

## ACCOUNTING IMPLICATIONS ON FINANCIAL DEEPENING IN KENYA: CASE OF KITUI COUNTY

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### ABSTRACT

Financial deepening linked to Kenya's financial ingenuity, M-Pesa has positively impacted livelihoods in Kenya. However, investigating the relationships between accounting for business activities promoted by financial deepening can offer better insights on the quality of livelihoods of Solo and Micro-Proprietors in Kitui County. The study therefore examined accounting implications on financial deepening in Kenya's Kitui County. This was a case study design survey and sought to examine the complex relationship between accounting and financial deepening, and their consequent effect on the quality of livelihoods of Solo and Micro-Proprietors in Kitui County. Based on the survey results, the overall fitted model was significant  $F(3, 26) = 6.634, p < .05, R^2 = .434$ . This clearly showed that accounting for costs, revenue, and balance sheet items had a positive significant impact on financial deepening which enhanced the livelihoods of the Solo and Micro-Proprietors. Mobile platforms have created an opportunity and enhanced financial deepening in many of Africa's rural setups such as Kitui County in Kenya. However, financial deepening can only be sustained through wealth creation or profit maximization which are identified, measured and reported in the accounting practice. This implies that mobile platforms are means and not the end, hence the need to examine accounting and financial deepening relationships. According to the study findings, accounting, as a measurement-communication-system, would explain the extent of financial deepening and the consequent quality of livelihoods of the survey respondents.

**Keywords:** Accounted, Financial deepening, Solo and Micro-Proprietors (SMPs), Net-Worth, Decisions.  
**Type of paper:** Research paper.

### I. INTRODUCTION

Financial deepening has been promoted in this study as the enhanced provision of efficient financial services especially in rural African set-ups such as Kitui County, where the service would otherwise be inaccessible. Kenya's financial ingenuity, the M-Pesa has stimulated financial deepening in these set-ups. However, whereas mobile money platforms provided the opportunity and enhanced financial deepening in Kenya and especially Kitui County, its sustainability, and influence on the quality of livelihoods of SMPs in Kitui County is dependent on either wealth creation or profit maximization which are identified, measured and reported in the accounting practice by the mobile money participants. In this survey, financial deepening was accordingly measured in (i) wealth creation, (ii) profit maximization, and (iii) community social responsibility activities by SMPs in Kitui County.

According to Romeo and McKinney (2008), the key activities of accountants comprise: to read the record, the hieroglyphics of accounts, whether unmistakably or blindly prepared, and to interpret,

rearrange, and produce in simple but distinct form; self-explanatory and free from mysteries of bookkeeping; the narrative of facts as they were, their relation to each other and intrinsic results. Furthermore, they prepare the record-the full record of the accounted. The American Accounting Association (AAA, 1973) identified Basic Accounting (ACC) theory as a cohesive set of conceptual, hypothetical, and pragmatic propositions explaining and guiding the accountant's actions in (i) identifying (ii) measuring and (iii) communicating economic information to users of ACC and financial data. Accounting was highlighted in the statement of Basic Accounting Theory (ASOBAT) as the process of identifying, measuring, and communicating economic information to permit informed judgments and decisions by users of the information (Sadan & Auerbach, 1974). Good decisions promote wealth creation leading to improved livelihoods.

As a measurement of the accounted, ACC is the story that exemplifies the monetary value of what is owned. Accounting measurement of business activities should reflect the business contribution to social value creation, which considers all the impacted stakeholders' expectations (Chabarak, 2018). Money is the epitome of human livelihoods. Without it, the human race is devoid of a strait through which economic activities which harbour human occupations are accomplished. Money factually voices to households, firms, and governments what they can, and cannot accomplish. Can they eat that meal or take that holiday? Can they take on that investment? Can they access that debt? Can they engage in those partnerships? Can they afford more risk? Etcetera. The answers are in the accounted. More specially, ACC unveils the true net worth of the accounted. Accordingly, the accountant is the utmost officer in the economic world. Communities, firms, and governments: as economic players measure their net-worth in the ACC language of (i) assets (ii) liabilities (iii) revenues (iv) expenses, and the (v) residue business claim (or return, otherwise known as equity). These have been branded in the International Financial Reporting Standard's (IFRS) conceptual framework as the elements of ACC. The balance sheet (the contemporary name is the statement of financial position) unveils material investments in assets such as Human Capital, financial capital, physical capital e.g. property-land-equipment & raw materials, operational capital, as well as social capital (worth networks which translate into markets); and any claims or obligations held against them, otherwise known as liabilities. The IFRS Foundation (2015) has equated liabilities to expenses and defined them as decreases in economic benefits during the ACC period in the form of outflow or depletion of assets that result in a decrease in equity other than those relating to payments to equity shareholders. Contrariwise, revenue is the increase in economic benefits during the accounting period in the form of inflow or appreciation of assets or a decrease in liabilities that result in an increase in equity other than those relating to contributions by equity shareholders.

