Assessing of the Impact of Stock Controls on Management of Costs in Organizations; a Case Study of Mukwano Group of Companies

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Abstract: The study's objectives were to determine the relationship between stock replenishment through procurement and management of costs at Mukwano Group of Companies, to establish the relationship between stock planning and management of costs at Mukwano Group of Companies, and to examine the relationship between stock controls and management of costs in organizations with a case study of Mukwano Group of Companies. The results showed a slightly decent relationship between utility companies' performance and stock planning in Uganda. Given that r=0.667 and the fact that the p-value for stock planning and performance was less than 0.050, the researcher accepted the relationship. Additional results from regression study showed that stock planning significantly impacts utility organizations' performance in Uganda (F=32.706, DF = 1, p0.05 (=0.000)). This suggests that improved stock planning can help utility businesses in Uganda function better.As according recommendations, electricity companies in Uganda, especially MGC, should spend more money on ICT for stock planning in order to make the process simple, effective, and efficient. This would ensure that stock outs are kept to a minimum and that adequate stock is maintained at all times. Utilities companies should hire stock planning professionals to advise them on how to create workable stock plans that will guarantee adequate stock all year long.

Keywords: STOCK CONTROLS, MANAGEMENT OF COSTS
Background of the study

Background of the study was presented in the order of historical background, theoretical background, conceptual background and contextual background. Earlier studies than the twentieth century have linked Management of costs in organizations to stock control. This is made possible through balance score card approach in which financial, customer, internal process and innovation can be combined in an organization to assist the management in decision making processes and problem solving. For instance, the manager in an organization can use the balance score card as a strategic management system to detect latedeliveries of inventories which have a potential to result in poor management of costs at work place (Kaplan & Norton, 2017). Another evidence is by use of just in time purchasing (JITP) as studied by Ansari and Modarress (between 2017 to 2010), the study showed that companies which implemented just in time estimated an increase in projected product quality by 43% andincrease in productivity by 21%.

Fullerton et al. (2013) looked into the connection between stock control and cost management in a JIT environment and found that there was a positive correlation between stock turnover and cost management in businesses as measured by return on asset, return on sales, and cash flow margin. (Deloof, 2003) in Belgium noted a high correlation between lower stock levels and greater management costs.

When the bottom finally fell out, Solectron was unable to stop orders from all of its 4000 suppliers because each of its major clients, including Cisco, Ericsson, and Lucent, had originally expected explosive growth for wireless phones and networking equipment. As a result, Solectron had $4.7 billion in stock (March, 2011). In a Total quality setting, Fullerton et al. (2013) investigated the relationship between stock control and cost management and discovered that there is a significant correlation between stock turnover and cost management, as measured by return on asset, return on sales, and cash flow margin. Lower stock levels and higher management costs are significantly associated, according to Belgian research (Deloof, 2003).

When the bottom finally fell out, it was too late for Solectron to halt orders from all of its 4000 suppliers as a result, Solectron then had $4.7 billion in stock. Each of Solectron's major clients, including Cisco, Ericsson, and Lucent, were anticipating explosive growth for wireless phones and networking equipment (March, 2011). Stock control and organizational cost management have no apparent relationship, thus according (Cannon, 2008). Obtaining more data on this subject could aid in better understanding the dynamics of cost management and stock control. Though stock is a crucial asset for any business, Barney (2018) asserts that stock is regarded as a liability under the just-in-time stock control system. This raises questions about the significance of stock in forecasting how firms will payments (JIT). According to Bates and Holton (2015), management of costs is a multidimensional construct, the measure of which varies based on a number of variables. The execution of a particular task is measured against a predefined established standard of correctness, completeness, cost, speed, etc. This is known as cost management.

