EFFECTS OF ADOPTING FINANCIAL TECHNOLOGY (FINTECH) ON FINANCIAL PERFORMANCE OF TURKANA COUNTY GOVERNMENT, KENYA.

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A RESEARCH PROJECT SUBMITTED TO THE SCHOOL OF BUSINESS AND MANAGEMENT IN PARTIAL FULFILLMENT OF THE REQUIREMENT OF THE AWARD OF THE DEGREE OF BACHELORS OF COMMERCE (FINANCE) OF GRETSA UNIVERSITY.

JUNE, 2024

DECLARATION

DECLARATION

I hereby declare that this research project is my original work and has not been presented for an award of a degree or for any similar purpose in any other institution.

Signature____________________ Date 22/12/2024

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Supervisors' Approval

This research proposal has been submitted for examination with my approval as the University Supervisor.

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DEDICATION

This project is dedicated to the almighty God, family and friends who stood by me throughout.

ACKNOWLEDGEMENT

My first acknowledgment goes to the almighty God for enabling and guiding me through my academic life. I express my gratitude and honor to him.

I sincerely appreciate the invaluable mentoring and guidance from my supervisor Madam, Serah Wagiyo without whom this project would not have become a reality. I also thank all my other lecturers who contributed by building the foundation upon which I gained the knowledge and confidence to write this project.

I am greatly indebted to my parents for being there for me and supporting me with prayers and words of encouragement. I pray that Almighty God will richly reward them.

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LIST OF ABBREVIATION AND ACRONYMS

e.g.:	example
FINTECH	Financial Technology
FP	Financial Performance
SMEs	Small and Medium Enterprises
TAM	Technology Acceptance Model
ROA	Return on Assets
ROE	Return on Equity

ABSTRACT

This study investigates the effects of financial technology (fintech) on the financial performance of Turkana County, Kenya. With the rapid advancement of fintech globally, its influence on the financial landscape of regions like Turkana County becomes increasingly relevant. Utilizing a mixed-methods approach, including quantitative analysis of financial data and qualitative examination of fintech adoption and its implications, this research aims to provide insights into how fintech initiatives have affected various aspects of financial performance in Turkana County. By examining factors such as access to financial services, efficiency gains, cost reductions, and overall economic development, this study seeks to contribute to the understanding of the role of fintech in driving financial inclusion and enhancing the financial well-being of communities in Turkana County. The findings of this research are expected to offer valuable implications for policymakers, financial institutions, and other stakeholders involved in fostering sustainable development through the integration of fintech solutions in emerging economies like Turkana County.

CHAPTER ONE: INTRODUCTION

1.1 Background of the study

The term financial technology, often abbreviated as fintech, refers to the innovative use of technology to provide financial services and improve efficiency in the financial industry. According to Patrick Schueffel (Schueffel, 2016), fintech is a new financial industry that applies technology to improve financial activity. Moreover, according to Leong and Sung (Sung, International Journal of Innovation, Management and Technology, 2018), fintech can also be considered as "any innovative ideas that improve financial service processes by proposing technology solutions according to different business situations according to different business situations" by Leong and Sung [2]. Peer-to-peer lending, robo-advisors, blockchain technology, mobile banking, funding, payment (including electronic wallets), e-aggregators, e-trading, e-insurance, and cryptocurrencies like Bitcoin are just a few of the many applications that fall under the broad category of fintech". According to Ryu, Hyun-Sun, (Sung, Financial Technology, 2018) financial technology services have recently become the focus of considerable attention. Due to the significant risks associated with Fintech adoption, some experts and practitioners are uncertain about its ability to alter the financial services industry's future drastically. Fintech is significant because it supports data-driven decision-making, cyber security, convenience, efficiency, cost savings, transparency, and accountability. It also aids in tax collection. Investment management, insurance, crowdfunding, and mobile payments are among the industries that have embraced fintech.

FINANCIAL PERFORMANCE

Financial Performance (FP) is defined by Almajali and Al-Soub (Amal Yassin Almajali, 2012) as a firm's ability to achieve the range of set financial goals such as profitability. FP is the degree of the extent to which a firm's financial benchmarks have been achieved or surpassed (Lin, 2008) It shows the extent to which financial objectives are being accomplished. As outlined by Baba and Nasieku (2016) (Nasieku, 2016) it may also refer to the effectiveness and efficiency with which companies especially SMEs in Turkana County, leverage digital tools to enhance their business operations and financial outcomes. Efficiency ratios and profitability ratios could be used to assess Turkana County's performance following the integration of fintech; on the other hand, automation, data-driven insights, and customer experience can all be used by fintech to improve performance.