Whereas the Basic ACC theory harbours the measurement-communication-process of the accounted, the Positivity Accounting Theory (PAT) displays the relations between ACC and human activity. PAT accomplished more than mere economic measurement and quantification to include: (i) the influence of ACC data on financial markets (Kothari, 2001); (ii) the behavioural approach on the relationships between ACC data and human activity (Bloomfield, Libby, & Nelson, 2002); and, (iii) the politico-social view, which examines the organizational, economic, and political determinants of ACC policy choices made by preparers of accounts (Fields, Lys, & Vincent, 2001). Accounted asset net-worth implies established economic capabilities to be applied for wealth creation.

### **A. Financial Deepening**

Mobile money, otherwise known as M-Pesa is the financial ingenuity of Kenya and Africa. M-Pesa has produced unparalleled financial deepening in Kenya. Kenya enacted the communication act in 1998 and set the stage for technological advancement. As of the 2014-2015 financial period, Mobile money subscribers reached 26 million, representing a penetration rate of 60.6% of the total population, and mobile Cash deposits reached Kenya shillings (Ksh.) 1,269 billion in 2014, up from Ksh. 1, 033 billion in 2013 (Communications Authority of Kenya {CAK}, 2018). According to CAK (2018), as of December 2018, the value of mobile money transactions hit the Ksh.2 trillion milestones for the first time, even as mobile penetration shot to the 100 percent mark. Mobile money transactions have profoundly changed not only the way business enterprises carry out their day-to-day activities, but also the nature of the work done, the nature of business relationships, and how enterprises structure themselves (Gale and Abraham, 2005; Kotb and Roberts, 2011). The m-transactions technologies have enabled enterprises and individuals to transact business anywhere and anytime, and its ubiquitous characteristics bring tremendous m-commerce potential, as earlier predicted (Yang and Jolly, 2006; Liang and Wei, 2004). Furthermore, the uniquely personal form of technology-based mobile phones allows enterprises or individuals, or households to position personalized and customized mobile businesses through mobile data services.

### **B. Financial Deepening: Empirical Implications**

Honoham (2008) compared the composite indicator with the poverty headcount ratio and found that financial access negatively correlates with poverty conditions in 162 countries. Sharma (2015) performed Granger causality and found a positive association between economic growth and various dimensions of financial inclusion, specifically banking penetration, availability of banking services, and usage of banking services in terms of deposits in the Indian emerging economy.

Kitui County: Justification

Medium firms, large firms, and governments have the financial muscle to produce an accurate record of the accounted and establish their asset net-worth for posterity. However, in Kitui County, a vast number of economic players were sole proprietors and micro-small economic outfits. These were the least educated and had inadequate financial resources to promote the ACC practice. A key question was whether these were able to determine their accounted for growth. Furthermore, if they were unable, could ACC or lack of it explain the lopsided economic intensification witnessed in most parts of the global economy such as Kitui County? For example, where communities and business ventures were unable to engage in evocative ACC, this would certainly lead to an unknown net worth in assets. However, could this lead to ill productivity-leading to low quality of livelihoods? This was a fundamental question in an economy such as Kenya's, and especially Kitui County, in which those contributing to significant GDP growth were Solo and Micro-Proprietors (SMPs): whose potential would be established on the face of redolent ACC practice. A majority of the SMPs in Kitui County operate informally (UNDP,2015), hence the desire to investigate how they carried out their ACC activities and the consequent impact on financial deepening which would lead to their improved livelihoods.