Problem Statement

Starr and Miller (2015) suggest that enterprises can maximize profits by using stock planning. Higher business profitability are generally attained by selecting the right kind of stock to satisfy consumer demand. Limiting the amount of outmoded stock in the business seems to be another benefit of stock planning and management techniques. The business must dispose of and write off any obsolete stock. A loss appears on the income statement when antiquated stock is written off. Employee stock abuse is addressed through policies and procedures. Employees who operate in informal settings may take stock items for their own use. The organization suffers a financial loss as a result of stolen shares. Additionally, employees are permitted to use company property for private purposes while on the job. Proper staff conduct is a key element in stock performance. According to (Kothari C, 2004), firms should think about implementing business technology to assist with tracking inventory for a well-informed stock planning. Business owners can order, receive, manage, and promote products digitally thanks to accounting and business software. Business owners typically spend less time on stock planning tasks because to technology. Business owners can increase their company's profitability by staying in front of business sales by spending less time on these back office tasks.

The goal of effective stock planning is to minimize markdowns brought on by excessive stock and business losses as a result of supply shortages. Effective stock level management depends on proper stock planning, which enables a planner to evaluate their stock across time. The goal of effective stock control is to have enough stock on hand at any given time to support planned sales or operational activities until the next delivery arrives. With explicit visibility to the amount of stock required to meet sales or operational objectives and provides greater insight into how each product and/or category contributes to the overall stock objectives.

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.

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

Research Questions

1. What is the relationship between stock planning and management of costs of Mukwano Group of Companies Kampala City?

2. What is the relationship between stock replenishment and management of costs of Mukwano Group of Companies Kampala City?

3. What is the relationship between stock control and management of costs of Mukwano Group of Companies Kampala City?

Hypothesis of the study

Ho: There is no relationship between stock planning and the management of expenses at the Mukwano Group of Companies Ha: There is a relationship between the two.

Ho: The Mukwano Group of Companies' cost management and stock replenishment are unconnected.

Ha: The Mukwano Group of Companies' stock replenishment and cost management are connected.

Ho: The Mukwano Group of Companies' stock control and cost management are unconnected.

Ha: The Mukwano Group of Companies' stock management and cost management are connected.

METHODOLOGY

Research design

The study used both quantitative and qualitative approaches as its framework to guide the process of data collecting and processing on the assessment of stock control on cost management of the organization in Mukwano Ltd. Kampala. The study used a cross-sectional study design. To evaluate the relevance of the numerous constructs and variables conceptualized in the study, a quantitative technique was used. This was performed by utilizing the Pearson correlation coefficient and multiple linear regression modeling to assess research questions and hypotheses (Barifaijo, 2010). The qualitative technique was chosen since using an interview guide is the most effective way to elicit the opinions and views of respondents. Additionally, the method is popular because it can be used to respond to socioeconomic "what, why, and how" inquiries. Amin, (2015) (2015)

Study population

According to Sekaran; (2013), the Population refers to the entire group of people, events or things of interest that the researcher wishes to investigate. Mukwano Ltd has the actual population ofall employees in the corporation standing at 3000 (three thousand workers) however; the target pulmwas 150 staff and the accessible size was 108 staff selected from Head quarter but working in different departments. Majority of the respondents were staff dealing directly with inventories under different circumstances as detailed in the determination of the sample size.

Sample size determination

From the target demographic of 150 respondents, staff members from various departments at the head office in Kampala were deliberately selected since they service the greatest number of clients. The sample size determination technique from Krejcie and Morgan (1970) was used to choose a sample of 108 respondents from both sexes. These respondents came from a variety of areas and departments, but they all directly interact with inventories in a wide range of situations. Except for the monitoring and evaluation staff, everyone was chosen on purpose.

Sampling techniques and procedure

With such a focus on the Kampala region, 108 respondents from various departments were selected at random and requested to complete surveys, while others were examined in line with the results. This method was selected because it minimizes sampling bias and is appropriate for determining sample sizes given the availability of sampling frames.

Data Collection Methods

The various interrelated operations that make up data collection methods are intended to gather information in order to address the research objectives (Creswell, 2017). According to (Suzanne Miller Friedman, 1998), referenced by Marshall and Rassman (2019), choosing among the many methods of data collection entails taking into account each one's applicability as well as relative limitations and advantages. Both primary and secondary sources were used to gather the data. Amin (2015) Primary information was gathered using both quantitative and qualitative methods. Interviews and self-administered questionnaires were used to gather primary data. The examination of documents comprising journal articles, reports, academic theses, and working papers, among others, was used to gather secondary data. Frechtling, (2012). (2012).