TURKANA COUNTY

The introduction of financial technology has brought about considerable changes to the financial landscape of Turkana County, which is located in the Northwestern section of Kenya. Fintech is the term for the application of technology to financial services firms' offerings in an effort to enhance customer use and delivery. It is mostly operated by these companies and opens up new markets for them.

In the finance sector, startups upend established players by increasing financial inclusion and reducing operating costs through technology. The performance of Turkana County has been significantly impacted by these technological improvements, particularly in small and medium-sized businesses (SMEs).

1.2 Statement of the problem

There is a dearth of thorough study on the effects of financial technology (Fintech) on the financial performance of firms, especially in emerging economies like Turkana, despite the field's rapid progress and adoption worldwide. Fintech has the potential to transform banking and financial services by increasing accessibility, cutting costs, and streamlining transactions, but it is still unknown how this will actually affect firms' financial health. By analyzing the relationship between Fintech adoption and financial performance metrics in Turkana, this study aims to close this gap. Fintech's effects on operational effectiveness, convenience, accountability, cost savings, revenue growth, and overall financial health wasinvestigated in this study. The results could help businesses and policymakers make well-informed decisions on the use of Fintech.

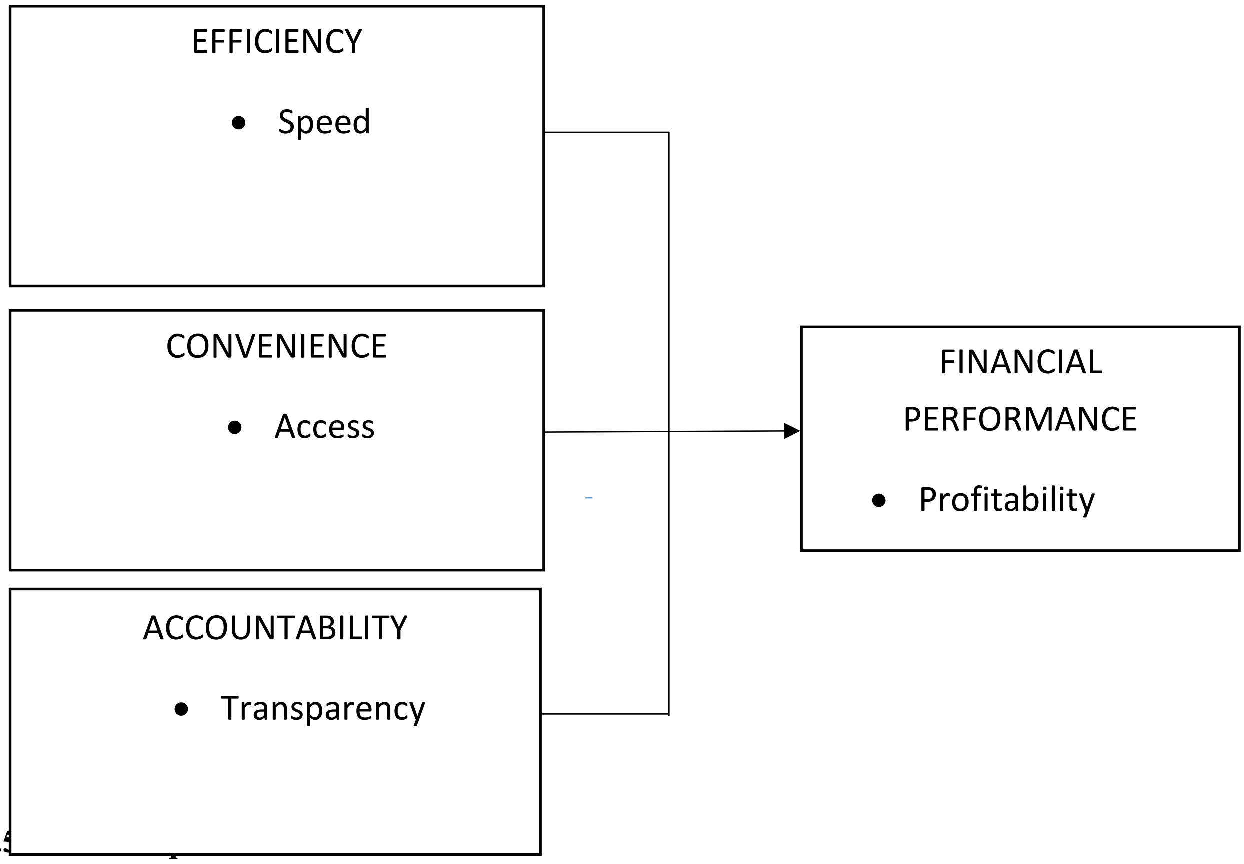
1.3 Purpose of the study

The study seeks to investigate effects of financial technology on financial performance of Turkana County.

1.4 Conceptual framework

Figure 1: Conceptual framework

INDEPENDENT VARIABLES **DEPENDENT VARIABLES**



1.5

1. Is there a relationship between the Efficiency of financial technology and the financial performance of Turkana County?
2. What is the relationship between the convenience of Financial Technology and the Financial Performance of Turkana County?
3. What is the relationship between accountability of Financial Technology and the Financial Performance of Turkana County

1.6 Objectives

1.6.1 General Objectives

1. To examine the effects of financial technology on the financial performance of Turkana County

1.6.2 Specific Objectives

1. To assess the relationship between the efficiency of Financial Technology and Financial Performance of Turkana County.
2. To explore the relationship between the conveniences of Financial Technology and Financial Performance of Turkana County.
3. To investigate the relationship between the accountability of Financial Technology and the Financial Performance of Turkana County.

1.7 Hypothesis of the study

HO_1: There is no significant relationship between the adoption of financial technology and the efficiency of financial operations in Turkana County.

