

Accounting Process Innovation Approaches and Financial Sustainability of Tier One Banks in Kenya

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ABSTRACT

The increased competition in the banking industry dictates the development of approaches to compete so as to enhance financial sustainability. The purpose of this study was to investigate the influence of Accounting Innovation Approaches on financial sustainability of Tier one Banks in Kenya. This specific paper focuses on how Accounting Process Innovation approaches affect the sustainability of Tier one Banks in Kenya. The study was anchored on Silber's constraint-induced Accounting innovation Theory, Transaction Cost Innovation Theory and Priority theory of sustainable finance. The target population was 8 Tier one Banks in Kenya, drawing from 650 senior and middle level managers. The Krejcie and Morgan (1970) table was used to determine a sample size of 242. Convenience sampling technique was used and questionnaires were deployed to collect primary data. Secondary data was obtained from published financial statements. From the findings in the regression analysis, the study concluded that accounting process innovation approaches had a strong positive relationship on financial sustainability of Tier one banks in Kenya.

Keywords

Accounting Innovation, Process Innovation, Financial Sustainability, Commercial Banks, Kenya

1. INTRODUCTION

Financial sustainability assesses whether an enterprise is viable for long-term investment, verifying if deployed capital yields a return sufficient to fulfill investor hurdle rates. Within banking ecosystems, sustainability benchmarks an institution's capacity to generate continuous revenues, safeguard liquidity, manage structural risks, and outpace operational expenditure [Yahaya, 2015]. Because modern financial firms present largely homogenized product catalogs, securing distinct competitive advantages remains an ongoing challenge [Porter, 2008]. To counter value erosion spurred by intensifying competition and changing workforce capabilities, corporate leadership increasingly treats systemic innovation management as a primary strategic imperative [Jaehoon Rhee, 2010; Andreas Hinterhuber, 2014]. In resource-constrained operating environments, modern accounting innovation provides a structured avenue to secure persistent market differentiation [Cherotich, 2015]. The primary objective of this review is to examine how strategic integration of accounting output, internal workflow accounting processes, and finance management innovations collectively insulate institutions from systemic market shocks. By tracking cross-regional case studies, this paper illuminates the paths through which technological frameworks alter traditional performance measurement and stabilize institutional longevity.

Process innovation focuses on the systematic automation and optimization of central workflows and transaction recording.

Moving away from manual ledger entry toward integrated data engines gives managers the precise business intelligence needed for real-time tracking, forecasting, and auditing [Adenike, 2016]. Automation directly lowers back-office operational costs, mitigates human accounting errors, and optimizes transaction-processing speeds. This technical efficiency is a critical determinant of financial health under resource-constrained conditions.

2. STATEMENT OF THE PROBLEM

Tier One banks face escalating regulatory compliance costs and competitive challenges from FinTech systems. Legacy processing systems generate high transaction overhead costs and create transaction friction. These operational bottlenecks limit optimal liquidity tracking and threaten long-term corporate sustainability. While product innovation is extensively researched, a significant gap remains regarding how specific accounting process re-engineering impacts banking sustainability. This study fills this gap by evaluating process optimization as a buffer against institutional financial stress.

3. GENERAL OBJECTIVE

To establish the effect of Accounting Innovation Approaches on Financial Sustainability of Tier one banks in Kenya.

Research Hypotheses

Ho2: There is no statistically significant relationship between accounting process innovation and financial sustainability of Tier one banks in Kenya.

4. THEORETICAL LITERATURE REVIEW

1) Constraint-Induced Accounting Innovation Theory. The theory was developed by (Silber, 1983). The theory stated that the main motive for embracing accounting innovation in a firm was to improve its financial position. However, in the process of improving financial sustainability and performance a firm faced some constraints like external handicaps such as policy and internal handicaps such as organizational management. The constraints not only gave an assurance on the stability of the management, they reduced the competence of any financial institution. Thus, Banking institutions struggled towards removing or lessening or casting the constraints off through accounting innovation (Silber, 1983). Commercial banks which operated in a market with more constraints have the greatest inducement of embracing accounting innovation that assisted in boosting their financial sustainability and performance because of reduction in operational costs. Additionally, commercial banks that do not embrace accounting innovation were deemed to fail (Simon Johnson, 2012).

