

**EFFECTS OF FINANCIAL LITERACY DELIVERY CHANNELS AND
CENTRAL BANK REGULATIONS ON FINANCIAL INCLUSION OF
COMMERCIAL BANKS IN KENYA**

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OF DOCTOR OF PHILOSOPHY IN BUSINESS ADMINISTRATION AND
MANAGEMENT (FINANCE) OF KENYA METHODIST UNIVERSITY**

SEPTEMBER, 2022

DECLARATION

I hereby declare that this thesis is my original work and has not been presented in any university for a degree.

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DEDICATION

This thesis is dedicated to my late parents Rev. John B. Boldar and Mother Wheyedia Boldar and my wife Jophina Sao Boldar whose dedication and diligence enabled me to achieve the absolute best peak of education. The thesis is additionally dedicated to Cllr. Ernestine Morgan for the financial assistance and other support provided to me during my struggling days while pursuing undergraduate studies. To my children: Teddy, Joseph, Josiah, Jophina, Jolyne, and Mardea for their understanding during my absence to study for the Ph.D.

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ABSTRACT

Kenya features a high financial services availability and accessibility. However, the usage of those services is low and remains a challenge for the full-service banks who are the suppliers and the main players for inclusion within the financial markets. Against this backdrop, the study evaluated financial literacy delivery channels and CBK regulations on financial inclusion of banks involved in commercial activities in Kenya. The predictor variables were financial education partnership, digital financial platforms, consumer awareness, and financial advisory services while the response variable was financial inclusion. The moderating variable was central bank regulations. The study was guided by resource-based theory, diffusion of innovation theory, motivation-needs theory, Prospect theory, and institutional theory to hypothesize the connection between the selected variables. The research adopted a descriptive survey design and the 10,717-management staff of the 40 banks engaged in commercial activities in Kenya was the study population. The sample size was 384 respondents obtained using the Cochran model. The study adopted stratified probability sampling to get a sample of 384 respondents comprising 199 from large banks, 120 from medium-size banks, and 65 from small banks. The study collected and analyzed primary data using semi-structured questionnaires. For data analysis, descriptive statistics were utilized to compute means, frequencies, and standard deviation while inferential statistics involved regression and correlation was applied to work out the connection between the study variables using advanced SPSS computer software version 23. The results of the multivariate analysis showed that financial education partnership, digital financial platforms, consumer awareness, and financial advisory services as delivery channels of financial literacy had a positive effect on financial inclusion. The findings further showed that CBK regulations significantly moderated the relationship between digital platforms, financial advisory services, and financial inclusion. The moderating effect of CBK regulations on the connection between financial education partnership, consumer awareness, and financial inclusion was found to be insignificant. The study concluded that financial literacy activities significantly influence financial inclusion of commercial banks, but due to low financial education partnership among the banks to sponsor financial education schemes and low financial advisory services the usage of monetary products and services by financial consumers remains low and this has reduced the general performance of financial inclusion. Additionally, the influence of the existence CBK regulations on the adoption of the financial literacy delivery channels was low which also affected the low usage of financial services. Based on these findings the study recommends that Central Bank of Kenya, the Kenya Bankers Association, and the full-service banks management work collaboratively to formulate policies that will help the banks improve their financial literacy delivery channels for the users of monetary services, which might, in turn, enhance financial inclusion already constrained by low usage of monetary products, and services. The study recommends that further studies should concentrate on other financial literacy delivery channels not factored in this study to bridge the conceptual gaps.

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ABBREVIATIONS

AFI	Alliance for Financial Inclusion
ANOVA	Analysis of Variance
APEC	Asia-Pacific Economic Cooperation
ARDL	Auto Regressive Distributed Lag
ATM	Automated Teller Machine
AU	African Union
CAWS	Consumer Awareness
CBA	Canadian Bankers Association
CBK	Central Bank of Kenya
CBM	Central Bank of Mozambique
CEPAL	Economic Commission for Latin America
CGAP	Consultative Group to Assist the Poor
DP	Digital Platforms
G20	Group of Twenty
CICO	Cash-in and cash-out
COVID	Coronavirus
EFA	Explanatory Factor Analysis
EU	European Union
FAS	Financial Advisory Services
FCAC	Financial Consumer Agency of Canada
FEP	Financial Education Partnership
FLEC	Financial Literacy and Education Commission
FSD	Financial Sector Deepening
FSI	Financial Services Industry

GEAR UP	Gaining Early Awareness and Readiness for Undergraduate Programs
GF	Global Findex
GFC	Global Financial Crisis
GPII	Global partnership for financial inclusion
GRA	Ghanaian Rural and Agricultural
ICC	Intraclass Correlation Coefficient
ICT	Information Communication Technology
ILO	International Labor Organization
INFE	International Network for Financial Education
ITU	International Telecommunication Union
KBA	Kenya Bankers Association
KCB	Kenya Commercial Bank
KDIC	Kenya Deposit Insurance Corporation
KMO	Kaiser-Meyer Olkin
KNBS	Kenya National Bureau of Statistics
KPMG	Klynveld Peat Marwick Goerdeler
MFI	Microfinance Institutions
M-PESA	“m-money” or Mobile Money Service
NACOSTI	National Council of Science, Technology, and Innovation
NPLs	Non-Performing Loans
OECD	Organization for Economic Co-operation and Development
Ph.D.	Doctor of Philosophy
PWC	Price Waterhouse Coopers
RBV	Resource-Based-View

SBA	Spanish Banker Association
SHG	Self-Help Group
SIM	Subscriber Identity Module
SMEs	Small and Medium Enterprises
SMS	Short Message Service
SPSS	Statistical Package for Social Sciences
TV	Television
UN	United Nations
US	United States
VIF	Variance Inflation Factor

CHAPTER ONE: INTRODUCTION

1.1 Background to the Study

The focus of financial inclusion is on the supply and demand of full-service banks' monetary products and services. Monetary products are instruments that allow individuals and households to invest. Among them are credit cards, bankcards, stocks, debentures, and bonds. Included too are hedge funds, options, futures, and swaps. Others include insurance, private equity, commodities, and currencies. Among the commodities are wheat, rubber, gold, diamond, iron ore, and other minerals beneath the earth. A monetary service is a skillful service provided by actors within the financial industry (Feyen, et al., 2021; Pazarbasioglu, et al., 2020).

There are three categories of monetary services provided by financial institutions: lending, investing, and asset management. Lending services involved loaning funds to individuals, businesses, and other institutions. For investment services, the focus is on accepting customers' checking and saving accounts deposits for interest income and selling financial products and services to investors. Lastly, wealth management services comprised of portfolio management and asset valuations. Commercial banks, micro-financial banks, and credit unions are among the financial organizations engaged with lending services. Insurance companies, investment banks, and full-service banks are among the financial market actors that performed the investment services. Investment banks performed most of the wealth management services. Other services performed by the financial markets' participants include audit, tax advisory, risk management, merger and acquisition, stockbroker services, and financial planning

that involves saving for investment, credit and debt payment plans, cash management, insurance, and retirement planning (Feyen, et al., 2021; Pazarbasioglu, et al., 2020).

The supply of monetary services by banks and demand by consumers enable financial inclusion to have enormous benefits that include employment, economic growth, and poverty alleviation (Al-Smadi, 2018; Iddik et al., 2018; Sharma et al., 2018 VO et al., 2019). These benefits are derived from financial inclusion objectives. Because of this economic advantage, Kenya and other Sub-Saharan countries in Africa experienced an increase in the rate of account ownership by 8 percentage points, from 63% to 71% from 2017 to 2021. This increase significantly contributed to the improvement in the overall performance of the economy, enabling Kenya to rank 91 of 137 countries in the Global Competitiveness Index from 2017 to 2018. The huge advantage positioned financial inclusion as an enabler in at least three items of the AU 2063 agenda and the maximum of eight goals of the UN sustainable development for 2030 (African Union [Au], 2015; World Economic Forum, 2018; World Bank, 2021a; (Economic Commission for Latin America [CEPAL], 2018).

The objectives are realized using three indicators. According to global policymakers, the measures are access, availability, and usage (Demirgüç-Kunt et al., 2015; Nizam et al., 2020). Banks, regulators, and consumers can accomplish monetary inclusion objectives. Banks are engaged with four main tasks for accomplishing the objectives. First, ensuring that individuals and households obtain financial products and services at a reasonable cost (Al-Smadi, 2018).

Secondly, to ensure that users access banks' financial facilities at their convenience. The convenience implies availability at a reachable location and in good quality, and are easy to access by the population. Thirdly, providing consumers' awareness relating to the products and services usage (Klapper et al., 2015). This consumer education is financial literacy comprising of financial knowledge, attitude, and behavior. Lastly, to comply with financial market regulations (Chaudhuri, 2018). Banks in both developed and developing economies have made tremendous efforts toward access and availability but usage remains a challenge mainly for the developing world (Central Bank of Kenya [CBK], 2019; Financial Sector Deepening [FSD], 2019; International Monetary Fund [IMF], 2020; Kenya National Bureau of Statistics [KNBS], 2019).

The challenge comes from the financial consumers and involved the usage of economic services provided by banks and informed financial decision-making. This has exposed banks to credit risk and liquidity risk from credit access that end in non-performing loans of microfinance services and digital loans (Lindahl, & Mokvist, 2020; Wamalwa et al., 2019). To counter these, financial institutions have embarked on promoting financial literacy also term as monetary literacy.

In Canada, the banking industry made immense contributions to financial literacy advancement for customers' usage of banking services. The Bankers Association in collaboration with the government developed Canada's financial literacy national strategy (Financial Consumer Agency of Canada [FCAC], 2017; Zhang, 2019). The banking sector invested more than 8 million United States dollars in programs for customers' financial literacy beginning in 2010. Canadian bankers' association

financial education activities comprised of funding various programs run by education groups and community volunteers to enhance consumers' financial awareness (Canadian Bankers Association [CBA], 2015).

Similarly, the banking sector in the United States partners with government, private and not-for-profit organizations to market financial literacy education. The gesture is meant for usage, making informed decisions, and bringing stability to the industry (Yilmaz, 2020). The banking system provides financial education materials and employees function as volunteers to teach programs developed by the sector in schools, colleges, and universities. Financial institutions and other registered agencies (Migliavacca, 2020) performed financial advisory services for financial market players. Organizations like Neighbor-Works and the Federal Deposit Insurance Corporation used delivery channels like digital financial platforms to supply online monetary literacy training to educators (Kasman et al., 2018).

In the same vein, financial organizations in Spain promote monetary literacy in many ways for users of financial products and services. The Spanish Bankers Association collaborated with the Central Bank of Spain and launched the first financial literacy program in 2008 called “Finance for All” to develop the citizens' financial decision-making skills (Bover et al., 2018). The Bankers Association lobbied with the Central Bank of Spain and the Spanish parliament and a new education law was approved that introduced financial education in the curriculum of primary school and compulsory secondary education (Hospido et al., 2015).

Romania on the other hand suffered two major casualties, the global financial crisis in 2007-2009 and its internal banking crisis. For rapid reform, the banking sector partners with the government and other organizations and invested in financial literacy (JA Romania, 2016). The banking industry in collaboration with other agencies formed a working group that developed Romania national financial literacy plan in 2007. They also launched Money IQ & Money Online. These are the two large-scale financial education programs training Romanians on money management and are taught in schools (JA Romania, 2016) using a blended learning approach.

For South Africa, financial literacy is promoted through sponsorship in the banking sector. The promotion is also carried out by other organizations through individual institutions' initiatives. The banks fund financial literacy programs through their 2012 new Financial Sector Code (Garg & Singh, 2018; Sibanda & Sibanda, 2016). The banking sector promotes financial literacy through "in school to teach children to save initiative". Other institutions used financial education activities that include consumers' awareness, students' financial literacy competitions, digital platforms, workshops, and special programs (Sibanda & Sibanda, 2016) to educate the financial consumer population.

In Ghana, financial institutions collaborated with the government and development partners to advance the population's financial decision skills. This is because of the increase in financial illiteracy among the users of monetary services in Ghana. Several financial literacy initiatives were undertaken across the country. The national forum on microfinance 2009 was launched with three activities: a national financial literacy

week, the development of educational materials, and financial literacy for loans, saving, insurance, and investment (Garg & Singh, 2018).

For Kenya, the government established the financial education and protection program for financial consumers' protection and education (Sindani, 2019). This monetary literacy initiative was established for financial services users to acquire basic financial knowledge on credit, saving, and payment services provided by banks. The government also provides knowledge of financial literacy through training to all public sector employees for making informed financial decisions (Sindani, 2019). In addition, organizations such as "Improving Financial Awareness & Financial Literacy Movement in Kenya, the Christian Community Healthcare Foundation of Kenya, and the Financial Awareness Foundation" are volunteer community-based organizations providing volunteering services such as awareness to institutions, employers in both the formal and informal sectors, individuals and households to support and ardently participate in financial literacy training. They also provide finance publications filled with fascinating financial literacy program materials to empower users of monetary services with essential principles to smart personal financial management and information on common personal finance mistakes to be eluded (Nyawino & Sabuco, 2020).

1.1.1 Concept of Financial Exclusion

Financial inclusion came because of the results of research on exclusion. Financial exclusion posed a challenge to the worldwide economic system. Due to the nature of this global problem, organizations including the World Bank introduced several

programs to tackle the key barriers for those financially excluded. Moreover, studies have indicated several obstacles to exclusion, among them are monetary literacy, poor services, lack of access thereto, distance covered to access banking services, and safety (Muhammad et al., 2018).

The idea of individual and household financial exclusion evolved in 1993 when it had been noticed by researchers who focused on concern for little access and availability of banking products and services. Investigators addressing this type of problem emphasized that it exists on the idea of social groups gaining access to modern financial instruments, banking services, credit lines, and insurance. In 1999, a broad definition was developed for financial exclusion for the primary time since academic scholars who delved into it and mentioned groups that have difficulty in accessing and using basic financial services discovered it (Mashahanya & Ngendakumana, 2019; Muhammad et al. 2018)

Consistent with Nowacka (2018) analysis, the definition of exclusion is usually put generally and more restrictive perspectives as indicated within the topic literature. The general approach emphasizes monetary needs, concerning the challenges experienced by the inhabitants who are low incomes earners and are in impoverished social situations. These financial needs are expenditures that are essential for a far better living. They will easily be met when individuals and households have an account with a financial organization. This may allow them to make small savings, non-cash settlements, and have access to credit and insurance (Dexu & Wenlong, 2016; Lamb, 2016).

In the more restrictive approach, the definition stresses specific services and their unavailability. They are often termed basic financial services. These monetary services are banking, investing, and insurance that influences cash flow and keeps track of spending in individual and household budgets. They constitute an important element within the lifetime of the individual for its continued existence (Mashahanya & Ngendakumana, 2019). Financial exclusion is usually voluntary or involuntary and a couple of self-exclusion barriers exist due to cultural distrusts for banks and personal and non-secular inclinations. The monetary sector is indispensable to the expansion and advancement of any economy through the mobilization and deployment of monetary resources (Dunham, 2018).

1.1.2 Commercial Bank and Financial Inclusion

Commercial banks in most cases operate as liberators to help the public and the personal sectors. They provide a wide collection of monetary services like loans, overdrafts, and wealth management. These banks are also called full-service banks and economic banks. Additionally, their intermediary role within the economic system is distinct in influencing the economic process, especially in emerging economies. Accepting deposits, lending money for investment, and providing money transfer services are among a number of their important functions (Herath, 2019; Kinyua & Omagwa, 2020).

The economic policies of the government that includes monetary and poverty alleviation cannot effectively be achieved without commercial banks' involvement. For instance, customer deposits are significant and affect monetary supply that

influences commodity prices, services, and inflation. (Fernando et al., 2019; Kinyua & Omagwa, 2020). In general, financial institutions sit at the center of decision-making for economic prosperity for a nation. Deléchat et al. (2020) mentioned credit access of banks as an important vehicle in spurring investments and advocate for inclusion to spread speedily across the world for every nation to benefit in working toward poverty reduction. When the personal sector has access to credit and better monetary services at affordable costs and is capable to use them by applying adequate financial knowledge their financial status in society will automatically change. Financial inclusion benefits both the providers and the users. When banking services are available and effective they will attract more people thereby increasing banks' profit margin. To feel the impact of inclusion, the World Bank (2014) and Mader (2018) suggested that the unbanked should be of primary concern for inclusion in the formal financial system and information for accessing bank services be simple to understand since there is a correlation between education and usage of financial services.

Developing countries such as Kenya continued to rely on commercial banks as the most viable channel of financial intermediation. Although the financial crisis experienced between 2007 and 2009 led to many debates on the sustainability of financial inclusion since many banks had challenges in pursuing inclusion (Kenya, 2018; Fernando et al., 2019). Based on good regulations, monetary inclusion is attributed to increasing bank financial performance. Nevertheless, existing literature in developing countries remains relatively silent on the role and effect of financial

literacy delivery channels used by commercial banks in promoting financial inclusion in the banking sector (Mader, 2018).

1.1.3 Financial Literacy in Kenya

The results of the international financial literacy survey reports showed that developing countries still have more work to do to improve the financial knowledge of their population. The document showed the overall financial literacy level of Kenya's inhabitants at 38%. This percentage implies that approximately, only 38% of Kenyans have a better chance of making independent decisions on financial matters without asking for assistance from someone. Being aware of the economic benefit of financial literacy knowledge is important. Having more financially literate persons in the economy influences economic growth (Klapper, et al., 2015).

When more people acquire the requisite knowledge in dealing with monetary issues there is high possibility for savings and investment. Beginning in 2016 the banking market experienced the proliferation of banks' products and services including those of digital nature from rapid growth in financial innovation (CBK, 2016; CBK, 2017; CBK, 2018a). This development calls for more Kenyans to have digital financial knowledge. The industry actors submit applications for approval each year to the regulator, the Central bank to introduce new digital products. Today, most users that lack digital financial literacy knowledge are challenged in using these digital products and platforms. Users' at times encountered fraudulent schemes from fraudsters and are defrauded (Mazer & Onchieku, 2019).

An empirical investigation by Tufano and Lusardi (2015) established that persons with low monetary literacy knowledge are usually challenged in financial situations and highly depend on friends and family members for advice. Limited financial knowledge creates problems of a high percentage of poverty and an increase in debt from borrowers' non-performing loans. This challenge is experienced by forty percent of the inhabitants of Kenya who lived below the poverty line with many families struggling to survive. Such a situation puts pressure on the government and stakeholders and finding a remedy is necessary to save society (KNBS, 2019; Nyawino, 2019).

1.1.4 Financial Literacy Delivery Channels

After the 2007-2009 global financial crisis ended, the World Bank, OECD, and G20 leaders called on governments and institutions across the globe to provide financial literacy for the unbanked population. The global financial inclusion policymakers considered this strategy as the best way in bringing the financially excluded into the formal financial system (Garg & Singh, 2018). Their actions brought about the involvement of financial institutions in the financial reform process. To strengthen the reform, the OECD and its INFE produced the fundamental principles in 2012, which became the roadmap for nations to develop their financial education strategy to educate citizens on the importance of being financially literate.

Among the principles are the mapping and evaluation of financial education initiatives, assessment of major policy issues and needs of the population, strengthening stakeholders' consultation, national wide awareness and communication, and establishing governing structure and leadership. Included too are

identification of target audiences, promoting stakeholders' roles and responsibilities, and establishing definitions for common objectives and policy priorities. Others include promoting public impact assessment, channels of delivery, and training and tools. Encourage resource mobilization and program evaluation and implementation processes (International Network for Financial Education [INFE], (2012). The principles call for governments and institutions' collaboration in the implementation of financial education programs. The principles also call for government legislation for financial education policies (Organization for Economic Co-operation and Development [OECD], 2015; [INFE], 2015).

In adherence to OECD, World Bank, and G20 leaders' most countries' strategies for financial knowledge advancement were developed between 2000 and 2015. This action plan contained various programs evolving from developed financial education curriculums. Besides the OECD, there are financial education programs developed by other institutions. The implementation of these diverse programs requires the appropriate delivery system to benefit the intended audience (OECD, 2018a). The OECD and World Bank acknowledged research for delivery processes of financial literacy to enable target audiences to gain an understanding of using financial facilitates in financial markets across the world (OECD, 2015).

Globally, there are four financial literacy delivery channels: financial education partnership, digital financial platforms, consumer awareness, and financial advisory services. Financial education partnership is the foundation and financial advisory services is the largest (Britt & Delgadillo, 2015; Choi et al., 2016).

1.1.5 CBK Regulations of Financial Literacy Delivery Channels

Since Kenya's independence in 1963, there have been many statutory laws promulgated aiming at reform. In 1966 there were statutory laws introduced by parliament as a continuation of the reform process. One of such laws was CAP 481. This Act established the CBK with the lawful objectives of supporting the advancement of a sound financial system that includes the banking sector and securities markets conducive to balancing wealth creation in the country. The bank function like most other bankers' banks around the globe. It formulates and implements policy for low inflation and maintaining a sound market-based financial system. The bank as a neighborhood of its responsibilities is charged with monitoring and supervising the full-service banks. This responsibility involved making rules and regulations for the activities of the commercial financial services providers in the country (CBK, 2018; Chaudhuri, 2018).

The Central Bank performed financial regulation, regulates financial inclusion along with other regulatory bodies in Kenya, and partly regulates financial literacy delivery channels in the banking sector. These tasks are carried out using micro and macro-prudential guidelines. The guidelines for financial regulation contained many activities. Among them are licensing of financial institutions, meeting capital adequacy

requirements, foreign exchange, consumer protection from reckless lending, cybersecurity risks for the banking sector, and Credit Reference Bureau. For regulation of financial inclusion, the policy guidelines covered its delivery channels and aspect of alternative finance. Among the channels are bank agents, mobile money, automatic teller machines, and internet banking. Included too are payment services providers, money remittance operators, and digital credit. For financial literacy delivery, the guiding principles covered digital financial platforms and financial advisory services (BFA Global, 2021; CBK, 2019; Musau, et al., 2018).

The regulation of digital financial platforms is comprised of the types of electronic information to be provided by the commercial banks for their consumers' use. For financial advisory services, the protection of customers and investors' financial information is cardinal. The Central Bank has brought credibility and stability to the banking industry but the full implementation of its mandate is challenged by regulatory gaps due to the growing number of regulatory authorities from parliament. The functions of these regulatory bodies are overlapped causing uneasiness in the challenging regulatory environment for financial services firms. For instance, the CBK does not fully control the fintech aspect of technology companies like Safaricom and Airtel that supply monetary services to individuals, households, and other financial market participants (BFA Global, 2021; Ndung'u, 2019).

Further, the Central Bank guidelines on financial inclusion covered the supply of monetary services and not transaction costs related to the commercial products or services being offered to the public. This function belongs to the Competitive

Authority of Kenya. A huge number of regulatory agencies are established mainly to regulate fintech companies' operations. Unfortunately, they are performing related tasks, and even with their presence, no specific fintech product is prohibited in Kenya's financial market. There has been a public outburst for parliament's determination to establish more regulatory authorities despite the regulatory gaps experienced by the market actors (BFA Global, 2021; Price Waterhouse Cooper [PWC], 2022). The CBK has exercised some control on the delivery channels of financial literacy used in the banks but has not taken full responsibility for influencing the financial literacy activities of banks to improve the users of monetary services' level of traditional and digital financial literacy. Because of this, the number of individuals without financial knowledge for financial services usage continues to increase. The percentage of the inhabitants without financial literacy knowledge increased from 62% to 69.3% from 2014 to 2019. This increased non-performing loans from the rise in indebtedness and reduced the usage of monetary services (Finaccess, 2019; Klapper et al., 2015; Wamalwa et al., 2019).

On the contrary, some reserve banks are deeply involved in using regulatory policies for mobilizing resources to promote financial literacy. For instance, commercial bank taxation for financial literacy promotion in South Africa was initiated to enhance inclusion. The Central Banks are also sponsoring financial literacy programs. The gathering of resources also involved financial education alliances with banks and other institutions to sponsor the transfer of financial knowledge from the financial educators to the population for their safety in using monetary products and services. The banks involvement in promoting monetary education is relevant in strengthening the citizens'

financial capability and speedily intensifying financial inclusion (Fluch, 2017; Garg & Singh, 2018; Sibanda & Sibanda, 2016). The evidence for this is scarce in the banking sector of Kenya.

In addition, there is insufficient proof regarding the banking sector partnership for resource mobilization to promote financial literacy through volunteer organizations and educational institutions to increase the usage of monetary services. Organizations like “Improving Financial Awareness & Financial Literacy Movement in Kenya, the Christian Community Healthcare Foundation of Kenya, and the Financial Awareness Foundation” are volunteer community-based organizations providing volunteering services like awareness to institutions, employers in both the formal and informal sectors, individuals and households to participate in financial literacy training. Under their own sponsorship, they provide publications filled with fascinating financial literacy program materials to empower users of monetary services (Nyawino & Sabuco, 2020).

1.1.6 Commercial Banks in Kenya

According to the CBK 2020 records, the licensed full-service banks in Kenya are forty. The banks are grouped into three broad categories by their regulator supported by three measures: net assets including customers' deposits, capital, and reserves. A weighted composite index is computed from the above indicators and banks with an index of above 5% are categorized as large banks while those with between 1%--5% are medium-sized banks. Small banks are those with a weighted composite indicator of below 1%. Included within the measures of bank categorization is market share

derived from customers' deposits. These deposits increase the banks' net assets. The shares are obtained on the idea of the number of obtainable customer deposits of every bank.

Banks with more customer deposits like KCB, Equity, Co-operative, and ABSA bank have a greater share of the industry. The CBK management reports mentioned nine big commercial banks controlling a joined market share of about 65.98%. One-tenth of the shares were controlled by 9 medium-size banks like Bank of Baroda, prime bank, family bank, and Eco Bank, while 22 small banks controlled 7.92% shares. In the recent past, CBK placed four commercial banks that included Imperial Bank, Chase Bank, Dubai Bank, and Citi bank under receivership and liquidation because of very poor performance, however, their poor performance was not attributed to financial inclusion (CBK, 2017; CBK, 2019; CBK, 2020). The large banks in Kenya are growing as shown by the rise in their combined market share from 49.9% in 2014 to 65.98% in 2017.

The big banks in the recent past are aggressive in increasing their availability through the establishment of new branches across the country using their financial inclusion strategies. As an example, the Bank of Africa and Diamond Trust Bank through their financial inclusion strategies were promoted from medium-size banks to large banks between 2014 and 2017. The financial inclusion strategies led to significantly increasing their deposits by increasing their accessibility and availability. These large banks have also invested in their mobile money platforms (CBK, 2016). During the same period that large full-service banks grew their profitability, medium-sized banks

experienced a reduced market share from 41.7% in 2014 to 32.42% in 2017, which explains how pursuing an inclusion strategy positively influences commercial banks' performance. The market controlled by small banks also grew but this growth was attributed to the demotion of Guaranty Trust Bank from medium-sized to small size (CBK, 2016).

1.2 Statement of the Problem

Globally, to benefit from financial inclusion an individual must have a bank account, which is the beginning of inclusion. On the other hand, for financial inclusion to have a greater impact on the economy its three global indicators; access, availability, and usage need to increase together. For Kenya, access and availability have increased concurrently while usage of financial products and services is low and remains a challenge for commercial banks (CBK, 2019; Demirgüç-Kunt et al., 2015; Finaccess, 2021; Nizam et al., 2020). Because of the low usage, less than 60% of the households and individuals within the population are using electronic or internet banking services, pensions, digital loans, traditional banking services, and insurance products (Finaccess, 2021).

The low usage of digital banking services, that is mobile bank accounts, 34.4% and 6.2% for digital app loans, insurance product usage, 23.8%, and pension is 12.5%. Usage continues to experience a decreasing trend in insurance, pension products, and digital loans. The usage of mobile money services (M-PESA) is 81.4% but 22.8% of users have no accounts with formal financial institutions. The adoption of banking technology resulted in a decrease in the usage of traditional banking services; checking

and saving accounts but has no significant effect on the increase in other forms of banking. Moreover, the usage of traditional banking and mobile money services coincides with non-performing loans of 19.6% 14.6%, and 13.1% in 2019, 2020, and 2021. The low usage also affects access to credit and investment (Finaccess, 2021; Kenya Bankers Association [KBA], 2019; Mwangi, 2019; Van Hove & Dubus, 2019; World Bank, 2021b).

Banks charge between 155-1,322 shillings for opening an account, and despite the low cost of account ownership, usage of financial services remains small. Of the population of 47.5 million 57% are of the productive age. From this group (18-64 years), 25million are employed in the formal and informal sectors. OF the 25 million 14.65 million have accounts with commercial banks while 10.35 million are still financially excluded (Finaccess, 2021; Financial Sector Deepening [FSD], 2019; International Labor Organization [ILO], 2022; KNBS, 2019; O'Neill, 2021; World Bank, 2021c). The percentage of the inhabitants without financial literacy knowledge increased from 62% to 69.3% from 2014 to 2019. An average of 41% of the population has limited financial knowledge of the borrowing cost of the various types of loans and this has increased indebtedness (Finaccess, 2019; Klapper et al., 2015; Wamalwa et al., 2019).

Previous studies on financial literacy in Kenya and elsewhere like Bire and Sauw (2019), Grohmann et al., (2018), Mwathi et al., (2017), and Wafula, (2017), studied financial literacy on financial inclusion but there appears to be a scarcity of study done to analyze how financial literacy delivery channels affect inclusion. Taking into consideration that no country or institution can achieve optimum financial inclusion

without financial knowledge, there is exigency to fill the knowledge gap been overlooked by other studies. Specifically, how the delivery channels of financial literacy influence financial inclusion in Kenya.

1.3 Purpose of the Study

The research intention was to bring to light new insights about financial literacy delivery channels moderated by CBK regulations towards the monetary inclusion of economic banks in Kenya. The declining trend of usage of monetary products and services needs urgent attention for a solution. The MPESA revolution championed the global recognition of Kenya for its contributions to monetary inclusion. The investment in financial technology introduced MPESA, which enhanced the usage of monetary services. This development in the financial sector increased bank account ownership of individuals and households to 81.4%. By 2021, the ownership of deposit accounts declined to 22.8%. Of the productive population of 27 million 14.65 million owned bank accounts while 10.35 million used MPESA services but do not have checking or savings accounts with the financial sector (CBK, 2018; Finaccess, 2021; Financial Sector Deepening [FSD], 2019; ILO, 2022; KNBS, 2019; Mwangi, 2019; Plecher, 2019; World Bank, 2021; Van Hove & Dubus, 2019).

1.4 General Objective

The study purpose was to evaluate the effect of financial literacy delivery channels and central bank regulations on financial inclusion of commercial banks in Kenya.

1.4.1 Research Specific Objectives

1. Examine the effect of financial education partnership on financial inclusion of full-service banks in Kenya.
2. Analyze the effect of digital platforms on financial inclusion of commercial banks in Kenya.
3. Assess the effect of consumer awareness on financial inclusion of commercial banks in Kenya.
4. Analyze the effect of financial advisory services on financial inclusion of full-service banks in Kenya.
5. Evaluate the moderating effect of CBK regulations of financial literacy delivery channels on financial inclusion among commercial banks in Kenya.

1.5 Research Hypotheses

The following null hypothesis governed the research.

H0₁ Financial education partnership has no statistical and significant effect on financial inclusion of commercial banks in Kenya.

H0₂ Digital financial platforms have no statistical and significant effect on financial inclusion of full-service banks in Kenya.

H0₃ Consumer awareness has no statistical and significant effect on financial inclusion of commercial banks in Kenya.

H04 Financial advisory services have no statistical and significant effect on financial inclusion of full-service banks in Kenya.

H05 CBK regulations do not moderate the relationship between financial literacy delivery channels and financial inclusion of commercial banks in Kenya.

1.6 Justification of the Study

Research in financial inclusion in Kenya is insufficient so the investigation carried out was noteworthy. The use of the delivery channels of financial literacy to promote inclusion is important since the global financial literacy rate for Kenya is low at 38%. This study, therefore, carefully examined approaches employed by full-service banks with good financial literacy delivery channels in other countries to enhance financial knowledge for adoption and effective utilization by banks for their customers in Kenya. The information is vital to policymakers like commercial bank executives, the Kenya Banker Association, and other actors within the industry to introduce new policies for commercial banks' financial inclusion. On the other hand, this study motivated further research into issues such as regulations of commercial banks' financial literacy education for customers to support inclusion in Kenya. This knowledge gap hopefully served as a basis for contribution to financial consumers' understanding of bank transactions, adequate use of financial services, access to credit, borrowing costs, and payment of loans. This will positively contribute to poverty reduction in the country when the population is financially included through financial literacy programs.

1.7 Limitation of the Research

Every study is affected by constraints. For this research, the problems encountered came from the COVID-19 pandemic. The pandemic affected all sectors of Kenya's economy. Companies and businesses were closed down and a huge number of the population was sent home from work for their safety. People who survived the pandemic were starting a new life when the study was conducted. Firstly, they were learning the new way of living introduced by COVID-19. The new way of life involved wearing a mask at home, work, and other places, no shaking of hands, no touching one another, and no one was allowed to be in crowded places. Also, no sitting close and talking. People were instructed to observe the 1.5-meter distance rule of the government in all places and at all times. The change in the condition of interactions was a barrier to the study. The respondents observing these rules did not have the time to focus and therefore not all the information provided may tell the plain truth. The respondents were learning these new rules and busy with work overload, trying to cover time lost when the country was closed down for almost a year due to the health crisis. These uncontrollable situations affected the response rate.

Secondly, the study was dealing with branch managers and not the number of branches. Most of the branches had 2-4 managers and therefore only 215 branches of the 40 commercial banks were covered. In addition, the government restricted the study to a few counties for health safety reasons. Some branches of banks in places authorized were in the hinterland and getting to them for data collection was not possible due to the government COVID-19 curfew and restrictions on transport activities across the Country.

1.8 Delimitation of the Study

The study had trouble with COVID -19 but the strategies employed overcame them. The study is good because the targeted population was reached and data was gathered from more than seventy percent of the respondents across the nation. The study was conducted with 40 licensed commercial banks. These were the banks in operation. The banks had 1,503 branches operating across the 47 sub-divisions of the country (CBK, 2020). The study covered 215 of the 1,503 branches. This is because some of the banks had 2, 3, and 4 managers assigned at a branch performing different functions. Out of the 40 commercial services providers, 35 participated, portraying 87.5%. Five abstained which is 12.5% of the total. The 35 banks had 1,468 branches representing 97.7% and the five nonparticipating banks had 35 branches constituting 2.3% of the total number of branches. The respondents to the questionnaires were all branch managers from eleven counties.

1.9 Significance of the Study

The study supported the Country's vision 2030 aimed at eradicating poverty through financial inclusion. This development goal contained a plan that provides for the inclusion of all Kenyans in taking advantage of top quality of life by 2030. This long-term development agenda has three pillars focusing on the sustainability of rapid economic growth and tackling poverty (vision 2030 National Plan, 2007).

The concept of monetary literacy is one important tool for poverty reduction to have a prosperous nation. It is one cornerstone for human capital development and plays a major role in inclusion and decision-making that creates a positive impact on the lives of individuals. Low monetary literacy of individuals and households is responsible for

slow economic growth and contributes to unemployment. The government and other practitioners like banks and academicians can use the study outcomes to help improve the population's financial services usage quest through improving financial literacy education. This can be achieved by formulating policies for practice improvement, and theory building to support this objective.

1.9.1 Policy Formulation

Kenya's monetary sector is managed by the reserve bank whose duties include formulating and revising policies to make sure that the sector remains afloat and vibrant. One among the points of concern is the low level of monetary literacy for financial inclusion and therefore the survey outcomes could be used as a basis for policymaking. The study analyzed several financial literacy practices employed by banks in other countries to enhance inclusion among their population. Effective financial literacy practices are recommended by the study to other industry players to help in improving the overall financial inclusion. The central bank can formulate policies to make it a requirement for commercial banks to take responsibility for ensuring their customers have a particular level of monetary literacy knowledge to reinforce their financial inclusion.

1.9.2 Practice Improvement

Commercial banks and other financial institutions are battling high NPLs due to the low financial literacy of loan customers. The industry players can use the results of the study as a guide in designing financial literacy programs for improving credit and debt counseling. The study analyzed financial literacy delivery channels for financial inclusion that commercial banks in countries that have high financial literacy have

adopted which can be used by local deposit-taking financial institutions in this part of East Africa. The survey provides insightful findings that can be used by local banks in enhancing the financial literacy education of their customers for their inclusion. The results will benefit the practitioners in this industry by improving performance.

1.9.3 Theory Building

The purpose of any scientific study is to contribute to existing theoretical knowledge within the subject field. Contributing to previous knowledge of a profession further strengthen its significance and adds additional value. This work benefit finance as a discipline specifically within the area of monetary literacy and financial inclusion as a component of consumer finance, household finance, personal finance, and wealth management.

Many studies on this subject have failed to address the issues of the delivery channels of financial literacy to reinforce individual financial inclusion and mostly focused on how financial literacy affects areas of entrepreneurship, enterprise performance, and growth. The study enriched existing academic literature and punctiliously analyzed the framework employed by commercial banks in improving financial literacy for inclusion among the population. Future researchers and academicians can use what is reported as referencing material.

1.10 Assumptions of the study

The survey focused on three key underlining assumptions: first, the government of Kenya has a framework for financial inclusion due to its role in supporting economic growth in the economy. Second, every sector in the economy supports financial inclusion. Third, commercial banks support financial literacy for financial inclusion of the population. Finally, the respondents were friendly and honest in their responses to the items in the questionnaires and that the information provided was true. The two main subjects that have expanded literature in consumer and personal finance are financial literacy and financial inclusion. They support economic growth and that constant research on the two pillars is important for full employment and poverty alleviation among the inhabitants.

1.11 Scope of the Study

The focus of the study was on financial literacy delivery channels, CBK regulations, and financial inclusion of full-service banks in Kenya. The study covered all four financial literacy delivery channels in which banks played a leading role in their customers' financial knowledge. The channels are financial education partnership, digital financial platforms, consumer awareness programs, and financial advisory services and how they affect financial inclusion in the Republic of Kenya. The study variables were measured using constructs developed by the researcher based on the research objectives. These abstract concepts were developed based on the literature review.