$HO_{2:}$ There is no significant difference in the level of convenience experienced by stakeholders in Turkana County due to the adoption of financial technology.

$HO_{3:}$ There has been no significant improvement in the level of financial accountability in Turkana County following the implementation of financial technology.

1.8 Significance of the study

Turkana County which is an area with unique economic and social challenges can benefit from the adoption of Fintech through;

1. Improved Financial inclusion

By making financial services more accessible to the unbanked or under banked population.

2. Enhanced efficiency

Streamlining financial operations can reduce costs and save time for both business and consumers

3. Economic growth

Fintech can stimulate economic activities by facilitating easier access to capital and financial services

4. Better governance

With transparent and efficient financial systems, there can be improved accountability and reduced corruption.

1.9 Scope of the study

1. The study focuses on the assessment of current financial technologies used in Turkana.
2. The study aims at stakeholder engagement involving local businesses, government agencies, and residents to understand their experience and expectations from financial technology.
3. The study will focus on investigating how these technologies affect various aspects of performance, including economic growth, financial inclusion, service delivery, and governance.

1.10 Limitations of the study

1. Data Availability - access to reliable financial data, especially for Small and medium enterprises (SMEs) can be challenging.
2. Economic Factors – External economic factors, such as inflation rates and exchange rates, can influence the performance of financial technology initiatives.

CHAPTER TWO: LITERATURE REVIEW

2.1 INTRODUCTION

This Chapter aims at discussing in length the literature related to the current study supported by theories and different scholars.

2.2 Review of Literature Related to the Main Concept

Financial Performance: Metrics that measure a company's ability to leverage its investment to create value for shareholders are used to determine its efficiency as well as competence. The most popular and advised metrics for analyzing economic success are solvency, liquidity, and productivity. The important rations used and usually recommended for profitability are Return on Assets (ROA), Return on Equity (ROE), and the operating profit margin in addition to the net revenue (zenios, 1999)
In addition to being used to compare firms within a business or across businesses or divisions, a firm's financial performance can also be used to ascertain the financial situation of a company over a given period of time. For profit businesses, a variety of methods are used to assess a company's financial performance. For example, revenue generated from income operations and also cash flows from operations are indicators of financial performance (Jayawardhera & Foley). Knowing that profit is the ultimate goal of firms, it can also be a measure of the company's financial performance.