## II. METHODOLOGY

The total population of the study consisted of one thousand four hundred fifty (1,450) SMPs within the Kitui Central Business District, and was sourced from the Kitui County Revenue office. The key items on the survey questionnaire were (i) the preparation of a record of the accounted. The IFRS conceptual frameworks define a quality record as one that is: (a) relevant implying that it possesses predictive value or confirmatory value or both, (b) faithfully represented, implying that it is complete, neutral, and free from errors; (ii) read and interpret the record. Inability to read and interpret the record implies the record is unhelpful; and (iii) ACC application in human activity, for example, business expansion and control decisions. The control environment and specifically, management integrity, is an important component of the accounting vocation (D'Aquila, 1998). The survey instrument was used to obtain anonymous information on the key questionnaire items. The SMP owners were numbered and a sample of fifty (50) selected by picking every 29th owner using systematic sampling, who completed a questionnaire in the period from early May 2021 to late June 2021. The systematic sampling technique was particularly suitable for the study due to cost and time implications. A data collection research assistant administered the 4 Likert scale survey instrument to each of the fifty SMPs. The subjects were requested to complete, stamp and return the completed questionnaire to the assistant without indicating their names to maintain anonymity. The subjects

were allowed two days to complete the instrument. A total of thirty responses (60%) were received and a total of twenty questionnaires were undeliverable.

### **A. Research Questions**

The survey sought to answer three research questions, namely: What was the implication of cost accounting on financial deepening, what was the implication of revenue accounting on financial deepening, and what was the implication of balance sheet accounting on financial deepening?

### **B. Research Hypothesis**

*Hypothesis 1: There was no statistically significant relationship between ACC for costs and financial deepening among SMPs in Kitui County.*

*Hypothesis 2: Accounting for revenues by Kitui County SMPs had no statistically significant relationship with financial deepening.*

*Hypothesis 3: There was no statistically significant relationship between balance sheet ACC and financial deepening among SMPs in Kitui County.*

## **III. RESULTS**

### **A. Study Findings**

This section contains the study's data findings. Data were coded, entered, cleaned, and analyzed using the Statistical Package for Social Science (SPSS, Version 28). To present the findings of the descriptive analysis, Percentages, averages, standard deviations, and frequencies were used. To present the results of the inferential study, the researcher employed bivariate correlation analysis, multiple linear regression analysis, and statistical tests such as the t-test, Z-test, F-test, and Analysis of Variance (ANOVA). To determine the relationship between the dependent and independent variables, the researcher employed a multiple linear regression model.

### **B. Reliability and Validity**

Reliability refers to the consistency with which a researcher's measurements are made. (Cozby, 2001) defines reliability as the degree to which an evaluation instrument produces consistent and reliable results. The validity of data is determined by the strength of results, conclusions, or statements. Data is analyzed to verify that it is relevant and accurate for the topic at hand. In sum, the researcher has to establish whether the information gained or gathered is relevant to the subject under inquiry and whether the survey conducted provided an answer to the problem. A pilot study was

undertaken to confirm that the data collected via the questionnaires were valid and reliable. The study employed Cronbach's alpha ( $\alpha$ ), the most widely accepted interior consistency measure. It demonstrates how a group of test items can be considered as a single latent variable. A proposed estimate of 0.6 or higher was chosen as a cut-off for reliabilities (Rousson, Gasser & Seifer, 2002). According to the results of the pilot study, all questionnaire control activities had the highest reliability ( $\alpha = 0.992$ ) in Table 1.1. All the scales had reliability scores more than or equal to 0.6, indicating that they were all reliable (Nunnally, 1978).

**Table 1.1:***Reliability Statistics*

Cronbach's Alpha	N of Items
.992	23

**C. Response Rate**

Thirty questionnaires, representing a 60% response rate were returned and validated for data analysis.

