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An Empirical Study on the Intention to Use Open Banking in Kenya

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DECLARATION

I declare that this work has not been previously submitted and approved for the award of a degree by this or any other University. To the best of my knowledge and belief, the Research Project contains no material previously published or written by another person except where due reference is made in the Research Project itself.

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Abstract

The banking relationship is perceived as a closed one between bank and customer. However, the arrival of open banking has challenged that closed model. Open banking involves the sharing of customer data with third parties as directed and initiated by customers. This sharing assumes that customers “own” their banking data and may therefore reap the advantages of such ownership. The most important goal this paper is to formulate the concept of Open Banking and, thus, to organize the inspiration for the whole analysis. Unambiguous meanings of the key terms are not just important for delimiting the examined issues from other related issues in Open Banking yet additionally fundamental for guaranteeing the consistency of the estimation and demonstrating approaches proposed later through review method. through survey technique. The banking system in Kenya, as an emerging economy, is considered an economy stuck to traditional banking, but providing banking facilities to the ‘unbanked’ in Kenya has proven difficult. Consumers aren't able to change to new, improved technology-based products, with technology readiness defined as “people’s propensity to embrace and use new technologies for accomplishing goals in society both professionally and reception, the stickiness to traditional banking remains highly significant. to review the utilization intention for open banking in Kenya, a primary survey was conducted using the convenience sampling technique through a structured questionnaire. Software SPSS 22.0 was used to analyze the info gathered from the survey. The results of the analysis demonstrate that the general level of Open Banking knowledge and technology readiness is a smaller amount than 60%. The outcomes infer that buyers are not as prepared to receive innovation, which should be considered by banks while doing product improvement and contributing changes to create consumer loyalty. The consumer-financial services relationship in terms of PCV and UNT for open banking shows Kenya is not prepared for Open Banking due to the profoundly huge tenacity to conventional/traditional banking.

Key Words. *Open Banking, PLS-SEM, API, SPSS, perceived customer value (PCV), Use Intention (UNT), emerging economy, stickiness to traditional banking (SKT).*

CHAPTER 1 INTRODUCTION

Nairobi is the East African technology hub mainly due to the rise of mobile application platforms and online banking, the incompetence of incumbent financial institutions, and Kenya's rising ease of doing business. Kenyan FinTech companies face several challenges with the slow and sluggish Kenyan economy and the low-interest rates on investments. Regarding the financial system, FinTech is allowing the unbanked to easily be included in the system and spearheading the move of Banking collaboration and reduction in barriers of entry.

The field of financial technology has received intense views and investment, especially following the global financial crisis. Academics view financial technology as, "the increasing role financial innovation and technological transformation in the financial services sector" (Epstein, 2005). There is a need to offer real value and service to the shareholders and customers of the financial services industry. Recent research on Open banking focuses mainly on the Application Programming Interfaces (API) and the role of the regulation (Krippner, 2005) and the changing trend in the banking industry. We focus on a key sector on emerging technology by looking at Open Banking which is the need to drive competition in the financial services sector. Open Banking is often mixed up with APIs. Open Banking refers to a change from the opaque system to a system of transparency and Bona Fide access by third-party organizations (Guzman and Seddon, 2017).

To build a competitive space in the banking industry, Open Banking is a rising initiative that is defined as, "*A platform that allows real-time sharing, payment initiation and allows them to compare products and services comparing based on their own requirements with consent to the consumer banking space and other mom-bank financial institutions*" (Open Banking, 2017). This work has its premises in shedding light redefining an effective business model that will restructure bank strategies, considering the growth of banks, and the emerging digital platforms (Microsoft Services, 2017). The challenge will be to ensure that the banks still retain their customers and see the value proposition while taking full advantage of new opportunities and synergies in Fintech space.

The concept of open banking and Open API (Tink,2019) is to enable organizations to relook their value propositions into products and services, standard data formats while enhancing and driving new channels of distribution and enhanced servicing capabilities. Banks are having to carefully balance investment in two major areas. The most significant is IT, to make sure they can meet the regulatory implementation requirements and quick deadlines. The second is to invest in products and digital services that leverage the open banking opportunity and add real value for customers and shareholders. This has proved to be difficult and attracted little or no research in academia. In Africa, this research has mainly been in Nigeria and South Africa. There are also emerging countries like Mexico and Brazil that have pushed for open banking and are past the regulatory stages. The motivation of this paper is to increase understanding of how open banking will influence changes in the financial services sector in Kenya

1.1 Problem statement

How is the relationship between Banks, consumers, and Fintech companies? Different researchers have expounded on three aspects, a competitive relationship (Navaretti et al,2017), cooperation between the two fields (Bomer and Maxin,2018). Since the Banks already control a big share of the financial industry, they support the entry of fintech firms, boost their revenue, and reinforce their products and services.

However, there are factors that prompt Fintech and Banks companies to become an alliance. Banks jump into the wagon due to the quicker innovation process that saves them time, money and a competitive edge and customer centricity since Fintech companies may provide new products over the current traditional banking products (Holotiuk,2018). He aligns the fact that banks need to learn from Fintech firms' line of thinking and incorporate it in their business model. Vice versa banks need to partner with Banks to gain trust, market share and then credibility of the customers. Banks also have a large pool of firms to support the marketing and growth budgets of the Fintech firms while also increasing their large customer base and financial service industry in General (Holotiuk,2018, pp.310).

On the other hand, we have researchers who view Fintech industry and banking as foes such as Navaretti (2017) who emphasize that traditional financial institutions can go head-to-head with new entrants with the diversifies source of funds with public guarantees, intense regulatory environment for Fintech firms and some of the top banks have already started to integrate digital strategies in their Business Models. The scope of this study was to find out the clear relationship between Banks, Fintech firms and consumers in Kenya, to know if they are friends or foes with each other, more so are Kenyan banks able to adapt to the open banking industry and focus on customer centricity and the behavior of consumers to this changing technology.

1.2 Study Objectives

1.2.1 General objective

The general objective of the study focuses on the following research question: *What is the use intention of open banking system among the consumers in an emerging economy such as Kenya?*

1.2.2 Specific Objectives

FinTech firms and Banks day by day seem to be providing similar financial services hence the interest in this research topic on the use intention and perceived value by consumers between traditional banking financial institutions and FinTech companies in Kenya characterized by new technologies. *What is the future of traditional financial institutions in the open banking space? Can it work in Kenya? Are consumers aware of open banking?*

This study investigates the use intention of open banking with the objectives:

1. *to make a conceptual model (Figure 5) using the factor analysis and cross tabulation framework so on review the use intention of open banking.*
2. *To validate the conceptual framework empirically.*

1.3 Brief Conceptualization; Research area & gap

This paper looks at the readiness of consumers and banks in adopting an open strategy in their relationship with Fintech firms. The context of research is very wide in these field and unexpected horizons constantly emerge as new Fintech companies restructure the industry. The disruption is the motivation for the study of how Fintech engages with the banking world. I intend to use an integral conceptual framework of Fintech based on the analysis of key definitions in the banking industry. The proposed framework of Open Banking is showed below.

