

Stock Controls On Management Of Costs In Organizations. A Case Of Mukwano Group Of Companies.

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Abstract

This research paper aimed to investigate the role and impact of stock control strategies in managing costs within organizations using Mukwano Group of Companies, a leading manufacturing conglomerate in Uganda, as a case study to analyze how effective stock management strategies could have helped reduce inventory holding costs and optimize operational efficiency. By implementing comprehensive inventory control techniques to regulate stocking levels, monitor consumption patterns, minimize overstocks and outdates, conduct regular cycle counting and reconciliation, leverage automated re-order alerts and stock takes, and analyze overall stock-turnover rates, companies were better positioned to lower their costs of carrying excess or obsolete inventory, avoid shortages that disrupted production schedules, and ensure value-adding resources were deployed most judiciously for optimal return on investment. At Mukwano Group, which consisted of over a dozen manufacturing units across several sectors, understanding current stock control procedures across divisions and plants, examining areas where wastage existed, benchmarking leading global practices, and developing customized improvement plans tailored to each business line's requirements became crucial to strengthening governance over inventory, cutting capital locked in unnecessary stock, and freeing financial resources for other value-driving initiatives imperative for sustained competitiveness in the market. From the findings, there was a moderate positive relationship between stock planning and performance of utility organizations in Uganda, ($r=0.607$ $p=0.000$ $N=58$). The relationship was statistically significant at 95% confidence level since $p\text{-value}<0.050(=0.000)$. With a detailed case investigation and recommendations implemented, it was expected the company would have seen notable gains from an optimized stock control environment where critical metrics were constantly reviewed to drive sustained enhancements in working capital management, cost optimization, minimal downtimes, and overall productivity enhancement - outcomes important in the manufacturing sector's goal of maximizing value for all stakeholders involved in the process. Utility organizations should introduce tighter security for stock control so that theft, obsolescence, and vandalizing of inventories by staff is eliminated. This will ensure reduced cost on expenditure on inventories.

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Background of the study

According to (Ronet et al., 2023), inventory management is a process that aims to provide the required level of service to both internal and external customers in terms of quantity and quality, to identify current and future requirements for all types of inventory in order to avoid overstocking and avoid production bottleneck (K. Faridah et al., 2023). Inventory management also helps keep costs to a minimum by reducing varieties, economic lot size during replenishment, analyzing costs incurred in acquiring and transporting inventory to ensure inventory visibility in the upstream and downstream supply chain (Alex & Moses, 2024).

Basically, inventory management focuses on proper allocation of resources/budget, quick and cheap reordering/replenishment of products, and efficient receipt and storage of inventory. Inventory management to ensure that the business always has enough stock to meet its own needs and those of its customers; however, there is a need to maintain a minimum amount of inventory to avoid waste and minimize inventory holding costs (Jallow et al., 2021). Inventory refers to goods or stocks, which may include assets purchased for resale, consumer goods stores, raw materials and components purchased for incorporation into products for sale; products and services in intermediate stages of completion, balance of long-term contracts and finished goods (Gracious, 2023).

The essence of inventory management is to expand business operations to ensure the efficient flow of goods, products and services (N. Faridah et al., 2023). In this context, "inventory" is a summary list of items; the amount of goods in the warehouse or warehouse of the product that the organization produces for sale and the components that ensure the sale (N. Faridah et al., 2023). "Inventory" includes a wide variety of goods or materials - stationery, office equipment, plant, machinery, consumables, etc. - available for use or sale. The element of "management" or "control" is considered central in this context, since any "control" is considered a process by which events are adjusted to a set plan. The term "control" has familiar synonyms such as management, supervision, administration, management, planning, supervision, management, organizing, supervision and regulation; all done to avoid 'powerlessness', 'neglect', 'weakness' or 'mismanagement' in the system (T. Christopher, 2022). Thus, inventory management is the supervision of the supply, storage and availability of items in order to ensure an adequate supply without excessive overcrowding (Benard, 2023). Inventory management is often associated with understanding the inventory mix of an organization and the different levels of demand for that inventory depending on the various external and internal factors that may trigger the demand for materials in a given period (Innocent et al., 2023).