**D. Demographic Characteristics of the Participants****Table 1.2:***Demographic Information*

		Count	Column N %
Gender of the Respondent	Male	15	50.0%
	Female	15	50.0%
Age of the Respondent	Below 50 Years	24	80.0%
	More than 50 Years	6	20.0%
Level of Education	Primary	4	13.3%
	Secondary	15	50.0%
	Certificate	6	20.0%
	Diploma	4	13.3%
	Other	1	3.3%
Number of Years running the business	Less than 1 Year	1	3.3%
	1-5 Years	19	63.3%
	More than 5 Years	10	33.3%

According to the research findings in Table 1.2, 50.0% ( $n=15$ ) of the overall survey participants were male, while 50.0% ( $n=15$ ) were female, a sign indicating the poll participants were evenly split between men and women. Most of the respondents' ages were discovered to be under 50 years old, accounting for 80.0% ( $n=24$ ) while those above the age of 50 made up only 20.0% ( $n=6$ ) of the total

respondents. The findings also revealed that the majority of the respondents had basic education, with secondary graduates accounting for 50% ( $n=15$ ) and certificate holders accounting for 20% ( $n=6$ ). Primary and Diploma holders each were 13.3% ( $n=4$ ), with one respondent (3.3%) ( $n=1$ ) not disclosing his/her educational level. The majority of the respondents had prior business experience, with 63.3% ( $n=19$ ) indicating that they had worked in their present business for 1 to 5 years, and 33.3% ( $n=10$ ) more than 5 years. Only 3.3% ( $n=1$ ) specified they had less than one year of experience.

## E. Descriptive Statistics

**Table 1.3:**

*Descriptive Statistics: Accounting for Costs in Business*

	N	Mean	Std. Deviation
My Business accurately accounts for all its purchase costs in a timely manner.	30	4.00	.910
My Business accurately calculates and accounts for the Costs of Goods sold in a30 timely manner.		3.90	.960
My Business accurately calculates and accounts for all its overhead costs such as30 electricity, water, and telephone in a timely manner.		4.00	.910
My Business accurately calculates and accounts for all of its employees' costs such30 as salaries in a timely manner.		4.00	.910
My Business accurately calculates and accounts for all its distribution costs such as30 transportation and storage costs on time.		3.83	1.206
After accurately accounting for all my Business costs I prepare a financial statement30 that enables me to determine my financial net worth		4.10	.845
I use the information in my final financial statement to make decisions that make29 my Business grow.		4.41	.682
Valid N (listwise)	29		

The measures of the effectiveness of Accounting for Costs in a business from important statements received from the respondents were detailed in Table 1.3. The respondents shared their views on Accounting for Costs in a business, as well as the impact it has on financial deepening. The responses were then ranked in terms of their Means and Standard Deviations for analysis of results. The study findings revealed that using final financial statements information to make decisions that promote business growth ( $M=4.41$ ,  $SD=0.682$ ) had the greatest influence on financial deepening in the category of Accounting for Costs in a business, while accurately calculating and accounting for all distribution costs such as transportation and storage costs promptly was perceived to have the lowest impact. This implied that shop owners who applied financial data derived from their final financial statements to make decisions related to business growth enjoyed utmost financial deepening. However, shopkeepers were required to ensure that they accurately calculated and accounted for all their distribution costs such as transportation and storage on time.

**Table 1.4:***Descriptive Statistics: Accounting for Revenue in Business*

	N	Mean	Std. Deviation
I maintain a correct record of the sales prices for all the items sold.	29	4.38	.677
I calculate and maintain a correct record of the sales prices for all the items sold in my29 business.		4.52	.688
I accurately calculate and confirm daily, weekly, monthly, and annual selling prices used in30 my business.		4.23	.626
I accurately calculate and account for daily, weekly, monthly, and annual total sales for my30 business.		4.30	.651
I accurately calculate and account for the total returned sales of my business.	30	4.30	.651
I accurately calculate and account for the total sales discounts of my business.	28	4.29	.659
After accurately accounting for my business revenue I prepare a financial statement that30 enables me to determine my financial net worth.		4.43	.679
I use the information in my final financial statement to make decisions that make my6 business grow.		4.17	1.169
Valid N (listwise)	6		

Table 1.4 shows the success of revenue accounting in business as measured by important statements obtained from respondents. The respondents enumerated how they accounted for revenue in their businesses and how it affected financial deepening. For analysis, the replies were sorted according to their Means and Standard Deviations. The study revealed that calculating and keeping accurate records of sales' prices for all items sold in a business ( $M=4.52$ ,  $SD=0.688$ ) had the greatest impact on financial deepening in the category of accounting for revenue in a business, while using information from the final financial statements to make decisions that support business growth had the least impact ( $M=4.17$ ,  $SD=1.169$ ). This implied that shop owners valued maintaining accurate records of sales prices for all items sold in their businesses the most to aid financial deepening. However, there was the need to apply information from the final financial statements to make decisions that augment business growth.