The independent variables financial education partnership, digital financial platforms, and consumer awareness have three constructs each and financial advisory services

have four constructs. The dependent variable, financial inclusion has three measuring constructs, and the moderating variable, CBK regulations have four constructs. The variables and their constructs are in the operational framework in chapter two. The study specifically focused on branches of the forty licensed commercial services providers. The study gathered primary data on financial literacy, CBK regulations and monetary inclusion in the commercial banks as at 2021 and was collected over the period of 6 months.

1.12 Operational Definition of Terms

Consumer awareness: education that provides detailed knowledge to buyers or consumers concerning their rights and protection on the goods and services to acquire including the kinds of business information to share (Kareem et al., 2016).

A digital platform refers to an online medium that facilitates commercial interactions between a business and customers or between two businesses (Rolland et al., 2018).

Financial advisory services refer to practices of financial planning, financial counseling, financial coaching, and financial therapy to ensure that financial consumers have adequate information in making rational decisions on the financial markets (Heinrich et al., 2014).

Financial Inclusion refers to various activities such as financial literacy and regulations that enable individuals, households, and vulnerable people to access and effectively use monetary products and services at a reasonable cost fairly and transparently (Majanga, 2016).

The financial literacy delivery channel refers to the appropriate delivery mechanisms used by commercial banks to promote financial literacy to the targeted audience (OECD & INFE, 2015).

Financial education partnership: refers to a joint coordinated initiative between public, not-for-profit, and private institutions such as commercial banks to provide financial and other resources and develop a framework for promoting financial literacy knowledge to the targeted audience (OECD & INFE, 2015).

1.13 Structure of the Thesis

The thesis is structured into five chapters. Chapter one presents the background to the research that includes an overview and current development in the subject. Additionally, the background provides discourse on the following subtopics to strengthen the analysis. The topics comprised the concept of financial exclusion, financial inclusion of full-service banks, financial literacy in Kenya, monetary literacy delivery channels, Central Bank regulations of financial literacy delivery channels, and classification of commercial banks in Kenya. The chapter also includes discussions on the statement of the problem, the purpose of the study, the general and specific objectives, research hypotheses, the limitation and delimitation, and the significance of the study. The significance outline policy formulation, practice improvement, and theory building. Lastly, the assumptions of the study, the scope of the research, and the operational definition of terms are presented in this chapter.

The chapter two reviews the scholarly literature on the conceptualization of monetary education partnership, digital financial platforms, consumer awareness, and monetary

advisory services in previous studies to assess their effect on monetary inclusion. Further, literature on central bank regulations was reviewed. From these revisions, the research gaps were identified. Other elements of the chapter are theoretical literature; five theories were adopted to explain the study variables, the conceptual framework and discussions of the variables within the framework were presented as well as the operational framework and summary of the entire chapter.

Chapter three covers the methods employed to conduct the study. Specifically, it contained the research design, questionnaire development, sampling, pilot testing, data collection, data analysis procedures, and ethical consideration in research. Other aspects of the chapter are research philosophy, target population, the concept of research on validity, reliability, and diagnostic tests.

The chapter four outlines how the study data were analyzed and the results obtained. The chapter first presents a preliminary data analysis of responses from respondents on their demographic profiles. Additionally, presented are the results of diagnostic tests, explanatory factor analysis, confirmatory factor analysis, hypothesis testing, and findings from the linear regression model used. The last chapter of the study presents the summary of the entire research work, the knowledge contribution made by this study, the conclusion from the results obtained, suggestions and areas of future investigation.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

Presented in this chapter is the analysis of pieces of literature both theoretical and empirical relevant to this study. The chapter is further comprised of the conceptual and operational frameworks.

2.2 Theoretical Literature Review

Every empirical work is tested against a research-based theory. Cauvery et al. (2018) noted that scientific theory is the conclusion of fact-finding, observations, hypothesis testing, verification of knowledge, and the making of inferences. The foremost theory that directed the study was the resource-based theory. Based on this preposition, the research analyzed financial literacy delivery channels as key resources that commercial banks can use to promote financial literacy of their target customers. Banks that have effective delivery channels have better resources and are more likely to succeed in their monetary literacy promotion compare to those with limited resources. Similarly, the type of financial literacy delivery channel that a bank uses relies on the available resources. Therefore, banks only invest in delivery channels that they are capable of financing. Other related theories that informed this study included diffusion of innovation theory, motivation-needs theory, Prospect theory, and institutional theory.

2.2.1 Resource-Based-View Theory

Wernerfelt's theory of "Resource-Based-View" was rooted in two articles he published in 1977 and 1984. It had been extended and improved by Barney (1986 & 1991) and other researchers that came after them. The RBV proposition was promulgated in the Journal of Strategic Management by Wernerfelt in 1984 and is among several theories applied to many disciplines. The idea originated from an economic concept: "firm resources", discussing the success of an establishment from the standpoint of its wealth in terms of factors of production", from previous work of Penrose et al., (1959, 1973, 1977 & 1984).

The relevant objective of the concept is bringing resources together creates the likelihood of growth. It considers the organization as a collector of economic resources and hypothesized that valuable strategies are tools for creating resources. This proposition was adopted to explain the theoretical foundation of financial education partnership. Alliances strengthen organization growth by bringing together financial, human, intellectual, and physical resources. Further, resources are often internal and external, and mixing them using better strategy increases organizational competence. Working with only internal resources may hinder progress.

Bringing together the resources of two or more organizations, individuals or groups accelerates institution development. In addition, it is essential to utilization of their expertise, knowledge, and skills for adequate checks and balances, share responsibility, and is paramount for capital accumulation. Resource integration is the best and fastest way of creating synergies in enhancing organization success. It enabled

the organization to have a competitive edge over others (Barney, 1991; Kamboja et al., 2015). According to Wernerfelt (1984), the resource-based view is critical because it pooled resources that are valuable with no possibility of transferring or acquiring, are harder to imitate by competitors, and are capable of bringing a few major changes within the organization.

Collaborations are necessary mechanisms for organization asset mobilization to accomplish the firm's goals (Madhok et al., 2010). It influences capability and is acceptable for gaining access to other valuable equipment that gives greater opportunity for achievement (Rice et al., 2012). The theory did not produce a selected meaning of the firm resources and did not mention its measuring instruments. It did not justify whether resources are acquired or developed (Barney et al., 2011; Kraaijenbrink et al., 2010). Banks could encounter difficulty in understanding resources in forming a partnership to market financial literacy. The proponents' different views in formulating the idea make the idea not to outline the training needs for obtaining and managing the firm resources that would influence the management of banks' partnership for financial inclusion are issues not addressed by RBV.

The study adopted this important theory to expound on the connection between the utilization of financial education partnership and inclusion. A partnership is often used as a technique by banks to spice up customers' financial literacy skills. As an example, financial organizations can collaborate with academic institutions, industry experts, and others for improving financial knowledge from the mixture of monetary and

human capital resources. This theory is significant in helping to find solutions to organizational challenges. Because of this function, its usage will continue to increase.

2.2.2 Diffusion of Innovation Theory

The idea originated from Rogers's seminal paper that he later produced in a book in 1962. The theory has its root in communication but it is among several theories that are applied to finance and other disciplines. An assessment of diffusion literature showed that five versions were published. The first was in 1962. The second is *Communication of Innovation*, 1971; the third, fourth and fifth, 1983, 1995, and 2003 (Dearing, 2009).

The theory explains the usefulness of innovation to society. It was used to explicate banks' need for digital platforms in this age of digital transformation. The platforms are communication channels derived from innovation that use cloud-based digital financial technology to communicate information between the commercial bank management and customers (Son et al., 2020). The platforms can allow users of financial services to perform online retail and digital banking tasks that include bill payments, reviewing spending information, and purchasing goods and services (Sonono & Ortstad, 2017). These electronic devices also permit end users to access bank digital financial products like checking and saving accounts, credit card, and lending products. Clients can also use the bank web page that is connected to social media via Facebook and LinkedIn for product information. The customers can transact and engage with their commercial services providers anytime and from anywhere using their platforms (Schich, 2020).

The online platforms can also be used for face-to-face interaction between commercial bank employees and customers. They provide an avenue to create a virtual classroom for digital financial literacy education online and deliver learning experiences that enable customers to actively engage with the financial services providers. This delivery channel for financial education programs is made to a large number of recipients at the same or different times and promotes active learning mostly among the youths. The programs include game-based learning that makes financial literacy knowledge more effective and enabled the students to understand and apply what they learn in financial literacy through video games. Educators used digital resources as part of their instruction to make learning more interesting and interactive (Aprea et al., 2018; Arora, 2016; Schich, 2020).

The theory mentioned elements of innovation and stages of adoption of innovation but did not consider the associated cost or resources needed to adopt and spread innovation. Innovation is the spreading of new knowledge and knowledge is associated with age. Roger's proposition did not take into account an individual's age and gender as social characteristics' that affect innovation. Further, it did not explain how economic and environmental factors such as pollution, poverty, instability, and policies affect innovation.

In this study, the theory was employed to elaborate on the connection between the utilization of digital financial platforms and financial inclusion. The idea is extremely useful to financial institutions because nearly all banking services used financial technology. Mobile banking and internet banking are examples

of platforms employed by the banking sector players to serve customers and increase financial inclusion.

2.2.3 Motivation-Needs Theory

Maslow (1943) developed and published his motivation-needs theory in the North America Psychological Review journal 1943. The idea is an extended version of Maslow's doctoral research in 1934. Maslow (1954) published a book called “Motivation and Personality” where he mentioned human needs in a hierarchy. Within the framework, he acknowledged that human needs are going to be fulfilled one at a time. A specific need is going to be satisfied before focusing attention on the subsequent highest need in the ranking order.

This theory considers the role-play by commercial banks in meeting the needs of the financial consumers through marketing their products and services. Consumers' education provided by the banks protects the purchasing decisions of the service users and influenced their rights and responsibilities (OECD, 2010; Qazzafi, 2019; Ward & Lasen, 2009). The awareness satisfies their physiological, safety, belonging, and esteem needs. This knowledge motivates the consumers and comes from available data processed into information by the suppliers of monetary services. Such education enables the buyer to develop the require skills to research costs related to the financial products and budget resources needed for purchasing. The education provided is financial literacy that satisfies the consumer’s choice and deficient needs. Customer knowledge about a product affects every aspect of consumer purchasing behavior (Levin, & Milgrom, 2004).

Informing customers about products and services is cardinal in consumer behavior studies that specialize in satisfying needs (Ansari & Alhazemi 2016). Manufacturing, wholesale, and retail institutions' financial budgets contained amounts allotted for consumer awareness geared toward providing the required information concerning every product. Consistent with Vigar-Ellis, (2016), a consumer has objective and subjective knowledge about a product. There is a direct correlation between objective knowledge and merchandise acquisition and this influences consumer needs. Objective knowledge is accurate information from awareness about the merchandise and is influenced by demographic characteristics like age, education, gender, and income.

The subjective knowledge is confidence about the product and is driven by consumption. Sapa, (2020), maintained that information needs affect all aspects of human behavior. Seeking information that is accurate for decision-making for the satisfaction of safety needs has relevancy. Maslow's theory did not rank the order of needs within the hierarchy consistent with the demographic characteristics of consumers in terms of gender, age, race, education, culture, ethnicity, income, and marital status. The idea did not justify how demographic characteristics will affect individuals' behavior and motivation in terms of various needs.

Further, no separation exists of the various needs within the hierarchy consistent with the individual's competence and education achievements. Moreover, it did not explain the length of time it takes to realize a specific need within the hierarchy of needs. These issues would affect commercial banks' consumer awareness of financial inclusion because the theory did not address them. The theory has relevance to the present study

because it considers the role-play by commercial banks in meeting the needs of monetary consumers through promoting their products and services.

2.2.4 Prospect Theory

Kahneman and Tversky (1979) produced and published Prospect theory in the journal of *Econometrica* 1979. The proposition is rooted in behavioral finance. The expected utility proposition was challenged by this theory, which explains how people make decisions involving risks. Kahneman and Tversky (1979) maintained that individuals and households make decisions involving risk for outcomes. They argued that human behavior influences decision-making. Individuals and institutions make decisions for utility maximization. They like to realize a gain in any decisions because losses have a greater emotional impact and thus finding the simplest opportunity to avoid risk for gain is going to be the priority. Kahneman and Tversky idea was borrowed to explain financial advisory services in achieving financial inclusion.

Banks' financial advisors use their knowledge and skills to supply financial literacy to clients to know the financial markets' activities. The advisors make sure that customers understand the rationale of risk and return decisions. They also monitor investors' finances and plan for the future. Having more financial advisors in the commercial banks will promote financial literacy, enable banks to maximize profit, and boost inclusion. A positive relationship was found between financial advisory services, saving volumes of bank clients with low wealth, and profitability (Hermansson, 2015; Rentková & Mariak, 2018; Söderberg, 2013).

Fredrickson (2009), acknowledge that prospect theory explains the relations between credit counseling in financial advisory services, saving behaviors, and insurance premium. Using prospect theory, decision-makers want positive results from any decision to make. They struggle to avoid chance phenomena and thus wish to base decision-making on empirical information that contains internal and external validities. The idea is predicated on an experiment that described lottery decisions in gambling. Experimental studies are not valid externally in situations in other societies (Devroe, 2016). Such study is related to probability, an opportunity phenomenon.

This suggests that decision-making supported by experiments has an equal chance of being excellent and bad. The theory-based decision-making on a start line called reference dependence. The purpose of the starting point is not specified and not well explained. Nobody knows the precise location of the point and thus locating the purpose for decisions might be challenging. The theory experimental procedures did not show how individuals and institutions will make decisions and be risk-averse during the challenging time of floods, hurricanes, and earthquakes. These are unresolved issues that would affect banks' decision-making to avoid risks for gains.

The proposition is critical because it enables the study to elucidate financial advisory services' relationship to financial inclusion. Commercial banks engaged in customers' and investors' advisory services as a choice for avoiding the danger of losing clients due to difficulties in understanding financial products and services within the banking markets. These advisory services will enable the banks to

maximize customers' satisfaction by reducing challenges in financial services delivery and this may, in turn, increase the banks' earnings.

2.2.5 Institutional Theory

The institutional theory proposed by Scott (2004) was adopted to explain the moderating variable CBK regulations for testing the hypothesis. According to Scott, institutional theory relates to how organizations combine structures, norms, procedures, and routines to establish accepted guidelines that authoritatively guide human behavior. The theory is further based on the external definition of legitimacy, which guides structures, norms, and rules that are adopted within organizations without much emphasis on consideration of efficiency (Meyer & Rowan, 1977).

The institutional environment could be effective or less effective depending on the structures and norms established. Organizations need separate resources to enact an institutional strategy as those required for designing their competitive strategy. The institutional strategy is more concerned with the ability of the organization to articulate, enhance and enforce practices and norms as legitimate and desirable. This theory, however, assumes that institutions must be designed similarly in terms of the structures put in place, norms, values, and systems to enable them to achieve a competitive edge. The theory does not anticipate the technological orientation of the institution, which has become an integral part of the organization's performance in the current operating environment (Berthod, 2018; Jepperson, 1991).

This theory has relevance to the present study since it disclosed how regulations could influence financial literacy channel adoption by commercial banks in promoting financial inclusion. Consistent with this theory, banks are subject to existing regulations, which determine the channels of monetary literacy to adopt to promote financial inclusion. The proposition further enables the study to know organization frameworks in terms of policies, rules, and regulations for financial literacy and financial inclusion and a few of the institutional strategies put in place by commercial banks to enable compliance with CBK regulations for the adoption of appropriate financial literacy channels. From a theoretical perspective, the adoption of financial education partnership, the use of digital financial platforms, consumers' awareness initiatives, and financial advisory services are viable financial literacy delivery channels that commercial banks can adopt to promote financial inclusion.

2.3 Empirical Literature Review

The empirical review of related literature summarizes other studies carried out based on experiments and experience. The scholarly writings explored were reported from authoritative sources of other studies and findings established. Observation, facts, methodology, and replication are attributes of empirical literature (Jalongo & Saracho, 2016; Nakano & Muniz, 2018). The review incorporated the systematic approach to identify the research gaps.

2.3.1 Effects of Financial Education Partnership on Financial Inclusion

Banking is a challenging task and commercial banks operate in an environment where there are many competitors (Nyachwaya, et al., 2020). They are involved in marketing financial services to the public for profit. To make a profit they have to attract

customers for the consumption of their goods and services. Banks' customers are individuals and households, and one way to attract them is to provide the requisite education for products and services sold. The education to the consumers is continuity as long as banks exist because different kinds of products are produced every time and marketed. They need resources for the delivery of consumer education that do not generate income. The different channels of financial literacy delivery require a good number of resources, and resources are scarce. For banks to succeed, they have to form a partnership among themselves and with other institutions and organizations as recommended by the OECD in 2012 (Kissimoto et al., 2016).

Authors have researched the significance of partnership in financial education and include Mross and Reiter (2019) who conducted a study in America on financial education partnership that sought to establish how academic library associations' partner with commercial banks and other organizations to support financial literacy education was managed for the student's success. The study surveyed 21 students who attended financial literacy programs organized by the library. Based on an exit survey, feedback was positive. Students indicated they found the sessions useful, and their financial knowledge improved after the sessions. The librarians also received calls from the participants asking for the sessions to be offered again in future semesters.

These findings showed that financial education partnership initiatives for financial literacy training between learning institutions and commercial banks improved student knowledge of budgeting and other financial concepts hence addressing their financial inclusivity. The study concluded that alliances are very useful in helping to address

community problems such as financial literacy for library users. Such initiative supports the resource-based theory and the transformation theory. The provision of library financial literacy education using a partnership with banks has been successful in the United States but Kenya has not introduced it.

Moreover, Hendrickson, Croymans and Jokela (2017) used a partnership with organizations, university libraries, and communities for financial literacy month in America to assess financial literacy promotion for youth. The qualitative survey concluded that huge benefits are associated with affiliation and among them are friendship, planning, and sharing of information. The study lamented that communication in the network between organizations and people enabled the youngsters to learn financial literacy concepts from materials available and parents also benefited in getting financial knowledge from materials provided by the communities and libraries. The use of university organizations in partnership with communities and libraries to promote financial literacy for young people had succeeded in American society but such as has not taken place in Kenya.

Closely, Hill et al. (2020) adopted a cross-disciplinary approach to financial education partnership in the US to assess undergraduate students in higher education financial literacy level. It was established that financial literacy partnership between schools and communities helps to expand financial literacy among people, improves individual financial knowledge for personal financial management, and increases their confidence in making financial decisions. The study adopted the qualitative technique and used focus group discussions with 70 students. The participants were divided into

six discussion groups each performing specific functions. The authors concluded that challenges of individual financial literacy would be overcome with the aid of financial education partnerships. The teaching of financial literacy to undergraduates in higher education has been successful in America but Kenya has not adopted this approach.

Similarly, Mosley (2017) in the US employed a collaborative model to analyze partnerships in financial education between schools, individuals, and agencies for resource mobilization in meeting the community needs. The study established that partnership is the driving force behind financial literacy activities for young people of school-going age. Further, through collaboration, financial literacy programs are implemented with ease in schools and in communities for improving financial knowledge. The study adopted the qualitative methodology and used the case study approach to study a sample population of 133 individuals comprising 115 youth and 18 adults. In conclusion, the authors acknowledged the strength of alliances as the gateway to finding quick solutions to organization challenges by using a team of experts and resources generated.

In addition, Visano and Ek-Udofia (2017) in Australia applied PEACH and York University Community financial literacy partnership to find out the benefits of inclusive pedagogy in learning that requires marginalized youths guided by financial experts to serve as consultants in financial literacy workshops organized to encourage a sense of self-initiative where student-facilitators identify financial literacy problems and develop the analytic skills in finding solutions. The study was conducted based on two structured workshops with 25 marginalized youths. The result showed that the

partnership efforts enabled facilitating students in the financial literacy workshops to develop active engagement potential in constructing their learning and such a learning approach addressed their financial inclusion. The study concluded that inclusive pedagogy brings about creativity that enables learners to use their ability to develop financial literacy problem-solving strategies, which create financial awareness in the community.

A survey carried out by Nkuna et al. (2018) examined commercial banks' role and financial education partnership initiatives for inclusion in Malawi. It was established in the qualitative study that partnership increased customers' financial literacy and their collaboration enabled the formation of consumer protection policies. It also enabled the banks to engage in other initiatives in their cooperation to address other barriers to enhancing financial inclusion. The results also pointed out that the banks had little accomplishment for expansion of branches but the number of electronic payment systems like ATMs increased and agency banking expanded in the rural areas reaching the unserved population.

Likewise, Friedline et al. (2015) in the US assessed the significance of partnership in financial education between academic institutions and banks for operating children saving accounts for low-income students of the GEAR UP project. The results showed that financial institutions' alliances with stakeholders open the corridor for teamwork to develop better strategies for effective planning and management of children's savings programs. The survey conducted adopted the qualitative method and employed purposive sampling to focus on underprivileged students. The target population was

10 employees from 6 banks with 4 beneficiaries from the project. The low-income student saving program implemented as the result of financial education partnership is effective in the United States but has not been applied in Kenya.

Trunk et al. (2017) conducted a study in EU countries for banks' customers' financial literacy training using the case of banks in Slovenia. The survey explored banks' approaches and patterns of education and training to increase customers' financial literacy knowledge in Slovenia. The findings established that banking institutions are successful to increase customers' financial knowledge through seminars, and conferences using initiatives that included financial education partnerships. These results confirm the outcomes of Bire and Sauw (2019); Chutani et al., (2015) and Molefe (2017) concerning the strength of training in financial literacy for financial inclusion.

A study by Further and Sari (2018) in Indonesia found that banks' financial literacy partnership programs in tertiary-level education would improve students' financial knowledge to scale back their consumer behavior and hence, promote their financial inclusion. The study concluded that higher education financial literacy programs are significant in addressing students' money management problems to their consumption level. The programs were intended for the youths in enhancing their understanding of banking activities including monetary products and services. These financial education schemes are awareness provided by banks and their partners on banking solutions and financial literacy.

In Romania, Lacatus et al. (2018) assessed financial education partnership programs between schools and institutions in the banking sector for improving students' financial skills for competencies. The study concluded that schools and banks have differing views concerning financial competencies. As a result, both are dealing with separate types of population with different objectives and financial education programs. Banks viewed financial competencies as financial literacy while the schools considered competencies to be linked to economic education. The study showed weak coordination between banks and schools' financial education partnerships in promoting financial literacy for financial inclusion. For banks and schools to achieve the same objectives and not differing views in financial education partnership, banks have to design the programs and control them in the schools.

Chung and Park (2015) study forms of financial education partnership in America for the acquisition of financial knowledge. To get outcomes and conclusions, the authors developed and tested two hypotheses. The authors hypothesized that the interconnection between groups in learning financial education positively influenced financial literacy knowledge. Further, the authors theorized that support for groups and support among individual members within groups strengthen the financial education network and is positively associated with financial literacy. These alternative hypotheses were tested on data gathered from respondents of 105 students in higher education.

The findings revealed that education networks solidified learning between groups in financial education and it is positively correlated with monetary literacy. The

outcomes of the research work concurred with those of Bongomin et al. (2016), Rahmawati and Rahadian, (2018) who established that various sorts of networks correlated with financial literacy and inclusion. Last, the authors indicated that strong social interaction between students and their lecturers in learning financial education contributes to improving students' financial literacy knowledge. The number of members in social network groups influences the promotion of monetary knowledge among those acquiring such knowledge. A partnership between organizations and education institutions supports the necessity for quality financial literacy programs to strengthen the financial skills acquired by students. The education network between groups in learning financial education in higher institutions of learning is successful within the United States but such a network has not been figured out in Kenya.

Research by Koomson et al. (2020) in Indonesia used gender diversity to analyze training in financial literacy partnership for financial inclusion and reported that financial education training significantly influences female account ownership and male saving behavior. The results also indicated that those that gain financial knowledge through training are likely to have an account at a financial organization and save.

Comparably, the financial services industry (FSI, 2016) conducted a survey intended to measure the financial inclusion index achieved through financial education partnerships to understand the number of individuals within the population with financial knowledge who are financially included. The study had 9680 participants and adopted the descriptive survey design. It had been established that Indonesia the

country with the largest population size within the APEC economics financial inclusion index increased by 29.66% and therefore the increase was attributed to the partnership between banks, the Financial Services Authority, and other organizations supporting financial education initiatives for financial inclusion. The collaboration between APEC member countries strengthens the development of monetary education schemes administered in schools and other institutions for youths and communities. Last, the authors maintained that the quality of the relationship between the financial services industry actors and partners was liable for ensuring the implementation of the monetary literacy and financial inclusion programs that resulted in the high percentage of inclusion index reported.

2.3.2 Effects of Digital Platforms on Financial Inclusion

In LAO Democratic Republic, Scholars including Morgan and Trinh (2019) evaluated the correlation between financial literacy, fintech adoption, and awareness of monetary products using digital platforms and reported that individual advanced level of computer-based financial literacy knowledge has strong and positive influences on financial technology product awareness. Improvement in financial education is important for quick use of banking services and hence the promotion of inclusion. Shen et al. (2018) who established that boosting the digital financial literacy of people supported this result and increasing public use of the web can influence electronic financial products utilization for optimal inclusion. The study used a cross-sectional design and a partial method of least squares for testing the hypothesis.

An investigation by Birochi and Pozzebon (2015) in Brazil on digital platforms explored the use of communication technologies in financial education for low-income micro-entrepreneurs to enhance financial inclusion for social transformation. The study adopted the case study design with a randomly selected sample of 32 persons from a population of 3,000 inhabitants with no access to financial services closer to their homes. From the analysis of data, it was reported that special developed information communication technology platforms for financial education programs for low-income micro-entrepreneurs can increase financial inclusion and such development can enhance social transformation. The results also pointed out that putting developed financial education software programs in standardized information technology would provide the capability for reducing tension experienced in financial literacy education.

Jaya's (2019) study in Indonesia on digital platforms used the life-cycle proposition for testing the impact of financial education on the provision of public services and found that financial technology influences financial inclusion but does not affect public financial services education. In conclusion, technology in public financial services requires training in digital-related programs to enhance the users' skills for using digital platforms for inclusion. The findings support the planning of financial inclusion training programs for users of public financial services technology. These results support the ongoing public servant financial literacy training sponsored by the government of Kenya in government institutions.

A study by Kuchciak and Wiktorowicz (2021) in Poland assessed commercial banks' use of digital platforms as a conduit to promote financial literacy education mostly for young clients. The survey was performed using cluster analysis for grouping banks with close characteristics. It was reported that various forms of online platforms provide different financial literacy programs on bank activities. The findings confirmed the study by Pranata et al. (2018) in Indonesia who used logistics regression for analysis and established a positive correlation between digital opportunity and inclusion. The outcomes also showed that the intensity of social media activities complemented inclusion. The study concluded that the rapid growth in access and usage of digital technology in Indonesia has increased the utilization of digital financial services.

In Udaipur City India, Prasad and Meghwal (2017) in their study on a government initiative to reinforce digital financial knowledge for inclusion in India found that males' respondents were more familiar with digital financial platforms and aware of the products and services due to their level of digital financial knowledge than the female respondents. The study also reported that an individual education level is a significant determinant of digital platform awareness than it uses.

The research of Tejawani (2018) in India reported that using the SHG framework for blending vocational training programs with digital financial literacy for digitalization in banks' financial inclusion process increases the rate of success in using digital platforms. Commercial banks' sponsorship of SHG in rural communities to provide

digital financial knowledge to the residents has been successful in India but banks in Kenya have not adopted such an approach.

Moreover, Bhuvana and Vasantha (2019) in India evaluated the strength of digital platform usage for rural bank customers to own mobile bank accounts and established that financial literacy knowledge played a key role in using digital banking for clients in rural communities. The study concluded that the utilization of banks' digital technologies by rural customers enhanced their inclusivity. The conclusion supported the banking industry's achievement in Kenya. The sector has invested hugely in innovation for access and availability of financial services but more investments are also needed in digital financial literacy for the rural inhabitants who are customers.

Meanwhile, Matita and Chauma (2019) in Malawi carried out a study on digital platforms to know if financial literacy influences mobile financial services usage. The statistical analysis and logit regression showed that the use of mobile phones for financial transactions increases with financial knowledge. The study was able to show that a positive correlation exists between cell phone usage for bank financial transactions and financial literacy. The total of 4,999 households were sampled based on stratified random sampling.

The findings of Hove and Dubus (2019) on M-PESA usage in Kenya found that mobile savings are not the primary objective of using mobile financial services, M-PESA in promoting financial inclusion. Savings are based on the need and decisions of the platform users. The results concurred with Leydier (2016) who used a sample of 8665 individuals and households to examine the savings habit of using mobile money

platforms. It was reported that usage of mobile money services has a significant impact on households but does not affect their saving habit. The investigation concluded that M-PESA users in Kenya are savings less while using this financial service. The results also supported the low usage of banking products and services in Kenya. Of 79.4% of M-PESA users, 23.3% do not have bank accounts and therefore do not save.

Nevertheless, the outcomes of Koori et al. (2020) in Kenya revealed that suppliers of financial services are satisfied with the adoption of financial digital platforms. Banks have ensured that banking and branchless banking services provided to customers using online platforms are easy to access, reliable, convenient, less costly, timely, and accessible. These positive outcomes are significantly associated with inclusion. The findings also revealed that technological innovation enables banks to adopt different types of strategies to cope with competitors in the financial markets.

The results supported the study of Durai and Stella (2019) who found that accurate timing, and convenience positively influenced mobile banking platforms. In addition, low service costs and careful planning were found to have a significant effect on banks' financial services delivery. These findings concurred with the research of Keli (2018) who established that using online platforms to perform money transfer services generate huge profit because of easy access and the internet strength and consistency facilitate the effectiveness of financial services delivery. The survey also found that mobile phone usage to facilitate digital financial transactions positively affects financial inclusion.

The results of Arday's (2017) study in Ghana were that ownership and use of cell phones for financial transactions have a positive impact on inclusion. It was also found that male ownership of phones and understanding of financial services was greater than females and usage by individuals and households significantly reduced exclusion. In conclusion, cell phone usage by the banked, unbanked, and underserved population for online and internet financial services is growing. Mobile phones can undertake both banking and CICO network financial activities.

The study further concluded that mobile financial services are helpful to individuals and households. It creates employment opportunities for agents of banks in urban and rural communities. It initiates remittances including money transfer services both from abroad and within the country and the cost of financial services is low for households. Future development of this digital financial sector in Kenya will bring greater benefit to households in terms of access to credit, savings, and others.

The evaluation by Musango (2018) posited that mobile banking activities involving the payment for services, management of bank accounts, and credit facilitation are positively related to inclusion. The study concluded that a reduction in commission charges for mobile financial transactions brought more participants and expanded banking services to other regions of Kenya. Mobile services usage by 79.4% for transactions has remarkably reduced the large number of clients that physically visit banking halls daily.

Similarly, Wang and Guangwen He (2020) in Rural China found digitalized financial services to have a significant effect in reducing hardship for rural farmers and

supporting their inclusion. It enabled the farmer to credit access, provide the opportunity for social networking, and for affordable cost of transactions and investment risk reduction, which created an expansion of their activities. The study concluded that for the farmers to use the services effectively, digital financial literacy programs would be the answer. The conclusion supports digital platforms delivery channels to reduce low usage of banking services as in Kenya.

Further, Senou et al. (2019) established that the internet and mobile phone are the two technologies significantly associated with changes in economic transactions that have influenced the financial markets in West Africa. The existence of digital platforms has contributed positively to financial inclusion but the region has challenges with the adoption of second and third generations' digital technology. These results show that Kenya is ahead of the region in acceptance of innovation. The study recommended that policymakers and regulators of the reserved bank of West Africa should make policies to govern the financial markets and it should affect digital financial education for understanding and using the technology.

It was established by Fairouz and Wickramasinghe (2019) in Sri Lanka that technology transformation contributes to intense competition from value creativity between banking and nonbanking institutions; increasing productivity to meet customers' tastes and preferences. The study adopted the qualitative method and used the case study design. Data obtained from primary sources were analyzed using measures of dispersion and simple linear regression for testing the hypothesis testing. The study findings agreed with the research of Ruggeri, et al. (2018) who assessed the importance

of digital technology on business innovative start-up models and established that customers create value from investing in digital technologies and the use of financial services.

In Kenya, Wathome (2020) found that digital platforms facilitated digital credit that influenced the financial inclusion of youths through credit access, employment creation, financing of education, reducing poverty, and establishing cordial relationships between lenders and borrowers. According to the results obtained through multiple regression of the research by Tan et al. (2018), mobile technology and big data are the drivers of financial innovation. It was also found that emerging economies embracing technology have created many business opportunities that strengthen inclusion.

In Kenya, Kimotho (2016) examined factors influencing digital innovations acceptance and found adoption to have a positive effect on organization resources and changes in customers' behavior toward accepting digital transformation. The results also stated that institution return, expansion, and competitors' pressure are strongly associated with innovation.

Mwania (2018) study on digital platforms in Kenya assessed micro-enterprises for electronic banking technology acceptance and found convenience, transaction financing, and collateral value as variables that have significantly influenced technology adoption for inclusion of small enterprises and hence enhanced growth in SMEs due to low transaction cost from credit access.

Certainly, Thairu and Wahome (2016) in Kenya study on digital platforms analyzed banks' initiatives for financial inclusion and found that innovation increases sales and incremental profit from quality financial products and services. The outcomes confirmed the study of Blythin and Cooten (2017) who in Kenya found that the excluded population was brought to the financial sector through innovation that resulted in the mass production of financial facilities at low cost. The findings also pointed out that fintech companies have made immense contributions to financial inclusion from the development of M-PESA that modernized financial transactions that are making the suppliers of banking services experience increased in sales and profit.

Thaddeus et al. (2020) investigation of digital platforms found digitalization of monetary services to possess a robust and positive association with economic process and development in Africa specifically within the sub-Saharan. The findings are in agreement with the study of Francis et al. (2016) who found the utilization of mobile technology services by developing nations to have a good trend in financial inclusion. The case-study analysis was adopted for the survey using empirical evidence from Ghana.

In Kenya, Midika (2016) found a negative association between agency banking, computerized financial services, and mobile banking. The study concluded that digital financial services expansion for branches in many parts of the country is still a challenge for most banks. The conclusion of Midika research supported the low usage and less than 30% are using digital banking services.

Consistent with Fernandes et al. (2020) on digital platforms using the ARDL model to assess computer-based financial services contributions to financial inclusion in Mozambique found that quick access and stability of the web for mobile banking and electronic money and withdrawals of funds deposited in mobile phones have a robust effect on inclusion. The outcomes also indicated that remittances and web banking transactions present low levels of penetration. These results confirmed the study of Shen et al. (2019) who found that the web plays an important role in serving financial market actors, and this influences the straightforward access and availability of monetary products and services. The results further indicated that inclusion was found to be influenced by individual financial skills and digital product usage. Lyons et al., (2020) study on financial resilience found that conventional and digitized financial literacy are the two most vital instruments for handling stressful events of life that affect individuals' and households' income.

Mwangi and Cheluget (2019) in Kenya used multiple regression to examine innovation and financial literacy for SMEs' financial access from banking institutions and established that SMEs owners' knowledge of digital platforms usage and financial literacy education influenced financial inclusion. The study also found that a negative or positive change in any of the variables would affect credit access of small and medium-sized businesses. In Kenya, Byegon et al. (2019) study on digital platforms analyzed the role of monetary technology in financial decision-making using human behavior approaches and reported a positive effect of self-confidence on financial inclusion with financial innovation moderating the relationship.

Hemmen (2019) in Denmark examined factors that drive digital platforms for financial inclusion and found that fintech innovation, female empowerment, legislation, and accessibility of financial services are the drivers. The study categorized all drivers as ecosystems and the women empowerment driver was found to be more critical and need attention in the developing region. In Kenya, a study by Mutua (2018) investigated financial innovation variables that influenced financial inclusion and found that agents of banks, the numerical value of ATMs, M-PESA and microcredit institutions transactions, and deposit accounts are strongly associated with inclusion.

A scholarly search by Howell (2019) on the acceptance of digital platforms by low-income credit unions in America to facilitate inclusion of the unbanked community established that credit unions' asset size and the length of time offering online banking influenced financial inclusion. The findings also indicated that credit unions help to educate and bring the unbanked to the financial industry. Low-income credit unions like commercial banks used digital platforms to supply monetary services to clients. Mobile platforms and web banking are digital platforms employed by credit unions to facilitate their financial transactions.

2.3.3 Effects of Consumers' Awareness on Financial Inclusion

Reifner and Herwig (2016) in the US studied consumer awareness on the use of information in financial services delivery and protection of consumer rights in the wake of fraud and misinformation in trading. The study concluded that knowledge of financial literacy was needed in every aspect of goods and services for the users for the prevention of fraud and misinformation. The results further noted that consumers

need timely information to manage their finances and guidance to make them confident in dealing with purchases, credit access, social credit, stock, and all other activities of the financial markets. The survey findings corroborated with the study of Chariri et al. and Wulandari (2018) in Indonesia who reported that investors' financial literacy strength features a significant and positive impact on investment fraud detection and consumer protection.

The results also presented five approaches for fraud identification in investing, concluded that fraud diagnosis in investment transactions protects the consumer, and enhanced financial inclusion. These findings confirmed the results of Engels, et al., (2019) in America who established that individuals' financial literacy skills were capable of their protection in fraud identification in using financial services. Banking product usage and basic money management skills cannot provide the propensity for fraud awareness and consumer protection unless adequate financial knowledge.

The conclusions from the studies of Chariri, et al. (2018), Engels et. al. (2019); Reifner and Herwig (2016), and supported the research by Padil et al. (2021) in Malaysia who revealed that adequate knowledge of financial concepts is positively related to awareness of student in higher education for detection of fraudsters' link to investment. The authors recommended that educators in tertiary education and regulators should ensure quality in financial literacy programs to enable students to set financial objectives and teach them fraud identification mechanisms for their safety in investment transactions.