According to (Winny et al., 2023), cost management of an organization involves actual output or results compared to or against planned output. It is used to make adjustments to achieve goals more effectively and efficiently (F. Christopher, Komunda, et al., 2022). Cost management in organizations is measured by organizational profitability, service quality, market share and continuous improvement, workforce quality, openness and actions (Winny et al., 2023). Organizations in Uganda have seen growth in recent years due to the increase in infrastructure and organizations are no exception, which has led to an increasing demand for public services such as water and electricity due to development in many areas in terms of schools and industry. many citizens have adopted the modern lifestyle of using treated water installed in their homes (Moses & Nancy, 2024).

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Mukwano industries Uganda Limited is a leading conglomerate in East and Central Africa and a major player in key business sectors including manufacturing, agriculture and logistics supply chain that drive the Ugandan economy (Winny et al., 2023). Its origins date back to 1910, when family members first entered East Africa and established a trading company. The business has grown through visionary diversification into various areas of manufacturing, agriculture, real estate development, and logistics and supply chain management (Frank et al., 2023).

(Julius, 2024) notes that every business needs to maintain optimal inventory to avoid damage and waste and minimize inventory holding costs. The organization regularly places orders when the inventory level of a particular item reaches the reorder level and tries at all costs to control the inventory level to the minimum that is kept on record to prevent the company from incurring excessive purchasing and carrying costs. on one side and stock on the other. However, over the past 10 years, apart from all efforts to control inventory levels by introducing recall orders from pre-qualified suppliers, the organization continues to experience inventory levels below the minimum with subsequent emergency purchases (K. Faridah et al., 2023).

Statement of the problem

Optimal inventory control not only provides information on the amount of raw materials needed for use in production or operations, but can also identify and account for raw materials that become leftover or waste during production or operations, while ensuring that inventory does not run out. at any time (Kazaara & Christopher, 2023). Lack of optimization is a common design problem that makes it difficult to accurately predict future inventory needs. Proper inventory control should capture the right data at the right time to avoid errors that lead to inaccurate inventory levels. The rapid expansion of organizations in Uganda due to the increased rate of development has exposed organizations to short lapses in service delivery due to the problem of stockpiling supplies to support efficient and effective service delivery to the public (Julius, 2024). Mukwano Group of Companies is a manufacturing organization that manufactures products for domestic use such as plastics, cooking oil, jerrycans, etc. The organization has contracted with recall suppliers to supply critical supplies such as raw materials, chemicals, lubricants and related materials, which is fair. just-in-time (JIT) purchasing method that allows suppliers to deliver as and when required to guard against critical inventory shortages in addition to inventory control on all inventory through inventory, variance control, and e-requisitioning, but the problem of critical inventory out-of-stocks persisted, leading to poor service delivery and finally to the overall cost management of Mukwano Co Ltd (F. Christopher, Muhindo, et al., 2022). The purpose of this study was to investigate the relationship between inventory management and cost management in organizations in Uganda on the case of Mukwano Group of Companies.

Specific Objectives

1. To examine the relationship between stock planning and management of costs at Mukwano Group of Companies.
2. To establish the relationship between stock replenishment through procurement and management of costs at Mukwano Group of Companies.

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3. To determine the relationship between stock control and management of costs at Mukwano Group of Companies.

Methodology

The study adopted a cross-sectional study design using both quantitative and qualitative approaches as its framework to manage the data collection and processing process in evaluating the organization's cost management inventory management in Mukwano Ltd Kampala (Racheal et al., 2023). . According to Kothari (2014), cross-sectional survey design is data collection primarily using questionnaires and structured interview to capture quantitative or qualitative data at a single point in time (Jallow et al., 2022).

A quantitative approach was adopted to measure the magnitude of the various constructs and variables that are conceptualized in the study.

According to (Nafiu et al., 2013), Population refers to the entire group of people, events or interesting things that the researcher wants to investigate. However, Mukwano Ltd has an actual number of all employees in the corporation of 3000 (three thousand workers); the target population was 150 employees and the available size was 108 employees selected from the headquarters but working in different departments (Nafiu et al., 2017). The majority of respondents were workers who directly dealt with inventory in a variety of circumstances, as detailed in the sample size determination. Headquarters and Kampala were chosen because they represent all the other areas where Mukwano Ltd operates (Julius, 2024).

From a target population of 150 respondents from employees working in various departments at the head office in Kampala, they were purposively selected because they serve more customers than others. a sample of 108 respondents of both sexes was selected using Krejcie and Morgan's (2010) sample size determination model. These respondents included respondents from different sections under different departments but dealing directly with inventory in different circumstances. All but the evaluation and monitoring staff were purposively selected (Faith, Kalikola, Kazaara, et al., 2023).

