

Business Process Reengineering Effects on Financial Performance of Commercial Banks in Meru County, Kenya

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Abstract

Financial sector is one of the fundamental dimensions of economic expansion and evolution. Financial institutions remain indispensable because of the role they play. In Africa, however, commercial banks have been reducing in number owing to tightening regulations, mergers, acquisitions, liquidations and collapses. On the same vein, Kenyan banking sector has recently encountered diverse experiences from new threats such as increasing inflationary pressure, worries about the sustainability of the public debt, a shaky economic recovery, and volatility in financial markets and devastating impact of COVID-19. Collectively, these make it difficult for the local banks to achieve optimum financial returns. The study aimed to determine how business process reengineering (BPR) affects performance of commercial banks in Meru County, Kenya. The objective was to determine effects of BPR on performance of commercial banks in Meru County. The study moored on Technology Adoption model. It employed descriptive research survey design with a target population of sixty (60) branch management staff comprising of three participants from each of the 20 commercial banks in Meru County. Additionally, the study adopted census approach and structured questionnaires to collect data. Descriptive statistics; mean and standard deviation coupled with linear regression were used to analyze data. Data was presented in tables. It was concluded that BPR enhanced financial performance of commercial banks. Further, the study recommended that commercial banks strengthen BPR to improve business operations. The study established that BPR, if effectively implemented, was a game changer to commercial banks, since it may reduce process time, simplify and streamline operations, and revamp service quality, thus increased efficiency that results into better services and products. This maximizes return on investment. Studies may be conducted to ascertain benefits and challenges of adopting BPR in commercial banks in Kenya.

Keywords: Financial, Processing, Business, Reengineering, Performance

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1.0 Introduction

There have been substantial studies on Business Processing Reengineering (BPR) in the last three decades. In the same vein, the speed of transformation in banking has also been fast due to market changes motivated by application of. The concept of BPR was propounded by Michael Hammer, a former professor of computer science at the Massachusetts Institute of Technology (MIT) in 1990. In an article titled "Reengineering Work: Don't Automate, Obliterate" in the Harvard Business Review, Michael Hammer pointed out the need to wipe out any work that does not build on value, rather than automating it (Hammer, 1990). Business processing reengineering (BPR) is considered crucial to this end (Hammer & Champy, 1993). BPR's goal is to speed up transaction processing without sacrificing security safeguards, product quality or real-time customer assistance.

Essentially, BPR focuses on sustaining lengthy tenure profitability and reinforcing competitive advantage of banks in adapting changing market realities (Sudha & Kavita, 2019). In India, BPR has enabled business establishments to reconsider their present procedures in bid to improve them through reductions cost and enhancing competitiveness (Bhasin &Dhami, 2018). In Malaysia, Hameed et al.(2021) pointed out that BPR aspects, such as commitment of top management, information technology capacity, people management and institution readiness to change had significantly impacted on the performance of an organization. In Nigeria, Chiekezie et al (2023) asserts that business processes ought to be reorganized in order to deliver valuable services to both the customers and the other stakeholders (. Within the Kenyan banking sector, BPR is anticipated to bring down operational expenses by replacing old procedures, and incorporating new innovations that demand less human resource, lessened stationary, as well as efficient processes (Noah, 2019).

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Statement of the problem

Banking industry has kept reviewing and improving their business models in an effort to benefit from structures that offer financial gain (Wafula, 2021). The goal of business process reengineering is to speed transaction processing without up sacrificing security safeguards, product quality or real-time customer assistance. Essentially, BPR focuses on sustaining profitability and reinforcing competitive advantage of banks (Sudha & Kavita, 2019). However, the Kenyan banking sector has recently encountered diverse challenges emanating from increased inflationary



pressure, worries about the sustainability of public debt, a shaky economic recovery, volatility in financial markets and devastating impact of COVID-19 pandemic (Kenya Bankers Association, 2022). Collectively, these make it difficult for the local banks to achieve optimum financial returns.

As a result of this, Dubai bank, Imperial bank and Chase bank were placed under receivership. Commercial Banks such as Ecobank Kenya Limited and Bank of Africa closed down some of their branches in Kenya. In addition, staff population in Kenyan banking sector gradually declined from 36,212 in 2015 to 32,440 in 2021. Consequently, over the past few years, commercial banks' financial performance has varied. The ROA for Kenva's commercial banks ranged from 3.2% in 2016 to 2.6% in 2017 to 2.6% in the year 2018, 2.6 % in 2019 to 1.7% in the year 2020, and 3.3% in 2021, indicating an inconsistent profitability pattern. In order to counteract such challenges, banks have positioned themselves for recovery through of business models, acceleration, review of business processes, cost containment, capital injections and consolidation (Bank Supervision Annual Reports, 2013-2021).