Further, Cwynar et al. (2019) evaluated the financial knowledge of consumers for their protection and found that buyers with more knowledge in financial matters were less challenged in understanding reports and information with numbers. Their financial knowledge provided a sort of security for personal decisions concerning their well-being. The study used 1,067 Polish adult consumers from the stratified sample and the hypothesis was tested using linear regression. In conclusion, Poland had been successful and have a high rate of monetary literacy and inclusion from huge investment in quality financial education schemes for all level of the Polish society with effective delivery channels.

In Europe, Filipova-Rivers (2016) used comparative analysis and evaluated financial literacy and the protection of financial consumers in Bulgaria and Romania. The study found that financial sector information disclosure to consumers on financial products and services and consumer rights need improvement. The diversification of financial services and improving consumers' financial knowledge are essential for their protection.

Moreover, Lobozyńska (2017) in Ukraine examined the relationship between consumer awareness and protection from high-risk innovative banking products, credit agreements, lending rates, loan installment plans, and warranty on financial products on credits, payment services, insurance products, and savings and confirmed that effective regulations were necessary for improving consumer protection. The findings also indicated that consumers' rights were violated in using credit, deposit, and

payment services in Ukraine. The descriptive survey method was employed using 1,500 consumers.

Similarly, Bongomin and Ntayi (2020) in Uganda analyzed clients' transaction privacy, account protection, prevention of SIM swaps, and security for personal information to understand their influence on consumer protection from consumer awareness. The study reported that the protection of consumers is significant to business growth. Laws that prevent unfair practices strengthen consumers' confidence in the markets. There should be punishment for individuals and institutions that violate the laws in the industry. The protection measure for consumers' information in digital platforms transactions should be strong for consumers' trust.

A study conducted by Aboagye and Anong (2020) in Ghana analyzed the relationship between consumer awareness and microfinance integrations and reported that consumers' perceptions of using mobile money and microfinance services influenced their protection from fraud, and network capacity, security, and the complexity in users' design. The services providers' perceptions focused primarily on access, product range convenience, and regulatory climate.

Additionally, Kriese et al. (2019) in Ghana evaluated financial access using cross-country data from 102 countries and reported that consumer protection enhanced financial inclusion and impact economic development. In the same vein, Alikariev and Poliakh (2018) in Poland examined consumer safety, enforcing consumer laws and regulations, fair treatment, recourses, and standards for complaints resolution for consumer security and established that consumer protection influences economic

improvement. The study found that the extra developed a country's economy, the higher the index of the safety of consumers and the higher the financial inclusion level.

The research by Chirwa and Mvula (2016) adopted a baseline survey approach to research households' financial literacy and consumer protection in Malawi. The survey findings showed low financial knowledge, protection, and consumer awareness. The authors recommended training for monetary education in learning institutions and the enforcement of consumer protection regulations. Further, market actors should prioritize the supply of consumer education, and better approaches for consumer dispute resolution. More so, Ali et al. (2015) performed a quantitative analysis of Australian youth's financial literacy for their protection and reported gaps in consumer rights, awareness, and financial knowledge. The study concluded that the gaps needed improvement for full participation in financial markets for the consumption of products and services.

Nonetheless, Dalkilic and Kirkbesoglu (2015) in Turkey applied consumer awareness and tested students in higher education financial knowledge of insurance products. The study found differences in their understanding of the product. Those who did business courses had vast knowledge than those from other disciplines. The study concluded that consumers need awareness of all goods and services at every level of education for their protection.

However, in an experiment conducted on consumer awareness to evaluate investors' financial literacy education in making decisions involving investing in high-risk financial products with high returns, Gui et al. (2021) in China found no relationship

linking financial literacy and individual choice to risk. The survey concluded that financial education programs be designed to provide awareness to suit consumer preferences.

In their study, Maroor and Pushpanathan (2016) in India examined the medium of consumer awareness used by banks in financial services delivery to customers for their protection in financial inclusion. It was found that banks' promotion of products and services such as checking and saving accounts, insurance, and loan is mostly carried out by customer services and marketing departments using social media platforms, radio, and newspapers. Further, it was reported that the government on regulations regarding new policies and practices of financial institutions also carries out awareness.

The conclusion of Garz et al. (2021) in the US was that consumer awareness programs were necessary and needed in low-and-middle-income nations for challenges that consumers faced in using financial services in the wake of technological advancement. The study identified concealed costs, debt burden, unfair treatment, and favoritism as obstacles that affect consumers daily in the financial markets. Further, the authors called for robust actions of government and institutions for effective consumer education and improvement in regulations for the markets as a remedy for the impediments.

A study carried out by Arora and Marwaha (2015) in India on consumer awareness analyzed the financial literacy of investors in the stock market in India and found that stock market participants had low knowledge of the securities invested in and their

associated costs. The results also pointed out that investors had a limited understanding of macroeconomic variables comprising the exchange rate, inflation, and interest rate.

A study by Blasch et al. (2018) in Switzerland used consumer awareness to examine the financial literacy knowledge of households in three EU countries on cost-saving for energy usage in homes. The results from the descriptive and econometrics analysis showed that males had a higher ability than females in using financial knowledge to analyze energy-related costs. The survey data was gathered from 4,796 families using a questionnaire. The authors concluded that more consumer education is needed in the energy sector to enable consumers to use financial literacy knowledge and analyzed costs associated with energy-related activities for homes.

Research by Buerke, et al. (2017) in Germany on consumer awareness examined the conduct of consumers for their sustainability. The study reported a positive association between accountable consumer behavior, knowledge, and consumption. The authors concluded that consumer awareness of consumption was influenced by factors that included the environment, financial literacy, value, and personal well-being.

2.3.4 Effects of Financial Advisory Services on Financial Inclusion

A study carried out by Girardone and Migliavacca (2018) in Italy on financial advisory services and financial literacy found knowledge transfer from professional independent financial advisors to be positively associated with an increase in financial literacy knowledge of investors. The study also stated that the education and experience provided by financial advisors, the willingness of the investors to learn,

and the period covered for the advice improve the cognitive abilities of investors. The survey adopted a field survey design.

In the same line, Gaudecker (2015) in the Netherlands found that individual and household financial literacy knowledge and professional advisor's financial advice contributed significantly to achieving positive investment outcomes. The findings also indicated that financial skills and financial advice provide a better understanding of investment portfolios and banking services for a household's financial inclusion. The research adopted a descriptive design and used cross-sectional data.

A study by Rentková and Mariak (2018) used financial literacy to examine financial advisory services in Slovakia to understand if financial advisors consulting services help their clients. The findings revealed increases in clients' financial skills from financial advice and this improves their decision-making. The findings of the study also showed that clients who sought financial advice were educated and needed advice for mortgage, retirement savings and to understand other financial activities of the markets.

Research by Nguyen and Rozsa (2019) in Vietnam evaluated the role of financial literacy in seeking financial advice in making retirement investment choices. It was found that investors' financial knowledge has a positive correlation with advice-seeking behavior for retirement investment preferences. This influences the adequate use of banking services that enhances financial inclusion. Financial advice and financial literacy education are complementing each other to assist individuals to make informed retirement investment choices.

In the US, Trent (2018) assessed whether the changing of the advisory model by financial advisors can adequately address the problem of clients' financial knowledge. It was found that to improve the financial literacy level of individuals and households three models should be adopted: the federal funding model, the retirement savings financial literacy model, and the financial advisor use of innovation technology model for adequate financial knowledge transfer. The study adopted the qualitative research method and used descriptive statistics to compute the mean, median, standard deviation, and percentages of the primary data gathered.

In Australia, research by Nguyen et al. (2016) declared that client financial knowledge, financial advisor reliance, and time spent with the financial advisory firm are associated with client output from advisement and decision-making for investment. The study adopted the field survey design with a sample size of 538 advisors determined using the maximum likelihood estimation method from a population of 548 financial advisers. The measures of variability and linear regression analyzed the data and tested the hypothesis to establish the reliability, validity, and goodness of data collected to find the relationship among the selected variables.

Consistent with the outcomes of Anton et al. (2016) in Spain, financial advisory knowledge acquired through learning applications in the financial advisory industry has a direct connection to organizational performance. The findings also stated that the effective application of knowledge acquired in the financial industry would promote financial inclusion. The case study method was adopted to study a randomly selected sample of 349 from the target population of 4,542 Spanish financial advisors working

with financial and investment institutions in Spain. The structural equation and logit regression models were applied to structure the variables and derive the results.

A scholarly search by Kilic and Schwabe (2014) in Switzerland examined how the use of design information technology models such as the microworlds-based method of knowledge transfer can aid learning in financial advisory services to improve client knowledge of financial concepts than the traditional approach. The results established that a good design information technology model is capable of promoting client learning. It was also found that the technology is capable of increasing the cognitive abilities of clients in acquiring the requisite financial knowledge needed from the advisors.

In addition, Heinrich and Schwabe (2015) carried out a study in Switzerland on financial advisory services to explore the significance of financial advisors using IT-supported service encounters for the delivery of financial education to enrich clients' financial knowledge. The results showed that technology-supported services for consumer education promote knowledge transfer to clients' satisfaction levels more than traditional delivery of financial education. The findings also indicated that an IT-supported setting to advance clients' financial literacy using predicted knowledge transfer and actual knowledge gain promotes financial inclusion.

An investigation by Migliavacca (2020) in Italy sought to determine the usefulness of clients' skills from advisors' awareness since financial education schemes were not too effective owing to the program design, harmonization, teaching methodologies, and regulation. The findings acknowledged that advisors are important players in

improving clients' basic and advanced financial literacy levels. It had been also revealed that financial advisors improved their clients' financial knowledge that provided a stable way for making informed financial and investment decisions on the financial markets resulting in their financial inclusion.

Ning and Hu (2019) in America posited that financial advice and monetary literacy support one another and are non-monotonic. The findings found financial advice to not be a proxy for investors' financial literacy knowledge but a compliment. That is, investors with basic financial knowledge consult financial professionals for investment decisions and people with very low knowledge give investment decision-making responsibility in its entirety to advisors.

In Switzerland, Silic and Ruf (2017) study on financial advisory services sought to determine whether clients' advisement could be carried out using mobile services platforms. The survey was concerned about trust in digital financial technology in the wake of fraud and other significant challenges regarding the protection of client financial information and other personal data. It was reported that customers' satisfaction was at the peak using mobile platforms for their financial advisory services more than traditional service systems. The results also found that trust was experienced due to timeliness, dependability, professionals, and security provided by banks for advisors and customers' protection in mobile platform advisory services to enhance clients' financial inclusion. Partial regression was adopted for testing the hypothesis.

In Romania, the main objective of the study of Magda-Nicolae and vieraşu (2015) was to determine how consumer firms like small and medium enterprises could seek the

services of financial advisory firms to address challenges and develop marketing strategies for better opportunities in improving their organization performances. The study reported that seeking many forms of financial advisory services by the majority of the SMEs was significant to influence their performance and expand their products and services for financial inclusion but firms were not interested in many forms of financial advisory services. Less than 80% were using one or two forms of advisory services.

A study by Hermansson (2015) in Sweden conducted on financial advisory services to understand the saving behavior of customers given complex financial decisions concerning savings and investment found an association between financial advisors and bank customers that significantly influence financial inclusion for saving volumes and stock of investment products. The findings also pointed out that the existence of loyalty and reliance in the relational exchange creates a strong tie that lasts longer for bank financial advisors, customers' relations, and customers' saving behavior.

The survey conducted by House (2020) in America on advisory services examined how advisors compete with each other in the financial advisory services industry using approaches of alternative investment to understand the macroeconomics dynamics of the markets for growth potential from diversification of clients' investment portfolios. The results showed that the portfolio's overall performance was greater due to the investment strategies incorporated by advisors for risk reduction. It was also found that financial advisor's alternative investment concepts adopted to diversify clients'

portfolios were associated with positive social change and the creation of specialized alternative investment jobs.

A study carried out by Chauhan and Dey (2020) in India aimed to determine the investors' willingness to pay financial advisory fees to obtain suitable financial advice reported that investors advanced knowledge of financial literacy was associated with their recognition of the significance of financial advisory services and willingness for financial advisors' payment for additional knowledge in trading in financial products and service to enhance their financial inclusion. The findings also indicated that investors with advanced financial skills were not willing to seek financial advice if advisory fees were more than the investors' total value of the net investment.

Carlson (2018) in Sweden assessed whether financial advisors' monetary value from clients' advisement was capable to impact changes in their income in the wake of competition in advisory services and government regulations of the financial advisory services industry. The results showed that an increase in investors' worth from advisory services is significantly associated with advisors' compensation, investor risk tolerance level, and investment time. The results also noted that from financial advice received, investors are opportune to benefit 1.66% rate of return. The strength of advisory services influences financial inclusion.

A survey by Tharp (2019) in America sought to establish if clients seeking financial advice could distinguish the numerous titles of financial advisors that included financial planners, financial consultants, investment consultants, and investment advisers in the financial advisory industry and their regulations. The results that

financial advisers' title in the industry are related to one another and the differences recognized by clients is consistent with the advisor's functions and professional practice.

A study carried out by Söderberg (2016) in Sweden on financial advisory services sought to examine the gender diversity of financial advisors to clients' assessment of the risky investment portfolio, financial literacy, and managing personal finance. It was found that the gender of financial advisors affects the assessment of clients seeking financial advice. The results also revealed that clients' consideration of investment risk, satisfaction with advisor instructions, level of financial literacy, and decision to follow the advice given by the advisor are statistically related to gender difference. Men are considered to have more financial knowledge than females.

In the US, White et al. (2018) employed the case study method to determine workforce diversity in financial advisory firms using a population of 1,379 advisors from 73 of the largest firms and found that diversifying the firm's website to reduce White male predominant features was the beginning for increasing diversity and inclusion in the advisory firms' workforce. The results also found a correlation between financial advisors' region and their qualifications for client financial inclusion.

A study conducted by Kramer (2014) in the Netherlands evaluated the financial knowledge and confidence of individuals seeking financial advice. It was reported that the call for financial expert advice was lower for investors who had higher overconfidence. The result also noted that overconfidence was only associated with male investors who preferred to make their own financial and investment decisions

using their financial knowledge, investment skills, and experiences for financial inclusion.

2.3.5 Effects of CBK Regulations on Financial Inclusion

Momanyi (2018) in Kenya examined the regulatory effect on financial inclusion and pointed out that regulation of financial institutions' activities is associated with financial stability and optimal inclusion. This study supported the current study that regulations of commercial banks' activities that include financial literacy delivery will enhance the usage of banks' products and services for speedy inclusion.

A survey done by Kelegama and Tilakaratane (2014) analyzed regulations of financial inclusion of individuals and households based on financial services delivery by institutions in Sri Lanka and concluded that fragmented laws need to be rectified for the protection of consumer and to enhance the extent of monetary knowledge through quality financial literacy programs. The rectification of laws will encourage transparency, credibility, and accountability to market financial inclusion.

In Thailand, Tambunlertchai (2015) assessed the influence of regulatory framework on financial inclusion, and financial regulation and located gaps between the prevailing outcomes and the desired outcomes caused by limited financial literacy education, weaknesses in financial markets regulatory reforms, and unsatisfied demand for monetary products and services on the banking markets.

Rojas-Suárez (2016) in Latin America used multiple regression to examine issues affecting financial inclusion from regulatory framework and found increases and

decreases in inclusion because of regulatory gaps. This is also the case with Kenya. However, institutional regulations play a major role in the direct and indirect effects of inclusion.

In Ethiopia, Zvedu (2014) explored financial inclusion, regulation, and inclusive growth and located a relationship between them. The financial sector growth is the result of financial regulation, monetary literacy of the population, stability, and supply, and usage of monetary products and services to individuals and households at affordable costs. The findings confirmed the research of Sreenu (2018) who in India found that inclusive growth could be achieved by ensuring increases in financial inclusion and financial stability. The study concluded that financial regulatory agencies could holistically use joint efforts to implement financial inclusion for growth.

On the other hand, Bongomin et al. (2017) in Uganda found an association between inclusion, institutional framework, and regulation and it was partially moderated by the social network; implying that regulations can improve financial inclusion and social network has little influence on financial markets regulations.

Further, the study of Anarfo (2018) in Ghana found financial inclusion in the sub-Saharan of Africa to be the key to better outcomes in economic activities. Inclusion causes expansion of the economy resulting from effective regulation. Consequently, Chen and Divanbeigi (2019) carried out a study to find out whether financial inclusion can be promoted by regulation. It was established that countries that followed many

good financial regulatory practices benefit from inclusion. It enables individuals and households to hold accounts at financial institutions.

Additionally, Ankomah (2017) in Ghana assessed global regulatory standards in Africa on financial inclusion and reported that the influences of macroeconomic policy of individual countries enable global standards to have significant effects on inclusion. Individual country-specific macroeconomic variables have a statistical influence on financial inclusion.

Kelly (2016) in America evaluated the policy of inclusion and financial regulation to find out the reasons for low-and-middle-income countries' acceptance of inclusion framework and regulation. It was established that inclusion policy and regulation followed the state's capacity and engagement with international organizations and peer countries. Most of the rules and laws governing inclusion and financial practices of a nation are experiences adopted from other countries and are in line with best practices. The research was carried out in India and Mexico.

Research by Heydenrych et al. (2018) in South Africa sought to establish how the interaction between regulators and insurance firms could achieve financial inclusion and stability from financial regulation. The results showed that regulators and industry actors should work together in developing regulatory policies for inclusion and stability rather than the regulator alone providing measures for financial market control.

Reynolds et al. (2018) analyzed the effectiveness of branchless transactions of banks, and mobile money services regulations in low-and middle-income countries using CICO networks. It was found that regulations of CICO networks were limited in scope with little or no impact on markets and consumers of the branchless services provided. The outcomes also indicated that rigorous financial regulations of the networks would influence the quick expansion of this digital financial service to enhance financial inclusion. The research used Bangladesh, India, Indonesia, Kenya, Nigeria, Pakistan, Tanzania, and Uganda as case studies.

A scholarly inquiry by Anarfoa et al. (2020) examined financial stability based on the financial inclusion of the population using financial regulation. It was established that losing prudential regulations in financial institutions will positively influence capital adequacy and will influence access to finance. The study also found a positive association between regulation, stability, and inclusion. The study agreed with the work of Kodongo (2018) in Kenya who pointed out that regulators should loosen macro-prudential regulations and know-your-customers policies in specific cases where they will not endanger financial inclusion. The results also established that improving access to credit in financial institutions is associated with financial literacy education and agency banking regulation that will stabilize the macroeconomic environment.

Research conducted by De Sousa (2015) in Canada explored policy promotion and institutional innovation in global economic management and partnership in financial regulation and reported that the application of global financial regulations does not

clearly show positive and negative effects on financial inclusion due to variation of developed and developing countries economic, political and social practices towards financial inclusion. Financial inclusion has a positive correlation to information disclosure requirements in financial regulation.

Aiba (2018) study on the regulatory framework in Cambodia sought to establish the effect of interest rate cap on individuals and households' access to finance involving lending and borrowing in financial institutions. It was established that the interest rate regulatory framework negatively and positively affects financial institutions' lending. This also affects access to finance and monetary inclusion. The study design was quantitative and used ordinary least square regression for the hypothesis testing.

A study by Gichuru (2021) on regulatory requirements of financial technology firms in Kenya for financial inclusion found a strong association between consumers and investors protection, entrepreneurial start-up cost, and inclusion. The hypothesis was tested using multiple regression of primary data collected from 281 of 435 managers in Fintech companies.

2.3.6 Financial Inclusion

A study by Grohmann and Menkhoff (2017) in Berlin established that inclusion is promoted by knowledge of financial literacy and the higher the financial knowledge of the inhabitants, the more the demand for financial services in a developed financial market reflects increases in usage. The study used linear regression to analyze the social and economic factors associated with the promotion of consumer education for the utilization of banks' monetary services that makes economies of developing and

wealthy countries gain from financial inclusion. The study corroborated the survey of Grohmann et al. (2018) in Germany who examined monetary literacy and credit access in financial services delivery and found inclusion to have a strong association with financial literacy.

These results supported the scholarly work of Bire and Sauw (2019) in Indonesia who used multiple regression to test the strength of training in financial literacy among a cross-section of entrepreneurs engaged in SMEs for financial inclusion in Indonesia and found that practical training in financial literacy activities is an important vehicle to quickly enhance inclusion. The study used a randomly selected sample of 54 from the target population of 119 SME entrepreneurs.

A study by Babu (2015) analyzed financial awareness by banks for inclusion in Krishna District, India, and revealed that adequate awareness was based on resources employed by banks in financial education for users. Those with better resources provided the requisite knowledge that improved financial literacy, which increased bank penetration. The banks' initiatives positively influenced inclusion. Similarly, a survey conducted by Jose (2017) in India assessed households' financial awareness for the consumption of financial services for financial inclusion in India found awareness to be associated with financial literacy and its determinants and household categorical variables that included gender, marital status, and education level.

In addition, Slamet et al. (2018) in Indonesia examined bank customers' financial literacy awareness in making decisions about using financial services. It was established that when accurate and timely information is availed to customers within

a timeframe before using bank financial services, financial literacy would increase the chance of one time. This implies that information dissimulation in advance for the use of banking services will reduce the stress of applying more financial knowledge for analysis and therefore increases the supply side of inclusion.

In their survey, Koomson et al. (2020) used individual gender to gauge the advantage of rural financial literacy training on financial inclusion in Ghana. It was reported that bank account ownership and savings increase with the financial literacy training of the inhabitants. The study also indicated that financial knowledge acquire significantly influences male and female saving behaviors. Increases in savings are associated with improved financial behavior obtained from financial literacy. The results supported the study of Mapuasari (2020) in Indonesia who found that savings would be improved through financial literacy for awareness to encourage individuals and households to take their money to financial institutions for safekeeping for future use. The results also indicated that awareness of effective access and use of bank products and services would also increase savings volume.

A research work by Morgan and Long (2020) in Laos reported that financial knowledge has a statistical and significant effect on savings habits. People save not because they have huge cash but due to their good financial decisions made that give savings priority over consumption. The study concluded that people with good scores in financial literacy have a better understanding of financial concepts to enable them to invest in every sector of the economy.

Research by Frączek et al. (2017) in Slovakia analyzed the efficiency of financial education programs for suitable financial literacy of students in higher education and found low financial skills among the students that affected their utilization of financial services for inclusion. The study results confirmed the World Bank survey carried out in the same countries: the Czech Republic, Hungary, Poland, and Slovakia.

Similarly, Yadav and Saxena (2018) in India used a case study approach to investigate financial literacy awareness of banks for use of their products and services by rural communities in India. It was reported that knowledge provided by banks for financial services usage was inadequate and could not reduce the population's financial illiteracy to improve their ability in making good and independent financial decisions. It was concluded that financial institutions needed to do more in training their employees to engage in the development of appropriate financial education programs for the consumers.

Moreover, in Kenya, Nyasani (2021) found that SME owners lack the requisite financial literacy information, which is affecting their financial inclusion. It was also reported that individual and household demographic information and financial literacy are strongly associated with inclusion. The study concluded that country governments should invest in financial education for SME owners at all age levels to improve their financial knowledge through the learning of financial concepts for effective decision making.

Research conducted by Ulwodi (2017) on financial inclusion found the cost of services and distance covered for services delivery as barriers that created a bottleneck for

individuals and households to benefit from access and usage of a wide array of banking services in Kenya and Tanzania. The study supported the findings of Kass-Hanna & Lyons (2019) who revealed that the economically vulnerable communities have very little chance of credit access, cost of services, and other related challenges. Moreover, uncertainty was identified in women and youth access and usage of banking services in the regions in the Mideast and North Africa.

Sisharini et al. (2019) study on inclusion examined the model for MSMEs' financial capability in Indonesia. It had been established that the simplest thing to do for entrepreneurs is to extend their financial literacy knowledge to enable them to use digital platforms like WhatsApp and Facebook to enable them to hunt for funding from banks and other institutions to permit them to require an edge within the financial markets.

A study by Krishnakumare and Singh (2019) in India found an association between financial literacy and inclusion and was statistically significant including its measuring variables that included financial attitude, financial behavior, and financial knowledge. The study also found the causes of financial knowledge differences in inclusion to be financial education program arrangements and teaching methodologies. In Uganda, Bongomin et al. (2018) examined the connection between financial literacy, cognitive skills of people, and households for making informed financial decisions in given situations for financial inclusion. It was found that financial consumers with higher cognitive ability have greater chances of processing accurate information and making

better decisions. It had been also reported that greater financial skills are related to individual superior cognitive ability.

Nkuna et al. (2018) analyzed the role of financial services providers in Malawi and found an increase in the number of electronic payment systems like ATMs and agency banking expansion in the rural areas reaching the unbanked population. The results also pointed out that individual bank helps clients improve their financial literacy knowledge, provide consumer protection and address other barriers to improving financial inclusion.

In Kampuchea and Vietnam, Morgan and Trinh (2019) conducted a comparative study in financial inclusion to assess the factors that influenced financial literacy. The study established that individuals' socioeconomic status has a big influence on financial knowledge and it influences inclusion within the two Asian countries. The study also found an association between general education levels, understanding of monetary concepts, saving behavior, and inclusion.

Research by Yourougou et al. (2020) on financial inclusion in Uganda used a partial least square and structural equation model to evaluate financial intermediaries' promotion of financial literacy for the inclusion of the poor. It was found that among the financial institution microfinance banks played a meaningful role in providing financial literacy training to strengthen the personal financial management and access and usage of banking services of the poverty striking families in rural communities.

Schützeichel (2019) observed that the rise in inclusion in Kenya is caused by mobile money services and an individual's financial behavior features a significant impact on access and usage of monetary facilities. The study aims to assess how financial literacy can contribute to improving the livelihood of poverty-striking families by understanding banks' financial products and services permanently financial decisions.

Molefe (2017) carried out a study on financial inclusion and evaluated financial literacy training of Makesi savings and credit co-operative to work out their contributions towards improving rural communities' inclusion in Lesotho. It had been found that the rural sector savings and credit co-operative society financial literacy training programs positively affect the inhabitants through knowledge of monetary concepts for the consumption of monetary products and services and this enhances their inclusion.

Bongomin et al. (2016) in Uganda indicated that for a society in which the working-age population has difficulties in making financial decisions, social connections would create a financial education network to enable the people to accumulate the requisite financial knowledge for their self-efficacy. The results also confirmed a uniform study by Bongomin et al. (2017) who established that social capital plays an enormous role among people living and dealing together and such relationships influenced their monetary literacy and financial inclusion.

The survey sought to assess whether social interaction among people of a specific society can have an impact on learning financial literacy for inclusion. The variables analyzed were skills in developing a saving plan, saving behavior,

eagerness to save lots of money, access, quality, and usage. Others were welfare, trust, attachment, and bridging. The outcomes of Bongomin et al. (2016) supported the scholarly work of Rahmawati and Rahadian (2018) in Indonesia who used multiple regression to investigate socialization in financial literacy education for inclusion in Indonesia and found that interpersonal relationships, understanding, and networks that exist between individuals and groups encourage learning that influences higher financial literacy and hence increase in inclusion.

Furthermore, in Uganda, a research work by Bongomin et al. (2016) on inclusion purpose to determine whether communication among people influences financial literacy and inclusion. It was found that interaction among people through culture, family, tradition, religion, and friendship influences the acquisition of financial literacy knowledge and this can enhance inclusion.

Bongomin et al. (2020) conducted a study in Uganda to analyze microfinance banks' use of social networks to supply financial literacy education to customers for their inclusion. The study revealed that social relations play a big and positive mediating role in consumers' awareness and inclusion. It had been also reported that social network is related to trust, good behavior, and fair practices, and banks use this medium to create customer relationship. The connection allows permanent customer education that is financial literacy for appropriate use of banking services.

An investigation by Frączek (2015) found that the success of raising funds for savings and investment in inclusion was influenced by the usefulness of monetary literacy regarding individual attitude, behavior, and understanding of risks and making

decisions related to money management. The study is in agreement with the scholarly research of Wafula (2017) who investigated small scale-farmers financial literacy knowledge for inclusion in Kenya and reported that financial literacy is liable for the access and effective use of monetary services. The study also revealed that monetary literacy skills provide the idea for the farmers' understanding of savings, investment, and financial planning practices that involves the management of farm budget, petty cash funds, debt, and farm expenditure.

Vijayvargy and Bakhshi, (2018) study on financial inclusion examined the financial attitude, behavior, and knowledge of families of Jaipur district, India in understanding financial affairs involving access and use of monetary services. Variables analyzed were demographic information and household structure. The results showed a significant and positive relationship between knowledge of monetary affairs and household performance in using financial products and services. Effective knowledge of household financial affairs reduces employment status and increases financial capability from good money management.

Fanta and Mutsonziwa (2021) found financial literacy education campaigns as the main driver influencing financial inclusion in Kenya and Tanzania, members of the East Africa Community. The campaign can facilitate an increase in the demand-side of inclusion through awareness to the consumers for use of monetary services offered by banks. In conclusion, making supply-side elements alone the focal point cannot expand inclusion but demand-side components have the potential to speed up inclusion by enabling people to effectively use more banking services.

Herispon (2018) found that inclusion is influenced by bank lending, household expenditure, and household debt. It was also established that financial inclusion increases with bank lending, financial knowledge, and debt attitude. The increases in inclusion influence households and businesses to credit access for savings and investing. Financial literacy positively influences household expenditure and debt payment attitude. The study used a field survey design with a subjective sampling method and gathered primary data from 303 households.

From a comparative perspective, Lone and Bashir (2017) investigated the monetary literacy and inclusion between the Muslims and non-Muslims in India and located disparities in financial knowledge and inclusion level between the Muslim and Non-Muslims population regarding financial services usage. The study concluded that knowledge deficit and trust deficit existed among the Muslims regarding their inclusion and hence government robust action was needed to enhance financial inclusion policies and practices.

Chutani et al. (2015) in India evaluated data on government financial literacy training programs in India for the inhabitants' post-financial inclusion schemes and found that government involvement in financial education programs initiatives increases financial inclusion and financial literacy rate. The findings supported the study of Babych et al. (2018) in Georgia who established that government initiatives to improve financial education programs would increase both the financial literacy level and inclusion of individuals and households.

Sinha (2018) in India used the determinants of financial literacy to analyze its impact on west Bengal financial inclusion. The study reported an average improvement in financial knowledge and financial skills of male and inclusion were greater than the female. The results also pointed out that urban financial inclusion was greater than in rural communities and that advanced education and income level significantly influenced financial literacy level, financial inclusion, and investment decisions.

The empirical analysis by Bongomin et al. (2017) indicated how individuals and families assess, comprehend, and make sound monetary choices, is strengthened by knowledge of monetary concepts obtained from training in financial literacy. The results strengthen and support the investigative work of Kamanga (2018) who used logistic regression and reported that monetary literacy is responsible to develop individual and household financial skills for the ownership and utilization of banks' services in emerging economies for inclusion.

The results also revealed that advancement in education and demographic factors affect individual financial knowledge and inclusion. The results of Bongomin et al. (2017) and Kamanga (2018) confirmed the research findings of Baskoro and Aulia (2019) who divulged that monetary literacy has a significant influence on planning for retirement for inclusion. The results further indicated that the more financially literate an individual is, the better his/her ability in making informed financial decisions in using financial services for saving and investing, and this positively affects retirement planning. Iriobe et al. (2017) in Nigeria found that increases in funding opportunities

for better financial education schemes to enhance financial literacy have an immediate and significant effect on entrepreneurship development for inclusion.

Iyer and Jose (2017) found that using available funds to cover more young people than adults in banks financial literacy training for financial services users and using the classroom and media for awareness enhance financial inclusion. The study sought to analyze financial inclusion plans using stages of individual financial literacy in India. Twumasi, et al. (2021) in rural Ghana revealed that knowledge of monetary literacy influences the utilization of banking services. It was also reported that households with low-income affect usage of banking services, and financial literacy is affected by age, education, and ownership of an asset. Probit and passion regression model were adopted for variables analysis and hypothesis testing.

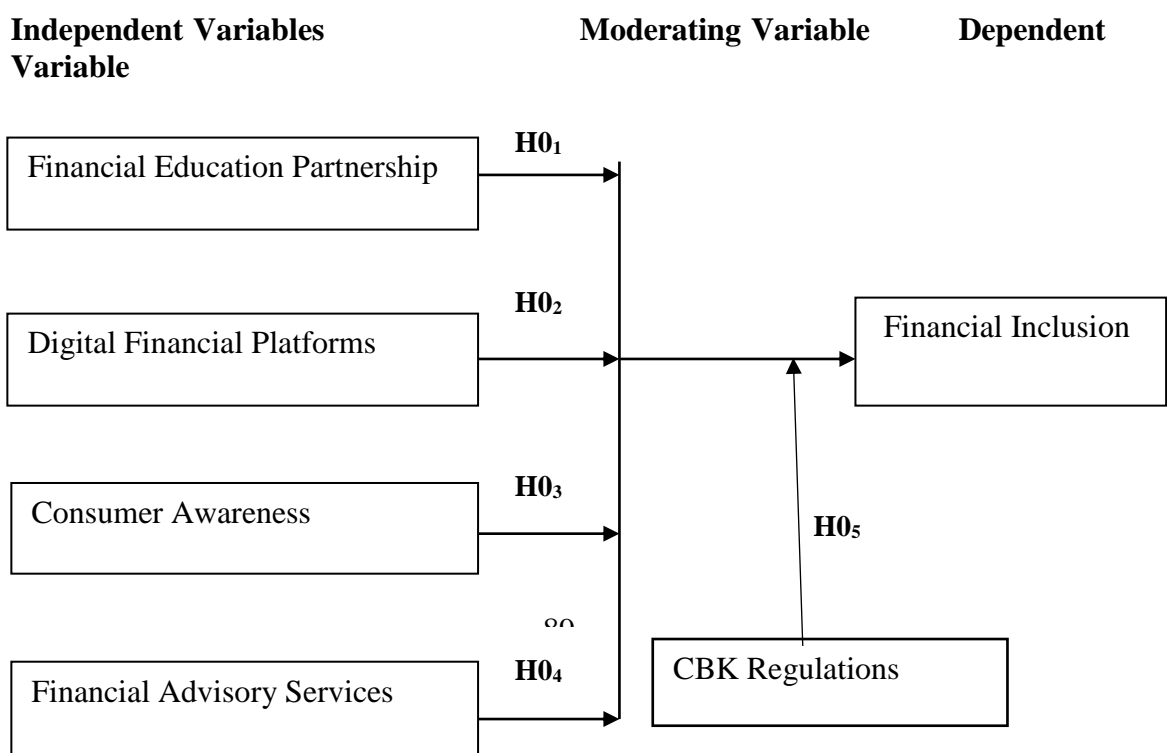
2.4 Conceptual Framework of the Study

Oso and Onen (2016) explain that every quantitative study contains a framework, which is a plan or model that arranged the concepts made of variables operationalize to achieve the aim of the research work. Variables supported by theories are placed in a diagram representing the conceptual framework. The theories strengthen the model and explain the connection between variables. According to Tamene (2016), the framework is the phenomenon the researcher plans to investigate. It is significant and supports the research design. Jabareen (2010) acknowledges that the conceptual model consists of the basic postulates and theories that provide an understanding that informs the researcher's judgment in the study. The research plan is very flexible in that the researcher can adjust variables and theories.

A variable is a case or event studied. The event observed has to be analyzed to obtain findings (Kaur, 2015). The variables of this study were financial literacy delivery channels, independent; financial inclusion, dependent; and CBK regulations, moderating. Independent variables can help explain causal relationships or cause-and-effect. The cause-and-effect is determined based on an analysis of the problem in a quantitative study. The analysis involved testing the internal validity and hypothesis to evaluate the strength of the findings produced by the study from the sample tested. The beginning of the process for gathering the findings is to first operationalize the explanatory variable to provide a clear purpose for the abstract concept studied. It makes it easier for other researchers to replicate the study and check for reliability (Flannelly et al., 2014). For this study, the manipulated variable financial literacy delivery channels were operationalized as financial education partnership, digital platforms, consumer awareness, and financial advisory services.

Figure 2.1:

Conceptual Framework



2.4.1 Financial Education Partnership

The delivery channel financial education partnership is for resource mobilization for the development of financial education curriculum, teaching, and other things. The partnership is the foundation of the delivery channels used to promote financial literacy and is achieved using the collaboration of banks and other organizations (Zhang et al., 2021). Banks' financial education partnership creates a financial education network between organizations. This social network pools resources to promote financial literacy to a targeted audience. Contributions from organizations facilitate the development of financial literacy syllabuses and programs. The partnership helps to enrich financial education efforts by training employees from member institutions (Birochi & Pozzebon, 2016).

Most of the partnership financial literacy programs are designed mainly for youths in primary and secondary schools, colleges, and universities as well as those in the communities. The OECD maintained that the younger generation needs financial knowledge before becoming adults (OECD, 2015). In the US, for instance, JumpStart, Council for Economic Education, Junior Achievement, and the National Endowment for Financial Education programs focused mostly on youth financial literacy (Kasman et al., 2018). Using this delivery channel, bank associations' employees or experts provide several volunteering services (CBA, 2015). The industry experts develop and review financial literacy programs, provide lecture series and engage in other activities necessary to promote financial literacy.

The lecture series are usually classroom and workplace teaching, conferences, workshops & seminars presentations, local financial literacy fairs, exhibitions shows, and hosting of TV programs, Others are communities, towns & villages' awareness, nationwide students' competitions, using media & religion institutions for awareness, creating financial literacy centers and hosting discussions, and awareness using financial literacy brochures, pamphlets and other documents (Bonga & Mlambo, 2016). This delivery channel has benefited many nations including the APEC Countries (OECD, 2018b).

2.4.2 Digital Financial Platforms

Banks' use of digital platforms or digital financial platforms as a delivery channel is specifically intended for customers' digital financial knowledge for using digital monetary products and services. Digital financial platforms originate from digital technology. The technology surfaced in the 1960s and is comprised of electronic tools, systems, devices, and resources that generate and process information (Ozili, 2018). The technology aims to enhance individual productivity, skills, abilities, and expertise in human resource development (Kapur, 2018).

For finance, digital technology is often classified as financial technology and digital banking. Both technologies are instruments for achieving financial inclusion. Fintech surfaced within the 1990s from innovation and provides business models used for the delivery of digital financial facilities while digital banking introduced within the 1980s is categorized into online digital platforms and electronic commerce. The platforms

facilitate online activities and promote interactions between the commercial services providers and users.