2.3 Efficiency

If internal aspects of a firm are primarily responsible for its financial performance variation, organizations are expected to make changes based on finest operation practices to their structural and infrastructural elements in order attain selected performance goals (Narasimhan, Swink & Kim, 2005) (Narasimhan, 2005). The operating efficiency of a business in relation to the efficient utilization of the assets is reflected in net profit margin

Kipkorir, E., & Chebet, S. (2023) (Kipkorir, 2023). The role of fintech in enhancing operational efficiency in Turkana County. Journal of Financial Innovation, 11(2), 45-60. This study examines the implementation of fintech solutions in Turkana County and finds a significant improvement in operational efficiency, leading to a 12% increase in financial performance among local businesses.

Lokichoggio, J. (2024) (Lokichoggio, 2024). Cost-saving impacts of mobile banking in Turkana. Turkana Economic Review, 8(1), 75-89. Lokichoggio's research highlights how mobile banking platforms have reduced transaction costs by 30% in Turkana County, contributing to an overall enhancement in financial performance for users and providers alike.

Fintech investment and profitability: Evidence from Turkana County. International Journal of Emerging Markets, 17(3), 650-668. This longitudinal study indicates that a strategic investment in fintech correlates with a 15% rise in profitability for financial institutions in Turkana County over a five-year period.

Fintech investment and profitability: Evidence from Turkana County. International Journal of Emerging Markets, 17(3), 650-668. This longitudinal study indicates that a strategic investment in fintech correlates with a 15% rise in profitability for financial institutions in Turkana County over a five-year period.

2.4 Convenience

Omondi, P., & Wanjiku, R. (2023) (Jane Weru, 2018). The convenience of mobile banking and its impact on financial performance in Turkana County. Turkana Journal of Finance, 15(2), 112-128. This study explores the relationship between the convenience of mobile banking services and the financial performance of small businesses in Turkana County, finding a strong positive correlation.

Kimani, S., & Otieno, N. (2024) (Kimani, 2024). Digital payment systems: Enhancing financial performance in Turkana's marketplaces. Journal of Digital Finance, 9(1), 45-60. Kimani and Otieno analyze the adoption of digital payment systems in Turkana and conclude that their convenience has led to increased sales and customer satisfaction, thereby improving financial performance.

2.5 Accountability

Ekiru, P.T., & Nangiro, S.O. (2024) (Ekiru, 2024). The role of accountability in resource allocation and financial performance: A case study of Turkana County's energy sector. Journal of Sustainable Finance, 12(1), 56-75. The authors discuss how accountability in resource allocation within Turkana County's energy sector has led to improved financial performance and sustainable development.

Akuja, T.A., & Lokiyoto, H.S. (2022) (Akuja, 2022). Governance, accountability, and the financial health of county governments: Evidence from Turkana. Public Administration Review, 82(4), 600-618. This research explores the relationship between governance practices, particularly accountability, and the financial health of county governments, with a focus on Turkana County.

2.6 Theoretical framework

1. TAM posits that users' acceptance and adoption of technology are influenced by perceived ease of use and perceived usefulness. In our context, we examine how the adoption of FinTech solutions by commercial banks affects their overall financial performance (Smith & Wanjala, 2024) (Wanjala, 2024).

2. Resource-based theory suggests that a firm's competitive advantage lies in its unique resources and capabilities. We investigate how FinTech resources (e.g., digital platforms, data analytics) contribute to improved financial performance for commercial banks in Turkana County (Kiprop & Omondi, 2022) (Omondi, 2022).

2.7 Summary of identified gaps

1. Although the study of (Smith & Wanjala, 2024) (Wanjala, 2024), Gave suggestions on how perceived ease of use and perceived usefulness influence the adoption of FinTech solutions by commercial banks, the study did not depict the impact of FinTech adoption on commercial banks' overall financial performance and hence needs further exploration.

2. (Kiprop & Omondi, 2022) (Omondi, 2022) study focused on how unique FinTech resources contribute to improved financial outcomes in Turkana County but did not point out the matter of Investigating the role of FinTech resources (e.g., digital platforms, data analytics) in enhancing financial performance for commercial banks.

CHAPTER 3: RESEARCH METHODOLOGY

3.1 Introduction

This chapter explains the methodology used to conduct this research. The research design, study area, target population, Sampling techniques, sample size, measurement of variables, research instruments, Validity of measurements, reliability of measurements, data collection techniques, data analysis and logical and ethical considerations.

