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OPERATIONAL BUDGETING AND PROCUREMENT PERFORMANCE AMONG MANUFACTURING FIRMS WITHIN JINJA INDUSTRIAL HUB IN UGANDA

Paul Bwire Kata
Data Analyst, Prana Research Company, Jinja, Uganda.
Email: bwirekata@gmail.com

Jovita Katusiime
Faculty in Purchasing and Supply Chain Management, Department of Marketing and Management, School of Business, College of Business & Management Science, Makerere University. Email: kjovie@yahoo.co.uk

Dr. Charles C. Sendyona (Corresponding Author)
Adjunct Faculty in Finance and Quantitative Business Methods, Department of Accounting & Finance, School of Business, College of Business & Management Science, Makerere University. Email: sempa1920@gmail.com

***ABSTRACT*: *Ineffective operational budget management negatively affects manufacturing firms' procurement performance. This paper investigates the impact of operational budgeting on procurement performance among manufacturing firms within the Jinja industrial hub in Uganda. A self-administered research instrument was used to collect the data on the operational budgeting variables of budgeting approaches, budget reviews, budgeting ethics, and expense forecasts. The study adopted a survey-based approach and a stratified simple random sampling technique to collect the data from a sample of 97 manufacturing firms within the Jinja industrial hub in Uganda. The data quality control was ensured by establishing the research instrument's internal consistency that yielded an overall Cronbach's reliability coefficient of 0.80. Correlation analysis and regression analysis techniques were applied to analyze the data. The study revealed significant positive correlations ($p < 0.01$) between all the variables of operational budgeting and procurement performance of manufacturing firms within the Jinja industrial hub in Uganda. The multiple regression analysis results indicated that $R^2 = 29.5\%$ and $Adj.R^2 = 25.9\%$. Furthermore, for the whole multiple regression analysis model $F(4,80) = 8.357$, $p < 0.001$, which signified that there was a significant impact of operational budgeting on procurement performance among manufacturing firms within the Jinja industrial hub in Uganda. The authors recommend that manufacturing firms should emphasize organizational goal attainment, practicability, cost reduction, and resource allocation efficiency when choosing budgeting approaches. Additionally, operational budgeting should be prioritized by manufacturing firms the same way as capital budgeting.*

KEYWORDS: Jinja industrial hub, manufacturing firms, operational budgeting, procurement performance, Uganda.

INTRODUCTION

Manufacturing firms convert inputs to outputs through conversion processes to meet society's needs (Slack & Brandon-Jones, 2019). The global business landscape is increasingly becoming competitive and complex, which requires manufacturing firms to adjust their procurement operating models to achieve more significant value creation and operational performance (Nixon, 2012). They, however, face inhibitors to better procurement performance such as lack of timely availability of resources, knowledge on key performance indicators (KPIs) design, difficulty in assembling meaningful data inputs for procurement performance metrics, and lack of comparative industry-standard KPIs and benchmarks such as financial accountability (Bhavesh, 2015). Therefore, regular reviews of the procurement process are critical for successful manufacturing firms' successful operations, but the analysis scale is mainly irregular (Tumutegyereize,2013).

The importance of procurement performance in manufacturing firms stems from the fact that it plays an integral role as one of the critical vehicles of the budget execution process (Omasso, 2014). The budgetary process also puts the present and future requirements into perspective to improve the procurement performance, thus enabling the manufacturing firms to succeed in their operations (Lorain et al., 2015). As argued by Wright (2016), most manufacturing firms' budget committees depend on operational budgets for guidance in determining procurement requirements in terms of what items an entity can attain. Operational budgets are useful to firms, and they motivate managers to do their best to reach their objectives (Muhammadi et al., 2013). Operational budgets cover day-to-day expenses that include wages, rent, utilities, and purchases of items for the current period, and it indicates how much cash is needed each month to cover bills (Johnston, 2016). Companies create operating budgets to plan, monitor, and adjust operational resources (Wright, 2016).

Kannan et al. (2013) submitted that an organization’s resources and operational budget are allocated to operational programs as an instrument of structured decisions and exploitation of opportunities designed to meet its competitive strategy and organizational goals. Operational budgets provide future expenses necessary to cover daily business, project, and other organizational operations (Universal Class, 2017).