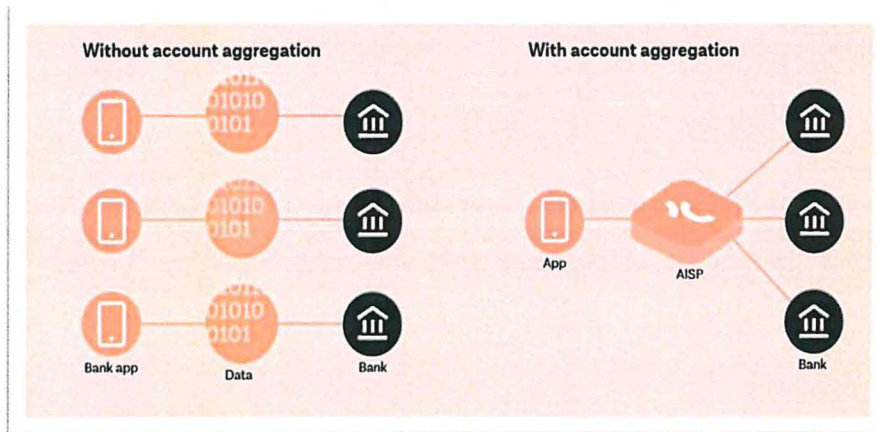
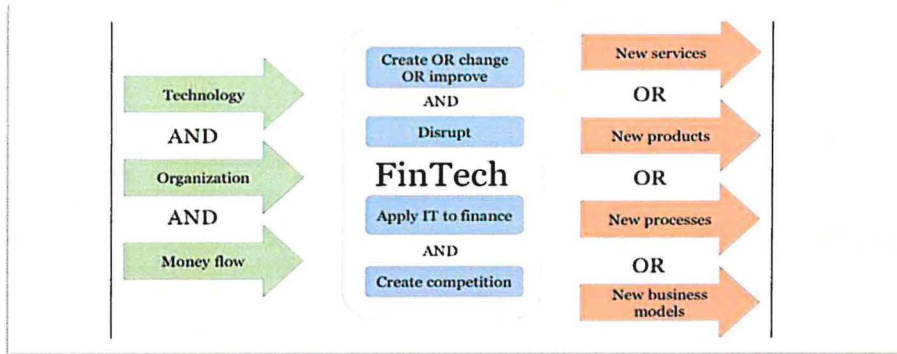


Figure 1: Open Banking proposition

1.4 Research questions

The scope of this paper is to measure the technology awareness about Open Banking in Kenya, Nairobi, and to work out the connection between technology readiness and key demographics, use intention, perceived value, and therefore the profiles of banking customers in an emerging country context.

The primary research objective of the research study brings up the subsequent research questions:

- i. Are urban customers in an emerging country like Kenya technologically ready than those in developed countries?
- ii. Are banking customers in Kenya currently using technological banking services getting the financial services and features they desire?
- iii. Are customers who have a high perceived customer value of using technological services more technologically ready?

The research paper puts into context the above questions with keen interest on the term 'Open banking'

Open banking may be a financial services term as a part of financial technology that refers to.

- a) The use of internal/partner/public APIs that enable third-party providers/developers to create applications and services round the financial organization.
- b) Greater financial transparency options for banking and Fintech value propositions (payments and savings, lending, investments, and insurance) customers starting from open data to non-public data.
- c) The use of open-source technology to realize the above points, Account information service providers and payment initiation services.

1.5 Justification of the Study

The study intended to make additions to the current existing knowledge on the financial services Banking sector performance. We can incorporate open banking in current banking business model, this will add to the existing work on open banking and APIs. The research output offers invaluable literature among the methodologies, use cases and discussions, and policies informed through this research. We justify the viability of integrating open banking in the Kenyan market.

The empirical a part of this paper is quantitative in nature. The approach suits the aim of the research and therefore the aim to urge a convenience sample from the population. The instrument utilized in this study, originally developed by Parasuraman (2000) may be a quantitative instrument that has proved to be a key tool to use for survey analysis on Open Banking. The study will be a key input to managerial decisions of commercial banks towards the general population of banking customers in Kenya and how they align their Business Models to survive the Fintech revolution and the tech-savvy population. The CBK strategic report 2021-2025 (Appendix 2) includes measure to move towards open technologies and collaboration among the various players of the financial market.

1.6 Scope of the Study

The study focusses on the top tier banks as per the Kenyan banking industry which have implemented open strategies and case studies of open banking in Europe, LATAM and Nigeria. The methodology then focuses on the technology readiness of the financial services consumers through survey instrument and factor analysis. It then looks at various open banking solutions provided by Fintech firms in Kenya and the direction to be taken.