Questionnaire method

A questionnaire survey is a methodology for gathering information in which a group of people are asked a set of questions on a form in order to get statistical data Amin (2015). According to Patton (2012), the survey's closed and open-ended inquiries generated in-depth replies. As according Kothari (2014), the benefit of a questionnaire is that it is free from interviewer bias because the respondents' own words are used to answer the questions. To collect information on stock control and internal cost management from Mukwano Ltd staff from the various departments under study, the researcher employed a self-administered questionnaire as a tool.

In-depth Interview method

According to Bailey (2014), an interview is an instance of social interaction between two individuals, the interviewer and the respondent. The interviewer used an interview guide as the instrument which allowed for an in-depth examination of the key informant on issues related to stock control and Management of costs of organizations. Interviews enabledthe interviewer to establish good rapport with the respondents, allowing the interviewer to observe, discuss and listen as well as permitting complex questions to be asked. Respondents gave their views on the challenges they go through during stock control and Management of

costs of organizations. Interviews are friendly fact finding conversation formulated in question form Barifaijo, et al (2010).

Data collection instruments

Questionnaire

A questionnaire was used to collect data from the Mukwano Group of Companies staff particularly branch managers, engineers, finance and cost accountants, stock officers,procurement officers and evaluation and monitoring officers. The questionnaire was used in this case because it enabled collection a lot of information from a large number ofindividuals in quite a short period of time. The questionnaires are popular because therespondents filled them at their own convenience and appropriate for large samples Mugenda & Mugenda, (2013)

Key informant interview guide

The researcher prepared and used a semi-structured interview guide to speak with branch managers, engineers, field technicians, and customer service workers, among many other members of the management team. Because they offer in-depth details regarding a specific research issue or question, interviews are preferred. In contrast to a questionnaire, an interview makes it simple to completely comprehend someone's opinion, their experiences, or their responses. Interviews are useful because they provide in-depth data that is impossible to collect through questionnaires, claim Mugenda & Mugenda (2013).

Data Collection Procedure

A letter connecting the researcher to the management of Mukwano Ltd. was supplied to the researcher after Metropolitan International University accepted the request. Mukwano Ltd gave the researcher the go-ahead to conduct the study. Following the researcher's distribution of a letter of consent to the respondents, questionnaires were delivered. The respondents were given an ultimatum by which they had to submit the completed surveys. Dates were determined for the key informant interviews. The researchers have gathered, organized, and coded the completed questionnaires after they had been submitted.

Data Analysis

Field data was first cleaned to remove errors before data analysis process for both quantitativeand qualitative data collected. Data cleaning is the process of detecting and correcting inaccurate record in a data set or a questionnaire, Amin, (2015)

Quantitative Data Analysis

Descriptive and inferential statistics were used in quantitative data analysis, and three levels of analysis univariate, bivariate, and multivariate analysis—were carried out. The analysis made use of the Social Scientist Statistical Package. To find measures of central tendency, such as the mean, frequency distribution, and percentages, descriptive statistics were used. The outcomes were presented using a frequency distribution table. To test the hypothesis, multiple multiple regression analysis analysis and Pearson Correlation were used in inferential statistics. The two analyses, in the opinion of Mugenda & Mugenda (2013), are the best appropriate for conducting the study in an organization's natural context with the least amount of interference and without the data being manipulated.

Qualitative Data Analysis

Qualitative data analysis involved both thematic and content analysis based on the study objectives. Qualitative data was conducted through interviews and writing the summaries in anote book and later on analysis was done by categorizing common themes extracted from responses of interviewees. Thematic analysis was used to organize data into themes and codedand the results was reported in verbatim using quotation marks Golafshani, (2013)

RESULTS

Response Rate Table 1: Response rate

Population category	Sample size	Actual no ofresponses	Response rate
Engineers/Technicians	24	23	95.8%
Stock officers	24	21	87.5%
Finance/cost accountants	10	10	100.0%
Brach mangers	15	14	93.3%
Evaluation/Monitoring Staff, customer-care officers	15	14	93.3%
Procurement officers	20	19	95%
Total	**108**	**101**	**93.5%**

Source: Primary data, 2022

A total of 108 questionnaires were circulated, and 101 of them were accurately and completely filled out and returned. However, only 4 of the 5 key informants who were scheduled to be interviewed really were. As a result, 93.5% of the questionnaires received a response, contrasted to 80.0% of the interviews, for a total response rate of 86.7%, as indicated in the table below. An overview of the study's response rate is shown in Table 3 above. As a result, the gathered information and its implications can be trusted. This response rate shows that information was gathered from a respectable amount of respondents. Mugenda and Mugenda (2009) claim that a response rate of 50% is sufficient for analysis and reporting, a rate of 60% is excellent, and a response rate of 70% is excellent.