Byrnes (2013) conducted a study on the preparation of operating budgets in which he presented seven components of an operational budget and the formulae required to create them. These components included the sales budget that shows management’s best estimate of sales revenue for the budget period, manufacturing overhead budget that shows the expected manufacturing overhead costs for the budget period, selling and administrative expense budget that projects anticipated selling and administrative costs per period. The other components are the budgeted income statement, which estimates the operations' expected profitability for the period, direct labour hour budget, direct materials budget, and the production budget (Byrnes, 2013). When preparing operating budgets, consideration should be for both expenditure and income. Operational expenditure refers to the cost of goods and services from which there will be short-term benefits such as salaries, phone services, and utilities. In contrast, operational income refers to the amount received for services delivered for a short-term period such as grants, interest, individual contributions, and corporate donations (Local Government Finances and Budgets, 2016).

Failure to undertake effective operational budget management negatively affects manufacturing firms' procurement performance, resulting in redundant spending, misinterpretation of contracts and needs, loss of money, and profitability (Omasso, 2014). The procurement performance problems arise due to faulty budget development, late approval, inadequate monitoring of budget execution, and inappropriate execution controls (Shah et al., 2007). Besides, there is indulgence in malpractices and unethical conduct in budgeting (Tumutegyereize, 2013).

Effective operational budgeting is beneficial as it leads to proper management of the manufacturing firms' procurement activities, resulting in the procurement of sufficient and reasonable materials and services that meet clients' expectations.

This paper investigates the impact of operational budgeting on procurement performance among manufacturing firms within the Jinja Industrial Hub in Uganda. The Jinja Industrial Hub (JIH) is located in Jinja, a district located in the Eastern part of Uganda, 80 kilometres away from Kampala, the capital city of Uganda. This study is focused on the Jinja district because it has got a large number of manufacturing firms that are actively engaged in regular procurement activities.

Objectives and Hypotheses of the Study

This paper examines the impact of operational budgeting on procurement performance among manufacturing firms in the Jinja industrial hub in Uganda. Specifically, the following objectives are to be explored.

1. Ascertain how budgeting approaches affect procurement performance among manufacturing firms within the Jinja Industrial hub in Uganda.
2. Examine the impact of budget reviews on procurement performance among manufacturing firms within the Jinja industrial hub in Uganda.
3. Evaluate the effect of budgeting ethics on procurement performance among manufacturing firms within the Jinja industrial hub in Uganda.
4. Investigate the impact of expense forecasts on procurement performance among manufacturing firms within the Jinja industrial hub in Uganda.
5. Evaluate the combined effect of budgeting approaches, budget reviews, budgeting ethics, and expense forecasts on procurement performance among manufacturing firms within the Jinja industrial hub in Uganda.

The hypotheses for the study are:

Ha_0: Budgeting approaches do not have a significant effect on procurement performance among manufacturing firms within the Jinja Industrial hub in Uganda.

Hb_0: Budget reviews do not have a significant impact on procurement performance among manufacturing firms within the Jinja industrial hub in Uganda.

Hc_0: Budgeting ethics do not have a significant effect on procurement performance among manufacturing firms within the Jinja industrial hub in Uganda.

Hd_0: Expense forecasts do not have a significant impact on procurement performance among manufacturing firms within the Jinja industrial hub in Uganda.

He_0: Budgeting approaches, budget reviews, budgeting ethics, and expense forecasts do not have a significant combined effect on procurement performance among manufacturing firms within the Jinja industrial hub in Uganda.

REVIEW OF RELATED LITERATURE

This section of the study presents a literature review under the following headings: Conceptual framework, theoretical review, and empirical review.

Conceptual Framework

Several variables constitute operational budgeting, and these variables are: Budgeting approaches, budget reviews, budgeting ethics, expense forecasts, and procurement performance.

Budgeting Approaches

Budgeting approaches refer to the different methodologies that allow a budget to perform its functions differently and to different extents. The functions of budgets include; mapping, controlling, coordinating, communicating, instructing, authorizing, motivating, and performance measurement (Harafonova, 2017; Pidgeon, 2010; Rigby et al., 2020). The several budgeting approaches used by firms include zero-based budgeting, incremental budgeting, bottom-up budgeting, top-down budgeting, performance-based budgeting, and activity-based budgeting.

Incremental budgeting involves taking the previous year's budget and adding incremental amounts for the new budget period to meet the new situation, rather than starting from nothing as with zero-based budgeting (Chartered Management Institute, 2015). An incremental budget treats existing programmes and departments as already approved, subject only to increases or decreases in the financial resources allocated. The incremental budgeting process is mainly concerned with the incremental or marginal adjustments to the current budgeted allowance.