1.7 Research gap

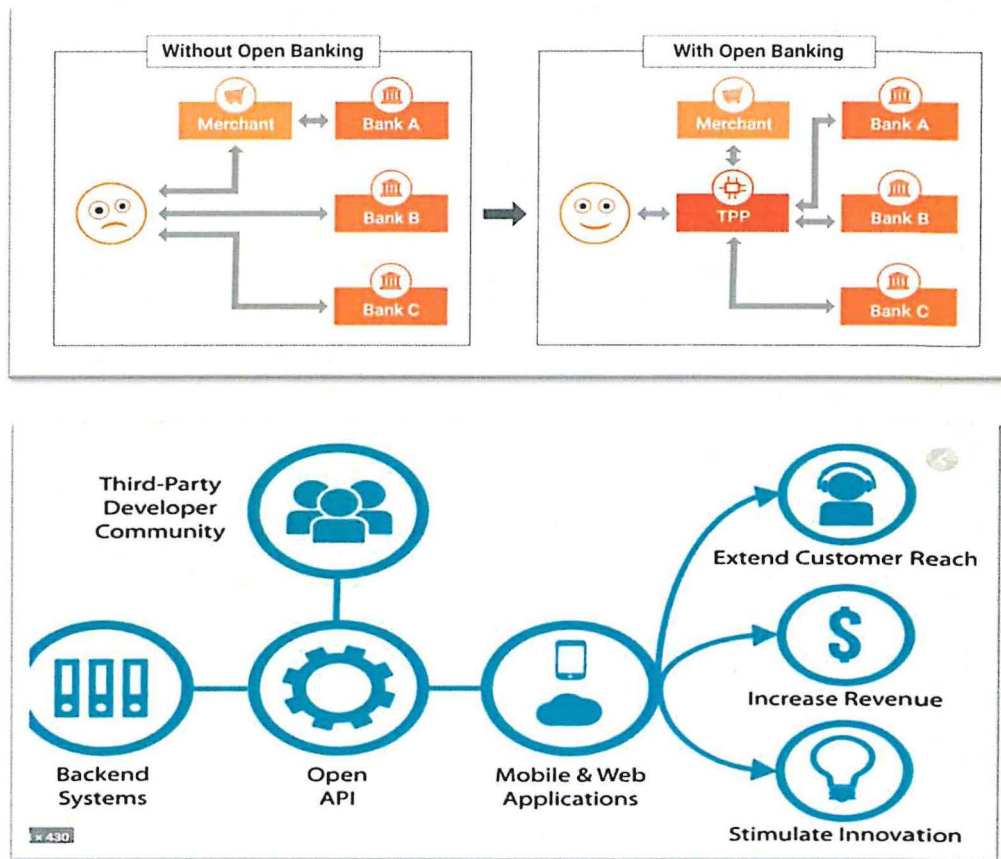


Figure 2: Research use case and gap

CHAPTER 2 LITERATURE REVIEW

2.1 Introduction

This chapter presents literature review on the *banking changes and the capabilities, challenges, and risks the emerge through Open banking Initiatives*. Both empirical and theoretical views of literature. Empirical literature focuses on inputs by other researchers on the Open Banking space and their conclusions on the matter. Theoretical review focuses on the body of research. Key definition of terms, structures, and the current studies of Open Banking. We finalize with the conceptual framework which defines the empirical work in diagram form.

2.2 Theoretical literature

New trends in technology are disrupting the banking sector; some of them are opportunities for banks, other are highly risky for banks current business models. *The open banking space is a space with three key players, banks, regulators, and Fintech innovators*. This space is greatly affected by the regulatory system of the country's financial system. The Competition Authority of Kenya mandate is to increase the welfare and prosperity of the Kenyan consumers They protect, strengthen, and supplement the way competition works in Kenya markets and industries to improve the efficiency of the economy and to increase the welfare of Kenyans. (Competition Act, 2010). The greatest barrier for them is innovation, it is global and fast, while regulation on the other side local and slow (Omarini, 2018). The financial revolution is changing the financial industry (Scott and Bolotin, 2016; Currie, 2017). Banking business structures view technology as a convenience and not a way to rethink the business model. This word can be interpreted in many ways depending on the approach: as an upper hand, preferability, but also comfort, coziness, proprietary, convenience, leisure or offering a competitive edge, benefits, and influence on their balance sheet (Anna Eugenia Omarini1 ,2018). The latest trend in digital transformation has gone beyond just access to transaction accounts such as current accounts to comparing of data, personal finance, and wealth management. Innovations are undoubtedly changing the financial service industry in terms of the culture and structure of business models and value propositions (Currie and Lagorade-Segot, 2017). Open Banking offers a solution to the financial services industry in the long term for generally the business model canvas (Kazan, Tan, 2018). A contemporary example, upon which we focus in this paper, banks are subject must constantly compare their business products with their competitors, hence, to stay in the game banks can leverage in open banking.

2.2.1 Bank business models

The threat comes from the fact that banks will no longer be able to control their interaction with their customers (Omarini, 2015)

A "business model" was defined by Drucker in his "The Practice of Management" (1954) adding to the history of managerial studies by incorporating the need to consider the effect of the external environment on the day to day running of a company and its culture design. According to Itami & Nishino (2010) a business model can be broken into two parts, the business system and profit model. Unfortunately, most implementors prefer the profit model over the Business system, yet the business system is integral to the performance of the balance sheet. Business models are flexible, they change depending on current market situations and need to improve performance (Teece, 2010). The business model must merge with the business strategy to realize optimal customer centricity. Value propositions need to be competitive in the

long run, if competitors and new entrants can copy it easily then it can only serve in the short term. Bank basically exhibit an opaque business model heavily supported by tight regulation requirements.

All this is aligned to redefining and restructuring of the overall banking business model targeted at processes and value propositions, fastening the time to market, offering new revenue streams costs, channels and distribution, collaboration, and synergy. Building a Sandbox environment would offer the platform that could allow banks to target towards fintech companies, small businesses, and developers

A practical example of to a business model with an edge to value proposition and streams of revenue, payment systems and account services. The key to this is the Strong customer Authentication. Banking experience would be aggregated into simpler user interfaces.

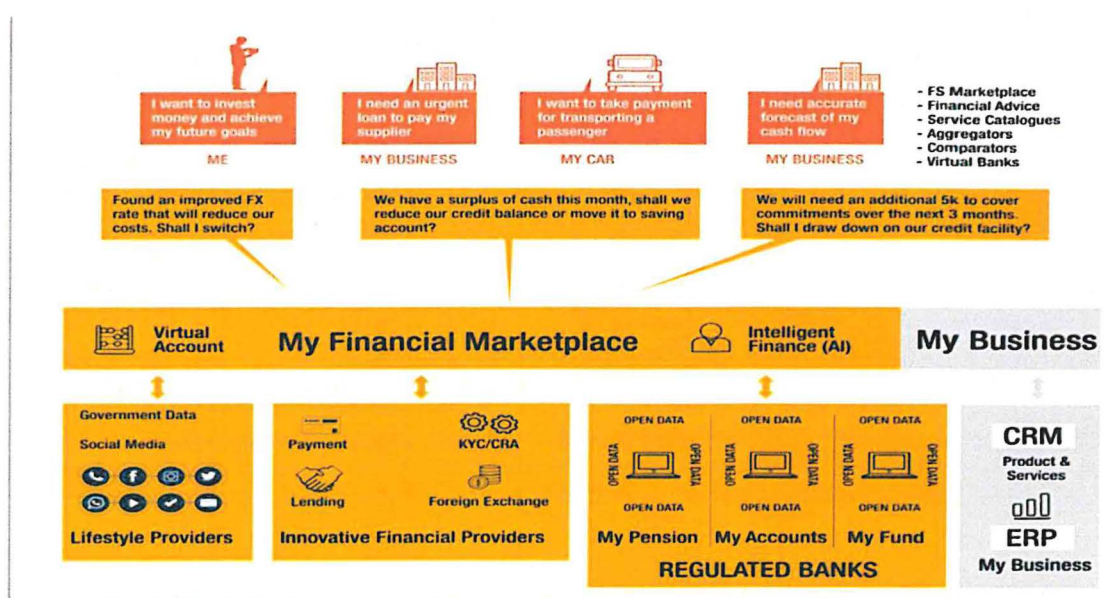


Figure 3: Open banking value proposition source; PWC Nigeria

2.2.2 Open Banking API's

Data is the new oil, a common phrase in the current fourth fintech revolution. Whoever can access data should be able to leverage it to offer new/better services.