Demographic characteristics of the sample

In this section the demographic characteristics of the respondents are presented for only the data collected using the questionnaires. The section presents gender, age, relationship, years ofrelationship, marital status and education level of respondents in the study.
Table 2: Distribution of respondents by gender

Gender	Frequency	Percentage
Male	60	59.4%
Female	41	40.6%
Total	101	100.0%

Source: Primary data, 2022

Table 2 shows that the majority of the respondents, 59.4% were males, as compared to 40.6% who were females. Majority of the respondents were males because the study population comprised more males than females. This was relevant to the study because the views and perceptions of the population of the study were well represented.

Table 3: Distribution of respondents by age

Age	Frequency	Percentage
Between 20 - 30 years	23	22.8%
Between 31 – 40 years	38	37.6%
Between 41 – 50 years	22	21.8%
51 years and above	18	17.8%
Total	101	100.0%

Source: Primary data, 2022

According to Table 3 above, the preponderance of respondents—37.6%—were between the ages of 31 and 40. In contrast, 22.8% were between the ages of 20 and 30; 21.8 were between the ages of 41 and 50; and 17.8% were over the age of 51. Due to the fact that the majority of the population and the sample size falls within this age range, the majority of respondents were between the ages of 31 and 40. As a result, the survey acquired information from the majority of the population, meaning that it accurately captures the general viewpoints of MGC. However, the minimum and maximum ages were 21 and 64, respectively. Age meets the requirements because its standard deviation (25.09) was within the range of the maximum and minimum age.

Table 4: Distribution of respondents by Departments

Relationship	Frequency	Percentage
Engineers/Technicians	23	22.8%
Stock officers	21	20.7%
Finance/cost accountants	10	9.9%
Branch mangers	14	13.9%
Evaluation/Monitoring Staff, customer-care staff	14	13.9%
Procurement officers	19	18.8%
Total	101	100.0%

Source: Primary data, 2022

According to Table 4 above, the majority of interviewees (22.8%) were engineers and technicians, trailed by stock officers (20.7%), finance and cost accountants (9.9%), branch managers (13.9%), evaluation/monitoring employees (13.9%), and customer service workers (18.8%). Since this group constitutes the largest portion of the population and sample size and is the one that is mostly present in the field, engineers and technicians made up the majority of the responses. As a result, the survey obtained data from the majority of the population, meaning that it accurately represents the general viewpoints of MGC.

Table 5: Distribution of respondents by years in service

Years of service	Frequency	Percentage
0 - 1 year	7	6.9%
2 - 3 years	23	22.8%

4 - 5 years	38	37.6%
6 – 7 years	14	13.9%
8 – 9 years	9	8.9%
10 years and above	10	9.9%
Total	101	100.0%

Source: Primary data, 2022

Table 5 above shows that the majority of respondents (37.6%) have been at MGC for 4 – 5 years, 22.8% for 2 - 3 years, 6.9% for 0 - 1 years, 13.9% for 6 – 7 years, 8.9% for 8 – 9 years,and 9.9% for 10 and above years. Since respondents from those who have been in MGC for a short time to those who have worked there longest were all represented in the study, this means that the data gave a reliable representation of the population.

Table 6: Distribution of respondents by level of education

Education level	Frequency	Percentage
Diploma	10	9.9%
Bachelors	64	63.3%
Masters	27	26.8%
PhD	0	0.0%
Total	101	100%

Source: Primary data

Table 6 above shows that the majority of the respondents (63.3%) were university graduates, while 26.8% possessed masters, and only 9.9% had diplomas. This means that the study generated data from knowledgeable respondents whose perceptions contributed to the quality of findings.