Zero-based budgeting encourages consideration and justification for everything that is included in the budget. An approach that involves the preparation of a budget for an organization by starting afresh in the new planning period is zero-based budgeting (Glass et al.,2014; Pidgeon, 2010). The approach allows the integration of top-level strategic goals into the budgeting process by tying them to specific organization functional areas. The basis of zero-budgeting is on the needs for the upcoming year without considering the previous year's budget and once developed the budget, which is considered balanced given funding constraints (Foose et al., 2015).

The bottom-up budgeting approach begins with the essential components of an organisation, generally at lower-level individual projects, to create a pooled budget for the organisation (Bolojan, 2011). The bottom-up budgeting approach utilizes the organisational staff's knowledge to formulate plans leading to employees' improved motivation. Furthermore, Bolojan (2011) and Mah'd (2020) concurred that the bottom-up budgeting approach is advantageous because it allows input from organisation managers and employees at the budget preparation stage thereby motivating the work force.

The top-down budgeting approach is also known as the tight or authoritative budgeting process and it is a planning system in which the budgeting process starts with a flow of information

from the top of an organisation down to the organisation's lower levels (Kramer & Hartmann, 2014). This bunch of information generally includes an outline of the year's overall goals, specific guidelines for helping lower-level managers prepare their budgets, and templates for submitting the budgets (Bolojan, 2011). The top-down method of budgeting presumes from the beginning that top management has a precise vision for the direction in which an organisation should go in order to accomplish its objectives and become more successful (Bolojan, 2011). In the top-down system, the responsible structure prepares templates and instructions for the other departments or divisions in budget building. The overall organisation goals for the coming year have to be communicated, and managers need to consider these goals during the preparation of their budgets because they are required to determine how to reach the proposed objectives while utilizing the existing number of employees (Bolojan, 2011). The disadvantage of the top-down budgeting approach is that lower-level managers, depending on their divisions or departmental responsibilities, may have a limited view of the process.

The performance-based budgeting approach connects performance information with the allocation of resources. Performance-based budgets contain information on the following elements: inputs measured in monetary terms, outputs, efficiency or productivity data, and effectiveness information (Pidgeon, 2010). The performance-based budgeting approach begins at a policy level where an organisation develops goals and explicit policy objectives. Managers must then develop relevant performance measures to track the achievement of these objectives (Pidgeon, 2010). The performance objectives are then integrated with budget preparation to allow for the alignment of spending plans with performance reporting. This process allows performance-based audits to be carried out about the accomplished programmes. Therefore, this approach avoids the problems related to establishing baselines after the event, which causes difficulties in delivering efficiency savings (Pidgeon, 2010).

Activity-based costing is the starting point for the preparation of activity-based budgeting. The process involves identifying cost drivers and their linkage with overhead costs and activities (Iidiko et al., 2014; Pidgeon, 2010; Pietizak, 2013). This process provides more robust information for budget preparation as planned changes in production or service can be connected to costs (Pidgeon, 2010). Organizations use the activity-based budgeting approach to forecast the demand for activities and the resources' anticipated usage to create an operational plan that determines the cost of resources (Iidiko et al., 2014).

However, while in theory, budgets can be designed to reflect an activity-based costing approach in practice, it is an under-developed approach since little financial information is usually available on activity bases and the associated cost drivers. The result is that all costs-including overheads, are allocated to activities based on the characteristics deemed to drive these costs (Pidgeon, 2010). The critical stages in activity-based budgeting are identifying the organisation’s activities, determining the cost drivers, spreading departmental costs to costs drivers, and calculating budgeted activity levels (Pidgeon, 2010).

Budget Reviews

For successful budgeting, it is vital to have regular reviews of the actual against budgeted performance and take corrective action (Price Waterhouse Coopers, 2013). Accordingly, an organisation should review actual performance against budget every month, and monitoring must happen promptly to ensure it is not too late to take corrective action (Price Waterhouse Coopers, 2013). However, as argued by Lorain et al. (2015) organizations operating in stable

environments do not need to modify their initial budgeting process except in situations where an increase in capital expenditure can cause an increase in operational budgets.

The modification of the budgeting process is necessary in enabling the adoption of a level of spending, which is commensurate to reduced revenue and shrink budget deficits (Hawkesworth & Klepsvik, 2013). Furthermore, frequent budget reviews could be a solution to the reproach that budgets do not consider significant changes in a dynamic environment (Tanase, 2014).

Few organisations regularly review their operating models or make the necessary adjustments to continuously ensure that procurement is integrated into the business and delivers higher value (KPMG, 2012). This process calls for regular reviews or audits of procurement processes to ensure its probity; otherwise, it may result in its demise (Chick & Handfield, 2014; Bashuna, 2013).