A simple random sampling technique was used to select respondents focusing on the Kampala region, out of which 108 respondents from different departments were asked to complete the questionnaires while the rest were interviewed accordingly. This procedure is chosen because it is convenient in choosing the sample size given the availability of the sampling frame and most importantly minimizes sampling bias (Jallow et al., 2021).

The questionnaire to be used was closed and open-ended, which according to Patton (2012) produced in-depth responses. (Anwar et al., 2022) argue that the questionnaire is advantageous because it is free from interviewer bias because the answers are in the respondent's own words (Nafiu et al., 2017). The researcher used a self-administered questionnaire as a tool to collect data from the employees of Mukwano Ltd from the various departments studied about the organization's inventory management and cost management.

Quantitative data analysis involved the use of both descriptive and inferential statistics and three levels of analysis were performed, univariate, bivariate and multivariate analysis Statistical Package for Social Scientist (Olanrewaju et al., 2021a) was used in the analysis. Descriptive statistics were performed to determine measures of central tendency such as mean, frequency distribution, and percentage, and the result was presented using a frequency distribution table.

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Inferential statistics using Pearson correlation and multiple regression analysis were performed to test the hypothesis. According to (Olanrewaju et al., 2021b), these two analyzes are most suitable for conducting the study in the natural environment of the organization with minimal intervention and no manipulation.

Qualitative data analysis included both thematic and content analysis based on the objectives of the study. Qualitative data was conducted through interviews and writing summaries in a notebook, and later analysis was conducted by categorizing common themes obtained from interviewees' responses (Kinyata & Abiodun, 2020). Thematic analysis was used to organize the data into themes and coding, and the results were presented verbatim using quotation marks (Nafiu, 2012).

RESULTS

Table 1: Views of respondents on quality of service, costs, revenue volume and rate of improvement

	SA	A	NS	D	SD	Mean	St'dD.
Statements measuring performance							
MGC is one of the best performing organizations because of proper stock management	37.9%	41.4%	6.9%	10.3%	3.4%	2.0	1.1
MGC is providing quality services and commendable customer care due to proper stock management	24.1%	44.8%	10.3%	20.7%	0.0%	2.3	1.1

MGC has adequate inventories all the time and my performance is not affected due to lack of inventories	24.1%	44.8%	0.0%)	27.6%	3.4%	2.4	1.2
MGC is quick to response to all customer demands like new connections, resolving customer complains etc. within stipulated time as result of adequate inventories	31.0%	51.7%	0.0%	13.8%	3.4%	2.1	1.1
MGC ensures all departments have adequate inventories hence achievement of objectives is	65.5%	31.0%	0.0%	3.4%	0.0%	1.4	0.7
no big deal							
MGC uses Balance score card to monitor the organization performance	37.9%	37.9%	3.4%	20.7%	0.0%	2.1	1.1

MGC normally focuses on priority areas to be accomplished	3.4%	13.8%	6.9%	69.0%	6.9%	3.6	0.9
MGC ensures cost reduction and revenue increase as a result of proper stock management	6.9%	41.4%	6.9%	34.5%	10.3%	3.0	1.2
MGC record of continuous improvement due availability of all resources all the time	51.7%	37.9%	3.4%	6.9%	0.0%	1.7	0.8
MGC has Monitoring and Evaluation section which evaluates performance	51.7%	37.9%	3.4%	6.9%	0.0%	1.7	0.8
Average						2.3	1.0

Source: Primary data

Key: SA – Strongly Agree, A – Agree, NS - Not Sure, D – Disagree, SD – Strongly Disagree

Table 1 shows that the majority of the respondents were in agreement on 9 statements, while they were in disagreement on one out of the ten statements used to measure quality of service, costs, volume of revenue and rate of improvements of utility organizations in Uganda a case of MGC as elaborated below. On whether MGC organization is one of the best

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performing organizations because of proper stock management, the majority, 79.3% agreed, while 13.7% disagreed and only 6.9% were not sure. And on the issue of whether MGC is providing quality services and commendable customer care due to proper stock management, the majority, 68.9% agreed, while 20.7% disagreed and 10.3% were not sure.