In East Africa new underwriting models and emerging from access Alternative sources of data Like mobile phone usage, branch, tala, M-shwari. *Open* banking is part of the financial revolution in which change is driven through complementing with the regulations in place and market forces and technological change, whereby new customer requirements emerge (Scott and Bolotin, 2016). The open banking space is bringing in new practices in the financial service industry (EBA, 2016). To generate results banks, need to offer value, safety transparency and adoption. The incumbents try to compete by investing more and improving their digitization and infrastructure, but the emerging SMEs are constantly distrusting their business models and targeting their value proposition (Hedman, 2015). For the banking we can reimagine tailor made APIs to support price comparison, shopping, and a whole range of financial products in one single portal. The entry of new products and the adoption of this products by consumers is challenging the banking model, it is transforming the competitive space and changing established cultures and practices. They enhance and foster competition among the new entrants

and change the strategic outlook of innovators and entrepreneurs to focus more on planning for collaboration and taking over a section of the value proposition (Hedman and Henningson, 2015, Kazan, 2018). They also shift the competitive criteria inherent among the current incumbents (Clemons, Croson and Weber, 1996).

Closed Banking	Open Banking
Customers and banks have limited access to data	Sharing of data between parties with consent
Bundled value chain for financial services	Unbundled value chain for financial services
Monolithic relationship between customer and bank	Open relationship between customer and bank

Figure 4: Closed vs Open banking

Literature on financial technology shows how key players, such as regulators, have an opportunity to be the catalysts of change in the Open Banking space (Tink, 2019). Barriers to entry become more transparent, flexible and technology plays a pivotal role in introducing new products and services to the market. These regulatory views is useful when investigating a field where new entrant like Open Banking models, (PwC, 2017, Deloitte, 2017). Delloite has classified Open Banking models according to value addition and choice of banks on the level of disclosure they intent to engage in open banking. This results in a scenario where banks could adopt models entailing.

Consistence with APIs through least transparency at the ordered levels and low worth included terms of suggestion (like the "comply" procedure). Low transparency and high worth added with new restrictive administrations and functionalities created (like the "compete" strategy). - Maximum transparency and low value through giving improved information and information to outsiders (like the "expand" procedure). - Maximum openness and high incentive through giving progressed information and information, permitting outsider applications to be implanted inside the center functionalities and playing a vivacious part in incorporating inner and outer contributions inside the claimed stage design (like the "transform "technique).

If banks play their open banking hand well, they can turn out to be the clear winners. But to do this, they will need to embrace new business models and feel comfortable working together with fintech's. Banks have a unique opportunity to lead the open banking transformation, which is exactly what their customers want them to do. By taking important strategic steps now, and delivering high-performance APIs to the market, it will attract an ecosystem of partners that want to create value-added services. If banks do not do it, others will. The difference will not be between the winner among the banks and FinTech's, it will be the firms that successfully monetize and attract customers through APIs.

2.2.3 Approaches in emerging markets

This diagram in figure 4 excludes the Latin America LATAM countries. Mexico and Brazil have also taken regulatory steps to build, create environments to build, test and review new products and services with phased implantation, tech and innovation hubs that can then target new revenue streams especially as the digital payments space in LATAM explodes. Other

countries to note are Argentina and Peru though they lack regulation and are adopting the wait and see position in this matter. In emerging markets, the growth in the financial services industry is greatly influenced by the rate of innovation hence fintech and now open banking is offering the catalyst to this rapid growth in the future of banking and the financial industry.

India has been rapidly incorporating open banking with top banks like yes bank and RBL bank. More Banks followed through offering banking as a service as a separate income in the P&L. A key mention is the India stack which is a set of APIs that allows businesses especially FinTech's to utilize the infrastructure and accelerate innovation.

2.3 Empirical literature

2.3.1 API technology

The term API is not a new term, software development has considered the importance of networks and software connections (Waldo, 1998). Application programming interfaces describe interactions between the inputs, outputs, and processes of banking software. APIs allow software developers to understand how to use a piece of software without knowing the how to gain insights above banking internal algorithms and by following level of consent. More so multiple use cases can be integrated and amalgamated to new functionalities for the same customer segments (Orenstein, 2000).

Salesforce.com was the first platform to run as an API on February 7th, 2000 which allowed access to the Salesforce.com application through an Extensible Markup language (XML) based API. Later, eBay released an API to Bona Fide developers and organizations. Application programming interfaces are the technical link to Open Banking (McKinsey, 2014). Open does not mean that any third parties can access the data. Bank will always retain control of their security, risk framework and privacy of business operation and decisions (Kim, Hwang, Jae, Jun, and Kwon, 2016). Examples include Alibaba, Amazon, eBay, Microsoft, Google, and Facebook. Developers can reuse existing such as transaction accounts and can choose to offer by innovating new products through advanced analysis of the data. Time-to-market becomes efficient and allows third party providers build above and around the banking system. For the various third-party providers, this way of value co-creation provides a sandbox like environment to innovate and merge with the banking model.

2.3.2 Role of regulation (Existing Frameworks, Technology readiness)

Many people are paying more than they should for their banking products and services and are not gaining from new services.” (Open Banking, 2017).

To improve customer centricity, the CMA has focused on driving competition between and among new entrants and traditional financial institutions through innovations focused on the products and services brought into market. The large 9 retail banks operating within the UK have already created and implemented API standards (Zachariadis and Ozcan, 2016). The APIs have different uses cases that must be tailored to meet customer satisfaction. Open Banking starts off with the regulatory framework, this can be offered by Regtech leveraging from Open APIs, Technology that provides solutions to the financial services companies to meet regulatory compliance and requirements. To improve transparency in the products and services that banks offer then the CMA incorporates the value to the banks (CMA, 2017).