Budgeting Ethics

Participatory budgeting can allow managers to influence the target such that budgetary deviations are not acceptable, resulting in tight control of budget manipulation (Tanase, 2014). The ethical budgeting behavior supports openness and accountability in a procurement process and gives confidence to participate in the budgeting process (Bashuna, 2013). Ethical behavior in budgeting activities can also reduce the cost of managing risks associated with fraud, theft, corruption, and other improper behavior and enhancing administration (Chilikona & Muturi, 2015).

Expense Forecasts

As Rafael (2014) submitted, forecasting with absolute certainty no matter what financial and marketing research takes place is next to impossible; every organisation has to take its risks. Furthermore, although accounting information may reduce the unpredictability in the future, it does not eliminate it. In situations where the actual results are entirely different from the target, the budget could lose its significance as a means of control (Rafael, 2014).

Procurement Performance

The two critical elements in procurement performance are procurement effectiveness and procurement efficiency (Kakwezi & Nyeko, 2010; Masindano et al., 2018). The future initiatives for performance improvement of an organization depend on assessing and identifying areas of weakness and strength and progress towards set objectives (Kakwezi & Nyeko, 2010; Rajab & Muchelule, 2016). The three primary procurement performance key indicators are cost savings, quality, and delivery of the purchased items (Ling, 2018).

There are numerous challenges, such as standardization of measurements and cost of conducting performance measurement in measuring procurement performance (Kakwezi & Nyeko (2010).

Procurement is a core activity of performance in every public and private institution; therefore, it requires a strict system to be followed and adopted. Furthermore, many procurement activities are still lacking in procurement planning and implementation due to lack of proper direction, poor organizational culture, inadequate operating procedures and management, lack of ICT adoption, lack of competent, trained, and qualified procurement specialists in conducting and managing the procurement process in a professional, timely and cost-effective manner (Amemba et al., 2015; Wanyonyi & Muturi, 2015).

The ability to realize several internal and external factors influence procurement goals and the factors that influence the performance of the procurement function include; interactions between various elements, professionalism, staffing levels and budget resources, procurement organizational structure, procurement regulations, rules, and guidance, and internal control policies (Kakwezi & Nyeko, 2010). It is also widely known that financial performance should not be the only measure to conclude the performances; quality of the procured goods and services, timely delivery of orders, customer satisfaction, dependability, flexibility, and quality of employees should all be included (Kakwezi & Nyeko, 2010).

Additionally, the procurement function is dynamic due to the explosion of technology, the shifting demands of consumers, and the new structures of markets that have converted the world of procurement into one that demands change and innovation (Bashuna, 2013). If the procurement cycle lacks robustness, it often leads to poor selection of projects, overruns of both costs and time, and poor service delivery leading to low value for money (Burger & Hawkesworth, 2013). The procurement function demands professionals with high-levels of strategic, tactical, and operational skills (Chilikona & Muturi, 2015).

Theoretical Review

The two theories that form the theoretical framework for this study are the systems theory and the performance management theory. The systems theory is an abstract philosophical framework that nonetheless entails a highly empirical and investigative form of management science, and it suggests an evolutionary explanation for the dominance of management in contemporary society (Chikere & Nwoka, 2015). The systems theory views organizations as systems with integrated parts that must function together to attain their goals. The systems theory focuses on the arrangement and relations between the parts and how they work together as a whole (Chikere & Nwoka, 2015; Gleeson, 2019). Manufacturing firms within the Jinja Industrial Hub have several departments such as finance, procurement, production, that are part of their organizational structures. These departments work in tandem and how they interact with each other determines the firms' success. The structured nature of the systems theory enables organizations to function effectively where the chain of command and lines of authority are spelt out clearly because of the inevitable subsisting relationship between subsystems (Chikere & Nwoka, 2015). While the finance departments develop the budgets, the procurement departments depend on clearly spelt out guidelines for coordinating with other departments to attain effective and efficient procurement performance.

The second theory for the study is the performance management theory, and the strategic establishment of performance objectives involving a systematic approach to performance improvement as an ongoing process is the main emphasis of this theory (Bititci et al., 2016). Measuring performance involves collecting, analysing, reviewing, reporting performance data, and using that data to drive improvement (Iles, 2014). In measuring the procurement performance of the manufacturing firms in the JIH, the determination of efficiency and effectiveness of procurement is through collecting and analysing data on cost, speed, accuracy, and completeness of the procurement activities (Ling, 2018). Neely (2011) averred that organisations do not apply the same strategies in the same way for the same set of clients. While the underlying philosophies, management structures, resources, and clientele are different for each organization, the performance indicators, or individual units of measurement, have the potential to break down a complex program into understandable and comparable units, thereby offering the potential to make the cross-comparisons reasonably.