Objective of the study

To ascertain whether business process reengineering affects financial performance of commercial banks in Meru county, Kenya.

Research Question

How does business process reengineering affect financial performance of commercial banks in Meru County, Kenya?

Technology Adoption Model (TAM)

The study was guided by the Technology Adoption Model (TAM) by Davis (1989). TAM explains how various consumers take up technology at any given time. The model argues that consumers take into account a number of factors prior to accepting the technology presented. There are two components that are considered by user before embracing any given technology; perceived usefulness (PU), which refers to the level in which the end user trusts that upon employing the specific system it will eventually boost his achievements; and perceived ease of use (PEOU), which refers to a state in which the user assumes that the system will be effortless (Silva, 2015). With reference to banking institutions, TAM assesses technology cost and acceptability level prior to adoption of technology. Adoption of technology will subsequently boost data analytics, credit assessments and transformation. results to desired financial outcomes (Kemboi, 2018).

Literature Review

Nadeem and Ahmad (2016) examined the impact of BPR in Pakistan banks by discussing the execution of BPR in fiscal institutions. The findings of their study indicated that BPR had an impact on the fiscal performance of banking sector. Oladimeji et al. (2017) examined the effect of BPR on organizational financial accomplishments in Nigeria Deposit money



banks. It adopted ex-post facto research design and employed purposive sampling technique. Regression statistics and t-test were both used to analyze collected data. Their study found out that implementation of BPR was very crucial in attaining anticipated performance in the realm of profitability and efficiency in the banking Wambua (2022)examined industry. business process reengineering methods on fiscal performance of Equity bank in Kenya. The study was supported by Resource-Based View. Diffusion Innovation theory and Technological Acceptance Model. Descriptive research designed was utilized. Data was collected questionnaires, structured inferential statistics were used to ascertain the relationship between the variables. Results indicated that BPR techniques enhanced competitive edge, growth in customer base, as well as increased market share.

2.0 Materials and Methods

This research adopted descriptive survey design. The target population was sixty (60) staff management from commercial banks in Meru County. Three participants from each bank considered. Questionnaires were used to collect data. The study adopted descriptive survey research design was adopted, while census method was used to identify respondents. Questionnaires were pretested to ensure validity and reliability. The statistical software for the social sciences (SPSS) was used to evaluate the data that had been gathered. The data were analyzed using statistical techniques such as descriptive statistics (mean and standard deviation) and regression analysis, and presented in tables. Informed consent was sought from the sampled respondents, and confidentiality and anonymity was observed. Further, inviolability of data was maintained.

3.0 Results and Discussion

The main goal of BPR is to enhance the pace of transaction processing without comprising security safeguards, product quality as well as real time customer service (Hammer & Champy, 1993). For this to succeed, it calls for top management commitment, technology capabilities, and organization's readiness to significantly embrace changes (Hameed et al., 2021). Therefore, the focus of the study was to ascertain how business process reengineering affected the financial success of commercial financial institutions in Meru County.

Participants were asked to reply to statements about business process reengineering by strongly disapproving (1), disagreeing (2), disagreeing (3), agreeing (4), or agreeing strongly (5) as showed in Table 1 below.