Further, the second Payment Services Directive PSD2 is a benchmark of the technical compliance needed to drive the Open banking framework (European Commission, 2015). Taking this to a Kenyan perspective, the aim of the CAO is to encourage and support innovation by allowing access to data that can be used to improve the performance of market products. Outside of Kenya similar efforts by regulators are integrated but a key factor to note is how different regions have varying customer requirements and consent of personal data by consumers (Lloyd et al., 2017). Figure 3 summarizes the approach by different regulators and governments. One of the Five key areas under the CMAs plan is to create a conducive business environment and expand the economy through innovation, investment and ensure growth in the banking industry. The Financial services industry is very crucial in realizing the Vision 2030 Agenda.

In the context an Open Banking regulatory framework must be proposed above the Master Plan that will ensure that the market is well positioned to support national economic growth and to meet future challenges from regional competition and globalization as Kenya endeavors to be an International Financial Services hub and become an emerging market. Kenya has an opportunity as a frontier market to improve their financial services industry through Open Banking.

2.3.3 Open Banking use cases

The research study will draw from collective analysis of experiences across consumers and the fintech and digital firms in the financial services industry. The following case studies set ground to show different open banking approaches and methodologies taken by banks and fintech companies already adopting the use of API's and offering solutions. We discuss BBVA, Visa, Mastercard, Lipisha API and SWIFT in terms of open API initiatives in the industry, to illustrate a rich connection of the regulatory landscape and technological disruptions (Patton, 1990). What this firms have in common is they majorly changed their strategies to target open banking value propositions; *investment management, multi-product comparators, single product comparator, aggregator with pre-screening services and aggregation offering risk sharing*

Key milestones have been brought to consumers by companies that are changing their strategic position and actions to improve the financial system, for example payinfra, Payinfra is the term coined for all the FinTech's which provide the infrastructure for making and accepting payments. These FinTech's enable the merchants to accept payments online as well as offline. For example, Mobile enabled POS devices. Five years ago, BBVA, changed their strategy to

reach more customers and through innovation and use of resources improve their financial health. By 2021 an agreement between google and BBVA will be complete and consumers will be able to use google and get financial insights and better user interface. Some of the use cases open banking platform by BBVA includes simple, digit for savings, azlo, catch, wise, tuvoli and xero. Digit is a finance app that calculate an optimal amount of money to set aside everyday based on customers income and spending. Its aim is to help customers meet their financial goals and make financial health effortless.

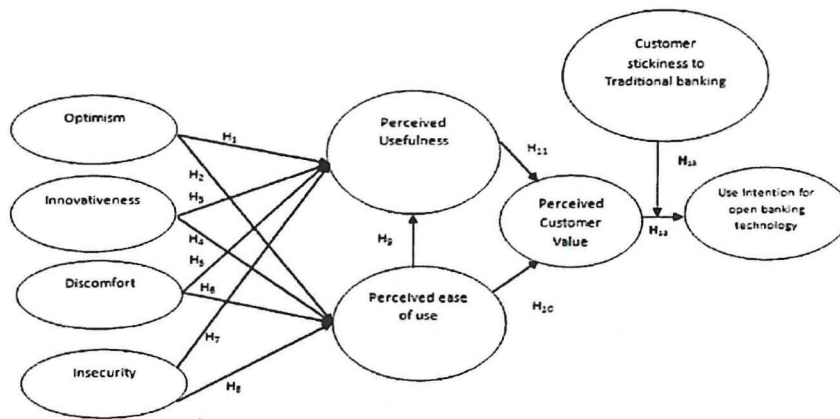
The most common use case for third parties to leverage on open banking platform provided by banks is show in the figure above. Kenya is position well in terms of the value propositions of open banking. Kenya still has a large population of unbanked individuals and a growing digital market.

2.3.4 Stickiness to Traditional Banking (SKT)

The stickiness (Demers and Lev, 2001; Maciag, 2000) is defined for websites and it means the power of any website to catch and hold the user's attention. It is referenced on the grounds that the ability to convey the client for an all-inclusive period and make regular visits. Open banking might be another innovation in banking; along these lines, tenacity to conventional banking is considered as a mediator during this investigation to supply a much better logical ability to realize the client use goal conduct for open banking through the cooperation impact of SKT with PCV and UNT. Traditional banking is utilized to clarify the all-inclusive bank model where clients do banking movement during a general way (Blakstad and Allen, 2018). Recent studies notice that tenacity has a relationship with the goal to get on a versatile application (Hsu and Lin, 2016) and expectation to attempt to the exchange on internet business site (Lin, 2007). It is discovered that tenacity to money installment directs the association between conduct aim to utilize advanced installment frameworks and genuine use of computerized installment frameworks (Sivathanu, 2019). This exploration does not think about the factor/variable 'Government Regulations' as there are no current guidelines and strategies by Government of Kenya (GoI) inside the setting of Open Banking.

2.4 Conceptual framework

The conceptual framework is decription of the key variable in Open Banking, independent variables, intervening variables, and a dependent variable. Independent variables are the variables which affect other variables to change and the researcher had control over them. The variables included Mergers of banks & Fintech, number of Open APIs, customer score, synergy and bank efficiency. The dependent variable showed the effect of the current and manipulating the independent variables. From the framework, the dependent variable will be Open Banking. Intervening variables stood between the independent and dependent variables and they implied theuncertain role of independent variable on the dependent variable.



- H₁: OPM about technology influences the PES of Open Banking Technology.
- H₂: OPM about technology influences the PUF of Open Banking Technology.
- H₃: INO towards technology leads to higher PES of Open banking technology.
- H₄: INO towards technology leads to higher PUF of Open banking technology.

Figure 5: Conceptual framework

CHAPTER 3 RESEARCH METHODOLOGY

3.1 Introduction

This research paper is largely quantitative in nature. This methodology suits the reason for the exploration and the plan to draw a considerable example of the population under examination. The instrument utilized within the examination and initially created by Parasuraman (2000) may be a quantitative instrument. This examination took the thought of a study and is exploratory in nature, where exploratory examination is viewed as sensible when there's minimal logical information a few marvel, yet there's motivation to simply accept that there are components worth finding (Stebbins, in Forest, Fisk and John 2003). This examination endeavored to utilize the components related with the Innovation Availability in a non-industrial nation to comprehend the open financial space, which is a region that has gotten little consideration from analysts and researchers.

3.2 Data collection procedures

To understand the sensible model size required for this assessment, the thumb rule (Gefen et al., 2000) was considered. To analyze the example size necessity in this examination model, multiple times the quantity of things of the greatest develop (Use Expectation with 9 things) was utilized. Was used. Along these lines, the model size required is 90 respondents. The coordinated survey was given to the respondents and the expert referenced them to finish it off to assemble the fundamental data. For this assessment, the target respondents were buyers who were using any banking products for their monetary transactions, similarly as these customers were a lot of instructed about open monetary development of open banking. The respondents were guaranteed of their obscurity and secrecy.