Empirical Review

Ogwel et al. (2016) adopted a descriptive research design to describe the factors influencing public procurement function performance in Trans-Nzoia County, Kenya. The study results indicated that the improper implementation of established corporate performance standards results in unnecessary high operational costs and uncoordinated business activities. Planning plays a crucial role in procurement performance because goods and services need to be purchased at the right price, right time, in the right quantity, and from the right suppliers. Additionally, the study results showed that self-competencies positively improve procurement performance, and as such, there is a need to train the employees regularly.

Hamza et al. (2016) applied correlation analysis and multiple regression analysis techniques to evaluate the factors affecting the procurement performance in Awassa Textile Company in Ethiopia. The factors were: procurement planning, staff performance, procurement procedures and resource planning. The study results indicated that there is a weak positive relationship between procurement planning and effectiveness of procurement performance, a medium positive relationship between staff performance and effectiveness of procurement performance, a weak positive relationship between procurement procedures and effectiveness of procurement performance, a strong positive relationship resource allocation and effectiveness of procurement perfomance. The multiple regression analysis results indicated that all the above factors were statistically significant predictors of procurement performance.

Wienhold (2015) undertook a study in Lisbon on better budgeting methods in which he analyzed the comparative effect on the traditional budgeting methods. The study utilized a quantitative research methodology, and the study results showed a strong correlation between the implementation of specific budgeting methods and the reduction of traditional budgeting problems.

Price Waterhouse Coopers (2011) undertook a study in Boston on financial planning, focusing on realizing the value of budgeting and forecasting. Cross tabulations were applied to determine the relationship between the review of the actual and forecasted budget performance. The study results pointed out that uncertainty in the business environment leads to variances between forecasts and budgets' actual performance in organizations. Additionally, while forecasting frequency is desirable, equally important is the need to improve the underlying processes and technology to avoid a strain on finance (Price Waterhouse Coopers, 2011).

What emerges from the empirical review is that most previous studies involving budgeting and procurement performance have predominantly utilized quantitative methodology.

Justification for the Study.

Budgets play a crucial role in planning future activities and the finances required to achieve organizational goals. Various researchers have carried out extensive research on budgeting. However, most researchers have focused on capital budgeting with little concentration on operational budgeting (Wright, 2016). Furthermore, most of the previous studies on budgeting have been conducted in other countries. For instance, Cavaleski et al. (2003) from the USA, Lepori et al. (2013) from Switzerland and Canada, Lorain et al. (2015) from Spain, Muhammadi et al. (2013) from Iran, Price Waterhouse Coopers (2011) in USA, Wienhold (2015) from Portugal. No previous studies on budgeting and procurement performance have been carried out in Uganda. Secondly this study contributes to research as it increases

knowledge about the impact of operational budgeting on the procurement performance of manufacturing firms.

Specification of Variables and Presumed Model for the Study.

This study's dependent variable is procurement performance and refers to accomplishing a given procurement task measured against pre-set known standards of accuracy, completeness, cost, and speed (Bashuna, 2013). The independent variable for the research study is operational budgeting, and it is defined as the variable that influences the dependent variable in either a positive or a negative way (Pallant, 2016; Sekaran & Bougie, 2014).

The independent variable of operational budgeting consisted of budgeting approaches, budget reviews, budgeting ethics, and expense forecasts. The following model was developed for the study, and primary data was collected on the dependent and independent variables.

Procurement performance is a function of operational budgeting, which can be stated using the functional notation as: PP = f(Operational Budgeting) = f(BA, BR, BE, EF).

Where:

PP = Procurement Performance that would be predicted based on specified values of the independent variables.

While the independent variables are:

BA = budgeting Approaches.

BR = Budget Reviews.

BE = Budgeting Ethics.

EF = Expense Forecasts.

Therefore, the presumed model specification for the study is:

$$\boldsymbol{PP = \tau_0 + \alpha_1 BA + \alpha_2 BR + \alpha_3 BE + \alpha_4 EF + e_i}$$

Where: α_1, α_2, α_3, and α_4 are the coefficients of the operational budgeting variables, and in the context of this study, every coefficient represents the increase in procurement performance for a very unit increase in the respective operational budgeting variables for manufacturing firms within the Jinja Industrial Hub in Uganda.

$\boldsymbol{\tau_0}$ is the intercept term, and in the context of this study, it represents the expected level of procurement performance of manufacturing firms within the Jinja Industrial Hub in Uganda in the absence of operational budgeting.

e_i is the error term representing the uncaptured elements of the regression line.