They allow the exchanges of products, services, and knowledge between suppliers and consumers. Among the platforms are social media, knowledge, media sharing, and service-oriented. Banks mostly used service-oriented, social media, and knowledge platforms for consumers' education and other sorts of transactions (Rouse, 2020; Watts, 2020). Digital technology can reduce digital transaction costs for providing financial services to mainly the less fortunate people and reduce the risks of handling cash by providing a medium for safe payments (OECD, 2018b). Digital financial services involved operations of monetary nature using digital technology to supply online financial services (G20/OECD INFE, 2017). There are four sorts of digital financial services: electronic payments, asset management, alternative finance, and internet-based insurance services. Electronic payments include digital money, cellular mobile wallets, crypto assets, and payment services.

The management of assets comprised of internet services that include web banking, online trading in crypto assets, brokers, robot advisors, mobile trading, and personal finance. The alternative finance category consists of crowdsourcing, peer-to-peer loaning, online record lending, and invoice and chain finance. Digital financial services also include other sorts of monetary transactions like depositing, withdrawing, crediting, sending and receiving money, and pensions. It involved unbranched banking, whether through a bank or non-bank institutions (Morgan et al., 2019).

It also consists of non-transactional services, like viewing personal financial information through digital devices (Mora et al., 2020). An individual should be digitally literate to use these technologies effectively. Digital financial literacy emerged as an answer for efficient and effective use of computer-based financial products and services (OECD, 2018b). One has to obtain digital knowledge through training to use the services correctly. Morgan et al. (2019) proposed that the most purpose of digital financial knowledge is to enable financial consumers to develop adequate skills for using computerized financial services.

For example, many banks in Kenya embraced mobile banking. There is a challenge with mobile app functionality. Therefore, banks are divided on the issue of digital loans by launching new loan services for straightforward access from consumers' phones. This growth has led to a rise in consumers that posed a challenge regarding the specified consumer education of those digital lending platforms (CBK, 2019; Claessens & Kodres, 2014; Flaming, et al., 2015; KNBS & FSD, 2019).

2.4.3 Consumer Awareness

The delivery channel of consumer awareness is for consumer education for their protection and focused on consumer rights, consumer behavior, customer satisfaction, consumer protection laws, protection from higher-risk innovative banking products, monitoring, and personal information protection. It also includes fair treatment, fraud detection, and prevention, divulgence of consumers' information, resolution of disagreement, consumers' trust in financial institutions, and financial risk awareness

(Ali et al., 2015; Alikariev & Poliakh, 2018; Bongomin & Ntayi, 2020; Filipova-Rivers, 2016; Kriese et al., 2019; Lobozyńska, 2017).

Lack of financial institutions' consumer awareness will result in fraud and other economic crimes that are disadvantageous to the consumers. The criminals think of ways to get access to the client's financial information and other transactions. The main aim is to get cash from the account or goods and services. Other avenues explored to commit fraud by criminals involved phishing and advance payment. Also included are the collection of debt, mortgage transactions, deception in interest rate reduction, and identity theft. For instance, in 2003 the KPMG conducted a global survey on financial fraud. The report classified financial frauds as electronic payment frauds, which includes ATM, e-check, debit and credit cards, and deceitful classification of merchandise for customers. The report further mentioned fraudulent merchandise returns.

Moreover, Kenya conducted a crime victimization survey in 2010 called the pyramid schemes survey. The study considered financial fraud as consumer fraud and categorized them into stolen or forged checks and fraudulent schemes. The schemes include franchise fraud, payment of fictional goods or services; and proliferation of fake goods or provision of poor services (Nabirasool & Prabhakar, 2016).

In the survey report, the task force mentioned that about 8.1 billion shillings vanished to criminals through fraudulent acts. The victims' lost properties including cash and some developed chronic diseases and depression due to the huge loss. Further, some people involved took their own lives because of the huge losses. The 8.1 billion was

the predicted amount without considering the principal and anticipated returns on investment (Nabirasool & Prabhakar, 2016). Consumer awareness is important because financial fraud does not distinguish anyone. It affects both the financial consumers and the monetary service providers.

Further, Musamali (2017) established that Deloitte East Africa revealed that approximately 2.54 billion shillings got missing in the region to fraud by financial organizations included banks and insurance companies in the year 2013. Financial professionals from Deloitte's financial crimes study carried out approximated the figure to be much higher than disclosed. Some of the organizations involved in the study were worried and try to protect their reputation as the report noted.

2.4.4 Financial Advisory Services

The delivery channel financial advisory services is mainly for making informed decisions in the financial markets. The essence of financial advice is to promote consumer education in financial market decisions. Banks are the major players in the activities of monetary advisory services for customers and investors. From the institution arrangement, financial advice fall under private banking and investment banking (Santacruz, 2017). Santacruz also confirmed that two types of customers seek bank monetary advice; institutional investors and personal investors. The institutional investors are comprised of pension funds, investment companies, banks, business entities, governmental bodies, and insurance companies. The personal investors' are individuals and households. Their activities covered financial planning programs, and among them are asset and cash management, tax planning, estate planning, insurance

and portfolio management, currency exchange services, stocks, and bonds investment, budgeting, and retirement planning (Santacruz, 2017).

Furthermore, Hermansson (2015) suggests that the main objective of financial advisory services is to enable customers and investors to avoid mistakes and develop the necessary financial management skills to obtain fruitful results from the application of financial literacy knowledge acquired. He established that age, gender, and marital status are determinants for banks' financial advisory services. Bank customers seek advisory services to satisfy three desires: to save, accumulate wealth, and plan for retirement. On average, most customers seek monetary advice to understand the financial products and services for investment such as saving. Men have a greater desire to invest in wealth. Regarding gender, both men and women have a strong desire to save for retirement and therefore seek the services of financial advisors. Financial advice adds value to the investment of bank customers and investors in terms of risk management and portfolio diversification (Carlson, 2018; Hermansson, 2017).

Meanwhile, Kilic et al. (2015) explains that financial advisors are deeply engaged with various sorts of programs and activities that makes their plan for a client advice to be different from what the client may expect for his/her financial situation. To have a balanced score, the client's collaboration with the advisor for completion of the program is needed to achieve goals and objectives. However, to determine whether the advice was adequate the client has to evaluate them by applying them to independent financial situations and examine the outcomes. The financial advisors' face-to-face meetings with clients, the period covered for the discussions, and the commitment of

the advisors and clients are important attributes that contribute to the relationship between the bank advisory services and their clients (Hermansson, 2015).

Additionally, financial advisory service is the biggest delivery channel of financial literacy. It comprised of four sub-channels, namely; financial planning, financial counseling, financial coaching, and financial therapy. The financial planning sub-delivery channel is concerned with personal financial management. Financial planners, investment advisors, and financial advisors provide personal finance management knowledge to individuals and households to enhance their level of financial literacy (Cytonn Investments, 2022; Rabbani et al., 2021).

Another sub-channel is financial counseling focusing on consumers' credit, debt management, insolvency or indebtedness, and homeownership counseling. Credit counseling programs cover loans, mortgages, and other forms of individual and household bankruptcies. The programs in financial counseling look at individuals' financial attitude and behavior regarding the spending of money and attitude towards debt. The financial counselor administers this financial literacy training to people with money management challenges. The counselor provides a candid opinion on the client financial situation based on the client experience and observation shared in discussions with the counselor (Benson, 2020; Gesme & Wiseman, 2011).

In addition, the financial coach conducts financial coaching. The program focuses on providing money management education for achieving financial goals. On the other hand, the newest financial advisory program is financial therapy developed by Rick Kahler and other psychologists in 1990 (Ford et al., 2020; Financial Therapy", 2022).

The financial therapist provides this financial literacy education to help people to cope with financial anxiety and respond to financial stress.

Of the four financial advisory services delivery sub-channels, commercial banks are mostly involved with financial planning and financial counseling programs. The banks employees directly interact with clients on financial planning and counseling but sponsored programs in financial coaching and financial therapy as well as the Central Bank and other organizations in the economy (Eddie, 2021; Santacruz, 2017; Stack, 2006). The investment advisors, financial planners, financial counselors, financial coaches, and financial therapists provide services to individuals and households on a fee basis as a way of buttressing the effort of the banking sector in ensuring that financial services users have adequate financial knowledge, better attitude and behavior for making informed financial decisions (Santacruz, 2017; Söderberg, 2013).

2.4.5 CBK Regulations

The proliferation of antecedents of financial inclusion within the financial markets requires that care be taken to guard both the financial institutions and the consumers and reciprocally increases financial performance. Globally, financial consumers have experienced challenges regarding the protection of data shared. Consumer welfare is compromised for access and use of banks' financial services. The difficulties for access and use are numerous and among them are limited traditional financial knowledge, financial fraud, inadequate digital financial education, product downtime, inadequate knowledge of charges of monetary services, and insufficient knowledge of key terms associated with financial services. Alleviating these challenges required regulations of

financial literacy and inclusion including their delivery channels to increase the usage of monetary services for optimal financial inclusion (Smith, 2004; Vieira, 2012).

Moreover, financial innovation enables banks in Kenya to introduce new financial products on the market once a year, some of which are very complex to use. Banks launch new products, expand the prevailing ones, and update the delivery channels. They also launched alternative channels for service delivery like e-banking and m-banking. Each year, banks submit applications to the CBK, some are approved and new financial products are brought on the financial market.

In 2016, banks submitted more than 70 applications to introduce new financial products. For 2017 & 2018, approximately 90 applications were submitted. Among the new financial technologies approved and introduced in 2016, 2017 & 2018 are video teller machines; cloud computing, private cloud, big data, and cryptocurrencies. These emerging and challenging technologies come with various sorts of risks that require regulation of financial literacy and inclusion for the threat they posed to both the banks and the users (CBK, 2016; CBK, 2017; CBK, 2018).

The Kenyan Parliament passed Banking Acts for financial regulations to protect the financial institutions and consumers of monetary services. Among the regulations are Capital Markets Act, Competition Act, Consumer Protection Act, Insurance Act, Retirement Benefits act, and the CBK Prudential Regulations. The regulations covered the control of securities in the financial markets. However, the financial inclusion challenges have drawn policy makers' attention, and therefore, call for a distinction between financial regulation and regulation of financial inclusion. Financial regulation

standards are promulgated by government regulators and are developed to license the providers of financial services, protect clients and investors and to promote the economy. The regulation of inclusion focuses on regulations that govern best practices in financial innovation, and increases financial services users' satisfaction and the performance of financial organizations (Demirguc-Kunt et al., 2015).

2.4.6 Financial inclusion

The World Bank Group coined financial inclusion; a term used in consumer finance in 2000. It has no acceptable definition that is known globally (Mwangi, 2018). The definition of inclusion varies. For instance, the GPF (2016) referred to financial inclusion as a state in which all working-age adults have convenient and effective access to credit, savings, payments, and insurance from formal service providers at a price affordable to the services users and feasible for the supplier, with the result that buyers with financial resources use authorized financial services.

Further, Ondiege (2015) considered financial inclusion as supplying financial facilities at reasonable cost to improvised communities including the low-income groups during which high-quality financial products like savings, credit, insurance, payments, and pensions are available. Financial inclusion has enormous benefits for the population. It influences saving, investment and welfare through access and use of formal financial services (Omar & Inaba, 2020). It drives innovation by taking advantage of the latest technology and increases the availability of various sorts of financial products (Mutua, 2018; Qamruzzaman & Wei, 2019).

Through innovation, financial products receive quality design and promote greater demand for financial services. It increases the economic process, reduces poverty, and reduces non-performing loans through a rise in lending to small and medium-sized businesses (Abimbola et al., 2018; Mohammed et al. 2017; Ussaini, & Chibuzo, 2018).

Financial inclusion can maintain stable inflation, and output and promotes employment, (Al-Smadi, 2018; Iddik et al. 2018; Sharma et al., 2018; VO et al., 2019). From the demand side, it enables individuals, households, and businesses to access and use a variety of appropriate financial services at low-cost from formal institutional players. Banks remain involved in inclusion and this significantly contributes to employment, growth per output, poverty alleviation, and economic stability (Iddik et al., 2018; Ussaini, & Chibuzo, 2018; Van et al., 2019).

Because of its huge benefits, the GPMI and G-20 countries are championing global commitment to advance inclusion as a critical pillar of worldwide financial development. Governments and institutions pledged to make inclusion become a success, and therefore, prioritized increasing banking services to people. Reserve banks in both emerging and underdeveloped nations have taken many initiatives in conjunction with many multilateral agencies including the IMF, G20, the AFI, and the CGAP to reinforce the inclusive banking agenda. In an inclusive financial sector, any member of the community, regardless of background, should be opportune to use available and affordable basic financial services given with ease (Demirguc-Kunt et al., 2015).

Consistent with Barth et al. (2015) the initiatives taken have had a meaningful effect on the levels of inclusion, and hence on the financial stability of monetary institutions. In the monetary markets, the promotion of inclusion is one good way to reinforce financial stability. This is done using three approaches: diversifying bank assets enabling lending to small firms to reduce the danger of monetary institutions' loan portfolios, two is to enlarge the dimensions of small savers to increase the number of deposits.

This will reduce banks' reliance on borrowing which tends to be riskier during a financial crisis, and three is preferable delivery of economic policy to promote higher inclusion and also adds to financial stability (García & José, 2016). Generally, there is a consensus from worldwide regulators like the IMF, CGAP, and GPFI that financial inclusion is often measured in three ways, namely availability, accessibility, and usage. Availability accounts for the physical locations of services provided by financial institutions that users can obtain.

It entails the physical distance to the physical point of delivery. That is the geographical location of the bank's local branches, ATMs, and agents. Accessibility focused on bank accounts per 1000 adult inhabitants and usage considers the number of credits plus deposits relative to the GDP (Musau et al., 2018). According to Rajeev and Vani, (2017), banks in most developing economies are energetically engaging mostly the unbanked to scale back the gap of over 1.5 billion adults that are still financially excluded.

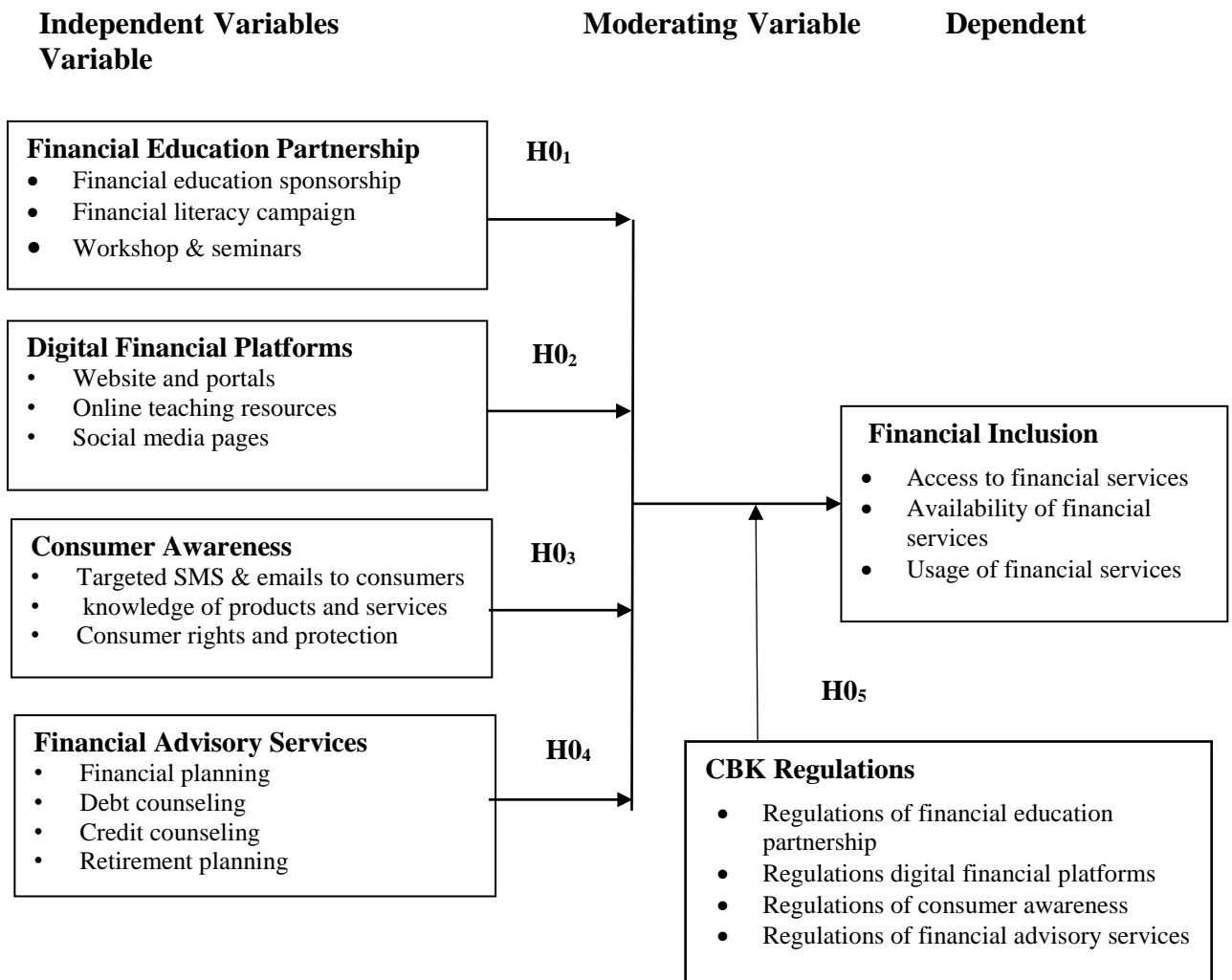
Fernando and Herath (2019) discover that banking institutions have put into place mechanisms to deal with financial inclusion obstacles by creating new services and products purposely for the low-paid earners and the needy around the globe. For the past ten years, Kenya witnessed huge accessibility of monetary services by the inhabitants and the progress is supporting the Vision 2030 agenda that includes enhancing inclusion by decreasing the share of the public without access to banking services by about 20%. Achieving this objective requires monitoring and Kenya had made considerable progress in financial access from the survey conducted in 2006, 2009, 2013, and 2019 (CBK, 2007, 2010, 2014 & 2019).

2.5. Operational framework

The element of the research work that presents the breakdown of the researcher's new ideas for contribution to knowledge is the operational framework. Its main component is the variables that show how the ideas work together in achieving an objective. The variables in the framework are operationalized into measurable constructs for data collection and analysis purposes (Zacharewicz, 2018).

Figure 2.2:

Operational Framework



2.6 Research Gaps

According to the current consumer and personal finance literature, there is lack of published financial literacy research to examine the interrelationships between financial education partnership, digital financial platforms, consumer awareness, and financial advisory services on financial inclusion. There are also no investigations into the mediating roles of central bank regulations on the delivery channels of financial literacy and monetary inclusion.

The literature reviewed on Kenya disclosed that there is a problem of financial inclusion arising from the usage of monetary products and services on the financial market by individuals and households, which has caused an increase in poverty and the number of poorest counties. Moreover, there is insufficient literature on commercial banks' financial literacy delivery channels in Kenya (Finaccess, 2019; Mwangi, 2019). The vast majority of literature focused on practices in developed countries and there are limited studies on the usage of financial products and services to suit the African context where there are many languages. There is a scarcity of studies linking financial inclusion with financial literacy delivery channels and the reserve bank regulation in Kenya. The gaps derived from previous studies evaluated in this research were conceptual, contextual, and theoretical. The gaps were filled from the analysis of raw data collected during the field survey research.

Table 2:1

Summary of Research Gaps

Authors	Study topic	Results	Research gaps
Iyer and Jose (2017)	Pradhan Mantri Jan Dhan Yojana, India; banks financial literacy training initiatives for financial inclusion plan second trajectory phase.	Strategies of covering more students than adults and households and using classroom and media to provide financial knowledge achieved the objectives of the program.	There is a conceptual gap since partnership as a strategy of financial education to enhance financial inclusion was not the focus of the study discussing strategies to increase financial knowledge. This survey was conducted in India.
Nkuna, Lapukeni, Kaude and Kabango (2018)	Commercial banks task to enhance financial inclusion in Malawi.	Individual banks provision of financial literacy knowledge to customers and put in place consumer protection mechanisms.	There is a contextual gap because this study in particular was carried out in Malawi and not in Kenya. In addition, there is a conceptual gap because the study concentrated on individual

			banks financial literacy education variables and did not include financial education partnership for customers' banks in Malawi. This study attempts to fill the research gap by including financial education partnerships for promoting consumers' financial literacy.
Mross and Reiter (2019)	Using library partnership to improve financial literacy programs for students.	Library financial education partnership improves students' knowledge of budgeting and other financial concepts.	This study was done in America. It has both theoretical and conceptual gaps since no theory supported the study and it ignored consumers' awareness that focused on consumer rights, consumer protection laws, monitoring, fair treatment, fraud detection and prevention, information and disclosure for consumers, dispute resolution, consumers trust in financial institutions and financial risk awareness.
Reynolds, Klawitter, Biscaye & Anderson (2018)	Cash-in, cash-out networks' regulations in low- and middle-income countries.	Improving financial regulations of CICO networks in financial markets is necessary for the expansion of CICO digital financial services.	There is a conceptual gap since the research analyzes CICO network regulations for mobile money and branchless banking and ignored consumer awareness of their protection in CICO network regulations.
Trunk, Kočar and Širca (2017)	Banks' financial literacy training using the case study of banks in Slovenia.	Banks used numerous strategies including partnership in activities performed to improve their customers' financial literacy skills in using financial products, and services and making financial decisions.	The study has a conceptual gap since the study did not consider digital platforms for digital financial literacy in improving customers' financial literacy skills.
Tejwani (2018)	Influence of vocational training	Blending vocational training and financial	There is a conceptual gap since the study overlooked

	and financial literacy with blending digitization process of self-help groups in India.	literacy in banks financial inclusion process will increase the rate of success in SHG digitalization.	financial advisory services in the SHG digital finance & vocational training platform. The financial advisory services platform looks at financial planning, credit, debt, retirement, etc. on the financial markets for financial inclusion.
Sari (2018)	Using financial literacy programs to reduce university students' consumptive behavior.	Banks financial literacy partnership programs in higher education can improve students' financial knowledge to reduce their consumer behavior and hence, promote their financial inclusion.	The study has theoretical and conceptual gaps since no theory supported the arguments and the study did not take into account the significance of bank financial advisory services in financial education programs in higher education. Banks financial advisory services programs can promote financial literacy for financial inclusion.

2.7 Summary of Literature Review

In this chapter, both theoretical and empirical literature reviewed established that financial literacy delivery channels formed a significant part of financial literacy promotion for the unbanked, underbanked, and banked individuals and households to access, use financial products, services and make informed financial decisions effectively in the financial markets in Kenya and other parts of the world. All previous studies examined that concentrated on financial literacy delivery channels and financial inclusion were specific in scope due to the omission of other important variables that could disclose other aspects of the financial literacy delivery system.

It is on this basis that the study attempts to determine if holistically studying financial literacy delivery channels has any influence on the promotion of financial inclusion.

Empirical studies reviewed were biased in their analysis and techniques due to the absence of empirical theories to support the outcomes in their discussions on financial education, digital platforms, monetary advisory services, and consumer awareness delivery processes to promote financial literacy for inclusion (Blasch et al., 2018; Cwynar et al., 2019; Kilic & Schwabe, 2014; Lobozyńska, 2017; Lyons et al., 2020; Ning & Hu, 2019; Reynolds et al., 2018; Rojas-Suárez, 2016; Sousa, 2015; Tharp, 2019; Ruggeri, et al., 2018; Prasad & Meghwal, 2017).

In addition, the majority of the qualitative studies (Biscaye & Anderson, 2018; Croymans, & Jokela, 2017; Friedline et al., 2015; Hendrickson, et al., 2020; Lacatus et al., 2018; Reynolds, et al., 2020; Mross & Reiter, 2019; Mosley, 2017; Visano & Ek-Udofia, 2017) followed this same path. However, empirical theories used in this study supported the delivery channels. Financial organizations can be successful in promoting financial inclusion when applying the financial literacy delivery channel variables. Finally, chapter three is the next chapter, which discussed the techniques adopted to conduct the investigation.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This section of the study discussed the hypothesis testing, philosophical concept guiding the study, the design of the research work, population, sampling frame, and sampling technique. Also included are the sample size, instruments to assemble the data, procedures for data gathering, pilot test study, the reliability of the research instrument, the validity of the research tool, analysis of data and presentation, statistical model, and ethical issues of the research.

3.2 Research Philosophy

The philosophy of research concerned itself with the basic beliefs, concepts, and ideas about knowledge. It is also concerned with the trust in the scientific method in which data about a phenomenon is collected (Cazeaux, 2017), carefully examined and findings applied as knowledge. Ryan, (2018), considered the components of research philosophy as ontology, phenomenology, critical theory, and epistemology. Ontology is about the nature of reality, and the importance of what is known, and the facts a researcher believes. Phenomenology enriches the researcher's mind in thinking about observable events using life experiences. It is a method of inquiry to know and understand the explanation of real-world situations involving human belief (Qutoshi, 2018). According to Thompson (2017), critical theory is an important approach to investigating and explaining an event. It is concerned with analyzing knowledge applied to everyday life.

On the other hand, epistemology is concerned with the use of the scientific method in conducting a study, the collection and analysis of data, and its contribution to knowledge. The two most important categories of epistemology are interpretivism and positivism. On the one hand, interpretivism argued that separating researchers from their values and beliefs is not possible because these values and beliefs inform how they collect, analyze and interpret data (Pham, 2018). On the other hand, a positivism philosophy is based on facts, truth, and reality (Cazeaux, 2017). Positivism is linked to quantitative research and accepts an ontological view about facts that can be proven through the testing of hypotheses (Major, 2017).

According to Alakwe (2017), positivism uses the scientific method and tests hypotheses using existing theories to contribute to scientific knowledge. The Positivist research approach usually employs the experimental, descriptive, or case study design. The designs can use quantitative methods for data analysis (Aliyu et al., 2014). A study with positivist philosophy implies that other investigators can conduct the same study to prove the findings through hypothesis testing. Meaning the study results can be repeated. This current study adopted the positivism philosophy. The study is quantitative, the descriptive survey design was employed, and the procedures leading to the outcomes can be repeated to certify the results.

3.3 Research Design

The plan that facilitates the accuracy and effectiveness of research work in achieving its objective is the research design (Cooper & Schindler, 2014; Kombo & Tromp, 2018; Sudha-Nayak et al., 2018). There are numerous research designs and the one

chosen for this study was the descriptive survey research design. It is non-experimental and capable of validating research results. Because of this characteristic, several empirical studies have adopted this framework. Karanja (2019) used it to study credit risk and lending performance; Ngeno (2018), capital adequacy framework for deposit-taking Sacco and Gichichi et al. (2019), access to entrepreneurial finance for small agribusinesses in Murang'a County, Kenya.

3.4 Target Population

Researchers usually make inferences on the population, which is the number of individuals, households, or things. The target population can be the community or a specific geographical region (Majid, 2018). The 40 banks supplying commercial financial services on a fee basis were the population. The banks branches totaling 1,503 were considered for a unit of analysis (CBK, 2020). In 2019, the banks had 32,205 employees divided into four categories in table 3. The 10,717 employees in management positions were the unit of observation.

The managers are the heads to whom reports are submitted for decision making either at the branches or head office. The heads of departments are comprised of the supervisory staff that reports to the managers. The management staff includes the managers at the head office and those at the branches. Among the head office managers are the regulatory risk and policies manager and commercial and business development manager. The managers at the branches include branch managers, operational managers, and relationship managers. They are the policymakers for financial products and services offered to the consumers.

Table 3.1***Total Number of employees in the banking sector in Kenya***

Category of employees	Population
Management Staff	10,717
Supervisory Staff	7,270
Clerical Staff	11,965
Support Staff	2,073
Total	32,025

Source: CBK, 2019

The study population was stratified according to the size of the bank hence; the target population of the study is shown in Table 3.2.

Table 3.2***Target Population***

Size of the Bank	Population of Management Staff
Large	5546
Medium	3343
Small	1828
Total	10,717

Source: (CBK, 2019)

3.5 Sampling Frame

The sampling frame has to do with the listing of sampling units to be included in the study (Kothari, 2017). For this study, the list used came from the actual records of management employees currently working with the banks. It was accurate and represented the target population. The list containing the 10,717 managers of the 40 banks was the sampling unit obtained from the Human resource department and authenticated using CBK supervisory report.

3.6 Sampling Technique and Sample Size

For sampling purposes, a stratification procedure was adopted. In sample size determination, the researcher can use qualitative and quantitative procedures. On the one hand, the qualitative approach involves considering the research objectives and evaluating the sampling technique that suits the study and its correctness to obtain the appropriate sample to avoid an invalid conclusion (Sharma, 2017). On the other hand, the quantitative procedure considers the statistical methods to apply for data analysis before using a quantitative method to determine the sample size (Yulianti, 2021).

For this study, the statistical techniques are descriptive statistics, exploratory factors analysis, and regression. Nevertheless, the quantitative method proposed by Cochran (1977) was used to compute the required sample size for the research. For the computation, the maximum variability of 0.5 was considered since the population comprised 10,000 elements and more. Using the below formula, the sample size was computed as follows:

$$n_0 = \frac{Z^2 pq}{e^2}$$

Where: n = Sample size for large population

Z = Normal distribution Z value score, (1.96)

p = Proportion of units in the sample size possessing the variables under study,
where for this study it is set at 50% (0.5)

e = Precision level desired or the significance level, which is 0.05 for the study

The substituted values in determining the sample size for a large population are as follows.

$$n = \frac{(1.96)^2 * (0.5)(0.5)}{(0.05)^2} = 384$$

The 384 potential respondents were selected using a simple random sampling method.

Table 3.3

Sample Size

Size of the Bank	Population of Management Staff	Sample size
Large	5546	199
Medium	3343	120
Small	1828	65
Total	10,717	384

Source: (CBK, 2019)

The target population was stratified and proportionately allocated to banks by size of the full-service banks. The study concentrated on the number of branches since financial literacy is practiced at the branch level. According to Oso and Onen (2016), stratified random sampling is employed to group the population into subsets that share similar characteristics to ensure equal representation of the population in the sample.

Commercial banks have similar characteristics making the sampling method appropriate for the study. The 384 respondents were randomly chosen after stratifying the banks by their sizes. To choose the sample, the list of the 10,717 branch managers was used. From the list, the large banks had 5546 managers, and 199 were selected. To select the 199, the number from 1-5546 was written on pieces of paper representing the names of the management employees. The papers were folded and placed in a box. The researcher shook the box every time a piece of paper was chosen. This same lottery procedure was applied in choosing 120 managers from 3343 staff of the medium-size bank and 65 from 1829 managers of small banks. The respondents were given the questionnaires developed with the aid of a statistician serving as a research assistant for statistical purposes. Each branch manager (respondent) was given a set of questionnaires. The questions took nine A-4 sheets. The nine sheets had forty-eight questions on the six variables of the study. The questions were multiple-choice, open-ended, and closed-ended. A detailed schedule of the number of questionnaires to each of the 35 banks that participated in the study is presented in appendix II.

3.7 Data Collection Instruments

Kothari (2017) describes the importance of data collection tools. In the survey, a semi-structured questionnaire was the tool utilized to collect raw data on each of the independent variables. For financial education partnership, data were gathered on financial education sponsorship to support financial literacy programs, hosting of financial literacy campaigns, and hosting of workshops, conferences & seminars.

The questionnaire for digital platforms focused on the use of banks websites and portals, online teaching resources, the use of social media pages, and online video games and courses to promote financial literacy to the consumers. Data gathered on consumer awareness comprised of banks targeted SMS and email to consumers, the provision of knowledge on financial products & services, and consumer rights and protection. For bank financial advisory services data were obtained on banks' role in financial planning, credit counseling, debt counseling, and retirement planning. Primary data was collected for the controlling variable, CBK regulations. Three hundred and eighty-four questionnaires were distributed to 384 branch managers in 11 counties. The distribution was one hundred ninety-nine to large banks, 120 to medium-sized banks, and 65 to small banks.

3.8 Data Collection Procedure

Data gathering is the measures instituted to obtain the relevant information to answer the research questions. It involves the utilization of research instruments to collect primary and secondary data (Kabir, 2016). The study used semi-structured questionnaires to gather the first data. The questionnaire was distributed to participants using a drop-and-pick methodology across the country while observing all COVID-19 safety measures of the government. The instrument to collect the data was taken to the branch managers alongside the introductory letter from the university and the NACOSTI letter. The researcher made follow-ups through physical appearance, and phone calls.

3.9 Pilot Study

A random trial of the principal survey was conducted. This was carried out by employing a smaller sample size to determine the suitability of the research instrument (Kombo & Tromp, 2019; Kothari, 2017). The role of a pilot or experimental study is to enable the researcher to check whether the proposed data collection tool will be able to gather the specified data set free of bias (Fahlman et al., 2018; Malmqvist et al., 2019). The study used a sample of 20 randomly selected bank managers for pilot testing in Nairobi County. Twenty questionnaires were administered to the managers and 17 were retrieved.

The researcher ensured that selected managers for the experimental trial were not included within the population for final sampling. Data gathered from the pilot study were tested for reliability and validity using approaches proposed in the subsequent sections. The test results are presented in chapter four of this thesis. However, consistent with Beyaztas and Yaseen, (2019) and Watkins (2018), some studies conducted have missed the aim of a pilot study by using it to avoid using large samples in their studies.

3.9.1 Reliability of the Research Instrument

A researcher should use a research tool that is consistent in measurement to gather the needed data. If the data collection instrument is reliable, the researcher's findings will be accurate. To ensure the reliability of the instrument it has to be tested (Kothari, 2017). The popular test to perform this task is Cronbach's Alpha. The Alpha coefficient computes the association between items used to measure the same variable. The Cronbach's Coefficient ranges from zero to one where zero denotes inconsistency

and one denotes complete internal consistency. Chapter four demonstrates the reliability of the data collection instrument. The accepted threshold for the study was 0.70, therefore variables with an Alpha of above 0.70 were considered to have internal consistency and those with an Alpha of below 0.70 were deemed to have no internal consistency. All the variables in the study had internal consistency and therefore no construct was rephrased or deleted to increase the internal consistency (Taber, 2018) .

3.9.2 Validity of the Research Instrument

Validity is concerned with whether the research instrument measures are in line with the research questions being addressed. Face validity, content, and construct were the validities considered during the pilot study (Kongnun, et al., 2019). The study tested for all these forms of validities using various methods as displayed in the next chapter. For instance, a correlation between objective and subjective items was utilized in face validity. Content validity was ascertained using explanatory factor analysis by ensuring that the items used in the questionnaire were based on empirical literature and have been validated by previous studies and finally construct validity was determined using confirmatory factor analysis (Bian, 2015).

3.10 Diagnostic Tests

Hypothesizing the relationship between the selected variables in the research was carried out based on the utilization of the multiple regression model. The premises of the model were treated with care in performing such tasks. Failure to deal with the assumption properly usually results in undesired estimates that affect the research findings negatively (Ali, et al., 2019). To not encounter such a situation, diagnostic tests were performed to correct the model irregularities. The actual function of the test

was to gauge the accuracy of the regression equation for the suitability of the study data. The study carried out tests that included normality tests, multicollinearity, heteroskedasticity, and linearity. These tests guaranteed the model predictions for making inferences and conclusions.

3.10.1 Test of Normality

One of the assumptions of the regression analysis is that the data set must adhere to a normal distribution (Derrick, et al., 2018). Therefore, to ensure that this assumption is achieved the study tested for normality of the data set before conducting inferential statistics. Data that do not conform to normality are bound to produce spurious results, which cannot be trusted in making inferences and conclusions. To test for normality, the study employed the use of the Shapiro-Wilk test, which was suitable and convenient, especially when using a primary data set (Derrick, et al., 2018). The null hypothesis test states that data follows a normal distribution hence, $p\text{-values} > 0.05$ were expected for the assumption to be achieved. P-values greater than 0.05 led to failure to reject the null hypothesis that implies that data was normally distributed.

3.10.2 Linearity Tests

Empirical studies usually administered linearity tests to determine the linear portable relationship between the result variable and one or more explanatory variables. If the test establishes an association, it means the arithmetic mean of the explained variable represents a straight-line function of every experimental variable, holding the others constant (Ali et al., 2019). To check linearity, the preferable method for the study is the statistical method that incorporates a linear correlation coefficient (Sykes, 1993).

3.10.3 Test of Multi-collinearity

The multiple linear regression model has many assumptions and one is the absence of multicollinearity (Winship & Western, 2016). This happens when one or two control variables are closely related (Having a coefficient of correlation of above 0.7). Failure to detect and take away closely related control variables will end in compromised regression coefficients and standard errors (Cooper & Schindler, 2014). Tolerance and Variance inflation factor (VIF) was utilized in the test for multicollinearity. The rule of thumb during this test states that VIF should be lower than 10, while tolerance should be below 1 to conclude that there is no multicollinearity between independent variables.

3.10.4 Heteroskedasticity

Similarly, another assumption of multivariate analysis states that the error term must have constant variance a phenomenon termed homoscedasticity. To make sure conformity of the idea, the study employed the Levine test for homogeneity to work out Heteroskedasticity. Consistent with Ali, et. al. (2019), if the computed p-values for all the variables are greater than 0.05 within the Levine test then there is no homoscedastic and therefore the study should fail to reject the null hypothesis.

3.10.5 Sampling Adequacy

Quantitative research usually conducts sampling adequacy. This diagnostic test supports the use of factor analysis on the study data (Glen, 2016). To ensure that the data collected were adequate for factor analysis, the sampling adequacy test was

performed on the independent and moderating variables. The test has a threshold of 0.8 to perform the factor analysis.

3.10.6 Factor Analysis

The content and construct validities were tested using a quantitative technique known as EFA. This approach is used in the absence of theory or earlier studies that profile the required number of dimensions of a specific construct. In addition, it is employed when the researcher creates the questionnaire for the study. It can also be adapted to evaluate factor formation (Yulianti, 2020). In this research, the questions developed for the respondents were the researcher's creation therefore the EPA was adopted to test for validities and internal reliability.

