while the learning and growth perspective emphasizes investments in human and technological development (Ittner, Larcker & Meyer 2015).

Empirical Literature Review

Proactive Risk Management and Public University Performance

Zhang et al. (2018) investigated the role of proactive risk management (PRM) in mitigating financial and operational risks in Australian universities. The study used a longitudinal approach, analyzing financial data and risk mitigation policies in 10 leading universities over a 10-year period.

Their findings revealed that universities that implemented early warning systems, scenario-based planning, and proactive contingency strategies had better financial stability, improved student retention rates, and fewer disruptions due to unforeseen crises. The study concluded that proactive risk management enhances institutional resilience, particularly in unpredictable economic and political environments. However, the research focused primarily on financial risks, neglecting academic and reputational risks, which are equally crucial for universities. This leaves a gap in understanding how proactive strategies can be tailored to safeguard academic integrity, research credibility, and long-term institutional reputation.

Mugisha and Turyahikayo (2019) conducted a study in Uganda's higher education sector, examining how proactive risk assessment frameworks influence university performance. The study employed a mixed-methods approach, collecting quantitative data from financial reports of 20 universities and conducting in-depth interviews with academic administrators. Their findings indicated that universities that adopted proactive risk assessment mechanisms, such as predictive analytic for student enrollment trends, preemptive financial restructuring, and crisis preparedness drills, performed 15% better in academic program stability and financial sustainability than those relying on reactive risk strategies. Also, in the study, Proactive Risk Management Strategy is explained as a measure to identify, envisage, assess, and try to action that will reduce or avoid the manifestation of the risks in the organization before they actually occur. The approach of this strategy include prediction of the risks before occurrence, preempting or envisaging the likelihood of the risks, preparing for the risks or threats before hand, get the necessary backups that can mitigate the havoc of the risks and finally, use proactive contingency approach. Apart from that, according to the study, the risks can be administrative or futuristic risks, when it can be viewed from foresight perspective. Also, to figure out the risks, identify the

indicators, schedule risks audit assessment and act quickly on the identified risks will drastically assist to act proactively (Mugisha and Turyahikayo, 2019).

However, their study did not explore the challenges faced by universities in implementing these strategies, such as limited funding, resistance to change, and lack of skilled risk management personnel. This creates a gap in knowledge on how public universities in financially constrained environments can effectively implement proactive risk management strategies.

Kinyanjui (2019), viewed the Kenyan perspectives of proactive risks management strategies as a shift from historical reactive perspectives to a real proactive collaborative and specific area framework, as researched from Kenyatta University and University of Nairobi by Kinyanjui (2019). He categorized this into four (4) thematic sectors. The first is Kenyan Vision 2030. This involves the country putting the government regulations through its performances in public sector. It is a measure by the Kenyan government to use adequate regulations, through the National Disaster Risks Management Strategies from 2025 to 2030. This government performance sometime hinders the smooth running of the universities system, which constitutes risks and threats. Also, The Commission for University Education (CUE) in Kenya, through the ERM, has effectively used Public Finance Management (PFM) system to mitigate risks in universities. National Treasury Directive, with the 3/2009 Treasury Circular, played very significant role in the risks management in Kenyan universities. The Treasury used Internal Risks Management Policy Framework (IRMPF) in 2024 to implement the regulations that assisted in risks reduction in various forms. Apart from that, the government of Kenya used the Nwongozo Code to instruct the university Councils and Vice Chancellors to be responsible for any lapses that emanate from risks that could be avoided (Kinyanjui, 2019).

Internal Risk Management and Public University Performance

Brown and Wilson (2017) conducted a study in Canadian universities, analyzing the impact of internal control mechanisms on financial stability and governance effectiveness. The study used case study analysis, focusing on six universities with strong internal audit functions and governance structures. Findings revealed that institutions with regular financial audits, strong procurement policies, and fraud detection mechanisms had better financial accountability, reduced corruption risks, and enhanced institutional credibility. The study concluded that strong internal control systems improve institutional governance. However, their research did not explore non-financial risks, such as academic malpractice, unethical research practices, and administrative inefficiencies, which are critical for university performance. This gap underscores the need for studies that address a broader range of internal risks beyond financial control.