METHODOLOGY

Quantitative research methodologies focusing on cross-sectional analysis, formed the study (Wienhold, 2015). The cross-sectional analysis enabled the researcher to gather data just once to address the research questions (Sekaran & Bougie, 2014). Specifically, the study employed the correlational research design to determine relationships between the variables (Pallant, 2016). Correlational analysis shows the strength and direction of the relationship between the dependent and independent variables (Muiruri & Orwa, 2015; Pallant, 2016). The researchers employed Pearson's Correlation analysis to determine the relationship between the independent variable, operational budgeting (with sub-variables of budgeting approaches,

budget reviews, budgeting ethics, and expense forecasts), and the dependent variable, procurement performance. The study also applied multiple regression analysis to analyse the data. The justification for using multiple regression analysis was because there was a need to determine the impact of the predictor variables (budgeting approaches, budget reviews, budgeting ethics, and expense forecasts) on the outcome variable of procurement performance (Pallant, 2016).

The population of manufacturing firms in the JIH is 130 (Uganda Bureau of Statistics, 2017), and a sample of 97 firms was selected for data collection using stratified random sampling. The method involved dividing the population of manufacturing firms in JIH into some strata, followed by a simple random selection of subjects from each stratum (Sekaran & Bougie (2014). The stratification variable employed by the researchers was the type of business engaged in by the various firms. The ten strata comprised manufacturing firms in steel and aluminium, food and dairy products, construction, leather products, agro-processors, carpentry and ceramics, paper and scholastics, water and beverages, textiles, and sugar. Data was then collected from respondents in the 97 manufacturing firms using a five-point Likert scale research instrument designed by the researchers and tested for reliability before the actual data collection. Microsoft Statistical Package for Social Scientists (SPSS) was later used for data processing.

EMPIRICAL RESULTS

Table 1 presents the Cronbach's coefficient alphas for each subscale variable and the overall Cronbach's reliability coefficient alpha for the research instrument used to collect data for the study. All the Cronbach's reliability coefficients were above .7, and as submitted by Bolarinwa (2015) and Pallant (2016), the items in the questionnaire reliably measured the desired constructs

Table 1: Cronbach's Coefficient Alphas of the Independent Variables

Study Variable	Reliability Coefficient
Budgeting Approach	0.807
Budget Review Regularity	0.795
Ethical Practices	0.793
Expense Forecasts Accuracy	0.812
Overall Cronbach's Alpha	0.800

Table 2 presents the intercorrelation coefficients for the independent variables for multicollinearity testing among the study's explanatory variables. There were no two explanatory variables that were perfectly correlated or with intercorrelation coefficients greater than 0.80, which signifies the absence of multicollinearity among the explanatory variables. The researchers took this precaution to ensure that the data was free from multicollinearity.

Table 2: Intercorrelation Coefficients for Independent Variables

Variable	Statistic	Budget Review	Budgeting Ethics	Expense Forecasts	Budgeting Approach
Budget Reviews	Pearson Correlation Sig. (2-Tailed)	1.000 -			
Budgeting Ethics	Pearson Correlation Sig. (2-Tailed)	0.585** 0.000	1.000 -		
Expense Forecasts	Pearson Correlation Sig. (2-Tailed)	0.326** 0.002	0.518** 0.000	1.000 -	
Budgeting Approaches	Pearson Correlation Sig. (2-Tailed)	0.373** 0.000	0.106 0.320	0.293** 0.006	1.000 -

** Correlation is significant at 0.01 level, *** Correlation is significant at 0.001 level

Tables 3 presents Pearson's correlational analysis results for all the independent and dependent variables, while Tables 4, 5, and 6 present the multiple regression analysis results for the coefficients of operational budgeting, model summary, and analysis of variance, which were used to accept or fail to accept the null hypotheses $H1_0$, $H2_0$, $H3_0$, $H4_0$, and $H5_0$ at the appropriate levels of significance.

Table 3: Pearson's Correlation Coefficients Results.

Variable	Statistic	Procurement Performance	Budget Review	Budgeting Ethics	Expense Forecasts	Budgeting Approach
Procurement Performance	Pearson Correlation Sig. (2-Tailed)	1.000 -				
Budget Reviews	Pearson Correlation Sig. (2-Tailed)	0.313** 0.003	1.000 -			
Budgeting Ethics	Pearson Correlation Sig. (2-Tailed)	0.378*** 0.000	0.585*** 0.000	1.000 -		
Expense Forecasts	Pearson Correlation Sig. (2-Tailed)	0.323** 0.002	0.326** 0.002	0.518*** 0.000	1.000 -	
Budgeting Approaches	Pearson Correlation Sig. (2-Tailed)	0.432*** 0.000	0.373*** 0.000	0.106 0.320	0.293** 0.006	1.000 -

** Correlation is significant at 0.01 level, ***Correlation is significant at 0.001

Table 4: Multiple Regression Analysis Coefficients for Operational Budgeting Variables.