Empirical findings on the relationship between stock management and performance of MGC

The descriptive statistics of frequencies, means, and standard deviation, as well as the inferential statistics of Pearson's correlation coefficient and regression analysis in connection to particular objectives, are used to convey the empirical findings of this study. Frequencies are shown as both absolute numbers and percentages, and when interpreting the results, strongly agree replies and agree responses are both shown as agree, while strongly disagree responses and disagree responses are both shown as disagree. A standard deviation that is approximately equal to zero appears to indicate that respondents' opinions did not vary, while a standard deviation that is roughly equal to one indicates that respondents' opinions varied moderately, and a standard deviation that is significantly larger than one indicates that respondents' opinions varied greatly.

Findings on quality of service, reduced cost and increased revenue in MGC

Performance of utility organization a case of MGC was measured on the questionnaire usingnine statements, to which the respondents were required to show their level of agreement or disagreement. The quantitative findings from the respondents are presented in the table below.

Table 7: Views of respondents on quality of service, costs, revenue volume and rate ofimprovement

Statements measuring performance	SA	A	NS	D	SD	Mean	St'dD.
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 qualityservices and commendable customer care due to properstock management	24.1%	44.8%	10.3%	20.7%	0.0%	2.3	1.1
MGC has adequate inventories all the time andmy 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 likenew 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 no big deal	65.5%	31.0%	0.0%	3.4%	0.0%	1.4	0.7
MGC uses Balance scorecard to monitor the organization performance	37.9%	37.9%	3.4%	20.7%	0.0%	2.1	1.1
MGC normally focuses onpriority areas to be accomplished	3.4%	13.8%	6.9%	69.0%	6.9%	3.6	0.9
MGC ensures cost reductionand 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 availabilityof all resources all the time	51.7%	37.9%	3.4%	6.9%	0.0%	1.7	0.8
MGC has Monitoring andEvaluation 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

According to Table 7, most respondents are agreed with nine out of the ten statements used to gauge the utility organizations' quality of service, expenditures, volume of revenue, and pace of improvement in Uganda—a case study of MGC—while only one out of the ten claims caused disagreement.

The majority, 79.3%, agreed that MGC organization is one of the best performing organizations due to effective stock management, while 13.7% disagreed and only 6.9% were unsure. The majority, 68.9%, agreed that MGC is offering exceptional services and outstanding customer care as a result of effective stock management, while 20.7% disagreed and 10.3% were unsure. While a significant percentage, 31.0%, disagreed, the majority of respondents, 68.9%, agreed that MGC always has consider the needs and that my performance is unaffected by a lack of inventories. Similarly, 82.7% of respondents agreed that MGC actually responded to all client requests, such as new connections and customer complaints, within the allotted period due to adequate inventories, while 17.2% disagreed.

96.5% of respondents agreed, with only 3.4% opposing, that MGC ensures all departments have sufficient inventory, making achieving objectives no big concern. And when asked if MGC employs a balance score card to track the performance of the organization, the majority, or 75.8%, agreed. Only 20.7% disagreed, and 3.4% were unsure.

75.9% of respondents disagreed with the assertion that MGC typically concentrates on tasks that must be completed in a hurry, while 17.2% did and 6.9% were unsure. Regarding whether MGC ensures cost reduction and revenue increase as a result of proper stock management, there were contradictory responses, with 48.3% in agreement, 44.8% in disagreement, and just 6.9% unsure.

The majority, 89.6%, agreed that MGC's track record of continuous improvement was the result of all resources being readily available at all times, while just 6.9% disagreed and only 3.4% were unsure. 89.6% of respondents agreed that MGC had a part for monitoring and evaluating performance; 6.9% disagreed, and 3.4% were unsure. 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.

Qualitative findings
It was determined that when basic necessities, such as water meters and pipes for new connections, were low on stock, consumers did not connect, which had an influence on water sales and the volume of revenue, which is crucial to the success of utility organizations in Uganda.

To look into the relationship between MGC performance and stock planning
The study used a total of ten statements on the questionnaire to which the respondents had to indicate their level of agreement or disagreement in order to understand the respondents' opinions on stock planning and analyze whether it affects MGC performance. The table below presents the questionnaire's quantitative results.