Amoako et al. (2019) examined internal risk control in Ghana's public universities, focusing on compliance with regulatory policies. Using a quantitative survey of 15 public universities, they analyzed how adherence to financial, academic, and administrative regulations influenced university performance. The findings revealed that universities with structured internal controls experienced fewer cases of financial mismanagement, improved student satisfaction, and greater institutional transparency. However, the study failed to address challenges related to enforcement and monitoring, particularly in universities that face political interference. This creates a research gap in understanding how public universities can maintain autonomy in enforcing internal risk controls while aligning with national education policies.

Mutiso et al. (2021) assessed internal risk control strategies in Kenyan public universities, focusing on procurement processes and financial oversight mechanisms. The study used content analysis of audit reports from five major universities and conducted interviews with finance officers. Findings indicated that universities with automated financial systems and strict procurement policies experienced lower incidences of corruption and resource misallocation. However, their study did not investigate the effectiveness of internal control mechanisms in non-financial areas, such as curriculum development, research ethics, and faculty evaluation systems. CUE also recommended the training of about 55% Risks Managers in every institution to effectively curb its impact in the universities. Financial sustainability is seen as another part that can conveniently jeopardize the smoothness in university administration. This, with operational deficits are eminent to risks in universities. Funding of education is very paramount when it comes to achievement of goals and objectives of education. When this is not properly placed, negativity occurs and risks emerge (Kinyanjui, 2019). He also stated that Public

universities in Kenya are choked with staff issues more than the private universities, which are more interested in what is called “3rd Party Risks” mostly from the outside of the private universities, like the case of United States International University (USIU), Kenya. Also, Kinyanjui (2019) confirmed that Cyber-security issues, involving technological and ICT intrusions, constitute threats in the universities. With anti-hacking experts and software, ERP system and treats vendors are efficiently useful, and the risks can conspicuously reduce or even be eradicated. Also, internal cultural efficiency gaps in these Kenyan universities are equally responsible, in some cases to risks in the institutions. When positive measures are put in place, theories or risks misunderstanding, with practical involvement of reasonable counter actions will assist to reduce these risks (Kinyanjui, 2019). Also, he described Internal Risks Management Strategy to be risks within the system, whereby the the risks or threats are engulfed as the organization lives. According to the study, the risks involves access risks, where they are embedded into the system, personnel involvement is a note to the strategy, governance or policy openness often makes such risks strive and eventually encourage its existence. Also, the strategy can include the use of open risks management approach, financial risks involvement, where there are loop holes for risks to strive, human lapses from personnel and actors in the system and IT or data insecurity, which make the system very vulnerable and open for risks or threats attacks. In this case, risks identification, risks checks with vigilance, assessment of the internal risks available and clear link effects of its impacts are reasonable steps to use the Internal Risks Management Strategy.

This leaves a gap in understanding how internal control frameworks can be extended beyond financial governance to improve overall university performance.

Research Design

Research Design used for this study is Cross-sectional design, with Convergent Mixed Method approach. This combines the quantitative part of the data collection and analysis with that of qualitative part. It employed descriptive method to conveniently describe the opinions and characteristics of the participants’ perception and performance view of the public universities.

Target population

The target population comprised the public universities Deputy Vice Chancellors of Administration, Finance, Human Resource and planning, as well as those of Academic Affairs.

Sample and Sampling Technique

Simple random sampling technique was adopted to choose 10 universities from the entire 38 public universities in Kenya. After which, stratified was used to select the participants from the chosen 10 universities. Then, purposive method brought out the education directors for records provision.

Validity and Reliability

Face and Content validity were observed by the CUEA research experts, while the reliability that showed the goodness of the questionnaire as a tool for data collection was carried out using Crombach-Alpha, with 0.89

Data Collection

The primary data was collected using questionnaire. These copies were administered to the DVCs and supporting members of staff in these universities. Also, the secondary data, through records from the Ministry of Education gave a clue to the needed data for the study.