The majority of the respondents, 68.9% agreed that MGC has adequate inventories all the time and my performance is not affected due to lack of inventories; while a substantial number 31.0% disagreed. Similarly, the majority, 82.7% agreed that MGC is quick to response to all customer demands like new connections, resolving customer complains etc. within stipulated time as result of adequate inventories and 17.2% disagreed.

On the issue of whether MGC ensures all departments have adequate inventories hence achievement of objectives is no big deal, the majority, 96.5% agreed and only 3.4% disagreed. And on whether MGC uses Balance score card to monitor the organization performance, the majority, 75.8% agreed, while 20.7% disagreed and only 3.4% were not sure.

The majority of the respondents, 75.9% however disagreed that MGC normally focuses on priority areas to be accomplished, while 17.2% agreed and only 6.9% were not sure. There were mixed reactions on whether MGC ensures cost reduction and revenue increase as a result of proper stock management, with 48.3% in agreement, while 44.8% disagreed and only 6.9% were not sure.

On whether MGC record of continuous improvement was due to availability of all resources all the time, the majority, 89.6% agreed, while only 6.9% disagreed and only 3.4% were not sure. The majority of respondents (89.6%) agreed that MGC has Monitoring and Evaluation section which evaluates performance, 6.9% disagreed, while 3.4% were not sure (Faith, Kalikola, Ariyo, et al., 2023).

The mean of 2.3 for performance of utility organizations in Uganda a case of MGC is an indication that on average the respondents agreed on the statements used to measure performance with a standard deviation of 1.0 implying that their responses moderately varied from the mean. This implies that performance of utility organization in Uganda a case of MGC is highly depended on stock management (Faith, Kalikola, Kazaara, et al., 2023).

It was found that when critical inventories like water meters and pipes for new connections were out of stock customers were not connected which resulted into reduced water sales and the volume of revenue reduced as a result impacting on revenue collection which is key to performance of utility organizations in Uganda.

Table 2: Views of respondents on stock planning

Statements measuring stock planning	SA	A	NS	D	SD	Mean	Std D.

MGC has process for planning for stock in place	62.1%	27.6%	0.0%	10.3%	0.0%	1.6	0.9
MGC has over 30% of the master budget spent on inventories annually	13.7%	55.2%	3.4%	17.4%	10.3%	3.4	1.1
The personnel involved in planning for stock always Know what to include in the budget	10.3%	58.6%	3.6%	24.1%	3.4%	2.5	1.1
MGC has process for involving all the stakeholders in the stock planning	15.3%	39.9%	0.0%	37.9%	6.9%	2.8	1.3
during budgeting							

MGC has technology to improve stock planning	62 %	20.8%	3.5%	3.5%	10.3%	3.7	0.9
MGC has personnel who are trained in stock management	17.2%	13.8%	3.5%	37.9%	27.6%	2.7	1.2
Stock planning help my organization to improve cash flow	31%	44.8%	3.5%	10.3%	10.4%	3.0	1.1
Stock planning help my organization to have critical materials like new connection fittings and maintenance available anytime I request for the materials	10.6%	37.6%	0.0%	24.1%	27.6%	4.0	1.0
MGC has policies and procedures for stock planning	41.4%	44.8 %	0.0%	13.8%	0.0%	2.8	1.3

MGC performs well because of proper stock planning	17.3%	3.4%	0.0%	72.4%	6.9%	3.7	0.8
Average						3.0	1.0

Source: Primary data, 2023

Table 2 shows that the majority of the respondents were in agreement on all statements used to measure stock planning as elaborated below.

On whether MGC has policies and procedures for planning for stock in place, the majority, 89.7% agreed, while 10.3% disagreed. And on whether MGC has over 30% of the master budget spent on inventories annually, the majority, 68.9% agreed, while 27.7% disagreed and only 3.4% were not sure. Similarly, the majority, 68.9% agreed that the personnel involved in planning for stock always know what to include in the budget, while 27.5% disagreed and 3.6% were not sure. On the issue of whether MGC has process for involving all the stakeholders in the stock planning during budgeting, the majority, 55.2% agreed, while a substantial number 44.8% disagreed. And on whether MGC has technology to improve stock planning, the majority, and 82.8% agreed, while 13.8% disagreed and only 3.4% were not sure (Jallow et al., 2022).