The test involves the extraction of factors. Statistically, factors are dimensions that embody variables. With a satisfactory data matrix, investigators can extract factors from their data. The EPA has two approaches for the extraction; the common factor analysis and the principal component analysis. The first is responsible to display the underlying factor of a particular construct while the second is employed to reduce items in a large set of measurements into smaller factors. This study aim was to determine the strength of the connection between the variables.

To achieve this objective, the study constructs were summarized before they were measured. Therefore, the EPA factor extraction method adopted and considered the most appropriate is the principal component analysis. The significance of performing a component factor analysis was to summarize the original variables information into inconsiderable factors without losing much detail. The importance of the factor

loading in explanatory factor analysis is decided by its score (the higher the score, the more important the factor). Henson and Roberts (2006) noted that only factors with an element loading above 0.4 are suitable for a study. Despite this threshold, Hair et al. (2010) cautioned researchers to take note of the following for factor loading evaluation: i. Factors loadings within the reach of + 0.30 to + 0.40 are allowable. ii. Factor loadings + 0.50 and bigger are realistically substantial. iii. Factor loadings + 0.70 and higher are expressions of well-defined factor formation. Factor loadings are contingent on sample size. The sample of 50 and above is significant (Henson & Roberts, 2006).

3.10.7 Correlation Coefficient

Assessing the strength of the relationship between diagnostic tests is important in research. Pearson correlation provides the basis for examining agreement between quantitative diagnostic test results. Once the firmness of the interdependence linking the study variables is determined using correlation, the ICC and other statistical measures can be applied for evaluating the agreement between diagnostic tests (Morgan & Aban, 2016). In this research, the bivariate correlation was adopted for this purpose.

3.11 Data Analysis and Presentation

The cleaning of data for analysis involved translating the answers to the questionnaire into a form that will be influenced to provide statistics. This involves coding, editing, data entry, and monitoring the entire processing procedure (Razali & Wah, 2014). After the data was gathered it was edited, coded, categorized, and keyed into the SPSS

computer software for analysis. The software contained in-built descriptive and inferential statistics elements.

Using the software, descriptive statistics involving frequency were computed for each demographic information obtained from the respondents. Moreover, the percentage was calculated for the demographic information and each of the study variables. Mean and standard deviation was computed for the independent, dependent, and moderating variables. The inferential statistics included multiple regression and correlation to work out the connection between predictor and output variables selected. Correlation is a powerful statistical tool capable of establishing an association between two or more variables and its coefficient represented by “r” can show the strength and weakness within the relationship (Gupta & Lehal, 2015). The analyzed data were interpreted using diagrams that include tables and charts.

3.11.1 Likert Scale

When conducting a survey, the investigator has a choice to use any of the numerous measuring scales developed for research based on the nature of the study. In making this choice, the investigator has to consider, what he/she intends to measure and how to measure it to obtain accurate outcomes. The most frequent use response scale is the scale invented by the American social psychologist, Rensis Likert in the early 1930s when researchers experienced challenges in measuring dissimilar kinds of data using a single scale (Chyung et al., 2018; Chen & Liu, 2021). The scale has bipolar and unipolar formats. The bipolar is symmetrical which gives the scale the advantage to take both disagreement and agreement options from structured survey questionnaires.

In addition, the scale is unipolar which allows the measuring of a variable to take place in one direction. Rensis scale is ordinal. Because of its bipolar and unipolar advantages, the scale can take ordinal and interval data. Moreover, the scale also has the edge to measure categorical, nominal, and continuous data. Scholars have used the Likert scale in different useful ways (Chen & Liu, 2021; Jamieson, 2004; Wu & Leung, 2017). For instance, Hassad (2010) adopted the scale to measure constructs in his study on health and behavioral sciences using continuous data at Boise State University. Hutchinson (2021) used the scale to explore the construction of optimal responses using interval data. In addition, Cruz (2015) adopted the Rensis Likert scale for measuring constructs in the study on the relationship between product quality and customer satisfaction using ordinal data. This study, however, used the scale to measure ordinal data.

3.11.2 Mean and Standard Deviation of Ordinal Data

The mean and standard deviation of ordinal data is computed when the data are transformed into group data in quantitative research. A researcher can perform this analysis of the ordinal scale even though there is a disagreement between two schools of thought regarding the utilization of the summated rating scale for computing the measures of dispersion. One argued that based on measurement theory the computation is unnecessary. They proposed that the best descriptive statistical measure for the Likert ranking scale data is to compute the frequency, mode, median, and range for variability. They also proposed the use of bar graphs to displace the responses (Bhandari, 2022; Liddell & Kruschke, 2018; Stacey, 2005). The second school of thought argued that based on response theory in measurement, ordinal data from the

Likert scale can be used to calculate the expected value and the root-mean-square deviation of a set of data.

According to this school of thought, the Renis scale can produce grouped and ungrouped data. The grouped data is obtained from the overall Likert scale. For instance, when the dependent and independent variables are operationalized in a study, their constructs are used to develop a set of questionnaires for each of the variables. The summary of each variable questionnaire from the respondents will produce the overall Likert scale that is treated as interval data. Once the ordinal scale questionnaires are summarized into interval data, descriptive statistics such as average or mean and standard deviation can be calculated and interpreted.

The American Psychologist, Stanley Smith Stevens, the inventor of the four levels of measurement (nominal, ordinal, interval, and ratio) for research purposes acknowledged that the computation of expected value and the root-mean-square deviation of summarized ordinal data can in many cases lead to fruitful results. Other researchers agreed that with a large sample size this analysis is performed from the summarized ordinal data to figure out statistical differences. Based on the unending debate between the two schools of thought, the researcher has a choice to accept the view of one of the schools.

On the other hand, the ungrouped data is derived from individual Likert-type questions. The individual questions generate ordinal data that can be analyzed to determine the mode, median, frequency, and range. Bar graphs are often employed for data presentation. Further, non-parametric tests that include the Mann-Whitney U test

(Wilcoxon rank sum test), Wilcoxon matched-pairs signed-rank test, Kruskal-Wallis H test, Spearman rank correlation coefficient, and chi-square test for independence are carried out using this ungrouped data (Arif, 2017; Bhandari, 2020; Gordon, 2017; Sauro, 2016).

In this study, the researcher accepted the view of the school of thought that supports the computation of mean and standard deviation based on response theory in measurement and is meaningful in empirical studies. The mean and standard deviation analyzed in this study point toward the selected variables. The study used a weighted mean to combine the parameters used to measure the variables and the mean scores were used in further inferential analysis.

3.11.3 Multiple Regression Model

Sarstedt et al. (2018) established that multiple regression is a good statistical tool for investigating the strength of the relationships between variables in a quantitative study. The study employed the multiple regression model and used four independent variables: financial education partnership, digital platforms, consumers' awareness, and financial advisory services to understand their association with the dependent variable, financial inclusion. To understand the association the dependent variable was tested while using the chosen independent variables. The regression model employed was expressed as follows:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

Where:

Y = Financial Inclusion

X₁ = Financial education partnership

X₂ = Digital Platforms

X₃ = Consumers Awareness

X₄ = Financial Advisory Services

β₀ is the Financial Inclusion when independent variables are zero

β_{1...4} is the Regression coefficient of independent variables

ε = is the error term

Testing for moderation effect of regulatory framework on the relationship between financial literacy delivery channels and financial inclusion

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X*Z + \varepsilon$$

X*Z = Interaction between combined independent variables and moderating variable

The SPSS package contained the regression model tested to determine how well it fits the data. Each independent variable was tested to find out its relevance. F-test was employed to test the relevance of the entire model at a 95 percent confidence level. To determine the reliability of the model, the p-value for the F-statistic was applied. The conclusion to accept or reject the null hypothesis was based on the p-value. The null hypothesis was rejected at a p-value lower than 0.05 and vice versa. The rejection meant that the model is significant and has good predictors of the dependent variable and that the results are not based on chance. The decision of the chosen model for the

study was in agreement with Nthenge and Zhang (2019) who employed multiple regression.

3.11.4 Qualitative Information

Qualitative information was gathered from the open-ended questions in appendix II. For each variable, the respondents were asked to explain other things regarding the variables not mentioned in the closed-ended questions. This qualitative information was displayed right after the descriptive analysis of data and interpretation of each variable. The additional information provided by the branch managers supported the interpretation of the empirical results obtained from each variable analyzed.

3.12 Research Ethical Issues

The study followed the University ethical guidelines developed to govern research work. The process began with a communication from the University to the government institution responsible for research authorization, the National Council of Science, Technology and Innovation (NACOSTI). A letter from the Council was directed to the banks where the study took place. At the bank, the researcher sought permission from managers at the head office branch and heads of branches in the counties included. The respondents were told about the aim of this piece of academic work and asked for their participation.

CHAPTER FOUR: RESULTS AND DISCUSSIONS

4.1 Introduction

The outcomes of the scientific investigation conducted on full-service banks' financial literacy delivery channels and financial inclusion are presented in this chapter. The chapter presents the results of the pilot study, demographic profile of the respondents, descriptive analysis, diagnostic tests, inferential tests, and the test of hypothesis.

4.2 Response Rate

The study contained one set of respondents, the branch managers of commercial banks. The data collection tool was a semi-structured questionnaire. It was divided into sections A, B, C, D, E, and F for the managers' easy understanding since they were very busy with huge tasks to perform daily. Section A comprised of multiple-choice questions. Sections B, C, D, E, and F comprised closed-ended questions. The latter sections had one open-ended question each intended for the respondents to provide additional information on the variable not included in the questions asked.

Three hundred and eighty-four questionnaires were distributed to 384 branch managers in 11 counties visited for the data collection and 274 were collected representing a 71.4% return rate. As per the strata, the response rate for large banks from the 274 questionnaires retrieved was 72.6%. For the medium-sized banks, 43.8%, and for small banks, 23.7%. The overall response rate was however adequate as acknowledged by Gordon (2002) that a 60% response rate was preferable for social science research and Fincham, (2008), an overall response rate of 60% was satisfactory for analysis. The high response rate recognized could be associated with the physical drop-and-pick

methodology allowing managers 1-3 weeks to fill in the questionnaire in the wake of constant remaindered.

4.3 Pilot Study Result

Table 4.1 presents the results of the pilot test. The study used Cronbach’s Alpha to check for the reliability of the scale adopted to measure the study variables as suggested by Bolarinwa (2017).

4.3.1 Reliability Statistics

The reliability statistics were computed using the Cronbach alpha and the findings are presented in table 4.1.

Table 4.1

Summary of Reliability Test statistic

Variable	Cronbach's Alpha	N of Items	Remarks
Financial Education Partnership	0.899	8	Scale Reliable
Digital Financial Platform	0.863	6	Scale Reliable
Consumer Awareness	0.844	5	Scale Reliable
Financial Advisory Services	0.924	9	Scale Reliable
Regulatory Framework	0.858	5	Scale Reliable
Financial Inclusion	0.853	3	Scale Reliable

The findings in table 4.1 showed that the measuring scales were dependable and satisfactory as they exceeded the minimum Cronbach’s alpha value of 0.7 as noted by Nawi, et al. (2020). The variable financial education partnership with a coefficient alpha of 0.899 was measured using 8 indicators. Digital platforms with Cronbach's Alpha of 0.863 were measured using six constructs. The variable consumer awareness had a coefficient's alpha of 0.844 with 5 indicators for its measurement. Financial

advisory services had a Cronbach's Alpha of 0.924 with nine indicators. The CBK regulations had a coefficient Alpha of 0.858 with five constructs. One construct of financial education partnership was modified because of terminology as recommended by the respondents within the pilot study. The semi-structured questionnaire developed was suitable and, hence used for the data assembling.

4.3.2 Validity Results

To ensure the correctness of the quantitative measures, content and construct validities were adopted and applied. A test of validity was designed and administered to confirm that the measuring instrument properly followed the procedure and measured the characteristic it was purposeful to measure. Both validities were designed and measured according to their indicators. They were tested using the EFA (Bolarinwa, 2017). View in table 4.2 the constructs for all the variables from the explanatory factor analysis were above the minimum threshold of 0.40, which implies that the factor loading is practically significant. The factor loadings for individual constructs were expressed in Appendix V.

Table 4.2

Explanatory Factor Analysis

Variables	Factor Loadings Range	No. of Items
Financial Education Partnership	0.579 -0.878	8
Digital Financial Platforms	0.610-0.922	6
Consumer Awareness	0.852-0.933	5
Financial Advisory Services	0.576-0.941	9
Regulatory Framework	0.483-0.607	5
Financial Inclusion	0.716-0.844	3

Extraction Method: Principal Component Analysis.

4.4 Demographics Profile

Information on respondents' gender, level of education, working experience, current position, and age range was gathered to understand their background as employees of commercial banks. Their detailed information is found in this section.

4.4.1 Gender of the Respondents

Gender was given important consideration within the research because of the balance and diverse views. It enabled the study to understand the participants and their contributions. It had been of essence within the study to assess if commercial banks employment was following the constitutional provision on gender. The respondents were asked to tick their sex as male or female on the question form.

Table 4.3

Gender of Respondents

Gender	Frequency	Percent
Male	168	61.3
Female	106	38.7
Total	274	100

The findings in table 4.3 showed that the bulk of the respondents was male which represented 61.3% and therefore the female was 38.7%. Most of the workers within the financial sector are male. The findings were corroborated by studies by Rózsa, et al. (2018) who studied gender differences because of the financial crisis in the US and Europe. Their study administered in banks within the Czech Republic found that gender disparity was a consequence of the managerial role of bank employees. More

women were employed in credit risk management than men and men dominated top management than women.

4.4.2 Highest Education Level

The study expressed optimism in determining the respondents' education level since it is paramount in dealing with large financial literacy tasks and rapid changes in banks related work. Their responses were indicated in Table 4.4.

Table 4.4

Respondent's Level of Education

Highest Education Level	Frequency	Percent
Diploma	11	4
Bachelor Degree	172	62.8
Master	90	32.8
Ph.D.	1	0.4
Total	274	100

From the outcomes in table 4.4 majority of the respondents, 62.8% were university graduates with bachelor's degrees while 32.8% were holders of master's degrees. Those within the diploma category were 11% and Ph.D. 0.4%. This suggests that bulk of the participants had the education level required in making better decisions regarding financial literacy education in their respective branches. Daqar and Constantinovits (2021) who found a positive correlation between banks employee training and performance confirmed the findings and the same relationship was found between training delivery and accomplishment of workers in the organization. In addition, Treľová and Olšavský (2016) established that level of education strengthens the

organization highly qualified workforce in achieving success in any competitive environment of business.

4.4.3 Working Experience

The survey assessed the number of years full-service bank branch managers who were the respondents have served the sector. The information was essential to work out the considerable knowledge that employees serving as supervisors have in banking matters, especially for financial literacy education. Their responses were expressed in table 4.5.

Table 4.5

Respondents Work Experience

Work experience	Frequency	Percent
Less than 1 year	7	2.6
1--5 years	49	17.9
6--10 years	105	38.3
Over 10 years	113	41.2
Total	274	100

The outcomes in table 4.5 showed that 41.2% of the respondents had over ten years of labor experience, 38.3% had available 6-10 years of experience while the remaining 17.9% had worked for 1-5 years and a couple of 2.6% had below one year of job training. The results inferred that majority of the respondents within the study had a few years of working experience to know and answer financial literacy matters sought by the study. The outcomes were confirmed by Hung and Wu (2016) who pointed out that workers' time spent on work was a significant determinant of employees' organizational commitment and may be a key to achieving success. Also, Johanda,

(2020) found a positive association between work experience and job performance within the organization.

4.4.4 Tenure in Current Position

The study checked the number of years the respondents had served in their current posts as branch managers in the industry. This was significant to determine whether they had the requisite knowledge of monetary literacy while in this position to supply the critical information needed. Their responses from the questionnaire distributed were expressed in Table 4.6.

Table 4.6

Respondents current position at work

Current position	Frequency	Percent
Less than 1 year	10	3.6
1--5 years	149	54.4
6--10 years	88	32.1
Over 10 years	27	9.9
Total	274	100

The findings showed that 54.4% of the respondents served in managerial positions at the branch level for 1-5 years whereas 32.1 % have served for 6--10 years and 9.9% served for over 10 years. People who have served for below one year were 3.6%. The outcomes showed that the participants were professionals who had sufficient knowledge of their bank operations considering the number of years that they had served within their respective positions as branch managers. The results were buttressed by the research of Hung and Wu (2016), who reported that the position of

workers in an industry was a big determinant of their organizational commitment and was important in achieving success.

4.4.5 Respondent’s Age Range

To have an understanding of employees’ skills, turnover rates, and job promotion, age diversity was considered. It contributes to job experience in their supervisory role in handling clients, and subordinates and solving critical work-related problems including financial literacy. They were asked to point their age range in the choices provided. Their views on the question asked were expressed in tabular form in Table 4.7.

Table 4.7

Respondents Age Range

Age range	Frequency	Percent
20--27 years	11	4
28--35 years	71	25.9
36--43 years	119	43.4
Over 43 years	73	26.6
Total	274	100

The results from table 4.7 divulged that the participants were in a close age range. Of the targeted population, 43.3% indicated they were between 36 and 43 years. These were male and female in their adulthood capable of providing supervision after years of coaching. This was followed by 26.6% over 43 years and 25.9% were within the age range of 28-35 years. Those at 20-27 years were 4%. The findings revealed that the bulk of the managers who were respondents was in adulthood 36--43 years and

implied that in commercial banks age is most likely a determinant of employment and job promotion.

Further, financial institutions nurture their employees through training and job rotation over a while for an adequate understanding of bank operations before taking managerial positions. The findings were supported by Cavanagh et al. (2020) who used socioemotional selectivity theory to review age differences at work and found that job satisfaction was related to workers' age and older workers contributed positively to firm outcomes through deep organizational knowledge and long-standing client relationships.

4.4.6 Bank Ownership Structure

The study investigated full-service banks ownership structure to determine how they were governed for investing in financial literacy education for users of their financial products and services. Their replies were indicated in Table 4.8.

Table 4.8

Bank Ownership Structure

Ownership structure	Frequency	Percent
Locally own	161	58.8
Foreign own	76	27.7
Government owned	37	13.5
Total	274	100

The findings indicate that 58.8% of the respondents came from branches of banks locally owned while 27.7% were from foreign-owned. The respondents from branches of government-owned banks were 13.5%. The results showed that bulk of the

participants were from branches of banks locally owned within the financial sector. Consistent with Hakenes et al. (2015), locally owned banks were the inspiration for initiatives in promoting economic processes and important players in funding businesses with low access to finance in various regions. In addition, Hasan et al., (2019) highlighted that ownership structure of locally owned banks and its related changes had influenced banking and has improved the local labor markets for SMEs' financial access from full-service banks.

4.5 Descriptive Statistics for Financial Education Partnership

This section presented the findings of the descriptive analysis performed by the study to point out the respondents' level of agreement with various statements used to measure the study variables. The examination was carried out for every independent and dependent variable.

The first intent of the study was to work out the influence of financial education partnership as a delivery channel of monetary literacy for financial inclusion in commercial banks in Kenya. The variable was selected for the survey since alliances are driving education speedily through combined funding across the globe. The survey was curious about checking out if such cooperation existed within the banking sector financial education schemes for improvement in financial knowledge for the expansion of Kenya's emerging market. The constructs that measure this variable included financial education sponsorship, financial literacy campaigns, workshop, conferences, and seminars. The descriptive statistics that analyzed the responses for the variable included frequencies, mean, percentages, and root-mean-square deviation.

Table 4.9:***Frequency for Financial Education Partnership***

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Our bank uses financial education sponsorship to promote financial literacy.	2.9%(8)	18.6%(51)	31.4%(86)	29.2%(80)	17.9%(49)
Our bank partners with other financial institutions to promote financial literacy.	1.1%(3)	19.3%(53)	29.6%(81)	31%(85)	19%(52)
Our bank partners with the government to promote financial literacy.	0.7%(2)	11.3%(31)	32.8%(90)	36.9%(101)	18.2%(50)
Our bank organized lectures in various learning institutions to promote financial literacy.	8.4%(23)	32.5%(89)	31%(85)	20.4%(56)	7.7%(21)
Our bank has adopted workplace teaching to help its customers in financial literacy.	2.6%(7)	16.4%(45)	25.9%(71)	33.9%(93)	21.2%(58)
Our bank conducts seminars and conferences in promoting financial literacy.	1.5%(4)	12%(33)	29.6%(81)	33.2%(91)	23.7%(65)
This bank has been involved in a nationwide campaign to promote financial literacy.	3.3%(9)	18.2%(50)	38%(104)	27%(74)	13.5%(37)
The use of financial education partnerships by our bank has improved financial inclusion in Kenya.	1.8%(5)	15.3%(42)	28.1%(77)	34.7%(95)	20.1%(55)

4.5.1 Financial Education Sponsorship

To establish whether commercial banks in Kenya conducted financial education sponsorship, the study asked the respondents whether their banks sponsor financial education to promote financial literacy. The views in tabular form were expressed in table 4.9. From the table, 31.4% and 18.6% of the respondents had no knowledge and disagree with banks' involvement in financial education sponsorship programs to promote financial literacy; whereas 29.2% and 17.9% indicated that banks were sponsoring financial literacy education. People who strongly disagree with banks supporting financial literacy programs were 2.9%. These results showed that an aggregate of 52.9% of the respondents were of the view that individual banks were not engaged in financial education sponsorship. From the responses, 47.1% agreed and 52.9% disagree implying that sponsorship existed in the commercial bank's financial education programs but on a low scale.

The findings are supported by Sibanda and Sibanda, (2016) who reported that in most economically developing countries bank sponsorship of financial education programs to promote financial literacy was not binding but was done through individual banks own initiatives and Garg and Singh, (2018), indicated that banks usually seek collaboration with governments for financial literacy sponsorship.

4.5.2 Banks Partner with Other Financial Institutions

The study investigated banks' use of partnership as a channel in promoting financial literacy to enable customers to get the requisite financial knowledge. The observations of the branch managers in the data collection instrument were expressed in table 4.9. From the analysis, it found that 31% and 19% agreed and strongly agreed with the

statement on the full-service banks use of partnership to market monetary education. On the opposite hand, 29.6% were neutral 19.3%, and disagree. Those that strongly disagreed were 1.1% of the participants. The findings implied that exactly half the participants agreed that their banks used partnership as a channel of promoting monetary literacy, the remaining half of the respondents disagreed.

A study by Rahmawati and Rahadian, (2018) acknowledge that partnership between organizations and academic institutions like the university supported financial literacy and strengthen the standard of monetary knowledge provided to the scholars. In addition, Park and Chung (2015) pointed out that the strength in academic network between groups in learning financial education features a positive association with financial literacy. The scholarly knowledge of Bongomin et al. (2016) and Rahmawati championed the findings and Rahadian, (2018) who studied various sorts of networks have found a positive link between financial literacy and inclusion.

4.5.3 Bank partner with the National Government

The study was curious about checking out whether banks and the government were working collaboratively in promoting financial literacy education among the population. The respondents' views expressed were tabulated in table 4.9. From the data-bearing responses, an aggregate of 55.1 % accepted the statement that bank partners with the government to market financial literacy whereas 32.8% were not aware of any partnerships between banks and the government. Those that strongly disagree were 0.7%. The results suggest that government partnership with financial institutions existed and was a channel commercial banks in Kenya utilized in

promoting financial literacy within the banking sector. Bover et al. (2018) and Yilmaz (2020) who established that government partnership with the banking sector created the environment for legislation to market financial literacy in developed countries confirmed the results.

4.5.4 Use of Education Institutions to Promote Financial Literacy

The study desired to determine if commercial banks were ready to capture the large number of scholars who were users of their financial services by using their educational institutions to market financial literacy besides the utilization of customer services within the banking hall. Their answers to the questionnaire were expressed in Table 4.9. Based on the outcomes 32.5% of the respondents said they were not conscious of banks' financial literacy campaigns involving educational institutions and 31% disagree. Of the remaining 28.1% indicated that banks engaged learning institutions, and 8.4% strongly disagree. The results revealed that an aggregate of 71.9% of the respondents from table 4.9 above stated that banks were not using learning institutions like primary, secondary schools, community colleges, and universities to market financial literacy.

A study by Further and Sari (2018) differs from the results and found that banks financial literacy teaching in education institutions improved students' financial knowledge and reduced their consumer behavior. They concluded that education institutions' financial literacy programs were significant in addressing students' money management problems concerning their consumption level. Contrarily, Lacatus et al. (2018) argued that banks and schools differ in terms of views on financial education;

both are handling different sorts of the population with separate objectives and financial literacy programs. Banks viewed financial competencies from financial literacy while learning institutions linked financial literacy to economic education. Last, their study showed weak coordination between banks and schools' financial education partnerships in promoting financial literacy.

4.5.5 Banks used Workplace Teaching to Promote Financial Literacy

The study was curious about checking out whether banks involved workplace teaching in their measures for promoting financial literacy among employees for their customers. Their independent opinions from the questionnaire were indicated in table 4.9. The study results revealed that 33.9% agreed that teaching within the workplaces were encouraged for customer services and credit management and as regular personnel meetings for financial literacy awareness to employees to enable them to supply the requisite financial knowledge to customers during transactions. Another 21.2% strongly agreed with the statement.

Nonetheless, 25.9% indicated that they were not aware, whereas 16.4% disagree and a couple of 2.6% strongly afflict banks teaching about financial literacy activities at their workplaces. The results revealed that most of the branch managers indicated that banks involved the utilization of workplace teaching in their activities to market financial literacy. The findings concurred with the study of Rodriguez and Walters (2017), who argued that stakeholders (employee & customer) training was good for organization growth. They concluded that effective training and development opportunities, also with proper performance assessment approaches for employees,

would enable them to become capable of assisting the organization in achieving its competitive posture within the dynamic financial markets.

4.5.6 Banks Financial Literacy Seminars and Conferences

The study assessed whether seminars, workshops, and conferences were part of the framework used by the banks in promoting financial literacy. The respondents were asked if banks used these activities in helping customers obtain adequate financial knowledge in meeting the demands of the financial market. Their feedback from the questionnaire administered was indicated in table 4.9. Based on the results 33.9% agreed that seminars, workshops, and conferences were held for the provision of training for both bankers and customers. Another 21.2% strongly agree with the statement. Only 25.9% indicated that they were not aware whereas 16.4% disagree and 2.6% strongly disagree with banks hosting financial literacy awareness through activities mentioned. The results revealed that an aggregate of 56.9% of the respondents indicated that banks used these activities to promote financial literacy.

The findings concurred with the study of Visano and Ek-Udofia (2017) who indicated that workshops in financial literacy partnership effectively facilitated learners to develop the needed potential in constructing their learning in financial education. Their study concluded that strategies from the workshop along with inclusive pedagogy brought about creativity that enabled learners to develop financial literacy problem-solving techniques for financial awareness in the community. Trunk et al. (2017) posited that banking institutions in Slovak were successful in increasing their customers' financial knowledge using various approaches adopted by partnerships like

a workshop, seminars, and conferences in financial literacy training activities. Their results confirmed the findings of Bire and Sauw (2019), Chutani et al. (2015) and Molefe (2017) concerning the strength of training in financial literacy for financial inclusion.

4.5.7 Bank used of Nationwide Campaign to Promote Financial Literacy

The study sought to research if banks held financial literacy campaigns across the country among the population who used their products and services since they had branches and customers in all the counties. Their replies were indicated in table 4.9. From the findings, 38% were unaware of banks hosting nationwide campaigns for the promotion of knowledge on financial concepts to banking services users. Of the remaining, 27% agreed that banks held financial literacy drives while 18.2% disagree. Those that strongly agreed were 13.5% while 3.3% strongly disagree.

The findings suggested that the bulk of the managers at the branch level indicated that banks were not involved in nationwide campaigns for promoting financial literacy knowledge to the population for their financial inclusivity. The research by FSI (2016) differs from these results and established those financial institutions and the government developed a national financial education strategy as a roadmap for a nationwide financial literacy campaign, which resulted in an increase in Indonesia's financial inclusion index from 16% to 29.66%.

4.5.8 Benefits of Banks Financial Education Partnership on Financial Inclusion

The study investigated the implementation of banks financial education partnership to improve financial inclusion in Kenya. The information gathered from the respondents from the questionnaire administered was presented in table 4.9. The results from the data analysis showed that 34.7% agreed on banks' involvement in partnership as a road map that resulted in gains by achieving optimal inclusion at 82%. Another 20.1% also alluded to the statement of banks' financial literacy framework for inclusion. On the contrary, 28.1% argued that they were unaware while 15.3% disagree and 1.8% strongly disagree.

The outcomes showed that the bulk of the participants indicated that banks' use of partnership to market financial literacy was fruitful. Bonga and Mlambo supported the findings, (2016) and stated that banks found in developing countries like Zimbabwe were collaboratively using financial literacy education and gradually improving the banking sector. They concluded that banks should involve the utilization of local languages, cooperative societies, and other measures in their financial education schemes for the unbanked. Similarly, Munene and Yourougou (2020), found that microfinance banks' intermediary role within the financial sector was significant in financial literacy education for inclusion.

4.5.9 Summary of Descriptive Results of Financial Education Partnership

This segment summarizes the descriptive statistics showing the mean score and standard deviation of the statements used for financial education partnerships.

Table 4.10:***Descriptive Results of Financial Education Partnership***

	Obs	Mean	Standard Deviation
Our bank uses financial education sponsorship to promote financial literacy.	274	3.41	1.07
Our bank partners with other financial institutions to promote financial literacy.	274	3.47	1.04
Our bank partners with the government to promote financial literacy.	274	3.61	0.94
Our bank organized lectures in various learning institutions to promote financial literacy.	274	2.86	1.08
Our bank has adopted workplace teaching to help its customers in financial literacy.	274	3.55	1.08
Our bank conducts seminars and conferences in promoting financial literacy.	274	3.66	1.02
This bank has been involved in a nationwide campaign to promote financial literacy.	274	3.29	1.02
The use of financial education partnerships by our bank has improved financial inclusion in Kenya.	274	3.56	1.03
overall mean score		3.43	

The results showed that the organized lectures in various learning institutions to market financial literacy was the smallest amount adopted financial education partnership that was utilized by full-service banks in Kenya as shown by the mean score of 2.86 while seminars and conferences in promoting financial literacy were the foremost used strategies to market financial literacy. The results revealed that the general score in table 4.17 for financial education partnership employed by banks to promote financial literacy was 3.43, which indicated that the bulk of the respondents feel financial education partnership was below average.

The outcomes concurred with the results of the study by Sibanda and Sibanda, (2016) who reported that banks' sponsorship of financial literacy programs for the unbanked was challenged by limited funding opportunities, which caused the supply of financial knowledge by banks to be low within the developing world. The study concluded that the banking sector of South Africa tried to fund financial education programs through an enacted law enabling individual banks to be taxed to fund the promotion of financial literacy. This is often considered an individual bank initiative.

Similarly, Krisnawati, (2020), found that to enhance the low level of monetary literacy knowledge, the banking system adopted a company social responsibility model in Indonesia to fund financial education schemes through government direct supervision. The low result from the mean of financial education sponsorship might be justified based on the respondents indicating that they were not conscious of the existing financial education partnership between the 40 full-service banks and the government not fully involved financially to effectively support financial literacy programs in schools and organizations within the country.

Additionally, the respondents were asked to explain how else the use of monetary education partnership in financial literacy influences financial inclusion. This qualitative data from the open-ended question was a piece of additional information for the survey conducted. According to the respondents, the collaboration between banks for the promotion of monetary literacy education was important for the capacity building of employees and customers. It opens the avenue for engaging stakeholders

for resource mobilization for financial mentoring of customers and investors for credit access and other financial market transactions.

4.6. Descriptive Statistics for Digital Platforms

The study second objective was to seek out the effect of digital platforms as a delivery channel of digital financial literacy for inclusion of full-service banks in Kenya. Choosing this variable was essential since technology is complex with merits and demerits, and globally reducing the demerits through the requisite digital education is the focus for emerging markets for optimal financial inclusion. The sub-variables used for measuring digital platforms were websites and portals, online teaching resources, and social media pages. The mean, frequencies, percentages, and root-mean-square deviation were utilized in descriptive statistics employed for analyzing the variables.

Table 4.11

Frequency for Digital Financial Platforms

	Strongly disagree	Disagree	Neutral	Agree	Strongly disagree
Our bank use websites and online portals in promoting financial literacy.	0.7%(2)	2.6%(7)	8.8%(24)	46.7%(128)	41.2%(113)
Our bank has invested in online financial literacy teaching resources.	1.8%(5)	18.6%(51)	21.2%(58)	34.7%(95)	23.7%(65)
Our bank social media pages are used to promote financial literacy.	1.1%(3)	5.8%(16)	17.5%(48)	43.1%(118)	32.5%(89)
Our bank has developed mobile applications to help	1.8%(5)	13.9%(38)	28.1%(77)	24.5%(67)	31.8%(87)

our customers with financial literacy.

Our bank used online games and courses for promoting customers' financial literacy.

17.2%(47) 28.5%(78) 37.2%(102) 13.1%(36) 4%(11)

The use of digital platforms in promoting financial literacy by our bank has improved financial inclusion in Kenya.

1.1%(3) 5.8%(16) 28.8%(79) 32.1%(88) 32.1%(88)

4.6.1 The Use of Bank Websites and Portals

To find out whether the commercial financial services providers in Kenya provided knowledge on digital financial literacy to their customers using digital platforms, the study asked the participants whether their bank used websites and online portals in promoting financial knowledge. The results were disclosed in table 4.11. The outcomes revealed that 46.7% of the commercial banks' branches involved in the study reported a rise in financial consumers using bank websites and portals to make an inquiry, purchase a product or review their financial activities, while 41.2 % strongly agreed to use this path to transact with the banks.

On the opposite hand, 8.8% were neutral whereas 2.6 disagree and 0.7% strongly disagree. These results showed that the bulk of the participants indicated that banks' websites and portals were used as a channel to teach users about financial services. The discovery was validated by the research of scholar Koori et al. (2020) who found

that in Kenya banks and their customers were satisfied with the utilization of digital platforms including websites and portals for timely provision of banking services involving branchless banking and banking hall transactions. The study concluded that technological innovation and advancement allowed financial institutions to adopt strategies that enabled them to deal with their competitors within the financial sector.

4.6.2 Banks invest in Online Financial Literacy Education

The study was curious about checking out whether the full-service banks have spent cash to take a position in online financial literacy teaching to enable their customers to know the utilization of digital monetary products and services. This is important since most of the services involved the utilization of digital devices. The data generated from the responses were tabulated in table 4.11. The findings from the table showed that 34.7% of the branch managers who were the respondents agreed that banks invested in online teaching materials to teach customers about the utilization of bank electronic services, while 23.7% strongly accept as true with the statement.

Nevertheless, 21.2% did not realize online teaching activities whereas 18.6% disagree and 1.8% strongly disagree. The finding suggested that an aggregate of 58.4% of the entire number of respondents in table 4.11 above indicated that banks fund online teaching to enhance the digital financial literacy knowledge of their customers. The study results concur with Rustomfram and Robinson (2017) who reported that the United States government and institutions invested in online financial literacy resources to teach parents, young adults, and others about banking activities involving saving, budgeting, investing, and making end-of-life financial decisions.

4.6.3 Banks Used Mobile Applications to Promote Financial Literacy

The study sought to research whether the participants were using banks' mobile apps to access financial services. This was intended to know the respondents' assessment of mobile applications developed by banks for customers' convenience. From the results in table 4.11, 31.8% strongly agree that banks' mobile apps were utilized in processing financial transactions online and anywhere in Kenya. Additionally, 24.5% also agreed of electronic devices like smartphones and computers were being used to access their accounts. On the opposite hand, 28.1% were not conscious of mobile apps developed by banks for customer use whereas 13.9% disagree and 1.8% strongly disagree.

These results unequivocally showed that an aggregate of 56.3% of the entire number of participants in table 4.11 said banks developed mobile apps and provided training to customers for accessing their financial activities. The findings are in agreement with Keli (2018) who found that the utilization of banks' digital technology like mobile money services in Kenya facilitated easy financial transactions and is positively related to financial inclusion. Similarly, Leydier (2016) reported that the utilization of mobile technology in Kenya accelerated digital financial transactions and resulted in huge profits. Additionally, Musango (2018) acknowledged that mobile banking activities enabled quick payment for goods and services, checking account management, and credit facilitation. Bhuvana and Vasantha (2019) acknowledged that banks' mobile technology enhanced the financial inclusivity of consumers within the rural parts of India.

4.6.4 Banks Used Online Game and Courses to Promote Financial Literacy.

To examine the influence of digital platforms education the respondents were asked if banks had online games and courses to promote financial literacy. Their responses were presented in table 4.11. As illustrated in the diagram, 37.2% of the participants indicated that they were not aware of banks using online games and courses for improving their customers' digital financial literacy knowledge while 28.5% disagree and 17.2% strongly disagree. Meanwhile, 13.1% agreed that banks used this medium and 4% strongly agree. These findings indicated that most of the branch managers considered respondents in the study stated that banks were not using teaching resources like online games and courses in their digital financial education programs.

The findings in this study differed from that of Rodrigues et al. (2019) who established that the use of online resources including video games, courses, fun sites, and given online quizzes in training was satisfactory in improving the all-over basic financial knowledge of investors. They concluded that online financial education activities contributed to adults' knowledge in understanding investment risks, investing in complex financial products, and making financial decisions.

4.6.5 Commercial Banks Used social media Pages

The study examined whether the internet community was included within the instruments employed by banks for promoting financial literacy. This is important since the social platform is employed to supply more information on banking activities to customers and investors. Their observations were presented in tabular form in table 4.11. It was reported that 43.1% of the respondents acknowledged using social network pages to check financial transactions and access other important information. Another

32.5% strongly accept as true the statement. It is only 17.5% that were neutral while 5.8% disagree and 1.1% strongly disagree.

From these findings, it was stated unequivocally that the bulk of the full-service banks in Kenya used social platforms in their quest to make sure that financial services users have improved financial skills to deal with the financial decision-making challenges of the financial markets. The findings agreed with those of Kuchciak and Wiktorowicz (2021), who found that banks that are more active on social networks like Facebook, Twitter, YouTube, Instagram, GoldenLine, and LinkedIn pay more attention to financial education to enhance customers' financial knowledge. They added that the financial education activities of banks on each social network channel differ from one country to another.