**Table 1.5:***Descriptive Statistics: Accounting for Balance Sheet Items in my Business*

	N	Mean	Std. Deviation
I accurately calculate and account for the cash generated by my business on time.	30	4.33	.661
I accurately calculate accounts of money owed to my business by customers promptly.	30	4.07	.944
I accurately calculate and account for the unsold inventory of my business on time.	30	4.20	.761
I accurately calculate and account for the amounts of money my business owes to suppliers30 on time.		4.13	.730
I accurately calculate and account for fixed assets such as a vehicle or building owned by my30 business on time.		4.40	.675
After accurately accounting for the balance sheet items of my business, I prepare a final30 financial statement which enables me to determine my financial net worth.		4.50	.682
I use the information in my final financial statement to make decisions that make my4 business grow.		4.00	1.414

Table 1.5 shows the effectiveness of accounting for balance sheet items in a business as measured by statements received from respondents. For analysis, the replies were sorted according to their Means and Standard Deviations. The study found that accurately accounting for a business's balance sheet items and preparing a final financial statement that helped determine financial net worth ( $M=4.50$ ,  $SD=0.682$ ) had the greatest impact on financial deepening in the category of accounting for balance sheet items while using the information in the final financial statements to make decisions that help a business grow had the least impact ( $M=4.00$ ,  $SD=1.414$ ). This implied that while accurately accounting for a business's balance sheet items and preparing a final financial statement that aided the determination of a shop owner's financial net worth was paramount in promoting financial deepening, there was the need to ensure that shop-keepers used final financial statements information to make decisions that promoted their business growth.

**Table 1.6:**

*I Have an Accounting Computer Software that I use to Account for my Business Costs, Revenue, and Balance Sheet Items*

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	14	46.7	48.3	48.3
	Yes	15	50.0	51.7	100.0
	Total	29	96.7	100.0	
Missing	System	1	3.3		
Total		30	100.0		

Computer ACC software improves accuracy by decreasing or eliminating human errors in calculations, as well as allowing shop owners to manage their accounting fairly quickly, resulting in lower expenses. Furthermore, the software produces accurate financial reports while also reducing the stress associated with business expenses schedules preparations. As a result, the researcher wanted to establish whether business owners had access to computer software that they could use to account for their shop's costs, revenues, and balance sheet items. According to the survey, 50.0% ( $n=15$ ) of the participants owned such software. This implied that shop owners in Kitui County would enjoy greater financial deepening if more of them had access to, and adopted the use of accounting software that allowed them to make better use of their financial resources and avoid costly bookkeeping errors in Table 1.6.

**Table 1.7:***Descriptive Statistics: Accounting Implications on Financial Deepening*

	N	Mean	Std. Deviation
My business has acquired an additional fixed asset such as land or vehicle or building or opened another shop in past three years.	30	3.47	1.358
The total of my revenue minus costs has increased in the past three years.	30	3.47	1.358
I frequently engage in activities that promote the welfare of my community (for example building a community school or donating cash for a needy sick neighbor).	30	4.13	1.074
Inability to determine my financial net worth would lead to my business's poor performance leading to the low quality of my livelihood.	4	3.00	1.826
Valid N (listwise)	4		

Table 1.7 shows that respondents participated in activities that benefited their communities, such as building a community school or offering financial support to a sick neighbour in need ( $M=4.13$ ,  $SD=1.074$ ). In the past three years, respondents also believed that their overall revenue minus costs had increased ( $M=3.47$ ,  $SD=1.358$ ). Furthermore, respondents affirmed that their businesses had bought a new fixed asset, such as land, a vehicle, or a building, or built a new shop ( $M=3.47$ ,  $SD=1.358$ ). Finally, the findings suggested that the inability to evaluate a business's financial net worth would result in bad business performance, resulting in a negative quality of life ( $M=3.00$ ,  $SD=1.826$ ). overall, this implied that accounting for costs, revenue, as well as balance sheet items by the shop owners, promoted financial deepening leading to their enhanced livelihoods.