The majority of the respondents (65.5%) however disagreed that MGC has personnel who are trained in stock management, while 31.0% agreed and only 3.5% were not sure. And on whether stock planning help my organization to improve cash flow, the majority, 75.8% agreed, while 20.7% disagreed and only 3.5% were not sure. Similarly, the majority, 51.7% disagreed that stock planning helps my organization to have critical materials like new connection fittings and maintenance available anytime request for the materials is made, while a substantial number 48.2% agreed. On whether MGC has policies and procedures for stock planning, the majority, 86.2% agreed, while 13.8% disagreed. And on whether MGC performs well because of proper stock planning, the majority, 79.3% disagreed, while 20.7% agreed (Alex & Moses, 2024).

The average mean of 3.0 for stock planning is an indication that on average the respondents were not sure on the statements measuring stock planning with a standard deviation of 1.0 implying that their responses moderately varied from the mean. The implication of the above descriptive statistics is that while users appreciate MGC efforts to offer high quality utility service, they are often strained. This might compel some users to start thinking about alternative sources.

Stock planning and Management cost of MGC

The researcher proceeded to statistically establish whether there is a significant relationship between stock planning and performance of National Water and Sewerage Corporation.

This was guided by the following hypothesis:

Hypothesis: There is a significant relationship between stock planning and performance of utility organizations in Uganda

The hypothesis was preliminarily tested at a 95% level of significance (two-tailed) using Pearson's product-moment correlation coefficient, which measured the degree and direction of relationship between stock planning and performance of utility organizations in Uganda. The results are presented in the table below.

Table 3: Correlation matrix for stock planning and performance of MGC

Study Variables		Stock Planning	Performance
Stock Planning	Pearson Correlation	1	.607*
	Sig. (2-tailed)		.000
	N	101	101
Performance	Pearson Correlation	.607*	1
	Sig. (2-tailed)	.000	
	N	101	101

*. Correlation is significant at the 0.05 level (2-tailed).

Source: Generated by SPSS

Table 3 shows that there is a moderate positive relationship between stock planning and performance of utility organizations in Uganda, ($r=0.607$ $p=0.000$ $N=58$). The relationship is statistically significant at 95% confidence level since $p\text{-value}<0.050(=0.000)$ (Nelson et al., 2023). This implies that improved stock planning shall lead to improved performance of utility organizations in Uganda. Similarly, declined stock planning shall lead to declined performance of utility organizations in Uganda.

Regression analysis was further used to establish the extent to which stock planning contributes towards performance of utility organizations in Uganda. The coefficient of determination (R Square) was used and the results are presented in the table below.

Table 4: Model Summary

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Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.607 ^a	.369	.357	.49975

a. Predictors: (Constant), Stock planning

Source: Generated by SPSS

Table 4 shows that the coefficient of determination (Adjusted R Square) is 0.357. This implies that stock planning accounts for 35.7% of the variance in performance of utility organizations in Uganda. This means that there are factors outside the study variable – stock planning that contribute to the greater percentage of performance of utility organizations in Uganda.

To assess the overall significance of the model, Analysis of Variance (ANOVA) was done and the results presented in the table below.

Table 5: Analysis of Variables (ANOVA)

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	8.168		18.168	32.706	.000 ^b
1 Residual	13.986	56	.250		
Total	22.154	57			

Dependent Variable: Performance

Predictors: (Constant), Stock Planning

Source: Generated by SPSS

In determining whether a model is significant, the decision rule is that the calculated p-value (level of significance) must be less than or equal to 0.05. Since the calculated p-value of 0.000 is less than 0.05, the model was found to be statistically significant ($F=32.706$, $df = 1$, $p<0.05$ ($=0.000$)). This means that stock planning has a significant contribution to performance of utility organizations in Uganda.

Basing on the research findings from correlation analysis that established that stock planning has a moderate positive statistically significant relationship with performance of utility organizations in Uganda, and the findings from

regression analysis that affirmed that stock planning has a significant positive contribution to performance of utility organizations in Uganda. The study accepted the hypothesis that was stated as thus: there is a significant relationship between stock planning and performance of utility organization in National Water and Sewerage Corporation.