Table 8: Views of respondents on stock planning

Statements measuring stock planning	SA	A	NS	D	SD	Mean	St'dD.

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 themaster 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 alwaysKnow 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 stakeholdersin the stock planning during budgeting	15.3%	39.9%	0.0%	37.9%	6.9%	2.8	1.3
MGC has technology to improve stock planning	62 %	20.8%	3.5%	3.5%	10.3%	3.7	0.9
MGC has personnel who aretrained 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 connectionfittings 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 stockplanning	17.3%	3.4%	0.0%	72.4%	6.9%	3.7	0.8
Average						3.0	1.0

Source: Primary data, 2022

Table 8 shows that the majority of the respondents were in agreement on all statements usedto measure stock planning as

elaborated below.

On whether MGC has policies and procedures for planning for stock in place, themajority, 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 personnelinvolved 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 only3.4% were not sure.

The majority of the respondents (65.5%) however disagreed that MGC has personnel who aretrained 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, and 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, whilea 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.

The average mean of 3.0 for stock planning is an indication that on average the respondentswere not sure on the statements measuring stock planning with a standard deviation of 1.0implying 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 then used analytics to determine whether there is a significant correlation between National Water and Sewerage Corporation's stock planning and performance.
The following theory served as the basis for this:
Ho: In Uganda, there is no relationship between stock planning and utility organization performance.
Ha: In Uganda, utility organization performance and stock planning have a significant relationship.
Using Pearson's product-moment correlation coefficient, which gauges the strength and direction of the relationship between stock planning and performance of utility organizations in Uganda, the hypothesis was first evaluated at a 95% level of significance (two-tailed). The table below displays the findings.

Table 9: 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	.667*	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 planning andperformance of utility organizations in Uganda and therefore since the P-value (0.00) is less than 0.05 at 95% confidence interval, we reject the null hypothesis and conclude that there is no significant relationship between stock planning and 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 12: **Model Summary**

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

According to Table 12, the adjusted R square (coefficient of determination) is 0.369. This demonstrates that 35.7% of the variability in performance of utility organizations in Uganda can be attributed to stock planning. It is a good fit because the R squared value (0.369) is higher than the adjusted R squared value (0.357). This suggests that the higher percentage of performance of utility organizations in Uganda is influenced by variables other than the study's variable stock planning.

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

Table 13: Analysis of Variables (ANOVA)

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

a.   Dependent Variable: Performance

b.   Predictors: (Constant), Stock Planning

Source: Generated by SPSS

The p-value determination (level of significance) must be less than or equal to 0.05 in order for a model to be considered significant, according to the decision rule. The model was determined to be statistically significant because the calculated p-value of 0.000 is less than 0.05 (F=32.706, DF = 1, p0.05 (=0.000)). This indicates that stock planning significantly impacts utility organizations' performance in Uganda.

The study supported the following hypothesis: There is a significant correlation between utility organization performance at National Water and Sewerage Corporation and stock planning.

To establish the relationship between stock replenishment through procurement and performance of MGC
Table 14: 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 orderfor 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 stockofficers 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 maintainedand 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
MGC uses automated order process to enable stock to be procured and delivered in time	0.0%	6.9%	6.9%	79.3%	6.9%	3.9	0.6
MGC has suppliers who deliver stock in time	6.9%	.31%	3.4%	55.2%	3.4%	2.6	1.1
Average						3.1	1.0

Source: Primary data, 2022

Key: SA – Strongly Agree, A – Agree, NS - Not Sure, D – Disagree, SD – Strongly DisagreeTable 14 shows that the majority of the respondents were in agreement on all the statementsused to measure stock replenishment as elaborated below.

The majority of respondents, 51.7%, agreed that MGC does not delay the purchase of stock during replenishment, while a goodly proportion, 44.8%, disagreed and only 3.4% were unsure. The majority, 69.0%, agreed that MGC has a policy of replenishment based on lead time, while just 31.0% disagreed. Similarly, the majority, 51.7%, agreed that MGC places orders for replenishment using an economic order amount, while a sizeable number, 44.8%, disagreed and only 3.4% were unsure.