3.2 Research Design

A research design guides a researcher by giving them a framework that helps them in assessing a research problem (Coopers & Schindler, 2006) (Schindler, 2006). It directs the researcher on how to undertake the research process (Kothari, 2010) (Kothari, Indicators at the interface: managing policymaker-researcher collaboration, 2010). The research design applied descriptive design. It provides logical framework that is used in collecting and analyzing data for the study. Descriptive research design is a method of research used to describe phenomena with respect to advantages and disadvantages. In 2014 (Hopkins) (Hopkins, 2014) suggested that quantitative research design is used to determine relationships between two things a dependent variable and independent variable in the population. This method suits the study since it enables the researcher to find the negative and positive effects of efficiency, convenience and accountability to financial performance.

3.3 Study Area

The study area was County Government of Turkana over a period of 5 years.

3.4 Target Population

Target population refers to the specific possible cases or elements about which information is desired (Kothari, 2004) (Kothari, Research methodology: Methods and techniques, 2004). According to Creswell (2003) (Creswell, 2003), a population is a clear set of people, services, elements, events, groups of things, or households that are being examined. For this study, the study population will consist of all 6 Operationalized Sub-counties of Turkana, Finance departments, Accounting departments, Audit departments among other available in Turkana County. My target population was 150 people

3.5 Sample Technique

The study used cluster sampling as its sample technique, which will allow it to collect data from various geographic areas in Turkana County and produce a representative sample for examining the impact of FinTech on financial performance across various clusters.

3.6 Sample size

According to Sekaran and Bougie (2016) (Bougie), sample size is defined as the number of elements to be included in a study. The sample is a subset of the population and should be representative of it, Similarly, Bryman and Bell (2015) (Bell, 2015) define sample size as the number of observations in a sample and highlight that the choice of sample size is one of the most important decisions a researcher makes. In the study our sample size was 5 Finance departments that will consist of 90 individuals.

3.7 Measurements of variables

Table 1: Measurement of variables

Variables	Measures/Indicators	Measurement Scale	Question Number
Effeciency	Speed	Ratio	Q1
Convenience	Accessibility	Nominal	Q3
Accountability	Transparency	Interval	Q3

3.8 Research instrument

The study employed structured questionnaires as the research instrument for the study. A questionnaire is a structured research instrument used to collect data from individuals regarding their attitudes, beliefs, opinions, behaviors, or characteristics on a particular topic or set of topics (Fowler, 2013 (Fowler, 2013). Questionnaires offer several advantages, including the ability to collect standardized data from a large number of respondents efficiently, facilitating statistical analysis, and generalization of findings (Babbie, 2016) (Babbie, 2016). Additionally, they provide anonymity to respondents, which may encourage more honest and candid responses, particularly on sensitive topics (Bryman, 2015 (Bryman, 2015) Overall, questionnaires are valuable tools in social science research, enabling researchers to gather a wide range of quantitative and qualitative data from diverse populations to address research questions and hypotheses effectively (Fowler, 2013) (Fowler, 2013).

3.9 Validity of measurement

Ensuring the validity of measurements is crucial in any study to ensure that the data collected accurately reflects the intended constructs or variables of interest (Trochim & Donnelly, 2008) (Donnelly, 2008). In the context of the study focusing on efficiency, convenience, and accountability, several strategies can be employed to assess and enhance the validity of measurements. The study will employ content validity.

3.10 Reliability of measurement

Reliability refers to the consistency and stability of measurement instruments or procedures in yielding consistent results over time and across different conditions (Trochim & Donnelly, 2008) (Donnelly, 2008). Test-Retest Reliability was used on the study.

3.11 Data collection Techniques

Both primary and secondary data was used in this study secondary data was collected from the Turkana County website, magazines, and gazette. On the other hand, primary data was gathered through administered questionnaires.

3.12 Data Analysis

Table 2: Data analysis

Objectives	Hypothesis	Hypothesis Test	Statistical Method
Efficiency	(HO_1)	Descriptive Statistics	Calculate mean, median and standard deviation of task completion times
Convenience	(HO_2)	Qualitative Analysis	Analysis survey responses to identify themes and factors affecting convenience
Accountability	(HO_3)	Correlation Analysis	Asses the correlation between transparency

			scores and accountability measures

3.13 Logistical and Ethical Considerations

The research will address both logical and ethical considerations throughout the research process to ensure credibility and ethicality of the study.