Data Analysis

The collected data from the participants were analyzed using descriptive analysis, involving the mean, standard deviation and percentages. Also, inferential analysis of the data, using correlation and multiple linear regression reflected its findings.

Findings

The descriptive:

A five-point Likert scale was employed for data analysis, with response ratings categorized as follows: where; 1= Strongly Disagree, 2= Disagree, 3= Neutral, 4= Agree, 5= Strongly Agree

Proactive Risk Management Strategies

The study aimed to assess influence of proactive risks management strategy on performance of public universities in Kenya.

Table 1: Descriptive Statistics for Proactive Risk Management

Statement	N	Mean	Std. Deviation
The university has a system in place to identify potential risks.	163	3.97	0.797
There are preventive controls established to mitigate risks.	163	4.01	0.793
The university uses predictive analytics to forecast potential risks.	163	3.28	0.899
Risk indicators are continuously monitored to detect emerging threats.	162	3.68	0.868
Staff are regularly trained on proactive risk management techniques	162	3.31	0.980
Crisis simulations and drills are conducted regularly to prepare for potential risks	163	3.03	1.051
Cross-functional teams collaborate to anticipate and address emerging risks	161	3.34	0.866
Aggregate	162.4	3.52	0.893

The aggregate mean score for proactive risk management strategies was 3.52 (SD = 0.893), suggesting that while public universities in Kenya apply these strategies moderately, there is considerable room for strengthening them. The highest-rated items were the establishment of preventive controls to mitigate risks (M = 4.01) and the existence of systems to identify potential risks (M = 3.97), indicating that most universities have foundational mechanisms for early risk detection and prevention. Continuous monitoring of risk indicators (M = 3.68) also scored above the aggregate mean, showing some level of vigilance in identifying emerging threats. However, the lowest means were recorded for crisis simulations and drills (M = 3.03) and the use of predictive analytics (M = 3.28), pointing to underutilization of advanced preparedness measures and technology-driven forecasting. Similarly, relatively low scores for regular staff training (M = 3.31) and cross-functional collaboration (M = 3.34) suggest that human capacity development and interdepartmental coordination in proactive risk management remain limited.

These findings are consistent with insights from the reviewed empirical literature. For example, Weingarten et al. (2016) found that preventive controls and structured risk identification frameworks have a positive influence on organizational performance, mirroring the high ratings observed here. Likewise, Singh et al. (2017) emphasized the importance of early detection systems and preventive planning in mitigating operational disruptions. However, the limited application of predictive analytics aligns with Uyar and Özkan's (2020) observation that many institutions in developing contexts have yet to fully integrate modern technological tools into risk management. Furthermore, the low emphasis on crisis simulations and staff training contrasts with best practices identified by Jifeng et al. (2023), who noted that simulation-based preparedness and workforce capacity building significantly enhance resilience. Overall, while Kenyan public universities demonstrate strength in basic preventive and detection measures, they may need to adopt more advanced, technology-driven, and people-focused strategies to achieve optimal proactive risk management.

Internal Risk Management Strategies

The study sought to ascertain the influence of internal risk control strategy on the performance of public universities in Kenya as presented in Table 4.13.

Table 2: Descriptive Statistics for Internal Risk Management

Statement	N	Mean	Std. Deviation
There is strong risk management culture promoted by university's leadership.	163	3.6900	0.85600
The university regularly analyzes potential internal risks.	163	3.7853	0.80693
There are policies and procedures applied to manage risks across different departments.	161	3.9565	0.86131
Relevant risk-related information is communicated effectively.	163	3.7791	0.80909
The internal controls are monitored regularly for effectiveness.	163	3.8221	0.86009
The internal audit function provides independent assurance on the effectiveness of risk management	163	3.9325	0.95017
Clear accountability structures exist for managing and reporting internal risks	163	3.7607	0.88774
Aggregate	162.7	3.8180	0.86162

The aggregate mean score for internal risk management strategies was 3.82 (SD = 0.862), indicating that public universities in Kenya generally implement these strategies to a moderately high extent. The highest-rated aspects were the existence of policies and procedures applied across departments to manage risks (M = 3.96) and the provision of independent assurance by the internal audit function on the effectiveness of risk management (M = 3.93). These results suggest that universities have formalized governance structures and internal oversight mechanisms to ensure consistent risk control practices. Monitoring of internal controls (M = 3.82) and regular analysis of potential internal risks (M = 3.79) also scored above the aggregate mean, reflecting ongoing evaluation and improvement of internal processes. However, the relatively lower mean for a strong risk management culture promoted by leadership (M = 3.69) implies that while structures are in place, there may be a gap in fostering organization-wide values and behaviors that embed risk management into daily practices.