Table 1Analysis of Business Process Reengineering

Statement	SD	Disagree	Neutral	Agree	SA	Mean	Std
Information technology has							
simplified information flow							
in the bank.	0.0	0.0	0.0	72.2	27.8	4.28	0.45
Adoption of technology cuts	0.0	0.0	0.0	, 2.2	27.0	1.20	0.15
cost of operation and						4.26	0.60
increases returns in the bank.	0.0	0.0	7.4	57.4	35.2	0	0.00
The bank subjects its staff to	0.0	0.0	,	07	00.2		
regular information							
technology trainings.	0.0	1.9	13.0	50.0	35.2	4.19	0.73
The bank engages in							
product/service innovations							
to attract new customers and							
retain the existing customers.	0.0	1.9	3.7	59.3	35.2	4.28	0.63
Queue management.	0.0	0.0	14.8	61.1	24.1	4.09	0.62
Loan management.	0.0	1.9	16.7	55.6	25.9	4.06	0.71
Cash tellering services.	0.0	3.7	11.1	64.8	20.4	4.02	0.69
Account processes.	0.0	1.9	5.6	74.1	18.5	4.09	0.56
Cheque clearing.	1.9	1.9	7.4	55.6	33.3	4.17	0.80
The CRM tools such as							
Analytical CRM, OMNI,							
Checkpoint, Credit Quest,							
MICR system, Sybrin system							
are being utilized by the							
bank.	0.0	1.9	9.3	55.6	33.3	4.20	0.68
With adoption of CRM,							
customers have since							
received personalized							
attention from the bank.	0.0	3.7	22.2	51.9	22.2	3.93	0.77
Bank processes and							
relationships with customers							
have been improved with							
CRM.	0.0	3.7	22.2	48.1	25.9	3.96	0.80
The bank incurred huge cost							
in regard to initial purchase							
and set up cost of CRM	0.6		.				0.05
system.	0.0	7.4	31.5	46.3	14.8	3.69	0.82
CRM system does not							
address the bank customers'	0.0	21.5	22.2	21.5	- -	2.02	1 11
needs.	9.3	31.5	22.2	31.5	5.6	2.93	1.11
						4.03	



According to Table 1, the majority of respondents concurred that continuous development of competitive information systems and networks enhance operational excellence as shown by a mean of 4.37. Similarly, most of the respondents were in consensus that information technology has simplified information flow in the banking sector as shown by a mean of 4.28. The study further established that bank engages in product/service innovations to bring in fresh business and to hold onto existing ones, as indicated by a mean of 4.28.

The results also showed that the majority (mean of 4.26) of participants felt that adopting technology lowers operating costs and boosts bank profits. The majority of respondents, as indicated by a mean of 2.93, were indifferent about the reality that CRM system does not meet the needs of the bank's clients. Overall, the study discovered

that reengineering business processes had an impact on commercial banks' financial performance, as shown by a total mean of 4.03. These findings supported Mwihaki (2016), who found that business process reengineering affects an organization's performance. The study's findings also concurred with the predictions made by Ahmad Nadeem and (2016).who hypothesized that BPR affected the financial performance of firms in the banking sector.

The study investigated how business process reengineering affects financial performance of commercial banks in Meru county. The participants were asked to give opinions regarding statements about financial performance by strongly disapproving (1), disagreeing (2), neutral (3), agreeing (4), or agreeing strongly (5) as highlighted in Table 2

Table 2

Analysis of Financial Performance

				Agre			
Statement	SD	Disagree	Neutral	e	SA	Mean	Std
Restructuring has led to							
improvement on							
shareholders' equity.	1.9	13.0	25.9	51.9	7.4	3.50	0.88
Restructuring has led to							
increase in banks of assets.	1.9	11.1	27.8	51.9	7.4	3.52	0.86
Restructuring has led to							
increased profitability.	0.0	13.0	22.2	51.9	13.0	3.65	0.87
The cost of bank operations							
negatively affects bank's							
profitability.	5.6	18.5	16.7	50.0	9.3	3.39	1.07
Generally, restructuring has							
improved financial							
performance of commercial							
bank	0.0	9.3	33.3	50.0	7.4	3.56	0.77
						3.524	



Table 2 shows that majority of responders concurred that BPR has led to improvement on shareholders' equity as depicted by the mean of 3.50. Further, most of the informants agree that BPR has led to increase in banks' assets as depicted by a mean of 3.52. On the other hand, it was established that many of the respondents accepted that BPR had resulted into increased profitability as depicted by a mean of 3.65. Average mean of 3.524

shows that a good number of respondents accepted that BPR affected financial performance.

Diagnostic Test

Normality and Multicollinearity tests were performed.

The normality test of the study was conducted using skewness and kurtosis as illustrated in Table 3.

Table 3

Normality Test

Variable	Skewness	Kurtosis	Sig.
Business Process Reengineering	874	1.047	.088
Financial performance	310	0710	.054

The probability value should be >0.05 for data to be normally distributed (Ghasemi & Zahediasl, 2012). According to the normality test results above, business process reengineering and financial performance attracted p-value>0.05. The data was normally distributed, and thus fit for use in linear regression.

Multicollinearity

Table 4 illustrates multicollinearity test results of the study conducted using variance inflation factors. For existence of severe multicollinearity, the VIF should be greater than 5, otherwise the multicollinearity is acceptable (Senaviratna & Cooray, 2019).