Model	Variables	Unstandardized Coefficients B	Standard Error	Standardized Coefficients Beta	t	Sig.
1	Constant	0.932	0.599		1.556	0.124
	Budgeting Approaches	0.352	0.098	0.389	3.601	0.001
	Budget Reviews	-0.023	0.157	-0.018	-0.144	0.886
	Budgeting Ethics	0.377	0.159	0.306	2.374	0.020
	Expense Forecasts	0.066	0.131	0.057	0.499	0.619

Table 5: Multiple Regression Analysis Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.543a	0.295	0.259	0.66393

a Predictors: (Constant), Expense Forecasts, Budgeting Approaches, Budget Reviews, Budgeting Ethics
b Dependent Variable: Procurement Performance.

Table 6: Results of Multiple Regression Analysis Variance (ANOVA) (b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	14.735	4	3.684	8.357	.000(a)
	Residual	35.265	80	.441		
	Total	50.000	84			

a Predictors: (Constant), Expense forecasts, Budgeting Approaches, Regularity of Budget Review, Budgeting Ethics
b Dependent Variable: Procurement Performance

DISCUSSION OF FINDINGS

In Table 3, It is evident that a moderate significant and positive correlation ($r = 0.432$, $p < 0.001$) exists between budgeting approaches and procurement performance among manufacturing firms within the Jinja industrial hub in Uganda. Furthermore, there is a weak and positive correlation ($r = 0.313$, $p < 0.01$) between budget reviews and procurement performance among manufacturing firms within the Jinja industrial hub in Uganda. Table 3 further shows a weak and positive correlation ($r = 0.378$, $p < 0.001$) between budgeting ethics and procurement performance among manufacturing firms within the Jinja industrial hub in Uganda. Besides, as indicated in the same table, there is a weak and positive significant association ($r = 0.323$, $p < 0.01$) between expense forecasts and procurement performance among manufacturing firms within the Jinja industrial hub in Uganda.

The multiple regression analysis results in Tables 4, 5, and 6 are discussed basing on the study hypotheses **Ha_o**, **Hb_o**, **Hc_o**, **Hd_o**, and **He_o** at the appropriate levels of significance.

Ha_o: Budgeting approaches do not significantly affect procurement performance among manufacturing firms within the Jinja Industrial hub in Uganda.
From Table 4, the results indicate that for the budgeting approaches variable of operational budgeting ($t = 3.601$, Beta $=0.389$, $p < 0.01$). The results provided evidence that budgeting approaches have a significant effect on procurement performance among manufacturing firms within the Jinja Industrial hub in Uganda, and the study failed to accept **Ha_o**.

Hb_o: Budget reviews do not significantly impact procurement performance among manufacturing firms within the Jinja industrial hub in Uganda.
Table 4 indicates that the budget reviews are not statistically significant ($t = -0.144$, Beta $= -0.018$, $p = 0.886$). The results provided evidence that budget reviews do not have a significant impact on procurement performance among manufacturing firms within the Jinja Industrial hub in Uganda, and the study failed to reject **Hb_o**.

Hc_o: Budgeting ethics do not have a significant effect on procurement performance among manufacturing firms within the Jinja industrial hub in Uganda.
From Table 4, the results indicate that the budgeting ethics variable of operational budgeting is statistically significant ($t = 2.374$, Beta $= 0.306$, $p < 0.05$). The results provided evidence that budgeting ethics have a significant effect on procurement performance among manufacturing firms within the Jinja Industrial hub in Uganda, and the study failed to accept **Hc_o**.

Hd_o: Expense forecasts have no significant impact on procurement performance among manufacturing firms within the Jinja industrial hub in Uganda.
From Table 4, the results indicate that the budgeting expense forecasts variable of operational budgeting is not statistically significant ($t = 0.499$, Beta $= 0.057$, $p = 0.619$). The result provided evidence that expense forecasts do not have a significant impact on procurement performance among manufacturing firms within the Jinja Industrial hub in Uganda, and the study failed to reject **Hd_o**.