Main Construct	Type	Measures
Optimism	Reflective	Question 4,6,9,11
Innovativeness	Reflective	Question 2,4,11
Discomfort	Reflective	Question 8,9,11
Insecurity	Reflective	Question 5,8,9,11
Use intention	Reflective	Question 2,3,6,7,11
Stickiness	Reflective	Question 2,6,7
Perceived ease of	Reflective	Question 5

use/customer value		
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Figure 6: Research Questionnaire

3.2.1 Sampling method

The sampling method choice that was utilized was a non-probability testing procedure, convenience sampling. The questionnaire was administered to a convenience sample of urban consumers in Nairobi, Kenya.

3.2.2 Non-Response Bias

Non-Response Bias might be an indispensable issue inside the overview technique confines the speculation of the discoveries and results (Michie and Marteau, 1999). The exploration finds a way to eliminate the nonresponse predisposition. The information was separated into two sets: early respondents and late respondents then the wave comparisons was controlled. to check the Non-Response Bias, the correlation of the principal wave and late wave reactions was done (Amstrong and Overtons, the t-tests and other SPSS measurements, indicating that non-reaction inclination doesn't influence this exploration.

3.2.3 Common Method Bias

The research hypothesis during this study tested by using survey method for data collection. Common method bias may affect the study when data is collected from various sources (Podsakoff and Organ, 1986; Mackenzie and Podsakoff, 2012; Podsakoff et al. 2003). to research the presence of common method bias during this study, the only factor Harman test (Organ, 1986) was conducted.

3.3 Data collection methods

Data was collected by use of questionnaires with open ended and closed ended questions. This method was preferred due the objective, need for structured information. The questionnaire, therefore, will reduce cases of biasness. Further, use of questionnaires was convenient to the desired respondents and will be easy to analyse the collected data to do data analysis. The questionnaire had an open-ended question to allow for detailed conversations in interviews to cushion bias and offer clarity. There is also a random sample data collected to assist in the assessment of Open Banking awareness to consumers

3.4 Data processing and Analysis

After the data was collected, the filled-in and returned questionnaires were checked for completeness and consistency. Entries were made into Ms-Excel, after which coding commenced. Coding in this study involved application of formulae to calculate mean, median and mode, to do factor analysis and to calculate the reliability scores and regressions. The mean be calculated in this study was the simple average. The analysis was carried out as follows: descriptive statistics first to check the distribution of the data; then measurement of the 2 variables used in the regression; and finally, the regression to assess the effect of closed banking, and technology readiness on Open Banking. The questionnaire consisted of the subsequent five sections:

- the most area contained inquiries concerning the respondent's essential socioeconomics
- the next area contained inquiries concerning the respondent's admittance to specific innovations.

- The third segment contained inquiries concerning the respondent's use of certain financial items and features of banking services.
- The fourth segment contained 36 proclamations addressing the four measurements (to be specific, perceived usefulness, innovation, uneasiness, and stickiness to traditional banking) of Parasuraman's (2000) Innovation Preparation Record. Respondents were mentioned, on a 6-point unlabeled Likert scale (from 'not likely at all to 'critical'), to demonstrate their assessment on explanations identifying with banking mechanical availability.
- The last (fifth) segment contained inquiries relating to the respondent's impression of things to come allure of different innovation-based features. Respondents were mentioned, on a nine-point Likert scale (from 'not probably by any stretch of the imagination' to 'likely'), to show their assessment on explanations identifying with apparent future attractive quality.

CHAPTER 4 DATA ANALYSIS AND RESULTS

4.1 Pretesting the survey

Pretesting was done among 40 undergraduates identified within Strathmore college. After pretesting the survey, it had been chosen to frame minor changes to the language in a few the assertions, all together that they may be better perceived inside the Kenyan banking system. Besides, the assertions were changed to manage the financial framework. The suggestion of information began with primary survey screening. inside the accompanying advances, information altering, and data/information coding were performed. Reason was to recognize and classes every reaction with mathematical scores and signs (Bajpai, 2011)

4.2 Implications of this part for the study information

The very initiative before analysing data is to convert data into a format suitable for decision-making and conclusions. it is required for data to be edited, coded, cleaned, screened then for further analysis and interpretations, entered mathematical computer software programs. The strategy for readiness of information is directed on the grounds that the principal interaction for examination.

In the final step, to get descriptive and inferential statistical analyses, to summarize data and knowledge, to look at the research questions and to hypothesize the measured model, the info must be entered into computer statistical software programs (i.e., SPSS 20.0 and Smart-PLS 3) (Manning & Munro, 2007; Tabachnick & Fidell, 2001).

4.3 Content validity and reliability

Endless supply of information section and recoding measures, computation of dependability and legitimacy of all measures were embraced through SPSS. Cronbach alpha is that the commonest proportion of internal consistency. The poll had different liker scale questions and that we use it to work out the dependability of the scales.

4.4 Method to Handle Missing Values

The information examination started with the appraisal of information segment and treatment of missing data and characteristics. This was basically recognized to achieve some fundamental observations about the information inside the information (Hair et al., 2014). Undoubtedly, inside the patterns of information cleaning, screening data ought to be coded, unsurprising and checked for missing characteristics and responses inside the returned outline reviews. Missing data and qualities is kind of conceivably the premier unavoidable issues in exploration examination. As demonstrated by Hair et al. (2014), missing data and characteristics happen

when a respondent either intentionally or suddenly fails to answer to at least one question(s). Regardless, when the proportion of missing data on a study goes past 15%, the insight ought to be disregarded from the information report (Hair et al., 2014) going before starting the assessment. This collaboration is finished. As to mind of missing characteristics, SPSS programming has the choice with different ways, for example, mean, middle, direct example and interjection. (Little and Rubin, 2002)

4.5 Reliability and Pre-discussion

		N	%
Cases	Valid	177	96.7
	Excluded	6	3.3
	Total	183	100.0

Table 1: Case processing Summary

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.785	.785	2

Table 2: Reliability statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation
features below of a mobile banking app	5.78	1.218	.533	.287
features below of a mobile banking app	6.10	1.019	.504	.275
digitally confident	8.10	2.853	.149	.026

	Mean	Std. Deviation	N
of a mobile banking app	4.21	.909	177
features below of a mobile banking app	3.89	1.025	177