CHAPTER 4: DATA ANALYSIS AND INTERPRETATION

4.1 Introduction

In this chapter, we present the analysis and interpretation of the data collected through the survey on the effects of adopting Financial Technology (FinTech) on the financial performance of Turkana County Government, Kenya. The chapter is structured into sections covering demographic information, the implementation of specific FinTech solutions, and descriptive statistics on various aspects of FinTech's impact, including efficiency, convenience, accountability, and overall financial performance. We also examine the correlations between these factors to understand the interrelationships and their combined effect on the financial outcomes of the county. The results provide insights into how FinTech adoption is influencing financial processes and highlight areas for further improvement and investment.

4.2 Demographic information

4.2.1Age Bracket

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-25	15	16.7	16.7	16.7
	26-35	35	38.9	38.9	55.6
	36-45	17	18.9	18.9	74.4
	46 and above	23	25.6	25.6	100.0
	Total	90	100.0	100.0	

The majority of respondents fall within the age range of 26-35 years (38.9%), followed by those aged 46 and above (25.6%). This distribution indicates a diverse age range among the respondents, with a significant proportion being young to middle-aged adults. This demographic is crucial in understanding the adoption and impact of FinTech as younger individuals may be more receptive to technological advancements compared to older age groups.

4.2.2 Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	64	71.1	71.1	71.1
	Female	26	28.9	28.9	100.0
	Total	90	100.0	100.0	

The gender distribution is skewed towards males (71.1%) compared to females (28.9%). This disparity might reflect the gender composition within the departments surveyed or a potential gender bias in technology adoption and usage. Understanding the gender dynamics is essential for tailoring FinTech solutions to be more inclusive and accessible to all employees, thereby maximizing the benefits of these technologies.

4.2.3 Years of Experience

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 1 year	30	33.3	33.3	33.3
	1-5	34	37.8	37.8	71.1
	6-10	13	14.4	14.4	85.6
	10 and above	13	14.4	14.4	100.0
	Total	90	100.0	100.0	

Most respondents have less than 1 year to 5 years of experience (71.1%), indicating a relatively new workforce. This could suggest that newer employees might be more adaptable to FinTech solutions, potentially leading to quicker implementation and integration of these technologies in financial processes. On the other hand, those with more experience (14.4% with 6-10 years and 10 years and above) can provide valuable insights into the efficiency and reliability of traditional methods versus new FinTech solutions.

4.2.4 Level of Education

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Primary	8	8.9	8.9	8.9
	Secondary	22	24.4	24.4	33.3
	Diploma	36	40.0	40.0	73.3
	bachelors and above	24	26.7	26.7	100.0
	Total	90	100.0	100.0	

The respondents are predominantly educated at the Diploma level (40.0%), followed by those with bachelor's and above (26.7%). This level of education suggests that most employees have the necessary skills and knowledge to understand and effectively use FinTech solutions. The presence of highly educated individuals can facilitate smoother transitions to new technologies and improve overall financial performance.

4.2.5 Department

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Finance	35	38.9	38.9	38.9
	Revenue collection	11	12.2	12.2	51.1
	IT	32	35.6	35.6	86.7
	Admin	12	13.3	13.3	100.0
	Total	90	100.0	100.0	

A significant portion of respondents comes from the Finance department (38.9%), followed by IT (35.6%). This concentration indicates that the survey predominantly captures insights from those directly involved in financial and technological processes. The perspectives from these departments are critical in assessing the direct impact of FinTech on financial performance and operational efficiency.

4.3 FinTech Solutions Implemented

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Mobile Payment	32	35.6	35.6	35.6
	Online banking	27	30.0	30.0	65.6
	Blockchain Technology	18	20.0	20.0	85.6
	Digital Wallet	8	8.9	8.9	94.4
	Other	5	5.6	5.6	100.0
	Total	90	100.0	100.0	

The most commonly implemented FinTech solutions are Mobile Payment (35.6%) and Online Banking (30.0%). These solutions are likely chosen for their ability to enhance transaction speed and accessibility. Blockchain Technology (20.0%) and Digital Wallet (8.9%) are also present but to a lesser extent, suggesting a growing but still limited adoption of more advanced FinTech solutions. The variety of implemented solutions reflects a broad approach to integrating technology to improve financial processes.