### F. Diagnostic Tests of the Regression Model

Diagnostic tests aid in determining the nature of the data and the model that would be used in a study, ensuring that the regression results are fair, consistent, and effective. This study performed a variety of diagnostic tests before going on to model estimation. The diagnostic tests were devised to confirm that the OLS regression model's assumptions were correct. Diagnostic tests that evaluated for breaches of normality, heteroscedasticity, and Multicollinearity error assumptions were applied.

### G. Normality test

The OLS regression model assumes that residuals behave normally when they have an impact on all tests' validity. The Kolmogorov-Smirnov and Shapiro Wilk tests, two non-graphical tests for normalcy, were utilized in this investigation to see if residuals behaved normally. The Kolmogorov-Smirnov and Shapiro Wilk tests were used to test the null hypothesis that the residual distribution was normal. The investigation would fail to reject the null hypothesis (with 95 percent confidence) if the p-value was more than 0.05 ( $p > 0.05$ ), and the residuals would be presumed to be normally

distributed. In Table 1.8, it is evident that the assumption was not violated since  $p > 0.05$ . Hence the research concluded that the residuals were normally distributed.

**Table 1.8:**

*Tests of Normality*

	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Financial Deepening	.287	30	.06	.875	30	.08

### H. Multi-Collinearity test

Multicollinearity demonstrates the existence of a linear relationship between the independent variables. Multicollinearity can cause considerable forecasting mistakes and make it difficult to determine the relative importance of different variables in the model. The Variance Inflation Factor (VIF) and Tolerance were utilized in this study to check for Multicollinearity. In the Tolerance Statistics, a value of 0.10 (1/VIF0.10) indicates a concern with Multicollinearity. The researcher employed the reciprocal of tolerance, often known as the Variance Inflation Factor, to check for Multicollinearity (VIF). Table 1.9 showed that all of the VIF values for each coefficient were less than 10 (VIF 10) indicating that this assumption was not violated and no further attention was required.

**Table 1.9:**

*Multicollinearity Test*

Model	Collinearity Statistics		
	B	Tolerance	VIF
(Constant)	.476		
Accounting for Costs	1.490	.331	3.024
Accounting for Revenue	-.333	.209	4.794
Accounting for Balance sheet	-.314	.234	4.270

### I. Heteroscedasticity

Heteroscedasticity typifies regression disturbances with non-constant variances across observations. Heteroscedasticity can arise in a variety of settings, including cross-section and time-series data, resulting in wasteful estimate results. In this study, the Breusch-Pagan test was utilized to determine heteroscedasticity. According to the null hypothesis, residuals were homoscedastic. As a result, heteroscedasticity is present if the F statistic strongly rejects the null hypothesis at a 90% or 95%

level of significance. In Table 2.0, it is clear the result was insignificant, ( $p > 0.05$ ) indicating the absence of heteroscedasticity hence the assumption was met.

**Table 2.0:***Studentized Breusch-Pagan Test**data: model*

BP	df	p-value
27.349	5	0.3835

**J. Inferential Statistics****Table 2.1:***Correlations*

		Accounting Costs	forAccounting Revenue	forAccounting for sheet	for BalanceFinancial Deepening
Accounting for Costs	Pearson Correlation Sig. (2-tailed) N	1 30			
Accounting Revenue	forPearson Correlation Sig. (2-tailed) N	.802** <.001 30	1 30		
Accounting for Balance sheet	Pearson Correlation Sig. (2-tailed) N	.774** <.001 30	.865** <.001 30	1 30	
Financial Deepening	Pearson Correlation Sig. (2-tailed) N	.621** <.001 30	.381* .038 30	.355 .054 30	1 30