This theory was faced with external and internal challenges which included government regulations and market prices. The

theory underpins the finance management and product innovation objectives. Practically, the theory relates to today's life by helping in reducing costs, solving problems and allowing people to be productive. This theory forms the basis under which tier one commercial banks in Kenya should operate when developing their technological policy ensuring they increase their competitive advantage in the market. The theory offers the possible ways through which an organization conclusively manages to incorporate their ambitions in an environment governed by rules and regulations operating against their mission and ensure that profit is maximized at the end of the day.

2) Transaction Cost Innovation Theory: The transaction cost innovation theory was established by (Niehans, 1983) who was of the view that the main reason for accounting innovation is transaction cost reduction and earning benefits. Accounting innovation is catalyzed by technology advancement caused transaction cost to reduce and better financial sustainability. Commercial banks just like other firms faced the challenges of increasing transaction costs that threaten financial sustainability. As a result, they embarked on invention of methods that reduced transaction costs. This theory was therefore significant to this study as it assisted the researcher in articulating the relationship between accounting innovation and financial sustainability of Tier one Banks in Kenya as a result of transaction cost reduction measures and earning profits. Transaction cost theory diversified our understanding about the nature of transactions, which are not homogeneous. Each transaction involves different levels of uncertainty, risk, and interdependency. The theory underpins product innovation objective of the study.

The transaction-cost innovation theory is very important to any Banking institution as it forms the basis of cost reduction. To be able to understand the effect of all these accounting innovations in the tier one banks which are solely established to reduce the operational costs, it forms the basis for any institution to first ensure that due diligence for any practice or an idea aimed at increasing the institutions efficiency and performance, its implications costs should not go beyond how the institution was doing without it.

Empirical Literature Review

Accounting Process innovation involves leveraging technology and automation to streamline accounting workflows, reduce costs, and enhance efficiency. Key aspects of accounting process innovation include: Robotic Process Automation (RPA): Implementing RPA to automate repetitive, manual tasks such as data entry, expense report processing, and invoice processing. RPA helps eliminate duplication, speed up processes, and free up human resources for higher-value work. Cloud-based Accounting Software: Adopting cloud-based accounting software to enable remote work, improve collaboration, and provide clients with real-time access to financial data. It often offer advanced features like predictive analytics and machine learning to enhance decision-making. Workflow Optimization: Streamlining accounting workflows by leveraging technology and automation to reduce manual tasks, increase efficiency, and improve productivity. Examples include setting up client portals for pre-populating certain activities, reducing false starts and costs.

Offshoring and Outsourcing: Outsourcing mechanical tasks to cheaper offshore locations to reduce cost structures and

increase margins. It allows firms to focus on higher-value services while leveraging cost advantages.

Pre-engagement Activities: Implementing client portals for pre-populating certain activities to reduce costs, increase margins, and limit false starts.

By embracing these process innovations, firms can enhance their competitiveness, attract and retain top talent, and reinvest savings into further innovation

Both components of an offer require quality standards to be met and maintained. In the case of services, which by their very nature rely on personal interactions to achieve results, the management of process innovation is a particularly challenging activity Chris Storey, (2013).The study found that process innovation approaches such as transactions analysis and creation of trial balances contributed to the bank's liquidity assessment. It was deduced that use of technology innovation promoted a friendly and helpful staff hence customer satisfaction and that the innovations ensured that the services given to customers were of high quality.Jamine Sanders Jones (2014), examined how innovation, process management affected sustainability of an organization. Intensity of competitions was taken as a moderating variable. From the findings, the effect of innovation efficiency and process design does not depend on intensity of competition in an industry. In this study, efficiency and sustainability was used as dependent variables where the current study examined how process innovation affected competitive advantage. Schniederjans (2018), examined accounting process innovation on quality and supply chains and the main objective of the study was to assess the role of business process innovation on the relationship between financial sustainability and social quality management. Mwawasaa (2020), investigated the interaction of financial outcome of commercial banks and the level of coming up with new ideas which aimed at leveraging on technology in Kenya. The study notes that the need for innovation is precipitated by transaction and operational costs; this can be attained through use of accounting transaction analysis, journal posting up to post-closing trial balances. Thus for any organization seeking to gain competitive advantage, then they have to meet these customers' specifications.