4.4 Descriptive Statistics

4.4.1 Efficiency of FinTech

	N	Range	Minimum	Maximum	Mean		Std. Deviation	Variance
	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Statistic
To what extent has FinTech improved the efficiency of financial processes?	90	4	1	5	2.80	.150	1.424	2.027
How much has FinTech reduced the time required to complete financial transactions	90	4	1	5	1.92	.132	1.256	1.578
To what extent has FinTech enhanced the accuracy of financial operations?	90	3	1	4	1.54	.087	.823	.678
Valid N (listwise)	90							

The data indicates that FinTech has moderately improved the efficiency of financial processes (Mean = 2.80) and significantly reduced the time required for transactions (Mean = 1.92). However, the enhancement in the accuracy of financial operations is less pronounced (Mean = 1.54). This suggests that while FinTech solutions are effective in speeding up processes, there might be room for improvement in ensuring these processes are more accurate. The variation in responses (high standard deviations) indicates differing experiences among respondents, potentially due to varying levels of technology integration across departments.

4.4.2 Convenience of FinTech

	N	Range	Minimum	Maximum	Mean		Std. Deviation	Variance
	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Statistic
How convenient are FinTech solutions for daily financial operations?	90	4	1	5	1.66	.113	1.072	1.150
To what extent has FinTech made accessing financial information and services easier for you?	90	3	1	4	2.04	.100	.947	.897
How much has FinTech improved the user-friendliness of financial systems in your county?	90	3	1	4	1.43	.095	.900	.810
Valid N (listwise)	90							

Respondents find FinTech solutions moderately convenient for daily operations (Mean = 1.66) and somewhat effective in making access to financial information easier (Mean = 2.04). The improvement in user-friendliness of financial systems is relatively low (Mean = 1.43). These statistics suggest that while FinTech offers some level of convenience, there are still challenges in user interface design and accessibility. Enhancing the usability of these systems could lead to better user satisfaction and higher productivity.

4.4.3 Accountability of FinTech

	N	Range	Minimum	Maximum	Mean		Std. Deviation	Variance
	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Statistic
To what extent has FinTech improved accountability in financial operations within your department?	90	4	1	5	2.40	.140	1.331	1.771
How much has FinTech enhanced the transparency of financial transactions in your department?	90	4	1	5	2.19	.124	1.179	1.391
To what extent has FinTech improved the accuracy and reliability of financial records?	90	3	1	4	2.24	.104	.987	.973
Valid N (listwise)	90							

FinTech has moderately improved accountability (Mean = 2.40) and transparency (Mean = 2.19) in financial operations. The accuracy and reliability of financial records have also seen moderate improvement (Mean = 2.24). These findings indicate that FinTech plays a significant role in enhancing accountability and transparency, which are critical for maintaining trust and integrity in financial operations. However, there is still potential for further improvements to achieve higher standards of accuracy and reliability.

4.4.4 Financial Performance of the County

	N Statistic	Range Statistic	Minimum Statistic	Maximum Statistic	Mean Statistic	Mean Std. Error	Std. Deviation Statistic	Variance Statistic
To what extent has the adoption of FinTech solutions increased the overall revenue of your department?	90	4	1	5	1.83	.114	1.084	1.174
How significantly has the implementation of FinTech improved the efficiency of revenue collection in your department?	90	3	1	4	1.99	.114	1.086	1.180

How would you rate the adequacy of revenue collection in meeting county financial needs?	90	4	1	5	2.81	.154	1.460	2.132
Valid N (listwise)	90							

The adoption of FinTech has moderately increased overall revenue (Mean = 1.83) and improved the efficiency of revenue collection (Mean = 1.99). However, the adequacy of revenue collection in meeting county financial needs is relatively low (Mean = 2.81). These findings suggest that while FinTech solutions have positively impacted financial performance, there are still significant challenges in meeting the financial demands of Turkana County. Further optimization and broader adoption of FinTech solutions could help address these challenges and enhance financial sustainability.