Table 6: Views of respondents on stock replenishment

Statements measuring stock replenishment	SA	A	NS	D	SD	Mean	St'd.D.
MGC does not delay the procurement of stock during replenishment	0.0%	51.7%	3.4%	10.3%	34.5%	4.1	1.0
MGC has policy of replenishment based on lead time	58.7%	10.3%	0.0%	31%	0.0%	3.6	0.9
MGC utilizes economic order quantity to place order for replenishment	6.9%	44.8%	3.4%	44.8%	0.0%	2.9	1.1
MGC always has safe stock to cater for stock outs	0.0%	13.8%	0.0%	44.8%	41.4%	3.0	1.0

MGC has stock officers who know how to calculate economic order quantities and reorder point	0.0%	17.2%	3.4%	65.5%	13.8%	3.8	1.0
MGC has ability to track inventories under procurement to ensure prompt delivery	0.0%	13.8%	3.4%	41.4%	41.3%	3.0	1.2
Replenishment enables the stock level to be maintained and I don't lack any stock anytime	6.9%	31.0%	3.4%	58.6%	0.0%	3.1	1.1
MGC has procurement section which does not delay the procurement of inventories during replenishment	6.9%	6.9%	10.3%	58.6%	17.2%	3.7	1.1

	0.0%	6.9%	6.9%	79.3%	6.9%	3.9	0.6
MGC uses automated order process to enable stock to be procured							
and delivered in time							
	6.9%	.31%	3.4%	55.2%	3.4%	2.6	1.1
MGC has suppliers who deliver stock in time							
Average						3.1	1.0

Source: Primary data, 2023

Key: SA – Strongly Agree, A – Agree, NS - Not Sure, D – Disagree, SD – Strongly Disagree

Table 6 shows that the majority of the respondents agreed on all the statements used to measure stock replenishment as elaborated below.

On whether MGC does not delay the procurement of stock during replenishment, the majority of the respondents, 51.7% agreed, while a substantial number 44.8% disagreed and only 3.4% were not sure. And on whether MGC has policy of replenishment based on lead time, the majority, 69.0% agreed while 31.0% disagreed. Similarly, the majority, 51.7% agreed that MGC utilizes economic order quantity to place order for replenishment, while a substantial number 44.8% disagreed and only 3.4% were not sure.

The majority, 86.2% however disagreed on whether MGC always has safe stock to cater for stock outs, while 13.8% agreed. Similarly, the majority, 79.3% disagreed that MGC has stock officers who know how to calculate economic order quantities and reorder point, while 17.2% agreed and only 3.4% were not sure. And on whether MGC has ability to track inventories under procurement to ensure prompt delivery, the majority, 82.7% disagreed, while 13.8% agreed and only 3.4% were not sure.

On whether replenishment enables the stock level to be maintained and don't lack any stock anytime, the majority, 58.6% disagreed, while a substantial number 37.9% agreed and only 3.4% were not sure. And on the issue of whether MGC has procurement section which does not delay the procurement of inventories during replenishment, the majority, 75.8%

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disagreed, while 13.8% agreed and 10.3% were not sure. Similarly, the majority, 86.2% disagreed that MGC uses automated order process to enable stock to be procured and delivered in time, while 6.9% agreed and a similar number were not sure. Furthermore, the majority, 58.6% disagreed that MGC has suppliers who deliver stock in time, while a substantial number 37.9% agreed and only 3.4% were not sure. The average mean of 3.1 for stock replenishment is an indication that on average the respondents were not sure on the statements measuring stock replenishment with a standard deviation of 1.0 implying that their responses moderately varied from the mean.

Table 7: Correlation matrix for Stock replenishment and performance of utility organizations in Uganda

Study variables		Stock Replenishment	Performance
Stock replenishment		1	.725*
	Pearson Correlation		.000
	Sig. (2-tailed)		
	N	101	101
Performance		.725*	1
	Pearson Correlation		
	Sig. (2-tailed)	.000	
	N	101	101

*. Correlation is significant at the 0.05 level (2-tailed).

Source: Generated by SPSS

Table 7 shows that there is a strong positive relationship between stock replenishment and performance of utility organizations in Uganda, ($r=0.725$ $p=0.000$ $N=58$). The relationship is statistically significant at 95% confidence level since $p\text{-value}<0.050(=0.000)$ (Nelson et al., 2023). This implies that improved stock replenishment shall lead to improved performance of utility organizations in Uganda. Similarly, declined stock replenishment shall lead to declined performance of utility organizations in Uganda.

Regression analysis was further used to establish the extent to which stock replenishment contribute towards performance of utility organizations in Uganda. The coefficient of determination (R Square) was used and the results are presented in the table below.