These findings correspond with Khalid and Ahsan's (2021) findings which emphasized that clear policies, independent audits, and regular monitoring significantly enhance organizational performance, supporting the high ratings observed for procedural frameworks and audit assurance in this study.

Correlation Analysis

Table 3: Correlation Analysis

		PIs	IRMS	RRMS	PRMS	IRMS	IS
PIs	Pearson Correlation	1					
	Sig. (2-tailed)						
IRMS	Pearson Correlation	.795**	1				
	Sig. (2-tailed)	0.000					
RRMS	Pearson Correlation	.800**	.734**	1			
	Sig. (2-tailed)	0.000	0.000				
PRMS	Pearson Correlation	.863**	.723**	.699**	1		
	Sig. (2-tailed)	0.000	0.000	0.000			
IRMS	Pearson Correlation	.817**	.692**	.695**	.739**	1	
	Sig. (2-tailed)	0.000	0.000	0.000	0.000		
IS	Pearson Correlation	.533**	.488**	.484**	.418**	.622**	1
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000	
	N	163	163	163	163	163	163

** . Correlation is significant at the 0.01 level (2-tailed).

Key

Code	Interpretation
PIs	Performance Indicators
IRMS	Integrated Risk Management Strategies
RRMS	Relationship Risk Management Strategies
PRMS	Proactive Risk Management Strategies
IRCS	Internal Risk Management Strategies
IS	Information Sharing

The strongest relationship was found between proactive risk management strategies and performance indicators, showing a very high positive correlation ($r = 0.863$, $p < 0.01$). This suggests that universities that actively engage in forecasting potential risks, training staff, and conducting crisis simulations tend to experience superior outcomes such as higher student retention, improved research output, and enhanced reputations. This finding is consistent with Jifeng et al. (2023).

Similarly, internal risk control strategies exhibited a strong positive correlation with performance indicators ($r = 0.817$, $p < 0.01$). This emphasizes that robust internal controls, frequent audits, and clear accountability structures are critical in sustaining operational excellence and safeguarding institutional assets, which ultimately translate into better performance metrics.

Regression Analysis

Table 4: Model Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	0.559	0.107		5.239	0.000
Integrated Risk Management Strategies	0.145	0.042	0.169	3.422	0.001
Relationship Risk Management Strategies	0.193	0.042	0.224	4.637	0.000
Proactive Risk Management Strategies	0.337	0.042	0.400	8.004	0.000
Internal Risk Control Strategies	0.193	0.037	0.249	5.163	0.000

Dependent Variable: Performance Indicators

Most notably, from the table above, proactive risk management strategies emerge as the strongest predictor ($\beta = 0.400$, $t = 8.004$, $p < 0.001$), underlining the critical impact of anticipatory measures such as predictive analytics, crisis drills, and staff training on institutional outcomes, leading to the rejection of *H₀₁*.

This finding aligns with Poi (2020) and Ongowo & Oloko (2022), who found that higher education institutions that invest in forward-looking risk practices are significantly more likely to achieve operational continuity and academic excellence even amid volatility.

Internal risk control strategies also show a substantial influence ($\beta = 0.249$, $t = 5.163$, $p < 0.001$), reinforcing the idea that robust internal audits, accountability structures, and communication of risk issues underpin sound institutional performance. This, therefore leads to the rejection of *H₀₂*. Together, the findings underscore that while each dimension plays a distinct role, it is their synergistic interplay, combining governance, anticipation, stakeholder relations, and enterprise-wide integration, that drives the success of public universities in Kenya.