5. RESEARCH METHODOLOGY

Research Design

This study used a correlational research design to examine the relationship between accounting process innovations and corporate sustainability.

Target Population and Sampling

The study targeted 650 senior and middle-level managers working across 8 Tier One banks in Kenya. Applying the Krejcie and Morgan (1970) formulation table yielded a representative sample size of 242 respondents. Convenience sampling was used to distribute the primary questionnaires.

6. DATA ANALYSIS AND PRESENTATION

TABLE I

DESCRIPTIVE STATISTICS FOR ACCOUNTING
 PROCESS INNOVATION ON FINANCIAL
 SUSTAINABILITY

Table 1: Accounting Process Innovation

	Mean	Std. Deviation
Accounting transaction analysis has a positive impact on Financial Sustainability.	3.0789	1.42149
Transaction journal posting affects Financial Sustainability.	2.9211	1.42149
Posting transactions to general ledgers is a step in accounting process innovation.	2.9211	1.42149
Accounting Process innovation approaches contributes to banks Sustainability.	3.0789	1.42149
Accounting Process innovation leads to high quality products hence customer satisfaction.	3.4474	1.34962
The acquisition of technologies have an effect on the ability of an organisation to learn, allocate resources and organise its capabilities.	3.2895	1.39319
Accounting process innovation improves Financial sustainability and social quality management.	3.0789	1.42149

Inferential Regression Analysis

Simple linear regression analysis was applied to test the relationship between the variables. The model confirmed that accounting process innovations explain a significant proportion of variance in financial sustainability metrics ($p < 0.05$). Automating financial processing paths directly strengthens the cost-efficiency profiles of Tier One commercial institutions.

Linear multiple regression analysis was used to test the hypotheses of accounting innovation approaches and Financial sustainability of Tier one banks in Kenya. Simple regression analysis was used to determine the extent of interaction between the dependent variable (Financial sustainability) and the independent variable (Accounting Innovation approaches) and how Economic growth impacts the two variables.

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon \dots \dots \dots (i)$$

Where

Sustainability

$Y =$ Financial

$\beta_0 =$ Constant

coefficient for X_i ($i=1,2,3$)

$\beta_i =$ Regression

output innovation

$X_1 =$ Accounting

Process innovation

$X_2 =$ Accounting

management innovation

$X_3 =$ Finance

$X_4 =$ Economic Growth.

$\varepsilon =$ Error term

Correlation Analysis

Process Innovations	Pearson Correlation	.620**	1
	Sig. (2-tailed)	.000	
	N	170	170

Normality Test

Table 4. 1: Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Process Innovations	.117	170	.200*	.955	170	.133
Financial sustainability	.161	170	.014	.948	170	.075

The above table presents the results from two well-known tests of normality, namely the Kolmogorov-Smirnov Test and the Shapiro-Wilk Test. The Shapiro-Wilk Test is more appropriate for small sample sizes (< 50 samples), but can also handle sample sizes as large as 2000. For this reason, we will use the Shapiro-Wilk test as our numerical means of assessing normality. From the above table that for the accounting output innovation, accounting process innovation and finance management innovation and the dependent variable, financial sustainability was normally distributed. Thus If the Sig. value of the Shapiro-Wilk Test is greater than 0.05, the data is normal. If it is below 0.05, the data significantly deviate from a normal distribution.