Table 4

Multicollinearity

Model Collinearity		Statistics	
	Tolerance	VIF	
(Constant)			
Business Process Reengineering	.641	1.560	

The VIF for business process reengineering and financial performance were less than 5. Thus, data did not suffer from severe multicollinearity; hence, the study was fit for regression model. The study's goal was to discover how business process reengineering affected the financial success

of commercial banks. According to the descriptive findings, the vast majority of respondents concurred that business processes reengineering is essential for a firm to achieve financial performance.



The correlation and regression results showed a strong and favorable impact of business process reengineering on the financial performance of commercial banks. Business process reengineering induces a new mindset in business that can improve performance drastically. Critical examination of business processes on the existing ways with an intention of changing how business should be run efficiently for desirable results to be achieved is an ingredient to financial performance. Business process reengineering brings out weakness and highlights strengths that business can explore to achieve the desired results. The findings of the study concurred with the study by Nadeem and Ahmad (2016) who pointed out that BPR has an impact on the financial performance of banking sector enterprises. It also agreed

with a study by Ogada (2017) who found a significant correlation between Kenyan state-owned enterprises' performance and commercial process re-engineering techniques. Likewise, it agreed with finding of the study by Mwihaki (2016) who concluded that there is statistically important association between BPR and performance. According to, Oladimeji et al. (2017), implementation of business process reengineering is very crucial in attaining desired performance goals in the realm of profitability and operational efficiency in banking industry.

The regression model was employed to ascertain the level of effectiveness BPR has on financial performance of commercial banks in Meru County. The result of model summary is depicted in Table 5.

Table 5

Business Process Reengineering and Financial Performance Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.836a	0.699	0.674	0.39666

a Predictors: (Constant), Business Process Reengineering,

Financial performance was judged to be satisfactorily explained by BPR. A modified coefficient of determination, also referred to as the modified R square, of 67.4% supported this. This indicates that the financial health of commercial banks in Meru County, the dependent variable, is explained by BPR in 67.4% of the changes.

Furthermore, the Pearson correlation coefficient (R = 0.836) showed a significant association between BPR and financial performance.

Assessment of variance (ANOVA) was used to confirm the model's validity, and the results are displayed in Table 6.



Table 6

Business Process Reengineering and Financial Performance: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	17.869	4	4.467	28.393	.000b
	Residual	7.709	49	0.157		
	Total	25.579	53			

A p value of 0.000, which was below the crucial p value of 0.05, supports the finding that the whole model was statistically significant. An F statistic of 28.393 indicated that BPR is an excellent predictor of financial performance.

The regression coefficients exhibit the impact predictor has on the dependent variable, while other predictors are held constant. Table 7 displays regression weight of BPR in the model

Table 7

Business Process Reengineering and Financial Performance: Coefficient Regression

Model		Unstandardized Coefficients		Standardized Coefficients	Т	Sig.		
			Std.					
		В	Error	Beta				
1	(Constant)	-1.04	0.444		-2.34	0.023		
	Business Process							
	Reengineering	0.325	0.113	0.281	2.869	0.006		
a Dependent Variable: Financial performance								

The hypothesized model [Y = β 0 + β 1X1+ ϵ] becomes;

Financial Performance= -1.04+ 0.325Business Process Reengineering

The independent variable (Business Process Reengineering) has identical (Likert) scales, and the constant value in the model is significant, thus the use of unstandardized B-coefficients. With regard to this, BPR moderately explains financial performance, given business process reengineering (β =0.325). This implied a unit improvement of financial performance

on 0.325 units of business process reengineering.

4.0 Conclusion

Business process reengineering improves the financial well-being of commercial banks, according to the study's findings. It can be concluded that BRP is a paradigm shift in how business is conducted. BPR's goal is to speed up transaction processing without sacrificing security safeguards, product quality, or real-time customer assistance.



5.0 Recommendation

Business process reengineering induces a new mindset that enhances performance in business. The study recommends that commercial banks reinforces BPR to improve business operations. Reengineering of new ideas into business enhances business performance, especially in banking where competitiveness keeps improving from time to time. The study

expounds that BPR can be a game changer in the operations of commercial banks. It may reduce process time, simplify, streamline and revamp operations, thus increasing efficiency and maximizing returns on investment. Further Studies can be conducted to ascertain the benefits of adopting business process reengineering in commercial banks in other counties in Kenya.

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