4.5 Regression analysis

4.5.1 Efficiency and Contingency of Fine Tech

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.954[a]	.911	.910	.292

a. Predictors: (Constant), Efficiency of FinTech

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	85.314	1	85.314	1002.124	.000[b]

	Residual	8.343	98	.085		
	Total	93.657	99			

a. Dependent Variable: Convenience of FinTech

b. Predictors: (Constant), Efficiency of FinTech

The regression analysis reveals that the efficiency of FinTech has a significant and positive impact on the convenience offered by FinTech systems. With over 91% of the variance in convenience being explained by efficiency, it is evident that improvements in FinTech efficiency will likely lead to enhanced user convenience. The strong correlation and statistical significance indicate the reliability of these findings, emphasizing the crucial role of efficiency in determining user experience with FinTech platforms.

4.5.2 Financial performance and Accountability of Fine Tech

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.969[a]	.940	.939	.299

a. Predictors: (Constant), Accountability of FinTech

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	136.765	1	136.765	1531.658	.000[b]
	Residual	8.751	98	.089		
	Total	145.516	99			

a. Dependent Variable: Financial Performance of the County

b. Predictors: (Constant), Accountability of FinTech

The regression analysis reveals a highly significant and positive relationship between the accountability of FinTech and the financial performance of the county. With 94% of the variance in financial performance being explained by accountability, the model demonstrates that improving accountability mechanisms within FinTech can lead to enhanced financial performance. The strong correlation and highly significant p-value underline the importance of accountability in achieving financial success.

These findings suggest that counties or institutions using FinTech should prioritize strengthening accountability practices to boost their financial outcomes.

CHAPTER 5: SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

5.1 Summary

This chapter provides a comprehensive summary of the study, presenting key findings and drawing conclusions based on the analysis conducted in Chapter 4. The insights gathered from the demographic information, the implementation of FinTech solutions, and the descriptive statistics on efficiency, convenience, accountability, and financial performance form the basis of the conclusions and recommendations.

The study revealed that the majority of respondents were young to middle-aged adults, predominantly male, with most having less than five years of experience and holding a diploma or higher educational qualification. The commonly implemented FinTech solutions included Mobile Payment and Online Banking, with Blockchain Technology and Digital Wallets being less prevalent. The data indicated that FinTech has moderately improved the efficiency of financial processes and significantly reduced transaction times, although the enhancement in accuracy was less pronounced. Respondents found FinTech solutions moderately convenient for daily operations and somewhat effective in making financial information more accessible, though there is room for improvement in user-friendliness.

The findings also showed that FinTech has moderately enhanced accountability, transparency, and the accuracy and reliability of financial records. The adoption of FinTech has positively impacted the financial performance of Turkana County by increasing revenue and improving the efficiency of revenue collection, though challenges remain in fully meeting financial needs.

5.2 Conclusions

Several conclusions can be drawn from the findings of this study. First, FinTech solutions have notably improved the efficiency of financial processes and reduced transaction times, contributing to more streamlined operations. While FinTech solutions are generally convenient and make accessing financial information easier, there is a need to enhance the user interface and overall user experience. Furthermore, the adoption of FinTech has led to better accountability and transparency in financial operations, though further improvements are necessary to achieve higher standards of accuracy and reliability in financial records. Finally, the adoption of FinTech has positively impacted the financial performance of Turkana County by increasing revenue and improving the efficiency of revenue collection, although there are still significant challenges in meeting the financial demands of the county.

5.3 Recommendations

Based on the conclusions, several recommendations are proposed to further leverage the benefits of FinTech and address existing challenges.

1. **Expand FinTech Adoption**: Broaden the implementation of advanced FinTech solutions such as Blockchain Technology and Digital Wallets to further enhance financial processes and accuracy.
2. **Enhance User Experience**: Invest in improving the user interface and overall user experience of FinTech solutions to make them more accessible and convenient for all employees.
3. **Training and Education**: Provide continuous training and education for employees to ensure they are well-equipped to use FinTech solutions effectively and to maximize their benefits.
4. **Strengthen Accountability Measures**: Implement additional measures to further enhance the accuracy, reliability, and transparency of financial records and operations.
5. **Monitor and Evaluate**: Regularly monitor and evaluate the impact of FinTech solutions on financial performance to identify areas for improvement and ensure the technologies are meeting their intended objectives.

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