Table 5: Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.929 ^a	.862	.858	.20488	1.907

Strategies, Integrated Risk Management Strategies, Internal Risk Control Strategies

Dependent Variable: Performance Indicators

The moderated regression model, as presented in Table 4.23, demonstrates an R value of 0.929, indicating a very strong correlation between the combined predictors, including information sharing, and university performance. The R^2 of 0.862 remains unchanged from the unmoderated model, suggesting that adding information sharing did not significantly increase the total variance explained. The adjusted R^2 of 0.858 further confirms that, even after including the additional variable, the model remains stable and free from overfitting. The standard error of the estimate (0.20488) is almost identical to the unmoderated model, indicating consistent predictive accuracy. The Durbin-Watson statistic of 1.907 continues to fall within the acceptable threshold, implying that the inclusion of information sharing does not introduce autocorrelation concerns.

Proactive Risk Management Strategies and Performance

Proactive risk management emerged unequivocally as the most powerful predictor of university performance, demonstrating the highest correlation ($r = 0.863$, $p < 0.01$) and the largest standardized beta coefficient in both the direct ($\beta = 0.400$, $p < 0.001$) and moderated ($\beta = 1.046$, $p < 0.001$) regression models. This finding provides robust empirical support for the Resource-Based View (RBV) and Dynamic Capabilities Theory. Anticipatory practices such as environmental scanning, predictive analytics, crisis simulation, and continuous staff training constitute a valuable and difficult-to-imitate organizational capability. This capability allows universities to foresee disruptions, adapt strategies pre-emptively, and thus create a sustained competitive advantage, aligning with the conclusions of Jifeng et al. (2023) and Poi (2020).

Internal Risk Management Strategies and Performance

The relationship between internal risk control strategies and performance revealed a consequential paradox. While a very strong positive bivariate correlation existed ($r = 0.817$, $p < 0.01$), the moderated regression analysis exposed a significant negative direct effect ($\beta = -0.311$, $p = 0.033$) and a negative interaction ($\beta = -1.100$, $p = 0.017$). The initial correlation aligns with Agency Theory, which emphasizes the need for controls, audits, and compliance mechanisms to safeguard assets, ensure accountability, and align activities with institutional goals, as noted in studies like Ohiwerei and Onimawo (2024).

Multiple Linear Regression Model

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + e \dots\dots\dots (Equation i)$$

Where:

Y = Performance of the public universities

β_i = The coefficients representing the various independent variables.

β_0 = the Y intercept

X_1 = Integrated Risks Management Strategies

X_2 = Relationship Risks Management Strategies

X_3 = Proactive Risks Management Strategies

X_4 = Internal Risk Management Strategies

e = the error term

CONCLUSION

The study concludes that proactive risk management strategies exert the strongest statistically significant positive influence on performance, resulting in the rejection of the null hypothesis. It was the most powerful predictor in the model ($\beta = 0.400$, $p < 0.001$) and exhibited the highest correlation ($r = 0.863$). This definitive finding establishes that a forward-looking, anticipatory approach to risk, characterized by environmental scanning, predictive planning, and pre-emptive training, is the single most critical capability for enhancing performance.

Also, based on the full analysis, the study concludes that the influence of internal risk control strategies on performance is complex and conditional. The direct regression model indicated a significant positive effect ($B = 0.193$, $p < 0.001$), supporting the rejection of the null hypothesis. However, the moderated model revealed a significant negative direct effect ($\beta = -0.311$, $p = 0.033$). This leads to the nuanced conclusion that while internal controls are fundamentally important, their impact can become negative in specific organizational contexts, likely where rigid, compliance-focused controls stifle agility. Therefore, their design and implementation climate critically determine whether they enable or hinder performance.

RECOMMENDATION

As revealed in the proactive management findings, such predictive systems are essential for transitioning from a reactive to a genuinely anticipatory risk posture. Regular staff training and scenario planning exercises should also be institutionalized to nurture a university-wide culture that not only complies with risk protocols but internalizes them as part of daily academic and administrative decision-making.

At the policy level, the study urges the Commission for University Education (CUE), the Ministry of Education, and allied agencies to develop tailored regulatory frameworks that specifically guide and benchmark risk management in public universities.

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