4.6.6 Benefits of Banks Digital Platforms to Financial Inclusion

The study was curious about checking out the usefulness of digital platforms to the banks in their financial literacy campaign. The observations of the respondents in the questionnaire administered on the issue were presented in table 4.11. The results from the analysis showed that an aggregate of 64.2% accepted the statement that digital platforms were adopted as a framework to improve the consumers' digital financial literacy knowledge to enable the banks to provide enough digital monetary products and services to users to hurry up inclusion from increasing financial transactions. The results demonstrated that of the remaining, 28.8% indicated that they were unaware of the advantages accrued while 5.8% disagree and 1.1% strongly disagree. The study outcomes agreed with Senou et al. (2019) survey that said the coexistence of mobile

money platforms and internet platforms as digital technology facilitated online financial transactions for banking and branchless banking activities, and this influenced changes in financial inclusion.

4.6.7 Summary of Descriptive Results for use of Digital Platforms Delivery Channels

This section contained the descriptive statistics for the statements designed to quantify the utilization of digital platforms delivery channels in marketing financial literacy for monetary inclusion in Kenya from the surge in usage of banking services.

Table 4.12

Descriptive Results for use of Digital Platforms Delivery Channels

	Obs.	Mean	Standard Deviation
Our bank use websites and online portals in promoting financial literacy.	274	4.25	0.78
Our bank has invested in online financial literacy teaching resources.	274	3.60	1.10
Our bank social media pages are used to promote financial literacy.	274	4.00	0.91
Our bank has developed mobile applications to help our customers with financial literacy.	274	3.70	1.11
Our bank used online games and courses for promoting customers' financial literacy.	274	2.58	1.05
The use of digital platforms in promoting financial literacy by our bank has improved financial inclusion in Kenya.	274	3.88	0.97
Overall mean		3.67	

The results indicate that websites and online portals were the foremost used digital platforms by commercial banks in Kenya in promoting financial literacy as shown by the mean response of 4.25, followed by social media pages (m=4.00) while the use of online games and courses was the littlest amount adopted channels for financial literacy. The findings on the mixture indicated a mean of 3.67 for digital platforms. The finding implied that commercial banks in Kenya used digital platform delivery channels in promoting financial literacy.

The results were in agreement with those of Ouma and Ndede (2020), who established that banks' innovation in digital technologies expanded banking opportunities, eased customer stress, and positively influenced financial performance. Similarly, Kitsios et al. (2021) found that digital transformation influenced the interior and external environment of the banking sector in servicing remote areas without physical branches, designing control processes, and replacing existing frameworks but employees' adoption through digital education schemes was necessary for the spread of the technology during this digital era. The good results from the mean of digital platforms were attributed to respondents overwhelmingly indicating the importance of digital platforms to the banking system.

Their positive responses might be explained by the government national survey of over 10,000 respondent households, which showed an increase in financial inclusion of 82.9% in 2019 from 75.3% in 2016 (CBK, KNBS & FSD, 2019). Banks in Kenya concentrated totally on technology and innovation (agent banking, mobile banking, and mobile bill payment services) because it is the most vital driver of

financial inclusion among the population. This makes banks remain the dominant channel of monetary intermediation (Mutua 2018; Van Hove & Dubus 2019). This has influenced the proliferation of full-service banks' electronic products and services on the markets (CBK, 2017 & CBK, 2018).

Consequently, the participants were to elaborate on how else the use of digital platforms in monetary literacy affects financial inclusion. The qualitative facts from the open-ended question provided additional information to the study. In their responses, the managers noted that digital platforms serve as a medium for quick information dissemination and provided convenience for customers and investors. Its use promoted digital monetary literacy, information security, saving culture, and accurate and timely data of customers' financial activities.

4.7 Descriptive Statistics for Consumers' Awareness

The survey third objective was to research the influence of consumers' awareness as a delivery channel of monetary literacy for the financial inclusion of full-service banks in Kenya. The variable was chosen because consumer education of monetary products and services is crucial in financial literacy since accurate information dissemination is prime for clients' protection within the financial markets. The constructs used for measuring consumers' awareness were targeted SMS and email to consumers, providing knowledge on products & services, and consumer rights & protection. The descriptive statistics applied to analyze the responses for the variable included mean, frequencies, percentages, and root-mean-square deviation.

Table 4.13***Frequency for Consumer Awareness***

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Our bank use targeted SMS and Email in promoting customers' financial literacy.	0.7%(2)	3.6%(10)	8%(22)	41.6%(114)	46%(126)
Our bank has invested in providing accurate knowledge to customers on products and other services provided.	0.4%(1)	4.4%(12)	9.5%(26)	46%(126)	39.8%(109)
Our bank frequently educates all consumers on their rights and responsibilities.	1.8%(5)	10.6%(29)	26.6%(73)	37.6%(103)	23.4%(64)
Our bank values consumers' protection and ensures that all our customers are aware of consumer protection regulations.	1.1%(3)	13.5%(37)	24.8%(68)	23.7%(65)	36.9%(101)
The use of consumer awareness in promoting financial literacy by our bank has improved financial inclusion in Kenya.	1.1%(3)	12.4%(34)	20.8%(57)	35.8%(98)	29.9%(82)

4.7.1 Banks use targeted SMS and email for consumers' awareness

The study investigated whether SMS and email messages were a part of the banks' framework for promoting financial literacy. This is often important since SMS and emails were good measures for shielding the purchasers against criminal frauds in using M-PESA and from stealing from their accounts and other financial transactions. The facts gathered from the questionnaire was expressed in table 4.13. The data showed that 46% of the respondents strongly agree that banks disclosed necessary

information regarding their transactions through SMS messages and email for account balances, purchase of products and services, and other transactions.

Another 41.6% agreed with the investigation statement and added that it had been done daily using their digital platforms. Meanwhile, 8% indicated that they were unaware, whereas 3.6% disagree and 0.7% strongly disagree. These findings showed that an aggregate of 87.6% of the entire number of respondents within the survey divulged that the measures mentioned were employed by banks and were determine to be effective for patrons and investors safety within the financial market. The results validated the study of Filipova-Rivers (2016), who established that information disclosure by the financial sector to customers on financial products and services was important and necessary for consumers' rights but needed to be improved. Further, improving consumers' financial knowledge on diversification of monetary services was significant for her inclusion.

4.7.2 Providing Knowledge on Products & Services

The study was curious about checking out if banks were giving out accurate information about their services to customers as one measure of market financial literacy. This is often important for their decision-making on what, how, and when to make purchases. Moreover, it guided them from making wrong choices since more complex digital products and services were introduced yearly on the financial market. Their responses were indicated in table 4.13. The results as disclosed on the aggregate, 88.8% of the entire number of respondents from branches of commercial banks sampled indicated that one among the responsibilities of banks, as provided within the

regulation, is the provision of the right information on all monetary products and services to the overall public and more important to users of their services.

On the opposite hand, 9.5% were neutral whereas 4.4% disagree and 0.4% strongly disagree. The findings concurred with Paul et al. (2016) who revealed that the availability of accurate banking information on financial products and services would solve problems by reducing queuing time, providing fast services, and opening the corridor for quick connection to the right person. Further, such measure was significantly and positively related to the general satisfaction of monetary services users but assistance to customers on follow-up was found to be negatively correlated with their all over satisfaction. Moghavvemi et al. (2018) proposed that due to staff competencies local bank customers have less satisfaction compared to foreign bank customers on information generation and dissemination to financial consumers for their rights and protection.

4.7.3 Consumer Rights and Protection

The study investigated whether the banks provided the needed customer education on their rights and responsibilities on a timely basis. This is important since this is another way to provide financial literacy to protect the service users. If they know what to do and how to do it, fraud will be minimized when transacting with the banks. Their feedback from the questionnaire distributed was presented in table 4.13. The results indicated that 37.6% agreed on the supply of timely information to all or any customers on their rights and duties.

Additionally, 23.4% strongly agreed with the statement. On the contrary, 10.6% disagree whereas 1.8% strongly disagree and 26.6% indicated that they were not conscious of all consumers being educated on their rights and told what to do as users of monetary services. The findings differ from Bekele (2016), who found that within the banking sector there is no comprehensive direction on the topic of consumers' rights and protection, banks relied on a persuasive approach, and developing and implementing banking code is insufficient.

The study concluded that the supervisory organ of the financial institutions should develop a code for customer protection, and at an equivalent time, banks should include the concept of customer protection in their operational procedure and utilize different electronic media (programs) to develop awareness and skills of consumers to use their rights. Kriese et al. (2019) argued that upholding customers' rights and protection enhanced economic process confirmed the results.

4.7.4 Customers are Aware of Regulations Governing Their Protection

The study also sought to establish whether financial institutions value their customers and provided the necessary information regarding consumers' regulations from their regulators for transparency in dealing with them on financial matters. This is important since financial literacy also covers all forms of awareness in business. Their responses were indicated in table 4.13. Based on the findings 36.9% strongly agreed that banks provided the necessary information on consumer regulations to all financial services users. Another 23.7% agreed financial institutions value customers and are protected.

On the other hand, 24.8% were neutral on the discussions whereas 13.5% disagree and 1.1% strongly disagree. These findings differ from Lobozyńska (2017), who found that consumers being aware of their protection regulations in the banking industry was still a challenge, consumers' rights were violated in using credit, deposit, payment services, and insurance products, and needed consumer protection laws that will protect their financial inclusivity. Similarly, Ali et al. (2015) argued that there were gaps in consumer rights, awareness, and financial knowledge that needed improvement for full participation in financial markets for consumption of products and services for their financial inclusion.

4.7.5 Benefits of Consumer Awareness in Financial Literacy for Financial Inclusion

The study investigated how consumer awareness had improved financial literacy between the services suppliers and the users for transparency in the financial transactions. Their responses were indicated below in table 4.13. The findings showed that an aggregate of 65.7% of the respondents in table 4.28 indicated that awareness increased the number of customers, enhanced their loyalty and trust, and make them understand the banks' products and services. Of the remaining, 20.8% were neutral whereas 12.4 disagree and 1.1% strongly disagree.

The results are in agreement with Nair and Gupta (2018) who reported that consumer awareness by banks using demographic information and geographic location was positively related to financial inclusion in India. Musango (2018) found that increased pay bill services, increased mobile money services, reduced customer queues, and

increased cash reserve and cash deposit ratios were associated with banks customers' awareness in Kenya.

4.7.6 Summary of Descriptive Results for use of Customers' Awareness Delivery Channels

This section shows the descriptive statistics for the statements that measure the utilization of customers' awareness delivery channels in marketing monetary literacy concepts for commercial banks financial inclusion in Kenya.

Table 4.14

Descriptive Results for use of Customers' Awareness Delivery Channels

	Obs.	Mean	Standard Deviation
Our bank uses targeted SMS and Email in promoting customers' financial literacy.	274	4.28	0.82
Our bank has invested in providing accurate knowledge to customers on products and other services provided.	274	4.20	0.81
Our bank frequently educates all consumers on their rights and responsibilities.	274	3.70	1.00
Our bank values consumers' protection and ensures that all our customers are aware of consumer protection regulations.	274	3.82	1.11
The use of consumer awareness in promoting financial literacy by our bank has improved financial inclusion in Kenya.	274	3.81	1.03
Overall mean		3.96	

The overall results showed a mean of 3.96 for consumer awareness. The findings were corroborated with those of Wangwe (2018) who established that consumers' awareness in Kenya had influenced consumers purchasing behavior, shaped their

attitudes, increased their loyalty, and enabled corporate entities like banks, Coca Cola, and others to spend less on marketing their products. Similarly, Gekonge, et al. (2021) argued that in Kenya consumers' level of education positively correlated with consumers' awareness, prices, product quality, consumption, and production. Further, sources of information increased awareness and monetary incentives. They concluded that lack of adequate information and unavailability of products are constraints.

In addition, Engels et al. (2019) reported that individuals' financial knowledge skills influenced consumers' awareness which created the capability for consumer protection in fraud detection in using financial services for inclusion. Further, product usage and basic money management skills cannot provide the propensity for fraud detection and consumer protection unless greater financial knowledge. The positive outcomes from consumers' awareness could be attributed to the majority of the respondents satisfactorily stressing its significance to bank operations and this can be seen from the continuous growth in bank assets, which is influenced by profitability (Kenya Bankers Association [KBA], 2020).

Nevertheless, the respondents were asked to explicate how else the use of consumer awareness in financial literacy influences monetary inclusion. The qualitative details from the open-ended question gave additional information to the study. From the open-ended inquiry, the branch managers stated that consumer awareness reduced customers' risks in monetary products and services access and usage. The education guided them in making investment choices and to understand complex monetary

transactions. It also gave them a sense of direction and improve their experiences in dealing with the banks.

4.8 Descriptive Statistics for Financial Advisory Services

The study fourth objective was to evaluate the influence of financial advisory services as a delivery channel of monetary literacy for financial inclusion of full-service banks in Kenya. This is often important since banks employed advisors financially knowledgeable and charged clients/customers a minimum fee to supply financial knowledge in the financial marketplace to scale back stress, financial therapy, indebtedness, confinement, and death (suicide) coming from taking away of properties and other benefits for failure to pay bank loans borrowed over a while. The variables employed to measure financial advisory services were financial planning, credit counseling, debt counseling, and planning for retirement. Frequencies, mean percentages, and root-mean-square- deviation were utilized in descriptive statistics employed for analyzing the variables.

Table 4.15

Frequency for Financial Advisory Services

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Our bank provides our customers with cash management training services.	2.6%(7)	21.5%(59)	33.6%(92)	29.6%(81)	12.8%(35)
Our bank trains our customers on financial planning which has promoted their level of financial literacy.	1.1%(3)	22.3%(61)	28.8%(79)	33.6%(92)	14.2%(39)
Investment planning services provided by our	0.7%(2)	18.2%(50)	33.2%(91)	35.8%(98)	12%(33)

bank have helped customers in promoting their level of financial literacy.					
Retirement planning services provided by our bank have helped customers in promoting their level of financial literacy.	2.9%(8)	28.1%(77)	44.5%(122)	18.2%(50)	6.2%(17)
Our bank provides tax planning advisory services to our customers to enhance their financial literacy.	12.4%(34)	30.3%(83)	34.3%(94)	16.4%(45)	6.6%(18)
Our bank provides insurance planning advisory services to our customers to enhance their financial literacy.	1.5%(4)	11.7%(32)	21.2%(58)	44.9%(123)	20.8%(57)
Our bank provides credit counseling advisory services to our customers to enhance their financial literacy.	2.2%(6)	17.2%(47)	29.6%(81)	36.9%(101)	14.2%(39)
Debt counseling services provided by our bank have helped customers in promoting their level of financial literacy.	2.9%(8)	27.1%(74)	34.4%(94)	20.5%(56)	15%(41)
The use of financial advisory services in promoting financial literacy by our bank has improved financial inclusion in Kenya.	0.7%(2)	19.3%(53)	31.4%(86)	27.4%(75)	21.2%(58)

4.8.1 Customers Cash Management Services

The study investigated whether the banks provided customers with financial advice on their cash management practices as part of its financial literacy-promoting framework.

This is important since financial planning has several components and good cash

administration is one major aspect because it leads to better savings and investment behavior. Their responses from questionnaire distributed were indicated in tabular form in table 4.15. The results from the table revealed 33.6% of the participants stated that they were unaware of ongoing cash management tutoring for customers. Another 21.5% disagree and 2.6% strongly disagree with the statement.

The results indicates of the remaining, 29.6% agreed and 12.8% strongly disagree with the question posed. From the findings, it is evident that financial advice on money management was not carried out by branches of commercial banks in the banking sector as suggested by the majority, 57.7% of the respondents on the aggregate of views sampled. The results differ from the study of Rentková and Mariak (2018) who found that financial advice increases personal financial knowledge, improves clients' decision-making, and enhanced their financial inclusion. Further, clients who sought financial advice were educated and needed advice for cash management, mortgage, and savings and to know other activities of the financial markets.

4.8.2 Financial Planning Services

The study was interested in finding out whether customers were provided financial advice on financial planning such as preparing financial schedules. This was cardinal since it helps customers to budget their daily and weekly spending to reduce consumption and enable them to save and invest with the banks. Their responses were indicated in table 4.15.

From the survey, 33.6% of the respondents indicated that bank consumers were given financial advice on financial planning involving how to rank their preferences using a

financial schedule, budgeting to spend; to save and to invest. On the contrary, 28.8% stated that they had no acknowledge of the ongoing cash management activities in the banking sector. In addition, 22.3% disagree and 1.1% strongly disagree.

It is indisputable from the results that professional advice given on financial planning activities mentioned in table 4.31 was low and did not benefit the huge stock of financial services users as indicated by 47.8% on the aggregate of respondents who agreed from the view sampled. A study by Gaudecker (2015) indicated that individual and household knowledge of financial literacy from financial advisors contributed significantly to achieving positive investment outcomes. In addition, financial advice was found to be a pillar for a better understanding of investment portfolios and monetary products and services for individual and household financial inclusion.

4.8.3 Investment Planning Services

The study investigated whether customers were given financial advice on why, how, and when to invest. This is paramount in financial planning because as people seek private, public, or self-employment they should be taught how to plan for priorities and save which is cardinal for investment. The respondents were asked to assess the use of financial literacy in the investment planning services in commercial banks. Their responses to the questionnaire were indicated in table 4.15. The analysis revealed that 35.8% agreed that banks provided financial knowledge to customers on how to plan for investment.

Additionally, 12% strongly agree with the statement. Of the remaining, 33.2% said they were not aware of such activities as branch managers while 18.2% disagree and

0.7% strongly disagree. The findings showed that financial advice was provided on how to plan and invest. Migliavacca (2020), acknowledged that financial advisors had a crucial task regarding improving the clients' level of monetary literacy to provide a stable way of creating informed financial and investment decisions on the financial markets that leads to their financial inclusion, supported the results.

4.8.4 Tax Advisory Services

The study was interested in finding out whether customers were given financial advice on how to plan and pay taxes since it is important for individual and businesses survival and growth. This is crucial in financial planning since bank customers are usually sent to prison for tax default and SMEs can be fined or closed down for failure to pay taxes and such can reduce financial institutions profitability. The responses to the questionnaire were indicated in table 4.15. From the table, it was found that 34.7% of the branch managers who were the respondents said that they had no information regarding customers' tax advisory services being carried by branches of banks in the industry. In addition, 29.9% disagree and 12.4% strongly disagree. Contrarily, 16.4% agreed and 6.6% strongly agree that this activity was conducted.

These findings showed that an aggregate of 77% of the total number of respondents in the survey stated that banks do not provide financial advice on tax payment as a measure for promoting financial literacy. The findings differ with the view of Cvrlje (2016 who acknowledged that financial literacy enhances the tax literacy of investors and has a significant impact on tax morale, tax compliance, and tax revenues, and

acquiring the basic knowledge for tax concepts reduces individuals' indebtedness in the financial markets as well as other tax challenges.

4.8.5 Insurance Planning

The study investigated whether customers got financial advice about insurance. This is often key in financial planning since most of the bank customers are working with the government, private institutions, or self-employed and a few were operating various sorts of businesses; so life and property insurance knowledge were necessary for their safety. Their responses were indicated in table 4.15. The results on insurance planning services in branches of full-service banks in Kenya showed that of the entire number of respondents, 44.9% indicated that banks provided financial advice to their customers regarding insurance, while 20.8% agreed that it is part of their operations. Meanwhile, 21.2% disagree and 1.5% strongly disagree on the topic.

The findings established that insurance education was a part of the banking sector's financial literacy framework. The result was confirmed by the study of Reyers (2016) who found financial advice to be good and correlated with financial literacy knowledge and served as a compliment and substitute for improving investors' financial knowledge for financial inclusion decisions.

4.8.6 Credit Counseling

The study was concerned to find out whether customers got financial advice on credit planning. This is crucial in financial advisory services since banks can loan individuals and businesses with small and large capital and payment is pivotal to banks' survival.

The respondents were asked about counseling on consumer credit and other forms of credit management. Table 4.15 contained their responses. The findings generated from the analysis showed that 36.9% agreed that banks conducted credit counseling for loan customers. Another 14.2% strongly agree that it had been a part of their credit arrangements.

The remaining, 29.6% were not aware, whereas 17.2% disagree and 2.2% strongly disagree. These findings showed that credit departments of monetary institutions provided financial advice to their loan clients. The outcomes were sustained by the investigation of Disney et al., (2016) who established that credit counseling strengthens financial situations and provided a protective umbrella for poor financial literacy and individuals with less financial knowledge are 60% bound to use counseling services for improving their financial decision-making.

4.8.7 Debt Counseling

The study investigated whether customers were given financial advice about planning to pay their debt. This is one of the overriding objectives for financial literacy since many actors in the financial markets usually take money on credit from banks to pay schools fees, attend to their health problems, pay rent, and purchase a home or car. Their responses are in table 4.15. The results presented showed that 34.3% of the respondents disclosed that there was no available information to their knowledge regarding banks' financial advice or debt counseling for loan customers. In addition, 27.4% disagree and 2.9% strongly disagree with this practice being in the banking

These results squarely indicated that banks do not carry out debt counseling for loan clients as stated by the majority of the respondents. According to Porto et al. (2019), debt counseling is necessary for relieving stressful financial events from individuals and businesses. Further, it complements financial education and improved the financial literacy knowledge of investors. Hermansson (2015) indicated that the existence of trust and commitment to obligations in the relational exchange makes the relationship between the bank financial advisors, customers' relation, and customer is saving behavior stronger and longer.

4.8.8 Retirement Planning Services

The study was curious on finding out whether the purchasers got financial advice on how to plan for their retirement. This is often important in financial advisory services since employees working with the public and personal sector who are bank customers will need to retire in time to come. Their responses were indicated in table 4.15. From the survey conducted, an aggregate of 75.5% of views sampled from the entire number of respondents indicated that no knowledge on retirement planning was provided to customers within the industry. Contrarily, 18.2% agreed and 6.2% strongly accept as true with the statement.

These results showed that the bulk of the respondents indicated that there was no financial advice given by banks to customers for future retirement. Nguyen and Rozsa (2019) argued that financial knowledge features a direct correlation with financial advice seeking for retirement investment choice and this influences the adequate use of monetary products and services that enhances financial inclusion.

Additionally, financial knowledge and financial advice seeking are complementary determinants to help individuals to make informed retirement investment choices. Trent (2018) posited that the retirement savings financial literacy model of a financial advisor is equipped for the supply of financial planning education for adequate financial knowledge transfer for clients' active participation for financial inclusion.

4.8.9 Benefits of Banks Financial Advisory Services in Financial Inclusion

The study delved into understanding how consumers' financial advisory services by banks enhanced their financial literacy knowledge and improved inclusion in Kenya. Table 4.15 contained the analysis of the responses of respondents to the questionnaire. The data presented showed that 31.4% declared that they were unaware of gains to the clients and the financial sector from financial advisory services used to promote financial literacy. Additionally, 19.3% disagree and 0.7% strongly disagree, this implies that the medium was not beneficial to stakeholders in the industry. Nonetheless, 27.4% agreed, and 21.2% strongly agree to the disclosure.

These results revealed that most of the respondents demonstrated that banks' financial advice for consumers' financial knowledge was not achieving the intended objectives. A study by Carlson (2018) found that clients' advisory services have greater benefits, include knowledge of investor risk tolerance, and increase the value of the client from adequate use of financial knowledge gained. Further, the strength of financial advisory services influenced the clients' financial literacy level and this affects their financial inclusion.

4.8.10 Summary of Descriptive Results for use of Financial Advisory Services

This section presents the descriptive statistics for all the statements used to measure the utilization of financial advisory services delivery channels in promoting financial literacy for financial inclusion in Kenya.

Table 4.16

Descriptive Results for use of Financial Advisory Services

	Obs.	Mean	Standard Deviation
Our bank provides our customers with cash management training services.	274	3.28	1.02
Our bank trains our customers on financial planning which has promoted their level of financial literacy.	274	3.38	1.02
Investment planning services provided by our bank have helped customers in promoting their level of financial literacy.	274	3.40	0.95
Retirement planning services provided by our bank have helped customers in promoting their level of financial literacy.	274	2.97	0.91
Our bank provides tax planning advisory services to our customers to enhance their financial literacy.	274	2.74	1.08
Our bank provides insurance planning advisory services to our customers to enhance their financial literacy.	274	3.72	0.97
Our bank provides credit counseling advisory services to our customers to enhance their financial literacy.	274	3.44	1.00
Debt counseling services provided by our bank have helped customers in promoting their level of financial literacy.	274	3.17	1.08
The use of financial advisory services in promoting financial literacy by our bank has improved financial inclusion in Kenya.	274	3.49	1.05
Over all mean		3.29	

The study outcome in table 4.16 showed the aggregate responses on financial advisory services measuring constructs. The results from the general score within the table above were 3.29, which indicated that it was below average from the bulk of the respondents' view sampled. The results implied that financial advisory services providers by commercial banks advisors to their customers was low and was unable to improve their knowledge of financial concepts and thus reduced the extent of inclusion. The results concur with Kim et al. (2021), who reported that financial advice was associated with time and adequate financial advice strongly improves the standard of monetary services provided by banks and financial literacy.

The less financially literate and other people with small and more wealth are helped by the financial advisors. Similarly, Girardone and Migliavacca (2016) acknowledged that more knowledge transfer from financial advisors is positively related to a rise within the financial literacy knowledge of the investors. Additionally, Ning and Hu (2019) argued that financial advice influences investors' inclusion, that is better financial and investment advice from financial advisors provides an honest understanding of monetary products and services, which influences financial inclusion. Magda-Nicolae and Jeraşu (2015) reported that individuals and businesses seeking many sorts of financial advisory services were significant and it influenced their performance and expand their products and services for financial inclusion. The below-average results from financial advisory services might be accredited to commercial banks not being proactive on client advisory services as indicated by the bulk of the respondents within the survey. This

can be seen from the continual increase in non-performing loans of borrowers within the banking sector annually.

However, the participants were also asked to explain how else the use of financial advisory services in monetary literacy enhances financial inclusion. The qualitative information from the open-ended inquiry supplemented the study information. In their responses, the managers said bank advisory services trained customers in meeting investment goals through savings and making credit decisions for obtaining loans. The process provided the requisite knowledge for the diversification of investment and created trust between the customers and the banks.

4.9 Descriptive Statistics for CBK Regulations

The study fifth objective was to seek out how CBK regulations acted on the four financial literacy variables to influence the financial inclusion of full-service banks in Kenya. The variable is of essence to the study since financial literacy activities contributes immensely to the expansion of the financial markets. Although there are opposing view on regulations and kinds of regulations but researchers in developing countries found that regulations of emerging markets were important for stakeholder's protection since the markets were underdeveloped (Ackah & Asiamah, 2016; Reddy, 2009; Abdallah, 2015). The constructs that measure regulatory framework was regulation of financial education partnership, regulation of digital platform, regulation of customers' awareness, and regulation of financial advisory services. The descriptive statistics applied to analyze the responses for the variables included frequencies, mean, percentages, and root-mean square deviation.

Table 4.17***Frequency for CBK regulations***

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Our bank adopted financial education partnership to promote literacy for customers based on CBK regulations.	7.3%(20)	21.9%(60)	30.7%(84)	23%(63)	17.2%(47)
CBK regulations allow commercial banks to adopt digital platforms to promote financial literacy for customers.	0.4%(1)	20.1%(55)	33.6%(92)	27.7%(76)	18.2%(50)
Our bank carried out consumer awareness programs to promote financial literacy for customers based on CBK regulations.	0.7%(2)	20.8%(57)	31.4%(86)	28.1%(77)	19%(52)
CBK regulations allow commercial banks to adopt financial advisory services for promotion financial literacy.	7.3%(20)	28.1%(77)	25.2%(69)	23.4%(64)	16.1%(44)
Commercial banks in Kenya financial literacy delivery channels is regulated by the CBK for financial inclusion.	2.2%(6)	19.7%(54)	32.8%(90)	24.8%(68)	20.4%(56)

4.9.1 CBK regulations on Financial Education Partnership

The study investigated whether government regulations of bank partnership to support financial literacy education influenced inclusion. This is often important since banks activities are regulated monitored, and supervised to make sure that the financial system remains stable and available to serve the users of monetary services in the least time. Their responses were in table 4.17. The statistical analysis revealed that 30.7% of the respondents signalized that they were unaware of CBK regulations on activities governing banks' partnerships. Additionally, 21.9% disagree and 7.3% strongly

disagree. Of the remaining, 23% agreed and 17.2% strongly accept as true with the statement. These results showed that the bulk of the respondents stated that partnership between individual banks and government to market financial literacy was not regulated by the government. The results differ with Bongomin et al. (2017) who found that regulations influenced social networks like a partnership among organizations and reciprocally improved financial inclusion. In addition, Rojas-Suárez (2016) acknowledged that regulations of institution activities play a serious role and have direct effects on inclusion.

4.9.2 CBK regulations on Digital Platforms

The study was curious to find out whether CBK regulations of banks' digital technology for the supply of monetary services and digital financial knowledge using digital platforms influenced financial inclusion. It is cardinal since the bulk of the services provided by banks and utilized by customers' involved mobile apps. The responses of the respondents on digital platforms were disclosed in table 4.17. The results of the descriptive statistical analysis revealed that the bulk of the respondents, 54.1% on the aggregate stated that there have been no regulations on digital platforms employed by banks to provide financial services to the users.

Contrarily, 27.7% agreed on the existence of policies governing the utilization of various online platforms while 18.2% strongly agree. The findings showed that the regulators of bank activities did not regulate digital platforms as a delivery channel for promoting digital financial literacy. The study results differ from Reynolds et al., (2018) who found that financial regulations of banking activities including branchless

banking and delivery platforms quickly influenced the expansion of digital financial services among the population to reinforce financial inclusion.

4.9.3 CBK regulations on Consumer Awareness

The study investigated whether regulations of banks for financial consumers' awareness influenced inclusion. This is often crucial since there have been complex digital financial products and services supplied by banks for customers used. The supply of accurate knowledge was important to scale back the high risk of fraud related to digital services. Their responses were found in table 4.17. The results revealed 31.4% of the population sampled were neutral. The branch managers were not conscious of financial consumers' awareness being regulated. They were supported by 20.8% who disagree and 0.7%, strongly disagree. Meanwhile, 28.1% agreed and 19% strongly agree that there was a policy.

From these results, the bulk of the participants stated that consumer awareness as a delivery channel to supply knowledge on consumers' rights and protection was not regulated by the CBK. A study by Gok and Ulu (2019) in Turkey found that government regulations were important for consumer awareness and awareness increases from providing the required information. Further, the study found age, income levels, gender, individual education level, and costs of products and services to be the determinants of consumer awareness. Similarly, Nabwire (2016) acknowledged that consumers' awareness was crucial for Kenya because consumers have limited knowledge of products and services offered by businesses as revealed

from geographical indications like consumer perception, trust, gender, education level, and information.

4.9.4 CBK regulations on Financial Advisory Services

The study was interested to find out whether regulations of banks' financial advisory services influenced financial inclusion. It is vital since financial services providers give out huge loans regularly, and high risks of default are experienced. The responses from the questionnaire were in table 4.17. The findings from the analysis of data showed that 60.6% on the aggregate indicated that there were no CBK regulations for financial advisory services as a medium to promote financial literacy. Contrarily, 23.4% agree with policies governing financial advice, and 16.1% strongly agree. These results showed that financial advisory services were not regulated.

A study by Ndalo (2019) in Kenya found many regulatory inefficiencies in the financial market and proposed an optimal model of regulation. The mode is unified for regulating the financial services providers as a monitoring mechanism for services offered including financial advisory services in the banking sectors. Heydenrych et al. (2018) argued that regulations of the financial markets were paramount but regulators and organizations should work collectively in developing regulatory policies for the activities of the market for financial inclusion and stability.

4.9.5 CBK regulations of Financial Literacy Channels

The study investigated whether regulations of commercial banks channels used for financial knowledge delivery influenced financial inclusion. This is paramount since regulations strengthen the activities of banks through monitoring and supervision for checks and balances for improvement. The responses were tabulated in table 4.17. The outcomes of the analysis indicated that the bulk of the branch managers who were the respondents, 54.7% on the aggregate disclosed that they were unwitting of financial literacy delivery channels being regulated to reinforce financial inclusion. Meanwhile, 24.8% agreed with regulations, and 20.4% strongly agree.

These results showed that most of those who responded to the questionnaires acknowledged that the medium employed by the banks to supply financial literacy knowledge to financial consumers was not regulated by CBK. A study by Zwedu (2015), found an association between inclusive growth, inclusion, and regulation, and therefore the financial sector growth is the result of financial regulation. Further, it brings about the supply and usage of monetary products and services to individuals and households at affordable costs. The study concluded that regulations were important for financial market activities.

4.9.6 Summary of Descriptive Results for CBK regulations

This section presents the descriptive statistics for all the statements that were used to measure CBK regulations in Kenya.

Table 4.18

Descriptive Results for CBK regulations

	Obs.	Mean	Standard Deviation
Our bank adopted financial education partnership to promote literacy for customers based on CBK regulations.	274	3.21	1.18
CBK regulations allow commercial banks to adopt digital platforms to promote financial literacy for customers.	274	3.43	1.02
Our bank carried out consumer awareness programs to promote financial literacy for customers based on CBK regulations.	274	3.44	1.04
CBK regulations allow commercial banks to adopt financial advisory services for promotion financial literacy.	274	3.13	1.20
Commercial banks in Kenya financial literacy delivery channels is regulated by the CBK for financial inclusion.	274	3.42	1.09
Over all mean		3.32	

The findings showed that the mean in table 4.18 for CBK regulatory framework of full-service banks financial literacy activities was 3.32 which indicated that the bulk of the respondents felt that the CBK regulations of banks financial education activities to improve the financial knowledge of the users of monetary products and services was below average. The results differ from Kori et al. (2020) who in their study established a statistically and positive association between performance and CBK regulations of banks activities in Kenya. Likewise, Momanyi (2018) found that through regulation of

banks in Kenya, access and usage of monetary services were positively correlated to financial stability.

Additionally, CBK through its role in regulation creates a framework for other activities of banks to encourage financial inclusion to reinforce financial stability. The justification for the low mean for CBK regulations indicated within the findings might be linked to the bulk of the respondents who were branch managers pointing out clearly that financial literacy activities of banks to enhance the financial knowledge of monetary services users were not regulated by regulators of the banking sector. Information on banks' financial education supervision by regulators for consumers of monetary services within the industry was scanty. Individual banks undertook the initiative on a low scale as a technique to enhance their customer base.

Nonetheless, the respondents were required to spell out how else the use of regulatory framework in financial literacy influences financial inclusion. Their responses from the open-ended question provided additional qualitative information. The managers' responses supported the importance of regulations. They indicated that the financial literacy delivery channels regulations was unique for the customers and investors risk management and financial access. Further, the respondents stated that regulation of the monetary literacy channels promote individuals and households financial welfare; protect their financial information and safe guide the business environment for improving livelihood.

4.10 Descriptive Statistics for Financial Inclusion

The six and final objective of the investigation was to determine the effect of the result variable, financial inclusion on the manipulated variables, financial literacy delivery channels. The constructs designed to gauge financial inclusion were access to financial services, availability of monetary services, and usage of monetary services.

Table 4.19

Frequency for Financial Inclusion

	very low extent	low extent	moderated extent	high extent	very high extent
Level of availability of your financial services to customers	0.4%(1)	2.9%(8)	36.1%(99)	35.8%(98)	24.8%(68)
Level of accessibility of your financial services to customers	0.4%(1)	3.6%(10)	36.9%(101)	35.4%(97)	23.7%(65)
The extent of usage of your financial services by customers	0%(0)	5.8%(16)	48.9%(134)	30.7%(84)	14.6%(40)

4.10.1 Access to Financial Services

The study was curious about finding out whether the consumers were able to explore banks' financial products and services. This is often important since access is predicated on the amount of individuals with bank products and accounts. The responses assembled were indicated in table 4.19. The results divulged that the bulk of the respondents, 36.9% indicated that access to banks' financial services was to a moderate extent. Another 35.4% said the high extent and 23.7% stated very high extent. Contrarily, 3.6% were of the view that it had been at a low extent whereas 0.4%

said very low extent. From these results, the bulk, 59.1% on the aggregate of the respondents indicated that consumers' access to financial services was to a high extent. The findings were confirmed by the KNBS, CBK, and FSD Kenya (2019) survey, which established that access to financial services was high at 82.9% during a study of over 8,000 respondents.

4.10.2 Availability of Financial Services

The study investigated whether the consumers were provided financial services per their demographic and geographical location. This is crucial since inclusion involved the availability of bank services that center on the location of these services and age groups that owned ATM cards and other products. Their responses were indicated in table 4.19. The tabular presentation of data revealed that 36.1% of the population sampled explicitly mentioned that availability of financial services was at a moderated level whereas 35.8% indicated high extent and 24.8% at a very high extent.

On the other hand, 2.9% suggested a low extent and 0.4% said a very low extent. These findings showed on the aggregate that the majority, 60.6% of the respondents indicated that financial services made available by banks to the users were at a high extent in the financial market. The findings agreed with Krishnakumare and Singh (2019), who established that an increase in banks penetration or availability of financial products and services was associated with improved bank awareness and consumers' level of financial literacy. Further, these initiatives from the services providers positively affect financial inclusion.