Table 8: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.725 ^a	.525	.517	.43334

a. Predictors: (Constant), Stock replenishment

Source: Generated by SPSS

Table 8 shows that the coefficient of determination (Adjusted R Square) is 0.517. This implies that stock replenishment accounts for 51.7% of the variance in performance of utility organizations in Uganda. This means that there are factors outside the study variable – stock replenishment that contribute to the greater percentage of performance of utility organizations in Uganda.

To assess the overall significance of the model, Analysis of Variance (ANOVA) was done and the results presented in the table below.

Table 9: Analysis of Variables (ANOVA)

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	11.638	1	11.638	61.977	.000 ^b
Residual	10.516	56	.188		
Total	22.154	57			

Dependent Variable: Performance

Predictors: (Constant), stock replenishment

Source: Generated by SPSS

In determining whether a model is significant, the decision rule is that the calculated *p*-value (level of significance) must be less than or equal to 0.05. Since the calculated *p*-value of 0.000 is less than 0.05, the model was found to be statistically significant ($F=61.977$, $df = 1$, $p<0.05$ ($=0.000$)). This means that stock replenishment has a significant contribution towards performance of utility organizations in Uganda. Basing on the research findings from correlation analysis that established that stock replenishment have a strong positive statistically significant relationship with the performance of utility organizations in Uganda, and findings from regression analysis that affirmed that stock replenishment has a significant positive contribution towards performance of utility organizations in Uganda. The researcher accepted the

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hypothesis that was stated as thus: there is a significant relationship between Stock replenishment and performance of utility organizations in Uganda.

Respondents interviewed were of the opinion that prompt replenishments through procurement guaranteed optimum stock levels all the time and the problem of stock outs of inventories would be avoided

Table 10: Views of respondents on stock control

Statements measuring stock control	SA	A	NS	D	SD	Mean	StD D.
MGC has effective stock control policy in place	50%	15.5%	6.9%	10.4%	17.2%	3.9	1.0
MGC has stock files to record stock receipts and usage	13.8%	48.3%	6.9%	31%	0.0%	3.0	1.2
MGC has stock control software to monitor receipts and issues	22.1%	45.4%	3.4%	25.6%	3.5%	2.3	1.1

MGC has stock control procedure which enables identification of obsolete stock for disposal	34.5%	41.4%	3.6%	20.5%	0.0%	2.5	1.1
MGC has stock control procedure which ensures no stock out therefore my	13.8%	48.2%	3.4%	34.6%	0.0%	2.8	1.1
performance is not affected by stock out							
MGC utilizes stock control to mitigate the risk of theft, damage, deterioration etc.	0.0%	10.3%	3.4%	48.2%	38.8%	2.1	1.1
MGC has facility to track stock movement on a daily basis	21.1%	20.3%	6.9%	34.5%	17.2%	2.5	1.2

MGC utilizes stock control as a means to hedge against future changes in price and demand change	6.9%	24.1%	3.4%	65.5%	0.0%	3.3	1.1
MGC uses Just in time (JIT) as means of controlling stock	48.3%	37.9%	3.4%	10.3%	0.0%	2.5	1.2
MGC has computers for all stock officers to facilitate effective record keeping	6.9%	24.1%	3.4%	65.5%	0.0%	3.3	1.1

Key: SA – Strongly Agree, A – Agree, NS - Not Sure, D – Disagree, SD – Strongly Disagree

Source: Primary data

Table 10 shows that the majority of the respondents agreed on all the statements used to measure stock control as elaborated below

On MGC has effective stock control policy in place, the majority, 65.5% agreed, while 27.6% disagreed and only 6.9% were not sure. And on whether MGC has stock files to record stock receipts and usage, the majority, 62.1% agreed, while a substantial number 31.0% disagreed and only 6.9% were not sure. Similarly, the majority, 67.5% agreed that MGC has stock control software to monitor receipts and issues, while 29.1% disagreed and only 3.4% were not sure. On the issue of whether MGC has stock control procedure which enables identification of obsolete stock for disposal, majority, and 75.9% agreed, while 20.5% disagreed and only 3.6% were not sure. Similarly, the majority, 62.0% agreed that MGC has stock control procedure which ensures no stock out therefore my performance is not affected by stock out, while a substantial number 34.6% disagreed and only 3.4% were not sure.