On whether MGC always has safe stock to cover stock outs, the majority, 86.2%, disagreed, while 13.8% did. Similarly, the majority, 79.3%, disputed that MGC has stock officers who can determine the best reorder point and economic order quantities, while just 17.2% and 3.4% agreed. And on whether MGC has ability to trackinventories under procurement to ensure prompt delivery, the majority, 82.7% disagreed, while13.8% agreed and only 3.4% were not sure.

The majority, 58.6%, disagreed that replenishment makes it possible to maintain stock levels and never run out of supply, while a sizable number, 37.9%, agreed and only 3.4% were unsure. The majority, 75.8%, disagreed with the assertion that MGC has a procurement unit that does not suspend the purchase of inventories during replenishment, while 13.8% agreed and 10.3% were unsure. In a similar vein, 86.2% of respondents strongly disagreed that MGC employs an automated order process to ensure that stock is obtained and delivered on time, while 6.9% agreed and a corresponding proportion were unsure. Furthermore, only 3.4% of respondents were unsure, while 37.9% of respondents agreed that MGC has suppliers who deliver stock on time. The overwhelming, 58.6%, also disagreed.

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 astandard deviation of 1.0 implying that their responses moderately varied from the mean.
Stock replenishment and Performance of MGC

The researcher proceeded to statistically examine whether stock replenishment positively contribute to performance of MGC. This was guided by the following hypothesis:

Hypothesis: There is a significant relationship between Stock replenishment and performance of utility organization 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 ofrelationship between stock replenishment and performance of MGC. The results are presented in the table below.

Table 15: Correlation matrix for Stock replenishment and performance of utility organizations in Uganda

Study variables		Stock Replenishment	Performance
Stock replenishment	Pearson Correlation	1	.755[*]
	Sig. (2-tailed)		.000
	N	101	101
Performance	Pearson Correlation	.755[*]	1
	Sig. (2-tailed)	.000	
	N	101	101

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

Source: Generated by SPSS

Table 15 shows that there is a strong positive relationship between stock replenishment and performance of utility organizations in Uganda, (r=0.755 p=0.000 N=58). The relationshipis statistically significant at 95% confidence level since p-value<0.050(=0.000). This impliesthat 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 replenishmentcontribute 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 16: 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 16 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 doneand the results presented in the table below.

Table 17: 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			

a.   Dependent Variable: Performance

b.   Predictors: (Constant), stock replenishment

Source: Generated by SPSS

58.6% of participants disagreed that replenishment makes it possible to maintain stock levels and ensure that there is always enough merchandise, while 37.9% of respondents agreed and only 3.4% were unsure. The majority, 75.8%, disagreed, while 13.8% agreed and 10.3% were unsure, regarding whether MGC has a procurement section that doesn't hinder the procurement of supplies during replenishment. Similarly, 86.2% of respondents disagreed with the assertion that MGC employs an automated order process to ensure that merchandise is acquired and delivered on time, while 6.9% did and a similar percentage were unsure. Additionally, only 3.4% of participants were unsure, while the majority, 58.6%, disputed that MGC's suppliers consistently produce stock on time. The researcher accepted the hypothesis that was stated as thus: thereis a significant relationship between Stock replenishment and performance of utility organizations in Uganda.
Qualitative findings on the relationship between stock replenishment through procurement and performance of MGC

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

To determine the relationship between stock control and performance of MGC

In order to understand the views of the respondents on stock control, so as to assess whetherstock control contribute towards performance of MGC , the researcher useda total of ten statements on the questionnaire to which the respondents were required to show their level of agreement or disagreement. The quantitative findings from the questionnaire arepresented in the table below.