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

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

The purpose of the correlation analysis was to investigate the relationship that existed between the dependent variable (Financial deepening) and the independent variables (Accounting for Costs, Revenues, and Balance Sheet Items), as well as any relationship(s) that existed among the independent variables. The study revealed that financial deepening and cost accounting were highly positively associated, as shown in Table 2.1, with  $r(30) = 0.621$ ,  $p < .001$ . This implied that cost accounting greatly promoted financial deepening. There was also an observed positive correlation between financial deepening and Accounting for revenue,  $r(30) = 0.381$ ,  $p < .05$ . Hence, according to the findings of this study, revenue accounting in a business enhanced financial deepening. The results further showed that Accounting for revenue and accounting for balance sheet items were

highly positively correlated,  $r(30) = 0.865$ ,  $p < .001$ . The same pattern was observed between Accounting for costs and accounting for revenue,  $r(30) = 0.802$ ,  $p < .001$  as well as between Accounting for costs and accounting for balance sheet items,  $r(30) = 0.774$ ,  $p < .001$ . This clearly showed that in each pair of independent variable correlations, either of the factors could be used to forecast financial deepening. This implied that accounting for costs, revenue, and balance sheet items, each promoted financial deepening among the shop owners, which in turn enhanced their quality of life.

### K. Regression Model

Regression analysis is a powerful statistical tool for investigating the relationship between two or more variables of interest. While there are numerous types of regression analysis, they always focus on how one or more independent variables influence a dependent variable. Regression analysis is a tried-and-true method of determining which variables influence a certain cause, in this case, financial deepening. It helps determine which elements are most important, which factors can be ignored, and how these factors interact with each other. To show the relationship between financial deepening (the dependent variable) and the independent variables in this study, the researcher employed regression analysis. Before regression analysis, the data were subjected to regression analysis assumptions, and no breaches were detected. As a result, the regression model was defined as follows:

$$FD = \beta_0 + \beta_1 ACC_1 + \beta_2 ACR_2 + \beta_3 ACBSI_3 + \varepsilon$$

Where: FD represented Financial Deepening,  $\beta_0$  was the model's constant, and  $\beta_1$ - $\beta_3$  were the regression coefficients. ACC represented Accounting for Costs, ACR Accounting for Revenue, ACBSI Accounting for Balance Sheet Items, and  $\alpha$  was the model error term. The model summary, also known as the coefficient of determination, was used to determine how well the statistical model could predict future events. The coefficient of determination,  $R^2$ , was the square of the sample correlation coefficient between the findings and expected values. As shown in Table 2.2, R was the square root of R-squared, and it represented the correlation between the observed and predicted values of the dependent variable. R-square refers to the percentage of variance in the dependent variable (Financial Deepening) that could be predicted using the independent factors. The model's coefficient of determination ( $R^2$ ) was determined to be 0.434, indicating that the independent variables explained 43.4% of the variation in Financial Deepening, leaving 56.6% to be predicted from components not studied. Each predictor explained a portion of the variance in the dependent variable owing to chance as more predictors were added to the model. Although some of the gains in

R-square was attributable to random fluctuation in that particular sample, predictors could be added to the model to improve the predictors' capacity to explain the dependent variable. The adjusted value of R-squared was .368, with a standard error of estimation of .805. The standard error of the estimate, also known as the root mean square error, was the standard deviation of the error term and was the square root of the mean square residual.

**Table 2.2:***Model Summary*

Model	R	R Square	Adjusted R Square	Std. The error of the Estimate
1	.658	.434	.368	.805

*Predictors: (Constant), Accounting for the Balance sheet, Accounting for Costs, Accounting for Revenue*

The ANOVA was used to ascertain how well the model used on data fitted the data, and as shown in Table 2.3, the regression F-statistic with 3 degrees of freedom was significant at 5% significance level. It was therefore concluded that the model fitted the data well.

*Table 2.3: ANOVA*

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	12.904	3	4.301	6.634	.002
	Residual	16.858	26	.648		
	Total	29.763	29			

*a. Dependent Variable: Financial Deepening*

*b. Predictors: (Constant), Accounting for the Balance sheet, Accounting for Costs, Accounting for Revenue*

*Table 2.4: Coefficients*

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.476	1.118		.425	.674
	Accounting for Costs	1.490	.411	.929	3.621	.001
	Accounting for Revenue	-.333	.552	-.195	-.604	.551
	Accounting for Balance sheet	-.314	.489	-.196	-.642	.527