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The majority, 86.2% however disagreed on whether MGC utilizes stock control to mitigate the risk of theft, damage, deterioration etc., while 10.3% agreed and only 3.4% were not sure. Similarly, the majority, 51.7% disagreed that MGC has facility to track stock movement on a daily basis, while a substantial number 41.4% agreed and only 6.9% were not sure. Furthermore, the majority, 65.5% disagreed that MGC utilizes stock control as a means to hedge against future changes in price and demand change, while a substantial number 31.0% agreed and only 3.4% were not sure.

On whether MGC uses Just-in-time (JIT) as means of controlling stock, the majority (86.2%) agreed, while 10.3% disagreed, while 3.4% were not sure, and concerning whether MGC has computers for all stock officers to facilitate effective record keeping, the majority (65.5%) disagreed, 31.0% agreed, and 3.4% were not sure.

The average mean of 2.8 for stock control is an indication that on average the respondents were not sure on the statements measuring stock control with a standard deviation of 1.1 implying that their responses moderately varied from the mean.

Table 11: Correlation matrix for stock control and performance of utility organizations in Uganda

Study Variables		Stock control	Performance
Stock control	Pearson Correlation	1	.422*
	Sig. (2-tailed)		.000
	N	101	101
Performance	Pearson Correlation	.422*	1
	Sig. (2-tailed)	.000	
	N	101	101

*. Correlation is significant at the 0.05 level (2-tailed).

Source: Generated by SPSS

Table 11 shows that there is a moderate positive relationship between stock control and performance of utility organizations in Uganda, ($r=0.422$ $p=0.000$ $N=58$). The relationship is statistically significant at 95% confidence level since $p\text{-value}<0.050(=0.001)$. This implies that improved stock control shall lead to improved performance of utility organizations in Uganda. Similarly, declined stock control shall lead to declined performance of utility organizations in Uganda.

Regression analysis was further used to establish the extent to which stock control contributes towards performance of utility organizations in Uganda. The coefficient of determination (R Square) was used and the results are presented in the table below.

Table 12: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.422 ^a	.178	.163	.57035

a. Predictors: (Constant), stock control

Source: Generated by SPSS

Table 12 shows that the coefficient of determination (Adjusted R Square) is 0.163. This implies that stock control account for 16.3% of the variance in performance of utility organizations in Uganda. This means that there are factors outside the study variable – stock control that contribute to the greater percentage of performance of utility organizations in Uganda

Conclusions

The conclusions are presented objective by objective on findings of each of the dimensions under the independent variable.

Stock planning and performance of utility organizations in Uganda

From the findings it was concluded that stock planning has a moderate positive relationship with performance and significant contribution towards performance of utility organization in Uganda. This means that improvements in stock planning such as proper records keeping shall have a significant positive contribution towards performance of utility organizations in Uganda. Management of MGC should therefore be encouraged to improve on records keeping so as to contribute towards performance of the company.

Stock replenishment and performance of utility organizations in Uganda

From the findings it was concluded that stock replenishment has a significant contribution towards performance of utility organizations in Uganda. This means that improvements in stock replenishment shall have a significant positive contribution towards performance of MGC which should therefore be encouraged to improve on budgeting so as to contribute towards performance of the Corporation.

Stock control and performance of utility organizations in Uganda

From the findings it was concluded that stock control has a moderate positive relationship with organization performance and a significant contribution towards performance of utility organizations in Uganda. This means that improvements in stock control shall have a significant positive contribution towards performance of MGC. Management of MGC should therefore be encouraged to improve on stock levels so as to contribute towards performance of the Corporation.

Contribution of the study

The study has added to the knowledge about performance of utility organizations in Uganda especially in terms of stock management. The study findings particularly fill the gap of knowledge that existed in the area of stock management in utility organizations in Uganda, particularly MGC.

Recommendations

The conclusions drawn in the previous sector of this study provided a basis upon which recommendations are being made according to the study objectives basing on the significant factors that were established.

Stock planning and performance of utility organizations in Uganda

Utility organizations in Uganda, particularly MGC should invest more money in ICT for stock planning in order to enable easy, effective and efficient planning which will ensure stock stock outs are minimized and adequate stock maintained all the time.

Utility organizations should hire experts on stock planning to best guide them on how to develop feasible stock plans which will ensure adequate stock throughout the year.

Stock replenishment and performance of utility organizations in Uganda Managers in utility organizations such as MGC should introduce automated systems to detect need for stock replenishment. This will ensure timely procurement of the required stock to avoid stock out which impacts on performance.

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