Table 3: Mobile banking, digital confidence

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic
mobile banking app	181	0	2	1.10	.573	.006
banks	183	1	3	1.40	.574	1.110
managing your money	182	1	5	3.35	.851	.029
financial data	182	1	2	1.74	.442	-1.081
Open banking	183	1	3	1.84	.607	.094
2 or 3	182	1	3	1.48	.778	1.196
digitally confident	182	1	2	1.88	.327	-2.345
features below of a mobile banking app	178	1	5	4.20	.910	-1.094
features below of a mobile banking app	177	1	5	3.89	1.025	-.647
Valid N (listwise)	172					

Table 4: Descriptive statistics

Frequency Table

features below of a mobile banking app					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	3	1.6	1.7	1.7
	2	3	1.6	1.7	3.4
	3	32	17.5	18.0	21.3
	4	57	31.1	32.0	53.4
	5	83	45.4	46.6	100.0
	Total	178	97.3	100.0	
Missing	System	5	2.7		
Total		183	100.0		

Table 5: Features of a mobile banking app

features below of a mobile banking app					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	3	1.6	1.7	1.7
	2	15	8.2	8.5	10.2
	3	40	21.9	22.6	32.8
	4	59	32.2	33.3	66.1
	5	60	32.8	33.9	100.0
	Total	177	96.7	100.0	
Missing	System	6	3.3		
Total		183	100.0		

Age					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-24 (post-millennial)	2	1.1	1.1	1.1
	18-25 (post-millennial)	163	89.1	89.1	90.2
	24 Millennials (Gen Y)	2	1.1	1.1	91.3
	26-35 Millennials (Gen Y)	6	3.3	3.3	94.5
	35-54 (Gen X)	1	.5	.5	95.1
	36-54 (Gen X)	8	4.4	4.4	99.5
	55-74 (Boomers)	1	.5	.5	100.0
	Total	183	100.0	100.0	

Table 6: Demographics

How important are the features below of a mobile banking app for you? [Running balance and transactions history]					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		5	2.7	2.7	2.7
	Extremely important	83	45.4	45.4	48.1
	Not at all important	3	1.6	1.6	49.7
	Not so important	3	1.6	1.6	51.4

	Somewhat important	32	17.5	17.5	68.9
	Very important	57	31.1	31.1	100.0
	Total	183	100.0	100.0	

Table 7: Innovative features (Running balance and transactions history)

How important are the features below of a mobile banking app for you? [Tracking monthly expenditure]					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		6	3.3	3.3	3.3
	Extremely important	60	32.8	32.8	36.1
	Not at all important	3	1.6	1.6	37.7
	Not so important	15	8.2	8.2	45.9
	Somewhat important	40	21.9	21.9	67.8
	Very important	59	32.2	32.2	100.0
	Total	183	100.0	100.0	

Table 8: Innovative features (Tracking monthly expenditure)

How important are the features below of a mobile banking app for you? [Budgeting]					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		6	3.3	3.3	3.3
	Extremely important	49	26.8	26.8	30.1
	Not at all important	4	2.2	2.2	32.2
	Not so important	21	11.5	11.5	43.7
	Somewhat important	45	24.6	24.6	68.3
	Very important	58	31.7	31.7	100.0
	Total	183	100.0	100.0	

Table 9: Innovative features: Budgeting

How important are the features below of a mobile banking app for you? [Connect all bank accounts in one place]					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		5	2.7	2.7	2.7
	Extremely important	51	27.9	27.9	30.6
	Not at all important	19	10.4	10.4	41.0
	Not so important	22	12.0	12.0	53.0
	Somewhat important	40	21.9	21.9	74.9
	Very important	46	25.1	25.1	100.0
	Total	183	100.0	100.0	

Table 10: Innovative features (Connect all bank accounts in one place)

How likely would you be to use the following features in your mobile banking app? [Connect all your bank accounts in one place]					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		9	4.9	4.9	4.9
	Likely	46	25.1	25.1	30.1
	Not likely	45	24.6	24.6	54.6
	Not likely at all	25	13.7	13.7	68.3
	Very likely	58	31.7	31.7	100.0
	Total	183	100.0	100.0	

Table 11: Innovative features (Connect all your bank accounts in one place)

How likely would you be to use the following features in your mobile banking app? [Create personal saving goal and see progress/notifications]					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		12	6.6	6.6	6.6
	Likely	70	38.3	38.3	44.8
	Not likely	13	7.1	7.1	51.9

	Not likely at all	6	3.3	3.3	55.2
	Very likely	82	44.8	44.8	100.0
	Total	183	100.0	100.0	

Table 12: Innovative features (Create personal saving goal and see progress/notifications)

How likely would you be to use the following features in your mobile banking app? [Interface driven by you - create and configure the look of your banking app]					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		11	6.0	6.0	6.0
	Likely	64	35.0	35.0	41.0
	Not likely	50	27.3	27.3	68.3
	Not likely at all	21	11.5	11.5	79.8
	Very likely	37	20.2	20.2	100.0
	Total	183	100.0	100.0	

Table 13: Innovative features; Scenario planning

How likely would you be to use the following features in your mobile banking app? [Scenario planning - tell the app what your goal is and let it plan for you]					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		10	5.5	5.5	5.5
	Likely	79	43.2	43.2	48.6
	Not likely	31	16.9	16.9	65.6
	Not likely at all	16	8.7	8.7	74.3
	Very likely	47	25.7	25.7	100.0
	Total	183	100.0	100.0	

How likely would you be to use the following features in your mobile banking app? [Switch and Save - switch to cheaper TV, mobile, utilities, insurance]					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		12	6.6	6.6	6.6
	Likely	73	39.9	39.9	46.4
	Not likely	35	19.1	19.1	65.6

	Not likely at all	18	9.8	9.8	75.4
	Very likely	45	24.6	24.6	100.0
	Total	183	100.0	100.0	

Table 14: Innovative features (Switch and save)

How likely would you be to use the following features in your mobile banking app? [Document uploading (bills, receipts) - Keep your documents along with transactions]					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		13	7.1	7.1	7.1
	Likely	70	38.3	38.3	45.4
	Not likely	8	4.4	4.4	49.7
	Not likely at all	6	3.3	3.3	53.0
	Very likely	86	47.0	47.0	100.0
	Total	183	100.0	100.0	

Table 15: Innovative features (Document uploading)

How likely would you be to use the following features in your mobile banking app? [Automated budgeting based on your spending behavior]					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		9	4.9	4.9	4.9
	Likely	61	33.3	33.3	38.3
	Not likely	26	14.2	14.2	52.5
	Not likely at all	14	7.7	7.7	60.1
	Very likely	73	39.9	39.9	100.0
	Total	183	100.0	100.0	

Table 16: Innovative features (Automated budgeting based on your spending behavior)

4.5.1 Hypotheses development

Before it is conceivable to decide the connection between innovation status and key socioeconomics, access, use, and attractive quality profiles of banking clients in an emerging country setting, it is important to test and affirm the dimensionality of the Factor examination Index. In this way, theory 1 is defined:

Theory 1: Developing country information will yield similar four elements of innovation preparation as set up by Parasuraman (2000).