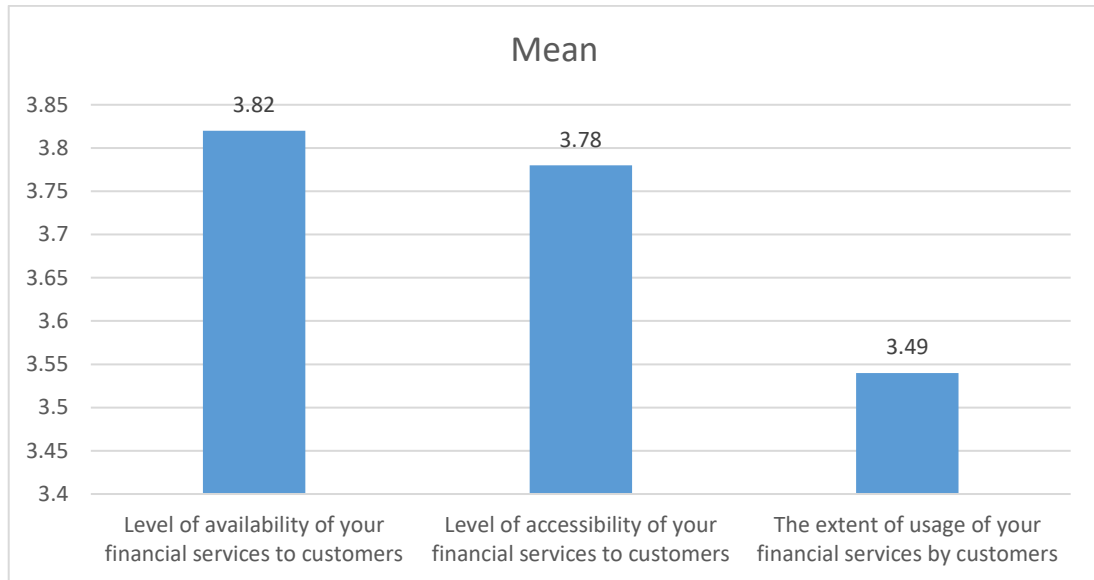
4.10.3 Usage of Financial Services

The study examined whether the purchasers were able to use financial services per their geographical location. This is often critical since usage in financial inclusion involved the number of people with traditional, electronic, and mobile banking accounts; using pension, have access to credit including digital loans, and insurance services. Their answers to the questionnaire were disclosed in table 4.19. Findings from the data analyzed showed that 39.4% of the managers indicated that usage of monetary services was at a moderate extent and 18.24% said at a low extent. On the contrary, 30.7% expressed that it had been at a high extent and another 11.7% said very high extent. The results showed that the bulk, 57.64% of the respondents in total indicated that the usage of banks' financial services by consumers was low. Mwangi (2019) measured the usage of monetary products and services in Kenya and established that insurance remained low, and KNBS, CBK, and FSD Kenya (2019) who found that usage was low, supported the results. The findings also are confirmed from the general average of access, availability, and usage in table 4.20.

Table 4.20

Descriptive Results for Financial Inclusion

	Obs.	Mean	Standard Deviation
Level of availability of your financial services to customers	274	3.82	0.85
Level of accessibility of your financial services to customers	274	3.78	0.86
The extent of usage of your financial services by customers	274	3.49	0.79
Over all mean		3.70	



The overall findings showed a mean of 3.70 for financial inclusion. The findings are in agreement with those of Wanjala (2017), who found a positive association between access, availability, and use of monetary products, services, and financial practices, and therefore the relationship increased savings and investment, debt management, and financial planning practices which enhanced inclusion in Kenya. In addition, Slamet et al. (2018) established that a rise in access, availability, and usage of monetary services was correlated with banks' investment and knowledge sharing with the demand side of financial inclusion.

They concluded that consumers' awareness before access and utilization of products and services reduced the strain of monetary literacy and increased the availability side of inclusion. The great outcomes from financial inclusion variables might be justified from positive disclosure made by the bulk of the respondents-based information in their possession as branch managers and CBK, FSD, and KNBS (2019) survey.

Notwithstanding, the bank managers were asked to comment on the level of financial inclusion in their respective commercial bank. The open-ended question responses gave additional qualitative detail on the dependent variable. According to the managers, the level of monetary products and services was high and the level of usage was still low in Kenya. They pointed out that a robust framework was needed for increasing the financial consumers' usage of monetary services provided by the banking sector across the country.

4.11 Diagnostics Tests Results

To apply the multiple regression model various tests were performed to check for normality, linearity, and multi-collinearity to work out the acceptable model for the study data (Esomon & Eleje, 2020). These were diagnostic tests intended for selecting the model.

4.11.1 Test of Normality

The study employed Shapiro-Wilk Test to check for normality. Consistent with Hanusz et al. (2016), the Shapiro-Wilk Test has known mean established to handle an outsized sample that is quite the chosen sample of the study. Further, it is widely applied to test for normality to work out whether the data were normally distributed or depart from normality. The outcomes in table 4.22 showed that the Shapiro-Wilk-Statistics for all the variables had p-values greater than 0.05. Therefore, the null hypothesis that data is not statistically different from normal distribution was not rejected inferring that the data for all the variables followed normal

distribution. The data therefore adhered to the regression assumption of Gaussian distribution.

Table 4.22

Kolmogorov- Simonov and Shapiro-Wilk test

Tests of Normality	Shapiro-Wilk		
	Statistic	Df	Sig.
Financial education partnership	0.875	274	0.12
Digital platforms	0.941	274	0.098
Consumer awareness	0.971	274	0.067
Financial advisory services	0.831	274	0.077
Regulatory framework	0.971	274	0.193
Financial inclusion	0.904	274	0.109

Source: Survey Data (2021)

4.11.2 Linearity

The major function of multiple linear regression is to correctly estimate the connection between the predictor and response variables to determine if the link allying the two variables are linear in nature. The occurrence of this linearity happens when the change or the variation rate between the variables scores does not change for all the range of scores for the two variables. Moreover, the linearity concept can be assessed by use of two methods: graphical and statistical. The graphical approach involves the evaluation of scatter plots while the statistical consists of applying the linear correlation coefficient to test the strength of the connection.

When the link between the variables has no linearity, the analysis of the regression outcomes can cause the true association between the variables to be underestimated. To underestimate the connection causes two statistical risks. The risk of type I and type II errors will increase for both the predictor variable and the multiple regression.

Specifically, the increase in the risk of type I error will result to an over estimation of others independent variables that share similar variance (I-gohary, 2019; Sedgwick, 2014).

Table 4.23

Results of Linearity Tests

Variable		Financial Inclusion
Financial education partnership	Pearson	
	Correlation	.545**
	Sig. (2-tailed)	0.000
	N	274
Digital financial platform	Pearson	
	Correlation	.557**
	Sig. (2-tailed)	0.000
	N	274
Consumer awareness	Pearson	
	Correlation	.563**
	Sig. (2-tailed)	0.000
	N	274
Financial advisory services	Pearson	
	Correlation	.606**
	Sig. (2-tailed)	0.000
	N	274

** Correlation is significant at the 0.05 level of significance (2-tailed).
The significance level of the correlation is at 0.05

Another diagnostic test performed on the observed data was correlation analysis. This test was conducted for linearity using the Pearson's product-movement coefficient. table 4.23 above showed the test results of the predictor variables and the response variable. The outcomes displayed revealed the explanatory variables exhibited a linear association with inclusion (($p < 0.05$). The outcomes further demonstrated that financial

advisory services have the strongest linear association with monetary inclusion ($r=0.606$). The others were consumer awareness ($r=0.563$), digital platforms ($r=0.557$) and financial education partnership ($r=0.545$) respectively. Taiyari, (2017) carried out this similar test while conducting a study to develop and validate a reliable risk model in the UK. Karanja (2019) adopted the same test and evaluated lending performance of full-service banks in Kenya.

4.11.3 Test of Multicollinearity

The study employed the Tolerance and Variance inflation factor (VIF) to check for multicollinearity. The rule of thumb during this test states that VIF should be lower than 10, while tolerance should be below 1 to conclude that there is no multicollinearity between independent variables. The leads to table 4.23 showed that each one of the variables had VIF below the edge of 10 utilized in this study. The study finding, therefore, confirmed there was no threat of multicollinearity among the study independent variables.

Table 4.24

Test of Multicollinearity

	Collinearity Statistics	
	Tolerance	VIF
Financial Education Partnership	0.49	2.039
Digital platforms	0.483	2.069
Consumers' awareness	0.52	1.922
Financial Advisory Services	0.453	2.207
Regulatory Framework	0.535	1.868

Source: Survey data (2021)

4.11.4 Heteroscedasticity

To ensure conformity to the present regression assumption, the study employed the Levine test for homogeneity to work out Heteroskedasticity. The null hypothesis for the Levine test is that data is Homoscedastic therefore the calculated p-values must be greater than 0.05 in order that the study fails to reject this hypothesis (Ali, et al., 2019). Consistent with the findings presented in table 4.24, Levine Statistics for all the variables had p-values >0.05 , therefore the null hypothesis that data is Homoscedastic was not rejected for all the study variables. The study, therefore, confirmed that there was no threat of Heteroskedasticity, hence this assumption was achieved.

Table 4.25

Test of Homogeneity of Variances

Test of Homogeneity of Variances	Levine Statistic	df1	df2	Sig.
Financial Education Partnership	0.316	3	270	0.814
Digital platforms	0.763	3	270	0.515
Consumers' awareness	0.63	3	270	0.596
Financial Advisory Services	1.216	3	270	0.304
Regulatory Framework	1.362	3	270	0.255
Financial inclusion	0.742	3	270	0.528

4.11.5 Sampling adequacy

The results of the test sampling adequacy are presented in table 4.26. From the table, the variables test statistics were above the KMO and Bartlett sampling adequacy threshold of 0.8 at the significance level.

Table 4.26***Test of sampling adequacy***

Variable	KMO	Bartlett's Test of Sphericity
Financial education partnership	0.929	1066.303 (sig. 0.000)
Digital financial platform	0.815	492.928 (sig. 0.000)
Consumer awareness	0.810	535.032 (sig. 0.000)
Financial advisory services	0.927	1128.888 (sig. 0.000)
CBK regulations	0.885	1152.664 (sig. 0.000)

4.11.6 Correlation Analysis

Schober et al. (2018) acknowledged that Pearson correlation focused on establishing a linear relationship between the control and outcome variables using its coefficient. For the study, the coefficient (r) was employed for this purpose. There are three main approaches for interpreting the sort of relationship observed. These approaches were positive, negative, or no correlation. High, moderate, and weak are associated terms for emphasizing the degree of association. A positive relationship (+) exists when the variables moved simultaneously alongside. When it is negative (-) they moved within the opposite direction; meaning, together surges the opposite will decrease concurrently which also depicts an inverse relationship.

When there is no connection joining the variables, the coefficient automatically becomes zero. The numerical values of the correlation fall between -1 to $+1$, where 0 indicates no correlation (Schober et al., 2018). The study had financial education partnership, digital platform, consumer awareness, and financial advisory services as the predictor variables. Each of the variables was correlated with financial

inclusion, the result variable using Pearson statistical approach to work out if there was a relationship existing between them. The outcomes were indicated in table 4.27.

Table 4.27

Correlation Matrix

		FEP	DP	CAWS	FAS	REGFR	FIN
Financial education partnership	Pearson Correlation	1					
	Sig. (2-tailed)	0.000					
	N	274					
Digital Platforms	Pearson Correlation	.623**	1				
	Sig. (2-tailed)	0.000					
	N	274	274				
Consumer Awareness	Pearson Correlation	.560**	.597**	1			
	Sig. (2-tailed)	0.000	0.000				
	N	274	274	274			
Financial advisory services	Pearson Correlation	.594**	.597**	.612**	1		
	Sig. (2-tailed)	0.000	0.000	0.000			
	N	274	274	274	274		
Regulatory framework	Pearson Correlation	.573**	.543**	.507**	.617**	1	
	Sig. (2-tailed)	0.000	0.000	0.000	0.000		
	N	274	274	274	274	274	
Financial inclusion	Pearson Correlation	.545**	.557**	.563**	.606**	.503**	1
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000	
	N	274	274	274	274	274	274

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

The findings of the correlation analysis indicated that there was a significant and positive association between monetary education partnership and financial inclusion ($r=0.545$, $p<0.000$). This implies that considering financial education partnership aspects such as sponsorship of financial education programs, financial literacy campaigns and workshop and seminars carryout by the banking sector in collaboration

with other institutions can lead to increase in monetary inclusion. The outcomes concurred with the research of Mross and Reiter (2019) who statistically acknowledged that partnership in financial literacy training between learning institutions and commercial banks improved student knowledge of budgeting and other financial concepts hence addressing their financial inclusivity.

Bonga and Mlambo, (2016) who stated that banks from economically developing countries like the Republic of Zimbabwe were collaboratively utilizing financial literacy and gradually improving the banking sector supported the findings. They concluded that banks should involve the use of local languages, cooperative societies, and other measures in their financial education schemes for the unbanked. Similarly, Munene and Yourougou (2020), found that microfinance banks' intermediary role within the financial sector was significant in financial literacy education for inclusion.

Correlation analysis between digital financial platforms and financial inclusion was also computed. The results revealed that digital platforms measurement was significantly and positively connected with financial inclusion $r = (0.557, p < 0.000)$. If aspects of the financial platforms such as website and portals, social media pages and online teaching resources are used by full-service banks to teach digital financial literacy to users of monetary services financial inclusion will increase. The results confirmed the findings of Arday (2017), who found that the ownership and effective usage of digital devices such as mobile phones facilitated mobile banking platforms employed by the banked, unbanked, and underserved population for online and internet financial services and it positively influenced financial inclusion. The results are in accordance with the scholarly work of Senou et al., (2019) who said the

coexistence of mobile money platforms and internet platforms as digital technology facilitated online financial transactions for banking and branchless banking activities and this influenced positive changes in financial inclusion.

The value of the correlation analysis between consumer education and financial inclusion was calculated and obtained. The Pearson correlation coefficient computed and tested indicated that the interrelationship between consumer awareness and monetary inclusion was found to be positively and statistically significant ($r = 0.563$, $p = 0.000$). This implies that if financial consumer education activities are considered and practiced, this will convert to increase financial inclusion. The outcomes agreed with the findings of Nair and Gupta (2018), who found that consumers' education was significantly related to the socio-demographic characteristics of the financial services users, which influenced financial inclusion.

Comparably, Zhang (2021) demonstrated that consumer tutoring of financial market activities is significantly related to the diversification of individual investors' investment portfolios. Further, financial literacy knowledge contributes to improving investment diversification and reducing limited attention bias, strengthening social trust, and promoting the utilization of professional investment advisors for consumer awareness. The study concluded that the promotion of continuous financial literacy programs will influence the optimization of monetary asset allocation decisions and improved financial welfare.

The findings of the correlation analysis showed that there was a significant and positive association between monetary advisory services and financial inclusion ($r=0.606$, $p=0.000$) implying that banks engaging in monetary products users' advisory services such as financial planning, credit counseling, debt counseling and retirement planning will enhance monetary inclusion. This suggests that monetary advisory services were influenced by continue consumer education and that commercial banks should take these activities with a lot of seriousness. The results confirmed those of Carlson (2018) who suggested that clients' advisory services have greater benefit, and a rise within the value of the investors' financial advisory services is significantly related to the investor risk tolerance level and the investment period.

A scholarly investigation by Bedford et al. (2021) reported that financial advisory services incorporates public accountants' opinions. These opinions are important variables for businesses and investors including those involved in takeover situations occurring in mergers and acquisitions found during a business combination. Further, the strength of financial advisory services influenced the clients' financial literacy level and this affects their financial inclusion.

The finding revealed a correlation analysis of $r=0.503$, $p=0.000$, indicating a significant and positive connection between the Central Bank financial literacy delivery channels regulation and monetary inclusion. The outcomes established that regulations of the banking sector monetary literacy channels for consumer financial education would cause a rise in financial inclusion. The results were supported by the study of Osano and Gekara (2018) who reported that government regulations of activities within the banking system influenced their profitability in Kenya. A study

by Zwedu (2015) found an association between inclusive growth, inclusion, and regulation, and financial sector growth is the results of financial regulation. Further, it brings about the supply and usage of monetary products and services to individuals and households at affordable costs. The study concluded that regulations were important for financial market activities.

4.12 Univariate Regression Analysis

It was essential to test the connection between each of the predictor variables and the response variable. The unique test adopted to perform this analysis was the univariate regression. The outcome of every variable and their explanation is displayed below.

4.12.1 Financial Education Partnership and Financial Inclusion

The first analysis was conducted for the study first objective of determining the effect of the connection between financial education partnership and financial inclusion of full-service banks in Kenya. The findings of univariate analysis are demonstrated in table 4.28.

Table 4.28***Univariate Regression Analysis for Financial Education Partnership and Financial Inclusion***

	B	Std. Error	Beta	T	Sig.
(Constant)	1.969	0.167		11.785	0.000
Financial education partnership	0.504	0.047	0.545	10.721	0.000

		Sum of Squares	Df	Mean Square	F	Sig.
Model	Regression	44.509	1	44.509	114.94	.000b
	Residual	105.329	272	0.387		
	Total	149.838	273			

Model Summary	
R	.545a
R Square	0.297
Adjusted R Square	0.294
Std. Error of the Estimate	0.62228

Source: Survey Data (2021)

The model summary in table 4.28 showed that the model had an R-square of 0.297 which inferred that holding other factors constant financial education partnership explained 29.7% of the changes in financial inclusion of economic banks in Kenya. The findings in table 4.26 showed the analysis of variance (ANOVA). The F-statistic obtained was 114.94 with a p-value of 0.000. The results indicated that the overall univariate model employed to connect financial literacy education partnership and inclusion was significant. The results further illustrated that financial education partnership was a significant predictor of financial inclusion of full-service banks in Kenya. These two statistics indicate that the study null hypothesis was rejected and indeed confirmed that there is a positive and statistically significant effect of financial education partnership on financial inclusion in commercial banks in Kenya.

The coefficient $\beta = 0.504$ also showed a notable different from 0 with a p-value = 0.000 which was smaller than 0.05. The findings showed that a unit change in monetary education partnership would end in a 0.504 unit change in financial inclusion of commercial banks in Kenya. The outcomes affirmed that there was a significant positive linear relationship between financial education partnership and financial inclusion of full-service banks. The findings agreed with Sari (2018), who established that banking institutions' financial literacy partnership programs in schools would improve students' financial knowledge to scale back their consumer behavior and promote their financial inclusion. The study concluded that education institutions' financial literacy programs are significant in addressing students' money management problems about their consumption level.

4.12.2 Digital Platforms and Financial Inclusion

The survey second objective was to assess the influence of digital platforms on financial inclusion of commercial banks in Kenya. The findings of univariate analysis are presented in table 4.29.

Table 4.29***Univariate Regression Analysis for Digital Platforms and Financial Inclusion***

Coefficients	B	Std. Error	Beta	T	Sig.
(Constant)	1.561	0.198		7.865	0.000
Digital Platform Delivery Channels	0.58	0.052	0.557	11.049	0.000
ANOVA	Sum of Squares	df	Mean Square	F	Sig.
Regression	46.419	1	46.419	122.085	.000b
Residual	103.419	272	0.38		
Total	149.838	273			
Model Summary	R	.557a			
	R Square	0.31			
	Adjusted R Square	0.307			
	Std. Error of the Estimate	0.61662			

Source: Survey Data (2021)

The model summary findings in table 4.29 revealed that the model had an R-square of 0.31, which indicated that when other factors are held constant, digital financial platforms explained 31.0% of the changes in financial inclusion of economic banks in Kenya. The leads to table 4.27 revealed the ANOVA. The F-statistic obtained was 122.08 with a p-value of 0.000. The results showed that the all-inclusive univariate model that linked digital platforms and financial inclusion was significant. The result further indicated that digital platforms are an important predictor of financial inclusion of commercial banks in Kenya.

The coefficient $\beta = 0.58$ also revealed a big different from 0 with a p-value = 0.000 which was less than 0.05. The findings revealed that a unit change in digital financial platforms would end in a 0.58 unit change in financial inclusion of full-service banks in Kenya. These two statistics indicate that the study null hypothesis was rejected and

indeed confirmed that there is a positive and statistically significant effect of digital platforms on financial inclusion in commercial banks in Kenya.

The results further confirmed that there was a significant positive linear relationship between digital platforms and inclusion of commercial banks. This was in agreement with Mwanja (2018) who argued that digital technology was behind the promotion and growth of micro enterprises and therefore the lower services of using the technology brought greater benefit to the institutions and further benefited financial inclusion. The study concluded that the hallmark of micro-enterprises growth was collateral, transaction cost, convenience, perceived value, and technology adoption.

4.12.3 Consumer Awareness and Financial Inclusion

The third objective of the study was to seek out the influence of consumer awareness on financial inclusion of full-service banks in Kenya. The findings of univariate analysis are presented in table 4.30.

Table 4.30***Univariate Regression Analysis for Consumer Awareness and Financial Inclusion***

Coefficients	B	Std. Error	Beta	t	Sig.
(Constant)	1.446	0.205		7.044	0.000
Consumer awareness	0.574	0.051	0.563	11.232	0.000
ANOVA	Sum of Squares	Df	Mean Square	F	Sig.
Regression	47.476	1	47.476	126.155	.000b
Residual	102.362	272	0.376		
Total	149.838	273			
Model Summary	1				
R	.563a				
R Square	0.317				
Adjusted R Square	0.314				
Std. Error of the Estimate	0.61346				

Source: Survey Data (2021)

The model summary leads to table 4.30 showed that the model had an R-square of 0.317 which implied that holding other factors constant consumer awareness explained 31.7% of the difference in financial inclusion of full-service banks in Kenya. The findings in table 4.30 showed the analysis of variance (ANOVA). The F-statistic obtained was 126 with a P-value of 0.000. The findings showed that the overall univariate model applied to link consumer awareness and financial inclusion was significant. The outcomes further indicate that consumer awareness was a significant determinant of financial inclusion of banks engaged in commercial activities in Kenya. These two statistics show that the study null hypothesis was rejected and indeed confirmed that there is a positive and statistically significant effect of consumer awareness on financial inclusion in commercial banks in Kenya.

The coefficient $\beta = 0.574$ also showed a different from 0 with a p-value = 0.000 which was lesser than 0.05. The findings indicated that a unit change in consumer awareness would end in a 0.574 unit change in financial inclusion of commercial banks in Kenya. The results further affirmed that there was a significant positive linear relationship between consumer awareness and financial inclusion of full-service banks. The results concurred with the study of Chariri et al. (2018) who found that investors' level of monetary literacy from consumer awareness was positively correlated with investment fraud detection and consumer protection. Further, fraud detection in investment protects consumers and enhanced financial inclusion.

4.12.4 Financial Advisory Services and Financial Inclusion

The study fourth objective was to work out the influence of financial advisory services on financial inclusion of full-service banks in Kenya. The findings of univariate analysis are presented in table 4.31.

Table 4.31

Univariate Regression Analysis for Financial Advisory Services and Financial Inclusion

Coefficients	B	Std. Error	Beta	t	Sig.
(Constant)	1.709	0.163		10.462	0.000
Financial advisory services	0.61	0.048	0.606	12.576	0.000

ANOVA	Sum of Squares	Df	Mean Square	F	Sig.
Regression	55.09	1	55.09	158.153	.000b
Residual	94.747	272	0.348		
Total	149.838	273			

Model Summary	1

R	.606a
R Square	0.368
Adjusted R Square	0.365
Std. Error of the Estimate	0.5902

Source: Survey Data (2021)

The model summary in table 4.31 showed that the model had an R-square of 0.368 which implied that holding other factors constant financial advisory services explained 36.8% of the variation in financial inclusion full-service banks in Kenya. The leads to table 4.31 revealed the analysis of variance (ANOVA). The F-statistic obtained was 122.08 with a p-value of 0.000. The outcomes indicated that the general univariate model used to connect financial advisory services and financial inclusion was significant. It further stated that financial advisory services are a significant determinant of financial inclusion of commercial banks in Kenya. These two statistics reveal that the study null hypothesis was rejected and indeed confirmed that there is a positive and statistically significant effect of financial advisory services on financial inclusion in commercial banks in Kenya.

The coefficient $\beta = 0.610$ also revealed a meaningful different from 0 with a p-value = 0.000 which was below 0.05. The findings showed that a unit change in financial advisory services would end in a 0.610 unit change in financial inclusion of full-service banks in Kenya. The results further confirmed that there was a significant positive linear relationship between financial advisory services and financial inclusion of commercial banks. Heinrich and Schwabe (2015) indicated that technology-supported services in bank advisory services promoted consumers' education and knowledge transfer to the client from financial advisors,

meeting their satisfaction level than traditional delivery of financial literacy education, supported the findings.

4.13 Multivariate Regression Analysis

This section presents the results of multivariate analysis, which was adopted to compute the joint effect between independent variables and dependent variables. The results of the multivariate regression were the idea for the hypotheses testing during this study.

Table 4.32

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.683a	0.467	0.459	0.54508

The results of the model summary presented in table 4.32 show that the multivariate regression model had $r=0.683$ and r -squared (coefficient of determination) = 0.467. The findings implied that financial literacy delivery channels (financial advisory services, financial education partnership, consumer awareness, and digital platforms) accounted for 46.7% of the variation in financial inclusion in commercial banks in Kenya.

Table 4.33**ANOVA**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	69.914	4	17.479	58.828	.000b
	Residual	79.924	269	0.297		
	Total	149.838	273			

The results of the ANOVA of the model fitted to check the effect of financial literacy delivery channels (financial advisory services, financial education partnership, consumer awareness, digital platforms) on financial inclusion show f-statistics =58.828, p-value =0.000 which was less than 0.05. The study, therefore, did not reject the null hypothesis that the model fitted had the goodness of fit. These results established that financial literacy delivery channels (financial advisory services, financial education partnership, consumer awareness, and digital platforms) significantly predicted financial inclusion in Kenya since the model was statistically significant at a 5 percent level of significance.

Table 4.34**Regression Coefficients**

Coefficients	Unstandardized Coefficients		Standardized Coefficients			95.0% Confidence Interval for B	
	B	Std. Error	Beta	T	Sig.	Lower Bound	Upper Bound
(Constant)	0.807	0.201		4.014	0.000	0.411	1.203
Financial Education Partnership	0.145	0.057	0.157	2.536	0.012	0.032	0.258
Digital Platforms Consumer Awareness	0.174	0.066	0.167	2.625	0.009	0.043	0.304
Financial Advisory Services	0.200	0.063	0.196	3.18	0.002	0.076	0.323
	0.295	0.063	0.294	4.677	0.000	0.171	0.42

Source: Survey Data (2021)

$$Y = 0.807 + 0.145X_1 + 0.174X_2 + 0.200X_3 + 0.295X_4 + \varepsilon$$

Where:

Y = Financial Inclusion

X_1 = Financial education partnership

X_2 = Digital Platforms;

X_3 = Consumers Awareness

X_4 = Financial Advisory Services

ε = error term

Multivariate regression was fitted to see the effect of financial literacy delivery channels (financial advisory services, financial education partnership, consumer awareness, and digital platforms) on financial inclusion in commercial banks in Kenya.

The following section presents the test of hypotheses.

H₀₁ There is no significant relationship between financial education partnership and financial inclusion of commercial banks in Kenya.

From the results of the statistical method presented in table 4.34, the coefficient for financial education partnership was $\beta = 0.145$ with a corresponding p-value = 0.012. Since the p-value was lower than 0.05, then the results imply that financial education partnership significantly predicted financial inclusion. The results further indicate that increasing financial education partnership by one unit will cause an increase of 0.145 units in financial inclusion.

From these findings, the hypothesis in chapter one which indicated that there is no significant relationship between financial education partnership and financial

inclusion of full-service banks in Kenya was rejected implying that financial education partnership had a positive and significant association with inclusion. The findings concurred with Park and Chung (2015) who reported that the strength in educational network between groups features a positive association with financial literacy. These findings also supported the results of Bongomin et al. (2016), and Rahmawati, and Rahadian (2018) who established that various kinds of networks have a positive relationship with financial literacy and financial inclusion. The study concluded that strong social interaction between students and their lecturers in learning financial education contributes to improving students' financial literacy knowledge.

H0₂ There is no significant relationship between digital platforms and financial inclusion of commercial banks in Kenya.

The outcomes of the statistical method presented in table 4.34, the coefficient for digital platforms was $\beta = 0.174$ with a corresponding p-value = 0.009. Since the p-value was below 0.05, the results imply that digital platforms significantly predicted financial inclusion. The results further show that increasing digital platforms by one unit will cause an increase of 0.174 units in financial inclusion. From these findings, the hypothesis presented in chapter one which stated that there is no significant relationship between digital platforms and financial inclusion of commercial banks in Kenya was rejected meaning that digital platforms had a positive and significant association with financial inclusion.

The findings confirmed the scholarly work of Mwanja (2018) who also reported that the adoption of different types of platforms of digital technology in Kenya promoted growth in micro-enterprises and this positively influenced inclusion. The study by Howell (2019) also confirmed that the adoption of digital platforms for online banking by low-income credit unions in America increased their assets size and financial markets transactions and this statistically and significantly influenced financial inclusion. The study concluded that low-income credit unions are actors in the financial markets who helped to bring the unbanked from the informal sector to the financial industry. Their work facilitate financial inclusion by offering financial services to individuals and households.

The findings also affirmed the research of Leydier (2016) and Keli (2018) who found that in Kenya the use of mobile services networks for purchase transactions and transferring money generated huge profit that significantly enhance households financial capability from the consistency and effectiveness of the financial services delivery promoted by financial inclusion.

H0₃ There is no significant relationship between consumer awareness and financial inclusion of commercial banks in Kenya.

The multivariate analysis in table 4.34 showed that the coefficient results for consumer awareness were $\beta = 0.200$ with a corresponding p-value = 0.002. From the outcomes, the p-value was below 0.05, which demonstrates that consumer awareness positively and significantly predicted financial inclusion. Meaning that an increase in consumer awareness by one unit will cause an increase of 0.200 units in inclusion. From the

analysis, the null hypothesis in chapter on which indicated that there is no significant relationship between consumer awareness and financial inclusion of full-service banks in Kenya was rejected implying that consumer awareness had a positive and significant relationship with inclusion. These findings concurred with Alikariev and Poliakh (2018) in Poland and Kriese et al. (2019) who found that consumer protection influence the quantity of economic development, which enhanced financial inclusion.

The studies concluded that the more developed a country's economy the upper the safety of consumers of the financial market and thus the upper is that the extent of inclusive finance. It also confirmed the studies of Bongomin and Ntayi (2020) and Lobozyńska (2017) who reported that consumers' protection is critical to business growth and consumers' awareness was necessary for improving consumer protection within the financial markets for his or her financial inclusion. In addition, studies of Chariri et al. (2018) and Cwynar et al. (2019), found that buyers and investors with more knowledge in financial matters were less challenged in understanding reports and knowledge with number and this data of monetary literacy provided could be a kind of consumer protection that influenced investment fraud detection and this enhanced their financial inclusion.

H0₄ There is no significant relationship between financial advisory services and financial inclusion of commercial banks in Kenya.

From the results of the statistical analysis presented in table 4.34, the coefficient for financial advisory services was $\beta = 0.295$ with a corresponding p-value = 0.000. Since the p-value was lesser than 0.05, the results imply that financial advisory services

significantly predicted financial inclusion. The results further indicate that increasing financial advisory services by one unit will cause an increase of 0.295 units in financial inclusion. From the findings, the null hypothesis that there is no significant relationship between financial advisory services and financial inclusion of full-service banks in Kenya was rejected indicating that financial advisory services had a positive and significant relationship with financial inclusion.

The results were in agreement with the study by House (2020), who found that investment strategies supported clients' choices provided by financial advisors improved the overall performance of investors' portfolios and reduced the risks of their assets and this enhanced their inclusion. Similarly, Chauhan and Dey (2020) established that investors' financial knowledge obtained from financial advisors was associated with their recognition of the importance of advisory services and willingness to compensate financial advisors for extra knowledge in trading in financial products and services to strengthen their financial inclusion. In addition, Perez et al. (2016) revealed that monetary literacy knowledge obtained from financial advisors through digital application features an immediate influence on organizational performance. Further, the effective application of knowledge acquired by investors can promote inclusion.

H0₅ CBK regulations do not have a significant moderating effect on the influence of financial literacy delivery channels and financial inclusion of commercial banks in Kenya.

A moderated multivariate analysis was conducted to ascertain the moderating effect of CBK regulations on the connection between financial literacy delivery channels and financial inclusion in commercial banks in Kenya. The study computed the interaction variables X1*Z, X2*Z, X3*Z, X4*Z by computing the product between manipulated variables and moderating variables. These interaction variables were included within the model. If the interaction variables are significant then, there exists a stimulating moderating effect.

Table 4.35

Moderated Regression Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.710a	0.504	0.489	0.52954

a Predictors: (Constant), CAWS, FEP, DP, FAS, X1*Z, X2*Z, X3*Z, X4*Z,

The outcomes of the model summary for the moderated multivariate regression model presented in table 4.35 show that the model had $r=0.710$ and r -squared (coefficient of determination) = 0.504. The findings implied that with the inclusion of the moderating variables (regulatory framework), the coefficient of determination increased to 0.504 from 0.467. The findings implied that the CBK regulations enhanced the interaction between financial literacy delivery channels and financial inclusion in full-service

banks in Kenya. Therefore, CBK regulations had a positive moderating effect on the connection between monetary literacy delivery channels and inclusion.

Table 4.36

Moderated Regression ANOVA

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	75.527	8	9.441	33.667	.000b
Residual	74.31	265	0.28		
Total	149.838	273			

a Dependent Variable: FINANCIAL INCLUSION

b Predictors: (Constant), X4*Z, CAWS, FEP, DP, FAS, X1*Z, X3*Z, X2*Z

The results of the ANOVA of the moderated multivariate regression model fitted to see for the moderating effect of regulatory framework on the connection between financial literacy delivery channels and financial inclusion showed f-statistics =33.667, p-value =0.000 which was less than 0.05. The study therefore did not reject the null hypothesis that model fitted had a goodness of fit.

Table 4.37

Moderated Regression Coefficient

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	T	Sig.
(Constant)	1.075	0.244		4.403	0.000
FEP	0.094	0.192	0.102	0.492	0.623
DP	0.987	0.233	0.948	4.23	0.000
CAWS	-0.09	0.214	-0.088	-0.422	0.673
FAS	-0.374	0.223	-0.372	-1.676	0.095
X1*Z	0.013	0.056	0.097	0.234	0.815
X2*Z	-0.248	0.068	-1.812	-3.661	0.000
X3*Z	0.085	0.061	0.636	1.383	0.168
X4*Z	0.183	0.062	1.316	2.947	0.003

H0_{5(a)} CBK regulatory framework does not moderate the relationship between financial education partnership and financial inclusion.

The interaction variable between financial education partnership and regulatory framework ($X1*Z$) had a coefficient of $\beta = 0.013$ with a corresponding p-value = 0.815 which was greater than 0.05. The findings, therefore, imply that the null hypothesis (H0_{5(a)}) that CBK regulatory framework does not moderate the connection between financial education partnership and financial inclusion was not rejected. The findings, therefore, imply that the CBK regulation does not moderate the connection between education partnership and financial inclusion. This finding agrees with those by Rojas-Suárez (2016), who evaluated financial inclusion in Latin America supported by facts, obstacles, and central banks' policy issues. The study findings acknowledged that institutional regulations play a serious role but have direct and indirect effects of financial inclusion.

H0_{5(b)} CBK regulatory framework does not moderate the relationship between digital platforms and financial inclusion

The interaction variable between digital platforms and regulatory framework ($X2*Z$) had a coefficient of $\beta = -0.248$ with a corresponding p-value = 0.000 which was greater than 0.05. The findings, therefore, imply that the null hypothesis (H0_{5(a)}) that CBK regulatory framework does not moderate the connection between digital financial platforms and financial inclusion was rejected. The findings, therefore, imply that CBK regulations do significantly moderate the relationship between digital platforms and financial inclusion. The results concurred with the findings of Momanyi (2018)

who found a direct correlation between financial stability and access, usage, and quality of monetary services and indicated that regulation of monetary institutions was positively related to financial stability.

H0_{5(c)} CBK regulatory framework does not moderate the relationship between customer awareness and financial inclusion

The interaction variable between consumer awareness and regulatory framework (X3*Z) had a coefficient of $\beta = 0.085$ with a corresponding p-value =0.168 which was greater than 0.05. The findings, therefore, imply that the null hypothesis (H0_{5(a)}) that CBK regulatory framework does not moderate the connection between consumer awareness and financial inclusion was not rejected. The findings, therefore, imply that CBK regulations do not significantly moderate the connection between consumer awareness and financial inclusion. The findings agreed with those of Anarfoa et al. (2020) who reported that there exists a positive relationship between financial regulation, inclusion and stability, downward adjustments of prudential regulations within the financial sector will positively influence capital adequacy, and this can influence access to finance for inclusivity.

H0_{5(d)} CBK regulations does not moderate the relationship between financial advisory services and financial inclusion

The interaction variable between financial advisory services and regulatory framework (X4*Z) had a coefficient of $\beta =0.183$ with a correspond p-value =0.003 which was greater than 0.05. The findings, therefore, imply that the null hypothesis (H0_{5(a)}) that

CBK regulatory framework does not moderate the connection between financial advisory services and financial inclusion was rejected. The findings, therefore, imply that CBK regulations do significantly moderate the relationship between financial advisory services and financial inclusion. These results are in agreement with Chen and Divanbeigi (2019), who found that good financial regulatory practices positively influence individuals and households to carry an account at banking institutions in countries with financial regulations.

Table 4.38

Overall Summary of Test of Hypotheses

Hypothesis	Analysis Results	Conclusion
H₀₁ There is no significant relationship between financial education partnership and financial inclusion of commercial banks in Kenya	$\beta_1 = 0.145$ p-value = 0.012 <0.05	Rejected H ₀₁
H₀₂ There is no significant relationship between digital platforms and financial inclusion of commercial banks in Kenya	$\beta_2 = 0.174$ p-value = 0.009 <0.05	Rejected H ₀₂
H₀₃ There is no significant relationship between consumer awareness and financial inclusion of commercial banks in Kenya	$\beta_3 = 0.200$ p-value = 0.002 <0.05	Rejected H ₀₃
H₀₄ There is no significant relationship between financial advisory services and financial inclusion of commercial banks in Kenya	$\beta_4 = 0.295$ p-value = 0.000 <0.05	Rejected H ₀₄
H₀₅ CBK regulations do not have a significant moderating effect on the influence of financial literacy delivery channels and financial	$\beta_{5a} = 0.013$, p-value = 0.815 $\beta_{5b} = -0.248$, p-value = 0.000 $\beta_{5c} = 0.085$, value = 0.168 $\beta_{5d} = 0.183$, p-value = 0.003	Rejected H _{05(b)} & H _{05(d)}

Hypothesis	Analysis Results	Conclusion
inclusion of commercial banks in Kenya		Failed to Reject $H_{05(a)}$ & $H_{05(c)}$

CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The synopsis of the investigation results is presented in this segment and includes the outcomes and conclusion, along with proposals for practice improvement and policy conceptualization. The conclusion together with suggestions purely established from the study findings are presented based on the study's precise objectives.