*a. Dependent Variable: Financial Deepening*

To investigate the effect of Accounting for Revenue, Accounting for Costs, and Accounting for Balance Sheet Items, a multiple linear regression model was fitted with Financial Deepening as the dependent variable and these factors as predictors. The Analysis of Variance (ANOVA) results was presented in Table 2.3. Based on the results, the overall fitted model was significant  $F(3, 26) = 6.634, p < .05, R^2 = .434$ . This showed that cost accounting, revenue accounting, and balance sheet items accounting all had a significant impact on financial deepening. The effects of each independent variable on Financial Deepening were presented in Table 2.4. However, only Accounting for Costs had a significant effect on Financial Deepening,  $t(28) = 1.490, p < 0.05$ . This implies that, while the

model is essential in determining financial deepening, the most important factor in projecting financial deepening was accounting for Costs (that is, a unit increase in accounting for cost increased financial deepening by 1.490). The fitted model was as follows:

$$FD=0.476+1.490ACC-.333ACR-.314ACBSIMbi.$$

#### IV. DISCUSSION

The survey results were evenly distributed between males and females at 50% each, the majority (96.6%) of whom had significant experiences (more than one year) in running their shops. Eighty percent of them were below the age of 50, implying that younger people were the majority of shop owners in Kitui County. The study findings supported the empirical findings of Honoham (2008), who established a negative correlation between financial deepening and poverty rates in 162 countries. The study findings also promoted the work of Sharma (2015) who established a positive correlation between financial deepening and economic intensification. In Romeo and McKinney (2008), the accounted would promote financial deepening, which reduced poverty in Honoham (2008), and enhanced economic intensification in Shrma (2005), and these led to improved quality of livelihoods for Kitui SMPs. The findings were further in support of the positive relationship between ACC as a measurement communication system in Sadan and Auerbal (1974) and in the American Accounting Association (1973); and financial deepening which enhanced Kitui SMPs quality of livelihoods.

The study sought to investigate the influence of accounting activities (focused on accounting for costs, accounting for revenues, and accounting for balance sheet items) on financial deepening which promotes business growth leading to enhanced livelihoods. Kitui County was selected for this study because most business ventures were owned by sole proprietors, devoid of adequate education and requisite financial muscle to promote rigorous accounting practice which promotes financial deepening leading to business growth and heightened incomes. The survey affirmed that only 13% of the participants had attained the education level of a diploma, with the majority (50%) possessing a secondary school secondary certificate. In Kenya, where those who pass with grade C at the secondary school level join government-subsidized university education, these participants were list educated. Furthermore, the research findings indicated that only half (50%) possessed accounting software that would enable them to execute accurate accounting, further enabling them to determine their financial net worth leading to better planning for business growth and improved livelihoods. This was an unexpected finding in the era of global technological advancements in Kenya and Kitui County, where electronic platforms such as the M-Pesa have, and continue to transform livelihoods

owing to their financial deepening capabilities. Shop owners would enjoy greater financial deepening if more of them had access to, and adopted the use of accounting software that allowed them to make better use of their financial resources.

Applying (i) final financial statements information in decision making, (ii) accurate sales prices, and (iii) preparing a final financial statement that helped determine financial net worth had the greatest positive significant influence on financial deepening. Accordingly, accounting for costs, revenue, and balance sheet items promoted financial deepening for improved shop owners' livelihoods. Furthermore, the survey model explained 43.3% of the dependent variable (financial deepening), implying a positive significant prediction. In conclusion, the accounted is paramount in explaining owners' financial position, which spurs financial deepening and inclusion and consequently improved quality of life. Shopkeepers had acquired additional assets in the three years preceding this survey, enjoyed increased financial profits, and participated in community-based activities such as building a school owing to their accounting activities and consequent financial intensification. Accordingly, all the null hypotheses were rejected. This implied that increased utilization of technology-based accounting would greatly enhance financial deepening and improved livelihoods for the shopkeepers, as only 50% were compliant. In support of the PAT, accounting relates positively to peoples' livelihoods.

The Kitui County Government was very active in revenue collection among the shop owners. To enhance the County's revenue collection and improve financial deepening and inclusion among the shopkeepers and especially women for improved livelihoods, it was recommended that the County Government and other stakeholders engage in education and empowerment of the owners to have access to, and adopt electronic accounting to accurately and efficiently exemplify their sales' prices and final financial statements which would help them determine their financial net worth and make valuable decisions. Furthermore, further research was recommended to unravel the factors responsible for the 56.6% of the model prediction.

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