Table 18: Views of respondents on stock control

Statements measuring stock control	SA	A	NS	D	SD	Mean	St'd 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 torecord stock receipts and usage	13.8%	48.3%	6.9%	31%	0.0%	3.0	1.2
MGC has stockcontrol software to monitor receipts and issues	22.1%	45.4%	3.4%	25.6%	3.5%	2.3	1.1
MGC has stockcontrol 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 stockcontrol procedure which ensures no stock out therefore my performance is not affected by stock out	13.8%	48.2%	3.4%	34.6%	0.0%	2.8	1.1
MGC utilizes stockcontrol to mitigate the risk of theft, damage, deterioration etc.	0.0%	10.3%	3.4%	48.2%	38.%	2.1	1.1
MGC has facility totrack stock movement on a daily Basis	21.1%	20.3%	6.9%	34.5%	17.2%	2.5	1.2

	SA	A	NS	D	SD	Mean	SD
MGC utilizes stockcontrol 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 forall stock officers tofacilitate 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 18 shows that the majority of the respondents were in agreement on all the statements used to measure stock control as elaborated below.

The majority, 65.5%, acknowledged that MGC has an effective stock control program in place. Only 27.6% dissenting opinion and 6.9% were unsure. The majority, 62.1%, agreed that MGC keeps stock files to track stock receipts and usage, while a substantial proportion, 31.0%, disagreed and only 6.9% were unsure. Additionally, 67.5% of respondents agreed that MGC uses stock control software to track revenues and issues, compared to 29.1% who disagreed and 3.4% who were uncertain.

The majority, or 75.9%, agreed that MGC has stock control procedures that enable the identification of old stock for disposal, while 20.5% disagreed and only 3.6% were unsure. Similar to the last finding, the majority—62.0%—agreed that MGC's stock control procedure assures that there is never a stock out, therefore my performance is influenced by stock out, while only 3.4% were unsure and a sizeable 34.6% disagreed.

On whether MGC uses stock control to reduce the risk of theft, damage, degradation, etc., the majority, 86.2%, disagreed, while 10.3% agreed and only 3.4% were unsure. As with the previous question, the majority, 51.7%, disagreed that MGC has the ability to track stock movement on a daily basis, while a sizable number, 41.4%, agreed and only 6.9% were unsure. In addition, 65.5% of respondents strongly disagreed that MGC uses stock control as a strategy to protect itself against future fluctuations in price and demand, while 31.0% did.

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 respondentswere not sure on the statements measuring stock control with a standard deviation of 1.1 implying that their responses moderately varied from the mean.

Stock control and Management cost of MGC
The researcher proceeded to statistically assess whether stock control positively contributetowards performance of utility organizations in Uganda. This was guided by the following hypothesis:

Hypothesis: there is a significant relationship between Stock control and performance of utility organization in Uganda.
The hypothesis was preliminary tested at a 95% level of significance (two-tailed) using Pearson's product-moment correlation coefficient, which measured the degree and direction ofrelationship between stock control and performance of utility organizations in Uganda. The results are presented in the table below.

Table 19: 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

According to Table 19, there is a moderately positive correlation between stock control and utility organization performance in Uganda (r=0.422 p=0.000 N=58). Since the p-value is less than 0.50 (=0.001), the relationship is statistically significant at a 95% confidence level. This suggests that improved stock control will result in better utility organization performance in Uganda. Similar to this, poor stock control will result in subpar performance from Uganda's utilities organizations.

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 17: Model Summary

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

a. Predictors: (Constant), stock control

Source: Generated by SPSS

Table 17 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 relationshipwith 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 beencouraged to improve on records keeping so as to contribute towards performance of the company.

Stock replenishment and performance of utility organizations in Uganda

The results resulted in the conclusion that stock replenishment leading organizations utility organizations' performance in Uganda. Therefore, MGC should be encouraged to enhance budgeting in order to contribute to the performance of the Corporation. This suggests that improvements in stock replenishment shall have a major positive effect towards MGC's performance.

Accordance with the financial and utility company performance in Uganda

According to the results, stock control makes a significant contribution to the performance of utility organizations in Uganda and has a moderately good link with organization performance. This indicates that enhancements to managing inventory will significantly enhance MGC's performance. Therefore, management of MGC should be urged to increase stock levels in order to participate.

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 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 detectneed for stock replenishment. This will ensure timely procurement of the required stock to avoid stock out which impacts on performance.
Stock control and performance of utility organizations in Uganda

Utility organizations should introduce tighter security for stock control so that theft, obsolesce, and vandalizing of inventories by staff is eliminated. This will ensure reduced cost on expenditure on inventories.

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