5.2 Summary of the Findings

The study's purpose was to measure financial literacy delivery channels, CBK regulations, and financial inclusion of full-service banks in Kenya. The study aimed to evaluate the effects of financial education partnership, digital platforms, consumer awareness, and financial advisory services on financial inclusion of commercial banks in Kenya. The investigation was guided by resource-based theory, diffusion of innovation hypothesis, motivation-needs proposition, prospect theory, and institutional theory to hypothesize the connection between the chosen variables. The study adopted probability sampling to get a sample of 384 respondents comprising 199 from large banks, 120 from medium-size banks, and 65 from small banks.

The study collected and analyzed only primary data. The data was gathered using semi-structured questionnaires developed by the researcher and distributed to the respondents. For data analysis, descriptive statistics was utilized to compute means and frequencies while inferential statistics involving regression and correlation were

applied to work out the connection between the study variables. The summary of the study findings is presented in the following subsections.

5.2.1 Financial Education Partnership and Financial Inclusion

The first intent of the study was to seek out the influence of financial education partnership as a delivery channel of financial literacy for financial inclusion in commercial banks in Kenya. The descriptive analysis showed that partnership in financial education adopted by commercial banks in Kenya included a partnership with the government for conducting seminars and conferences in promoting financial literacy. The findings of the correlation analysis disclosed that financial education partnership had a robust positive and significant association with inclusion.

The results implied that engaging in partnership in financial education would cause a rise in inclusion. The outcomes of multivariate analysis further established that use of financial education partnership to deliver financial literacy significantly predicted financial inclusion. The results further indicate that increasing partnership in financial education by one unit will cause a rise of 0.145 units in inclusion. From these findings, the null hypothesis that there is no significant relationship between financial education partnership and financial inclusion of commercial banks in Kenya was rejected implying that financial education partnership had a positive and significant relationship with financial inclusion.

5.2.2 Digital Platforms and Financial Inclusion

The study second objective was to find out the effect of digital financial platforms as a delivery channel of digital financial literacy for monetary inclusion of commercial banks in Kenya. The sub-variables used for measuring digital platforms were websites and portals, online teaching resources, and social media pages. Frequencies, percentages, mean and standard deviation were utilized in descriptive statistics employed for analyzing the variables. The results indicated that websites and online portals were the foremost used digital platforms by banks providing commercial services in Kenya in promoting financial literacy, followed by social media pages while the utilization of online games and courses was the smallest amount adopted channels for financial literacy. The findings established that banks involved in commercial activities in Kenya used digital platform delivery channels for financial literacy.

The findings of the correlation analysis revealed that there was a significant correlation between digital platforms and financial inclusion. This implied that increasing the adoption of digital platforms as financial literacy delivery channels would increase the extent of monetary inclusion. The results of the multivariate analysis further established that digital financial platform significantly predicted inclusion. The outcomes demonstrated that increasing digital platforms by one unit would cause a rise of 0.174 units in financial inclusion. From these findings, the null hypothesis that there is no significant relationship between digital platforms and financial inclusion of commercial banks in Kenya was rejected meaning that digital platforms had a positive and significant association with inclusion.

5.2.3 Consumer Awareness and Financial Inclusion

Third, the survey sought to research the influence of consumers' awareness as a delivery channel of financial literacy for financial inclusion of commercial banks in Kenya. The constructs used for measuring consumers' awareness were targeted SMS and email to consumers, providing knowledge on products & services, and consumer rights & protection. The descriptive statistics that analyzed the responses for the variable included frequencies, percentages, mean and standard deviation.

The descriptive analysis results showed the bulk of the respondents indicated that their banks had consumer awareness as their financial literacy delivery channels. The buyer awareness aspects employed by the banks included the utilization of targeted SMS and email in promoting customers' financial literacy. Moreover, providing accurate knowledge to customers on products and services provided, frequently educating all consumers on their rights and responsibilities, promoting consumers' protection, ensuring that every client is conscious of consumer protection regulations and eventually, using consumer awareness in promoting financial literacy by banks has improved financial inclusion in Kenya.

The correlation analysis results pointed out that consumer awareness had a robust strong bond with financial inclusion. The findings indicated that the banking sector undertaking consumer awareness would cause a rise in inclusion. The multivariate regression outcomes showed that the coefficient results for consumer awareness were statistically significant. Therefore, the study demonstrated that consumer awareness positively and significantly predicted inclusion. These findings

implied that a rise in consumer awareness by one unit would cause a rise of 0.200 units in financial inclusion. The results reported the null hypothesis that there is no significant relationship between consumer awareness and financial inclusion of commercial banks in Kenya was rejected implying that consumer awareness had a positive and significant relationship with inclusion.

5.2.4 Financial Advisory Services and Financial Inclusion

The study fourth objective was to determine the effect of financial advisory services as a delivery channel of financial literacy for financial inclusion of commercial banks in Kenya. The variables that measured financial advisory services were financial planning, credit counseling, debt counseling, and retirement planning. Frequencies, percentages, mean and standard deviation were utilized in descriptive statistics employed for analyzing the variables. The results of descriptive analysis showed commercial banks in Kenya moderately used financial advisory services as financial literacy delivery channels. The foremost used financial consulting service by commercial banks in Kenya was the supply of insurance planning advisory services to their customers to reinforce their financial literacy.

The results of the correlation analysis indicated a robust positive and significant relationship linking banks' advisory services and inclusion. The findings indicated that financial organizations' involvement in advisory services would cause a rise in financial inclusion. From the results of the multivariate analysis, the coefficient for financial advisory services was significant which implied that financial advisory services significantly predicted inclusion. The results further indicate that increasing

financial advisory services by one unit will cause a rise of 0.145 units in inclusion. From the findings, the null hypothesis that there is no significant relationship between financial advisory services and financial inclusion of commercial banks in Kenya was rejected indicating that financial advisory services had a positive and significant relationship with financial inclusion.

5.2.5 CBK Regulations, Financial Literacy Delivery Channels and Financial Inclusion

The study fifth objective was to seek out how CBK regulations acted on the four financial literacy variables to influence financial inclusion of banks providing commercial services in Kenya. The construct that measures regulatory framework was regulation of financial education partnership, regulation of digital platforms, regulation of customers' awareness, and regulation of monetary advisory services. The descriptive analysis results showed that the regulatory framework influenced commercial banks' financial literacy activities.

The findings demonstrated that with the inclusion of the moderating variables (regulatory framework), the coefficient of determination increased to 0.504 from 0.467. The findings implied the regulatory framework of the CBK enhanced the interaction between financial literacy delivery channels and inclusion in commercial banks in Kenya. In addition, it was revealed from the statistical analysis that CBK regulations do not significantly moderate the connection between financial education partnership, consumer awareness, and financial inclusion. The moderating effect of CBK regulations on the connection between digital platforms, financial advisory services, and financial inclusion was found to be statistically significant. Based on the

rise in R-squared, the study rejected the null hypothesis that CBK regulations do not have a significant moderating effect on the influence of financial literacy delivery channels and financial inclusion of commercial banks in Kenya.

5.3 Conclusion

This section presents the conclusion made by the study, which supported the research findings. The study first concluded that financial products and services usage in Kenya was low which reduced the general performance of inclusion. Commercial banks in Kenya have in the recent past increased availability and accessibility however, usage, which is a critical aspect of financial inclusion in Kenya, was still very low. The study also conclude that financial literacy delivery channels positively and significantly contributed to financial inclusion in commercial banks in Kenya.

5.3.1 Financial Education Partnership

The study further concluded that the utilization of financial education partnership as financial literacy delivery channels increased financial inclusion. Commercial banks in Kenya sparring used these delivery channels. The bulk used a partnership with the government to market financial literacy by conducting workshops and conferences in promoting financial literacy. Other sorts of financial education partnerships had not been fully utilized to reinforce financial education sponsorship. Utilizing other sorts of partnerships could enable banks to arrange lectures in education institutions, conduct seminars, nationwide campaigns, and other activities to market financial literacy. The study, therefore, concluded that the utilization of partnership in financial education would significantly enhance financial literacy, which successively can

improve financial inclusion especially the usage of monetary services provided by commercial banks in Kenya.

5.3.2 Digital Financial Platforms

Digital platform channels were also found to significantly affect financial inclusion in full-service banks in Kenya. Additionally, the research arrived at the conclusion that commercial banks in Kenya had leverage on the reachability of digital platforms like websites and online portals, social media pages, and online games and courses as channels of promoting financial literacy that significantly contributed to inclusion. The survey also deduced that with ever-increasing penetration of internet usage and access to digital platforms, this channel is critical within the promotion of monetary literacy that the banks are embracing and its role in increasing financial inclusion will remain crucial.

5.3.3 Consumer Awareness

For consumer awareness channels and inclusion, the study deduced that the utilization of targeted SMS and email in promoting customers' financial literacy and providing accurate knowledge to customers on products and services has enhanced inclusion. Further, frequently educating all consumers on their rights and responsibilities, promoting consumers' protection, ensuring that customers are conscious of consumer protection regulations, and eventually, using consumer awareness in promoting financial literacy by the bank has improved financial inclusion in Kenya.

5.3.4 Financial Advisory Services

The study also revealed that banks' advisory services and financial inclusion are positively connected. Based on these findings, the study concluded that financial advisory services were a critical component in promoting financial literacy that commercial banks in Kenya should strive to adopt. However, the adoption must be expanded beyond the supply of insurance planning advisory services to their customers to completely unlock the potential of this delivery channel in enhancing financial inclusion especially the usage of monetary services.

5.3.5 Central Bank Regulations

Finally, the study concluded that CBK regulations play a meaningful role within the banking sector. Regulations of the sector must be progressive and versatile to permit commercial banks to be innovative in adopting modern financial literacy delivery channels that significantly improve financial inclusion. The banking industry is in the middle of economic development within the country as viewed from the financial intermediation role; hence, a vibrant sector can only be achieved when the regulatory framework is favorable to players to work optimally.

5.3.6 Contribution to knowledge

The study made several valuable contributions to knowledge. First, financial education identified consumer education or awareness, digital platforms, and financial advisory services as the available measures for promoting financial literacy to the population. The addition of financial education partnership as a delivery channel of monetary literacy expanded the literature in personal finance. This channel has several contributions: resource mobilization, forming financial literacy alliances, training

financial literacy experts, and the development of programs and curriculums of financial education to promote financial literacy. The study identified financial advisory services as the largest financial literacy channel. This channel is comprised of financial planning, financial counseling, financial coaching, and financial therapy.

Secondly, the study proposed a model: $Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \varepsilon$ for predicting financial inclusion using the four financial literacy delivery channels identified which were lacking within the existing body of knowledge. The model was tested empirically using data collected from commercial banks. Financial planning, financial counseling, financial coaching, and financial therapy activities in the model are components of financial advisory services. The computation of the combined four elements' values represents a single value for financial advisory services in the model. The findings showed financial advisory services as the financial literacy delivery channel with the greatest effect on financial inclusion. Additionally, financial education partnership was found to possess the smallest effect.

Lastly, the study further expanded the utility of resource-based theory, diffusion of innovation theory, motivational-needs theory, prospect theory, and institutional theory to link the relationship between financial literacy delivery channels and financial inclusion. Most of the prevailing research that adopted these theories used them in a different context, hence the study contributed by developing these theories.

5.4 Recommendation of the study

This section presents suggestions made by the study supported by the findings and the specific objectives.

5.4.1 Financial Education Partnership and Financial Inclusion

For practice advancement, the study recommends that full-service bank management should adopt aspects of financial education partnership currently not used. These include sponsorship of literacy programs, collaborating with other financial institutions, and academic institutions through organizing lectures, and being involved in nationwide campaigns to advance financial literacy. The promotion can happen by bank's management entering into contracts with learning institutions, international stakeholders, and development partners like the International Bank for Reconstruction and Development, the African Development Bank, and the IMF, which can sponsor financial education partnership as a way of promoting financial literacy for financial inclusion. On the policy level, the ministry of finance and CBK should formulate policies to mandate the commercial banks to interact in financial education partnerships with various players in promoting financial literacy.

5.4.2 Digital Platforms and Financial Inclusion

The study recommended that the management of banks engaged in commercial activities should ensure the ICT department has a team dedicated to providing financial literacy training using digital platforms targeting loan applicants to improve their usage of financial services. Commercial banks currently use digital platforms mainly for marketing their services and responding to customers' concerns and complaints; therefore, they need to mainstream digital financial literacy training through their

social media pages, websites, and application. On the policy level, the banking sector players, regulators, and government agencies must streamline existing policies to allow commercial banks to leverage digital platforms in promoting financial literacy.

5.4.3 Consumer Awareness and Financial Inclusion

To increase the utilization of consumer awareness channels for improving financial inclusion, the study recommended that commercial banks should specialize in constant advertisement campaigns for their products and services using the mass media and their websites and portals to teach the consumers about their rights and responsibilities, and hence for his or her protection. The commercial banks should improve the collaboration among themselves to mobilize resources for more aggressive consumer awareness, which will increase financial literacy among inhabitants. The study further recommends that the board of directors within the commercial banks lobby with regulators to revise any existing policies that limit the banks from engaging in consumer awareness campaigns.

5.4.4 Financial Advisory Services and Financial Inclusion

The study made the subsequent recommendations: first, the management of the commercial banks in Kenya should increase the utilization of financial advisory services through upscaling cash management training services, training on financial planning, Investment planning services, Retirement planning services, tax planning advisory services credit and debt counseling advisory services. The study found that the supply of those services was low among the banks despite the many effects of advisory services on financial inclusion. Secondly, the banks should develop internal policies not currently in use for training their clients and potential customers on

financial advisory services to promote their financial literacy. This will enhance the usage of monetary services in Kenya.

5.4.5 CBK regulations and Financial Inclusion

The study recommends that players in the banking sector which include commercial banks shareholders, the Central Bank of Kenya, the National Treasury, the Banker Association of Kenya, and other stakeholders should collectively relook at the regulations, laws, and policies governing the financial literacy delivery channels of commercial banks to ensure that they are in line with the latest development in global banking. Existing regulations should be reviewed and revised to ensure that commercial banks are given the flexibility to adopt new measures coming up in the sector. The regulations should be progressive for financial literacy promotion.

5.5 Suggestion for Further Studies

This study established that financial education partnership, digital financial platforms, consumer awareness, and financial advisory services as financial literacy delivery channels accounted for 46.7% of the variation in financial inclusion in commercial banks in Kenya. Further studies should therefore concentrate on other financial literacy delivery channels not factored in this study to bridge the conceptual gaps. Furthermore, the ownership of commercial banks in Kenya is local or private, foreign/international, or government. The data gathered was not analyzed on a comparative basis to compare the financial literacy delivery channels across the three categories of banks to determine which bank in terms of ownership has effective channels of financial literacy for improving customers' financial knowledge. Future researchers can look in this direction. Lastly, future studies on the independent

variables should consider other financial organizations in the financial market order than commercial banks.

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APPENDICES

Appendix I: Letter of Introduction

To whom it may Concern

RE: Request for Participation in Data Collection

I am requesting your participation in the survey titled “*Effects of financial literacy delivery channels and central bank regulations on financial inclusion of commercial banks in Kenya*”. The survey is aimed at helping Joseph D.S. Boldar a Ph.D. foreign student at Kenya Methodist University (KEMU) completes his academic research in fulfillment of the Degree of Doctor of Philosophy in Finance. Data collected during this process will be utilized for academic purposes only and all research ethics including confidentiality will be adhered to. In case of any clarification please contact me on the cellphone number (0759 683 823) or via email at josephboldar@gmail.com

Thank You.

Yours Sincerely,

Joseph D.S. Boldar

Appendix II: Research Questionnaire

This questionnaire aims at collecting information on the “*Effects of financial literacy delivery channels and central bank regulations on financial inclusion of commercial banks in Kenya*”. Your firm has been selected to form part of this study. Please answer the following questions. Information collected will be confidential and used for academic purposes only.

PART A: GENERAL INFORMATION

1) Please indicate your gender.

- a. Male
- b. Female

2) What is your highest education level?

- a) Diploma
- b) Bachelor degree
- c) Master
- d) Ph.D.

3) How long have you served in this bank?

- a) Less than 1 year
- b) 1 – 5 years
- c) 6 – 10 years
- d) Over 10 years

4) How long have you served in your current position?

- a) Less than 1 year
- b) 1 – 5 years
- c) 6 – 10 years
- d) Over 10 years

5) Please indicate your age range.

- a) 20—27 years []
- e) 28 – 35 years []
- f) 36 – 43 years []
- g) Over 43 years []

11) Kindly indicate the kind of ownership structure for your bank

- a. Locally Owned []
- b. Foreign-Owned []
- c. Government-Owned []

SECTION B: FINANCIAL EDUCATION PARTNERSHIP

Indicate in your own opinion, how you can rate the extent to which the use of the following aspects of financial education partnership in financial literacy delivery is applied in your bank. Use the scale of 1 – Strongly Disagree (SD), 2 –Disagree (D), 3 – Neutral (N), 4 –Agree (A), and 5 – Strongly Agree (SA).

No	Statement	Strongly Disagree (SD) 1	Disagree (D) 2	Neutral (N) 3	Agree (A) 4	Strongly Agree (SA) 5
1	Our bank uses financial education sponsorship to promote financial literacy.					
2	Our bank partners with other financial institutions to promote financial literacy.					
3	Our bank partners with the government to promote financial literacy.					
4	Our bank organized lectures in various learning institutions to promote financial literacy.					
5	Our bank has adopted workplace teaching to help its customers in financial literacy.					
6	Our bank conduct seminars and conferences in promoting financial literacy.					
7	This bank has been involved in a nationwide campaign to promote financial literacy.					
8	The use of financial education partnerships by our bank has improved financial inclusion in Kenya.					

9) Explain how else the use of financial education partnership in financial literacy influences financial inclusion _____

SECTION C: DIGITAL FINANCIAL PLATFORMS

Indicate in your own opinion, how you can rate the extent to which the use of the following aspects of digital platforms in financial literacy delivery is applied in your bank. Use the scale of 1 – Strongly Disagree (SD), 2 –Disagree (D), 3 – Neutral (N), 4 –Agree (A), and 5 – Strongly Agree (SA).

No	Statement	Strongly Disagree (SD) 1	Disagree (D) 2	Neutral (N) 3	Agree (A) 4	Strongly Agree (SA) 5
1	Our bank use websites and online portals in promoting financial literacy.					
2	Our bank has invested in online financial literacy teaching resources.					
3	Our bank social media pages are used to promote financial literacy.					
4	Our bank has developed mobile applications to help our customers with financial literacy.					
5	Our bank used online games and courses for promoting customers' financial literacy.					
6	The use of digital platforms in promoting financial literacy by our bank has improved financial inclusion in Kenya.					

7) Explain how else the use of digital platforms in financial literacy influences financial

inclusion _____

SECTION D: CONSUMER AWARENESS

Indicate in your own opinion, how you can rate the extent to which the use of the following aspects of Consumer awareness in financial literacy delivery is applied in your bank. Use the scale of 1 – Strongly Disagree (SD), 2 –Disagree (D), 3 – Neutral (N), 4 –Agree (A), and 5 – Strongly Agree (SA).

No	Statement	Strongly Disagree (SD) 1	Disagree (D) 2	Neutral (N) 3	Agree (A) 4	Strongly Agree (SA) 5
1	Our bank use targeted SMS and Email in promoting customers' financial literacy.					
2	Our bank has invested in providing accurate knowledge to customers on products and other services provided.					
3	Our bank frequently educates all consumers on their rights and responsibilities.					
4	Our bank values consumers' protection and ensures that all our customers are aware of consumer protection regulations.					
5	The use of consumer awareness in promoting financial literacy by our bank has improved financial inclusion in Kenya.					

6) Explain how else the use of consumer awareness in financial literacy influences financial inclusion _____

7) Please indicate the name of your bank_____

SECTION E: FINANCIAL ADVISORY SERVICES

Indicate in your own opinion, how you can rate the extent to which the use of the following aspects of financial advisory services in financial literacy delivery is applied in your bank. Use the scale of 1 – Strongly Disagree (SD), 2 –Disagree (D), 3 – Neutral (N), 4 –Agree (A), and 5 – Strongly Agree (SA).

No	Statement	Strongly Disagree (SD) 1	Disagree (D) 2	Neutral (N) 3	Agree (A) 4	Strongly Agree (SA) 5
1	Our bank provides our customers with cash management training services.					
2	Our bank trains our customers on financial planning which has promoted their level of financial literacy.					
3	Investment planning services provided by our bank have helped customers in promoting their level of financial literacy.					
4	Retirement planning services provided by our bank have helped customers in promoting their level of financial literacy.					
5	Our bank provides tax planning advisory services to					

	our customers to enhance their financial literacy.					
6	Our bank provides insurance planning advisory services to our customers to enhance their financial literacy.					
7	Our bank provides credit counseling advisory services to our customers to enhance their financial literacy.					
8.	Debt counseling services provided by our bank have helped customers in promoting their level of financial literacy.					
9.	The use of financial advisory services in promoting financial literacy by our bank has improved financial inclusion in Kenya.					

10) Explain how else the use of financial advisory services in financial literacy influences financial

inclusion _____

SECTION F: CBK REGULATIONS

Indicate in your own opinion the extent to which the following aspects of CBK regulations allow commercial banks to adopt financial literacy delivery channels for the promotion of financial inclusion. Use the scale of 1 – Strongly Disagree (SD), 2 – Disagree (D), 3 – Neutral (N), 4 – Agree (A), and 5 – Strongly Agree (SA).

No	Statement	Strongly Disagree (SD) 1	Disagree (D) 2	Neutral (N) 3	Agree (A) 4	Strongly Agree (SA) 5
1	Our bank adopted financial education partnership to promote literacy for customers based on CBK regulations.					
2	CBK regulations allow commercial banks to adopt digital platforms to promote financial literacy for customers.					
3	Our bank carried out consumer awareness programs to promote financial literacy for customers based on CBK regulations.					
4	CBK regulations allow commercial banks to adopt financial advisory services for promotion financial literacy					
5	Commercial banks in Kenya financial literacy delivery channels is regulated by the CBK for financial inclusion.					

6). Explain how else the use of regulatory framework in financial literacy influences financial inclusion.

Financial Inclusion

Please rate the following regarding your bank.

Use the scale of 1 – Very Low Extent (VLE), 2 –Low Extent (LE), 3 – Moderated Extent (ME), 4 –High Extent (HE), and 5 –Very High Extent (VHE).

No	Statement	Very Low Extent (VLE) 1	Low Extent (LE) 2	Moderate d Extent (ME) 3	High Extent (HE) 4	Very High Extent (VHE) 5
1	Level of availability of your financial services to customers					
2	Level of accessibility of your financial services to customers					
3	The extent of usage of your financial services by customers					

4) Comment on the level of financial inclusion of your commercial bank_____

Appendix III: Secondary data collection template

Year	2007	2008	2009	2010	2011	2012	2013	2014	2015
Number of bank branches									
Number of ATMs									
Number of bank Agents									
Number of deposit Bank accounts									
Number of loan bank accounts									
Total loans									
Total Deposits									
Country's GDP									

Level of availability of your financial services to customers
Level of accessibility of your financial services to customers
The extent of usage of your financial services by customers

Appendix IV: Operationalization of the Study Variables

Variable	Operationalization	Indicators	Measurement
Financial Inclusion (dependent Variable)	Accessibility of financial services Availability of financial services Usage of financial services	Level of availability monetary products & services to customers Level of accessibility of financial products & services to customers The extent of usage of monetary products & services	Ordinal scale
Financial Literacy Delivery Channels (Independent Variable)	Financial Education Partnership	Financial education sponsorship Industry Experts and volunteer services Lectures in Classroom Work place teaching Workshop & Seminars Nationwide students competitions	Ordinal scale
	Digital Platforms	Websites and Portals Online teaching resources Social media pages Online video and courses	Ordinal scale
	Consumer Awareness	Targeted SMS and Email to consumers Providing knowledge on products and costs to consumer Consumer rights & responsibilities Consumer protection	Ordinal scale
	Bank Financial advisory Services	Cash management Financial plan Investment planning Retirement planning Tax planning Insurance planning Credit counseling	Ordinal scale

Regulatory Framework (Moderating Variable)	Regulatory Framework	Financial education partnership regulation Digital platforms regulation Consumer awareness regulation Financial advisory services regulations	Ordinal scale
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Appendix V: Factor Analysis of the Constructs Used to measure variables:

Factor Analysis for Financial Education Partnership

Financial education partnership Channels	Initial	Factor loading
Our bank uses financial education sponsorship to promote financial literacy.	1	0.62
Our bank collaborates with other financial institutions to promote financial literacy.	1	0.699
Our bank collaborates with the government to promote financial literacy.	1	0.524
Our bank organized lectures in various learning institutions to promote financial literacy.	1	0.564
Our bank has adopted workplace teaching to help its customers in financial literacy.	1	0.545
Our bank conducts seminars and conferences in promoting financial literacy.	1	0.605
This bank has been involved in a nationwide campaign to promote financial literacy.	1	0.462
The use of financial education partnerships by our bank has improved financial inclusion in Kenya.	1	0.685
Extraction Method: Principal Component Analysis.		

Factor Analysis for Digital Financial Platforms

Digital Platforms Channels	Initial	Factor loading
Our bank use websites and online portals in promoting financial literacy.	1	0.436
Our bank has invested in online financial literacy teaching resources.	1	0.718
Our bank social media pages are used to promote financial literacy.	1	0.583
Our bank has developed mobile applications to help our customers with financial literacy.	1	0.476
Our bank used online games and courses for promoting customers' financial literacy.	1	0.403
The use of digital platforms in promoting financial literacy by our bank has improved financial inclusion in Kenya.	1	0.621
Extraction Method: Principal Component Analysis.		

Factor Analysis for Consumer Awareness

Consumer awareness Channels	Initial	Factor loading
Our bank use targeted SMS and Email in promoting customers' financial literacy.	1	0.651
Our bank has invested in providing accurate knowledge to customers on products and other services provided.	1	0.592
Our bank frequently educates all consumers on their rights and responsibilities.	1	0.711
Our bank values consumers' protection and ensures that all our customers are aware of consumer protection regulations.	1	0.722
The use of consumer awareness in promoting financial literacy by our bank has improved financial inclusion in Kenya.	1	0.699
Extraction Method: Principal Component Analysis.		

Factor Analysis for Financial Advisory Services

Financial advisory services Channels	Initial	Factor loading
Our bank provides our customers with cash management training services.	1	0.601
Our bank trains our customers on financial planning which has promoted their level of financial literacy.	1	0.663
Investment planning services provided by our bank have helped customers in promoting their level of financial literacy.	1	0.633
Retirement planning services provided by our bank have helped customers in promoting their level of financial literacy.	1	0.502
Our bank provides tax planning advisory services to our customers to enhance their financial literacy.	1	0.46
Our bank provides insurance planning advisory services to our customers to enhance their financial literacy.	1	0.595
Our bank provides credit counseling advisory services to our customers to enhance their financial literacy.	1	0.562
Debt counseling services provided by our bank have helped customers in promoting their level of financial literacy.	1	0.585
The use of financial advisory services in promoting financial literacy by our bank has improved financial inclusion in Kenya.	1	0.674
Extraction Method: Principal Component Analysis.		

Factor Analysis for Regulatory Framework

Financial literacy delivery channels regulation	Initial	Factor loading
Regulatory framework influences our bank to adopt financial education partnerships to promote literacy programs.	1	0.78
Regulatory framework influences our bank to adopt digital platforms to promote literacy programs.	1	0.789
Regulatory framework influences our bank to adopt consumer awareness programs to promote literacy.	1	0.773
Regulatory framework influences our bank to adopt financial advisory services to promote literacy programs.	1	0.859
Regulatory framework influences financial literacy delivery channels, for financial inclusion of commercial banks in Kenya.	1	0.783
Extraction Method: Principal Component Analysis.		

Factor Analysis for Financial Inclusion

Level of financial inclusion	Initial	Factor loading
Level of availability of your financial services to customers	1	0.716
Level of accessibility of your financial services to customers	1	0.844
The extent of usage of your financial services by customers	1	0.761
Extraction Method: Principal Component Analysis.		

Appendix VI: Counties where primary data were gathered from commercial banks branches

TABLE ONE:				
<i>NAIROBI COUNTY</i>				
On University of Nairobi Campus:	ABSA			
In Westland Area:	KCB (Mall)	ABSA (Mall)	Equity Bank	National Bank
	Habib Bank AG Zurich	SBM	Guaranty Trust Bank	NCBA (Behind the Mall)
	Cooperative Bank	Paramount Bank	National Bank	Equity Bank
	ABSA (Behind the Mall)	KCB (Mall)	Cooperative Bank	NCBA (Mall)
	Bank of Baroda (Mall)	Prime Bank (Mall)	UBA Kenya Bank	
University Way	KCB	Cooperative Bank		
Haile Selassie Avenue:	Cooperative Bank			
Upper Hill Area:	Equity Bank	Cooperative Bank	KCB	KCB
	National Bank	ABSA	EcoBank	Bank of Africa
	NCBA			
Mayfair area:	SBM	Equity	Stanbic Bank	Mayfair Bank
Ngara:	Equity	KCB	Family Bank	Post Bank
Moi Avenue:	Family Bank	KCB	Equity	Family Bank
	National Bank	Cooperative Bank	Family Bank	
Tubman Road:	SBM Bank			
Parliament Road:	KCB	Family Bank		
Harambee Avenue:	ABSA Bank	Consolidated Bank	National Bank	Equity Bank
Karen	Cooperative Bank	KCB	EcoBank	Equity Bank
	Prime Bank	Cooperative bank	NCBA	
In Yaya area:	ABSA	KCB	Kingdom Bank	
Tom MBoya Street:	Post Bank	Equity	KCB	Cooperative
River Side Road:	KCB	Bank of Africa		

Koinange Street:	Spire Bank	M. Oriental Bank	Diamond Trust Bank	Credit Bank
	Consolidated Bank	Guarantee Trust Bank	Frist Community Bank	Equity
City Hall Way:	KCB head office branch			
Kenyatta Avenue:	National Bank	Family Bank	Sidian Bank	NCBA
	Cooperative Bank	KCB	Equity Bank	
Kimathi Street:	Stanbic Bank	Diamond Trust Bank	Cooperative Bank	Guarantee Trust Bank
	First Community Bank	Equity Bank		
Wabera:	National Bank			
Muindi Mbingu Street:	EcoBank	Cooperative Bank	Kingdom Bank	ABSA Bank
	Family Bank	Equity Bank		
Valley Acade	I&M	Eco Bank		
Loita Street	ABSA	Prime Bank,	Development Bank	
Ngongo Road	Equity			

Total branches 104

TABLE TWO
KIAMBU COUNTY

DATA WERE GATHERED FROM THE BELOW COMMERCIAL BANKS BRANCHES				
In Ruraka:	Family Bank			
In Banana:	Family Bank	Post Bank		
In Limuru:	KCB	ABSA	Equity Bank	National Bank
	Cooperative Bank	Family Bank		
On Biashara Street, Kiambu Town:	National Bank	Equity Bank	KCB	Cooperative Bank
	Kingdom Bank	Family Bank	Post Bank	

Total 15 branches

TABLE THREE
MACHAKOS COUNTY

DATA WERE GATHERED FROM THE BELOW COMMERCIAL BANKS BRANCHES						
Equity Bank	Cooperative Bank	Post Bank	Diamond Trust Bank	ABSA	National Bank	Spire Bank
Sidian Bank	Standard Charter Bank	Credit Bank	Family Bank			

Total 11 branches

TABLE FOUR
KAJIADO COUNTY

DATA WERE GATHERED FROM THE BELOW COMMERCIAL BANKS BRANCHES						
Equity Bank	KCB	Post Bank	Consolidated Bank	NCBA	Sidian Bank	Spire Bank

Total 7 branches

TABLE FIVE
KAKAMEGA COUNTY

DATA WERE GATHERED FROM THE BELOW COMMERCIAL BANKS BRANCHES						
Equity Bank	KCB	National Bank	Post Bank	Bank of Baroda	Diamond Trust Bank	Spire Bank
ABSA	Bank of Africa					

Total 9 branches

TABLE SIX
KISUMU COUNTY

DATA WERE GATHERED FROM THE BELOW COMMERCIAL BANKS BRANCHES						
KCB	Access Bank	National Bank	Post Bank	Bank of Baroda	Diamond Trust Bank	Prime Bank
ABSA	Bank of Africa	African Banking Corporation	Cooperative Bank	Guardian Bank	Eco Bank	NCBA
Family Bank	SBM					

Total 16 branches

TABLE SEVEN
UASIN-GISHU COUNTY

DATA WERE GATHERED FROM THE BELOW COMMERCIAL BANKS BRANCHES						
KCB	National Bank	African Banking Corporation	Post Bank	Spire Bank	Diamond Trust Bank	SBM
ABSA	Bank of Africa	NCBA	Cooperative Bank			

Total 11 branches

TABLE EIGHT
NAKURU COUNTY

DATA WERE GATHERED FROM THE BELOW COMMERCIAL BANKS BRANCHES						
KCB	Access Bank	National Bank	NCBA	Bank of Baroda	Diamond Trust Bank	ABSA
Sidian Bank	Bank of Africa	African Banking Corporation	Spire Bank	SBM	Eco Bank	Stanbic Bank
Equity	First Community Bank	EcoBank				

Total 16 branches

TABLE NINE
MERU COUNTY

DATA WERE GATHERED FROM THE BELOW COMMERCIAL BANKS BRANCHES						
ABSA Bank	Credit Bank	Diamond Trust Bank	National Bank	Bank of Baroda	Prime Bank	Bank of Africa
Stanbic Bank	Equity Bank	Family Bank				

Total 10 branches

TABLE TEN
NYERI COUNTY

DATA WERE GATHERED FROM THE BELOW COMMERCIAL BANKS BRANCHES						
ABSA Bank	KCB	Diamond Trust Bank	National Bank	Consolidated Bank	NCBA	Sidian Bank
Kingdom Bank	Equity Bank	Family Bank	Equity Bank			

Total 11 branches

TABLE ELEVEN
MURANGA COUNTY

DATA WERE GATHERED FROM THE BELOW COMMERCIAL BANKS BRANCHES					
KCB	Family Bank	Consolidated Bank	Equity Bank	Consolidated Bank	

Total 5 branches

Appendix VII: Counties Where Data Were Collected:

NO.	County	Number of commercial banks branches for questionnaire
1.	Nairobi	104
2.	Kiambu	15
3.	Machakos	11
4.	Kajiado	7
5.	Kakamega	9
6.	Kisumu	16
7.	Uasin-Gishu	11
8.	Nakuru	16
9.	Meru	10
10.	Nyeri	11
11.	Muranga	5
	Total	<u>215</u>

APPENDIX VIII: Commercial Banks That Participated In the Study

1. ABC Bank of Kenya
2. Bank of Africa
3. Bank of Baroda
4. Barclays Bank
5. Central Bank of Kenya
6. Stanbic Bank
7. Consolidated Bank of Kenya
8. Cooperative Bank
9. Credit Bank Ltd
10. Development Bank of Kenya
11. Diamond Trust Bank
12. ECO Bank of Kenya
13. Equity Bank
14. Family Bank
15. First Community Bank
16. GT Bank
17. Guardian Bank
18. Gulf African Bank
19. Habib Bank AG Zurich
20. I &M Bank
21. Middle East Bank Kenya
22. National Bank of Kenya
23. Oriental Bank
24. Paramount Universal Bank
25. Prime Bank Kenya
26. Sidian Bank
27. Standard Chartered Bank
28. ABSA Bank
29. Kingdom Bank
30. NCBA
31. Kenya Commercial Bank (KCB)
32. Spire Bank
33. Access Bank
34. SBM
35. Post Bank

(Source: Author)

APPENDIX IX: University Introductory Letter



KENYA METHODIST UNIVERSITY

P. O. Box 267 Meru - 60200, Kenya
Tel: 254-064-30301/31229/30367/31171

Fax: 254-64-30162
Email: info@kemu.ac.ke

Our ref: NAC/PHD/1/2021/4

17th MARCH 2021

Commission Secretary,
National Commission for Science, Technology and Innovations,
P.O. Box 30623-00100,
NAIROBI.

Dear Sir/ Madam,

RE: JOSEPH D.S.BOLDAR (BUS-4-0045-1/2019)

This is to confirm that the above named is a bona fide student of Kenya Methodist University undertaking a PhD in BUSINESS ADMINISTRATION. He is conducting a research titled : EFFECT OF FINANCIAL LITERACY DELIVERY CHANNELS, CENTRAL BANK REGULATIONS ON FINANCIAL INCLUSION OF COMMERCIAL BANKS IN KENYA.

We confirm that his thesis proposal has been defended and approved by the university.

In this regard, we are requesting your office to issue a permit to enable him collect data for his Ph.D. dissertation.

Any assistance accorded to him will be appreciated.


Yours faithfully,

Prof. Evangeline Gichunge PhD.
ASS DIRECTOR, RESEARCH DEVELOPMENT AND POSTGRADUATE STUDIES




Encl.

APPENDIX X: NACOSTI Permit




REPUBLIC OF KENYA



NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION

Ref No: 544549 **Date of Issue: 20/April/2021**


RESEARCH LICENSE




This is to Certify that Mr. Joseph D.S. Boldar of Kenya Methodist University, has been licensed to conduct research in Kajiado, Kakamega, Kiambu, Kisumu, Machakos, Meru, Mombasa, Muranga, Nairobi, Nakuru, Nyeri, Uasin-Gishu on the topic: EFFECT OF FINANCIAL LITERACY DELIVERY CHANNELS, CENTRAL BANK REGULATIONS ON FINANCIAL INCLUSION OF COMMERCIAL BANKS IN KENYA, for the period ending : 20/April/2022.

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