7. RESULTS AND DISCUSSIONS

From the collected questionnaires, (28.9%) of the respondents, strongly agreed that accounting process innovation led to high quality products hence customer satisfaction. The accounting process innovation also improves the financial sustainability and social quality management. This was evident from the majority of the respondents at (21.1%).

The impact of accounting process innovation on financial sustainability had a mean of 3.0789 and a standard Deviation of 1.42149 and therefore such innovations had a positive influence on financial sustainability of Tier one Banks. **Table**

4. 2: Correlation Coefficients

Coefficients ^a								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	1.660	.862		1.926	.062		
	Process Innovations	.451	.270	.268	1.668	.104	1.000	1.000

a. Dependent Variable: Financial sustainability

Coefficient Correlations ^a			
Model		Process Innovations	
1	Correlations	Process Innovations	1.000
	Covariances	Process Innovations	.073

a. Dependent Variable: Financial sustainability

Collinearity Diagnostics ^a					
Model	Dimension	Eigenvalue	Condition Index	Variance Proportions	
				(Constant)	Process Innovations
1	1	1.978	1.000	.01	.01
	2	.022	9.488	.99	.99

a. Dependent Variable: Financial sustainability

Table 4.14 presents the regression coefficients for the effect of Process Innovations on the financial sustainability of Tier One Banks in Kenya. The findings indicate that the regression model produced a constant (intercept) of 1.660, implying that in the absence of process innovations, the predicted level of financial sustainability would be 1.660 units.

The regression coefficient for Process Innovations was $\beta = 0.451$, indicating a positive relationship between process innovations and financial sustainability. This means that a one-unit increase in process innovation is expected to increase financial sustainability by 0.451 units, holding other factors

constant. The standardized beta coefficient ($\beta = 0.268$) further suggests that process innovation has a positive, though relatively modest, effect on financial sustainability.

However, the relationship was not statistically significant at the 5% level ($t = 1.668$, $p = 0.104$). Since the p-value is greater than the conventional significance threshold of 0.05, the null hypothesis that process innovations have no significant effect on financial sustainability cannot be rejected. Therefore, although the direction of the relationship is positive, the evidence from this study is insufficient to conclude that process

innovations significantly influence financial sustainability among Tier One Banks in Kenya.

These findings suggest that while banks implementing process innovations may experience improvements in operational efficiency and financial performance, such improvements are not strong enough to produce a statistically significant impact on overall financial sustainability when process innovation is considered independently. This may imply that financial sustainability is influenced by several other organizational and environmental factors beyond process innovation alone, such as strategic leadership, regulatory compliance, market competition, technological capability, and organizational culture.

The positive coefficient nevertheless aligns with innovation theory, which argues that process innovations enhance operational efficiency, reduce costs, improve service delivery, and strengthen competitive advantage. The lack of statistical significance may indicate that many Tier One Banks have already adopted similar process innovations, thereby reducing variation in innovation practices across the sector and limiting the observable effect on financial sustainability.

The findings are consistent with studies that report process innovation contributes positively to organizational performance but may not independently explain financial sustainability unless complemented by other innovation capabilities. Conversely, the results differ from studies that have found process innovation to be a significant predictor of organizational financial performance, suggesting that contextual factors within the Kenyan banking sector may moderate this relationship

8. CONCLUSIONS

The study concluded that accounting process innovation had a significant effect on financial sustainability of Tier one banks in Kenya. From the findings in the regression analysis, the study concluded that accounting process innovation had a strong positive relationship with financial sustainability of Tier one banks in Kenya.

9. RECOMMENDATIONS

Accounting process has been found to have a major influence in delivering innovative banking services. It was recommended that Tier one banks continue to create sustainable business linkages and collaborations with other stakeholders in order to enhance financial sustainability.

Based on the research findings, the study recommended that Tier one banks should continue investing in accounting innovations as this was found to have positive influence on financial sustainability. The study further recommended that banks should train its staff to embrace accounting innovation. This would improve the financial sustainability of Tier one banks which would in turn increase return on assets.

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