He_o: Budgeting approaches, budget reviews, budgeting ethics, and expense forecasts have no significant combined effect on procurement performance among manufacturing firms within the Jinja industrial hub in Uganda.
Tables 5 and 6 indicate that a 29.5% variance in procurement performance among manufacturing firms within the Jinja industrial hub in Uganda is explained by operational budgeting characterized by budgeting approaches, budget reviews, budgeting ethics, and expense forecasts. The results also show that the budgeting approaches, budget reviews, budgeting ethics, and expense forecasts have a statistically significant combined effect on procurement performance among manufacturing firms within the Jinja industrial hub in Uganda, $F(4,80) = 8.51$, $p < 0.001$, $R^2 = 0.295$, $AdjR^2 = 0.259$ and the study failed to reject **He_o**.

The resulting empirical regression model for the study is: ***PP = 0.352BA + 0.377BE* + 0.66393**
Where:
PP = Procurement Performance.
BA = budgeting Approaches.

BE = Budgeting Ethics.

CONCLUSIONS

The study results and findings have provided evidence concerning the impact of operational budgeting on procurement performance among manufacturing firms within the Jinja industrial hub in Uganda. Budgeting approaches as a constituent of operational budgeting have a statistically significant effect on procurement performance among manufacturing firms within the Jinja industrial hub in Uganda. The result provides evidence that budgeting approaches are cardinal determinants of procurement performance such that for every 1 percent improvement in budgeting approaches, procurement performance would improve by 0.389 percent among manufacturing firms within the Jinja Industrial hub in Uganda. Therefore, the null hypothesis $\mathbf{Ha_o}$ is rejected, and it is concluded that there is a significant effect of budgeting approaches on procurement performance among manufacturing firms within the Jinja industrial hub in Uganda.

Budget reviews have a non-significant impact on procurement performance among manufacturing firms within the Jinja industrial hub in Uganda. The above result implies that budget reviews are not essential determinants of procurement performance among manufacturing firms within the Jinja Industrial hub in Uganda. Therefore, the null hypothesis $\mathbf{Hb_o}$ is not rejected, and it is concluded that there is no significant impact of budget reviews on procurement performance among manufacturing firms within the Jinja industrial hub in Uganda.

Budgeting ethics have a statistically significant effect on procurement performance among manufacturing firms within the Jinja industrial hub in Uganda. The result provides evidence that budgeting ethics are crucial determinants of procurement performance such that for every 1 percent improvement in budgeting ethics, procurement performance would improve by 0.306 percent among manufacturing firms within the Jinja Industrial hub in Uganda. Therefore, the null hypothesis $\mathbf{Hc_o}$ is rejected, and it is concluded that there is a significant effect of budgeting ethics on procurement performance among manufacturing firms within the Jinja industrial hub in Uganda.

Expense forecasts have a non-significant impact on procurement performance among manufacturing firms within the Jinja industrial hub in Uganda. The above result implies that expense forecasts are not vital determinants of procurement performance among manufacturing firms within the Jinja Industrial hub in Uganda. Therefore, the null hypothesis $\mathbf{Hd_o}$ is not rejected, and it is concluded that there is no significant impact of expense forecasts on procurement performance among manufacturing firms within the Jinja industrial hub in Uganda.

The combined effect of budgeting approaches, budget reviews, budgeting ethics, and expense forecasts showed a significant effect on procurement performance among manufacturing firms within the Jinja industrial hub in Uganda. Therefore, the null hypothesis $\mathbf{He_o}$ is rejected, and it is concluded that budgeting approaches, budget reviews, budgeting ethics, and expense forecasts have a combined significant effect on procurement performance among manufacturing firms within the Jinja industrial hub in Uganda.

RECOMMENDATIONS

Effective procurement performance among manufacturing firms hinges on proper operational budgeting. With effective procurement performance, manufacturing firms would be able to properly utilize their manufacturing capacity and ensure timely delivery of goods to their clients. This goal calls for the adoption of budgeting approaches by manufacturing firms that are consistent with the nature of business they are involved in and the scale of operations they undertake.

The primary considerations in the choice of budgeting approaches are organizational goal attainment, practicability, cost reduction, and resource allocation efficiency. Therefore, manufacturing firms should emphasize the above four main approaches when choosing budgeting approaches to implement in pursuit of goal attainment.

Additionally, manufacturing firms should ensure that professional budgeting ethical practices are adhered to during the budgeting process. Ethical budgeting conduct should involve transparency, accountability, and timeliness. Any form of malpractices in the budgeting process is bound to affect manufacturing firms' procurement performance negatively. The authors also recommend that operational budgeting should be prioritized by manufacturing firms the same way as capital budgeting.

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