Theory 2: Customers who at present approach innovation-based items and administrations are more innovatively prepared than those clients who as of now have no admittance to innovation-based items and administrations.

Parasuraman (2000) further found that clients who use, or want to utilize, innovation-based administrations in future were more innovatively prepared than clients who didn't utilize, or want to utilize, innovation-based administrations in future. Tsikriktsis (2004) discovered somewhat clashing outcomes, which proposed that less mechanically prepared clients did truth be told utilize some innovation-based administrations, for example, cellphones, text informing, ATMs and online buys and demonstrated a future craving to utilize innovation-based administrations, for example, email, Internet, and electronic financial balances. In this way, theories 3 and 4 are figured:

Theory 3: Customers who at present use innovation based financial administrations are more innovatively prepared than those clients who don't right now utilize innovation-based items and administrations.

Theory 4: Customers who have a higher seen allure for different innovation-based administrations are more mechanically prepared than those clients who have a lower seen attractive quality for different innovation-based administrations.

CHAPTER 5 RESEARCH FINDINGS AND CONCLUSION

The findings initially focus on the profile of the typical respondent, after which the key findings regarding Open Banking Technology readiness (TR) and the hypotheses are discussed.

5.1 Reliability of the measures

The reliability of the scale used to measure TR was determined using Cronbach's alpha. The items (inclusive of the two Likert scales) had a Cronbach's alpha of 0.785, which is greater than the 0.7 suggested by Hair et al. (2006) as acceptable. This confirms that the scale that was used is reliable.

5.2 Respondent profile

Age						
		Frequency	Percent	Valid Percent	Cumulative Percent	
Valid	18-24 (post-millennial)	2	1.1	1.1	1.1	
	18-25 (post-millennial)	163	89.1	89.1	90.2	
	24 Millennials (Gen Y)	2	1.1	1.1	91.3	
	26-35 Millennials (Gen Y)	6	3.3	3.3	94.5	
	35-54 (Gen X)	1	.5	.5	95.1	
	36-54 (Gen X)	8	4.4	4.4	99.5	
	55-74 (Boomers)	1	.5	.5	100.0	
	Total	183	100.0	100.0		

5.3 Discussion

Table 17: Demographics discussion

5.2.1 The use of mobile banking

Respondents were asked to indicate if they have a mobile banking app and use it including how many they currently have. From the responses received, many of the respondents currently have and use mobile banking (65.6%). Employees, 26.7% indicated that they currently had used a mobile app, while 10.5% indicated that they do not use.

What customer segment do you fall under?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		1	.5	.5	.5
	Employee	38	20.8	20.8	21.3
	Self-Employed	8	4.4	4.4	25.7
	Student	136	74.3	74.3	100.0
	Total	183	100.0	100.0	

Do you use a mobile banking app * * What customer segment do you fall under? Crosstabulation						
		What customer segment do you fall under?				Total 23
			Employee	Self-Employed	Student	
Do you use a mobile banking app *		0	0	0	2	2
	No	0	4	2	34	40
	Rarely use the App	0	2	1	18	21
	Yes	1	32	5	82	120
Total		1	38	8	136	183

Table 18: Cross tabulation; Mobile Banking, Customer segment

From these responses, the current ownership of the typical respondent seems to include the following: a bank account, a credit card, a cellphone, landline telephone access and internet access via either a landline or broadband; but they have no plans to obtain a wireless handheld device.

5.2.2 The knowledge of open Banking

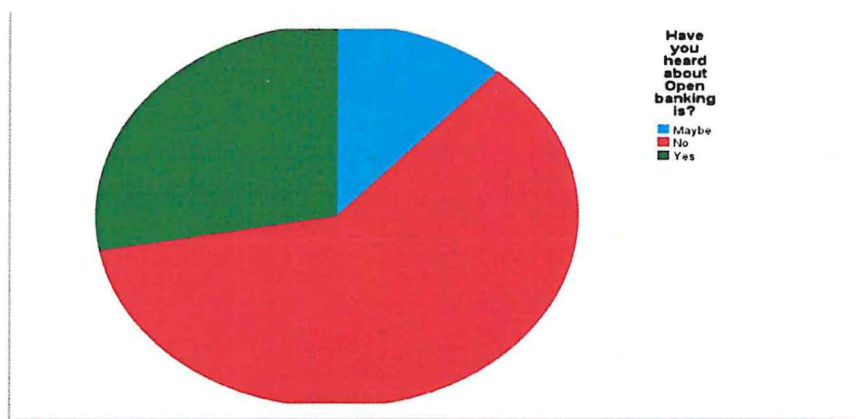


Figure 7: Overall level of Open Banking knowledge

5.2.3 Open Banking readiness and Likert scales

The scale utilized in this segment was an unlabeled 5-point Likert scale, where 1 address 'strongly disagree' and 5 addresses 'strongly agree'. The main assertion in this part identified with the idea of the contact that the client needs with the bank. The assertion read, "11 Do you consider yourself to be digitally confident or you would rather go to your local branch?", and this assertion had a mean score above 0.278 (on a five-point scale) and a standard deviation of 0.555. This is the most noteworthy mean and the least standard deviation of the multitude of explanations. ANOVA Table gives an article of the illustrative measurements.

Have you heard about Open banking is? * What customer segment do you fall under? Crosstabulation						
		What customer segment do you fall under?				Total
			Employee	Self-Employed	Student	
Have you heard about Open banking is?	Maybe	0	6	0	15	21
	No	1	23	5	82	111
	Yes	0	9	3	39	51
Total		1	38	8	136	183

A secondary objective of the investigation was to decide the factor examination score in an emerging country context. From the reactions got, the normal was determined for each measurement. More consumers with employment and education have heard about Open Banking.

Do you prefer closed banking or open banking? * What customer segment do you fall under? Crosstabulation						
		What customer segment do you fall under?				Total
			Employee	Self-Employed	Student	
Do you prefer closed banking or open banking?		0	0	0	1	1
	Closed Banking	0	7	2	15	24
	No preference	0	2	1	5	8
	Not sure	1	24	5	88	118
	Open Banking	0	5	0	27	32
Total		1	38	8	136	183

5.2.4 Intended highlights of Open Banking

The scale utilized in this segment was an unlabeled 6-point scale, where 1 addressed 'not likely at all', and 4 addressed 'likely'. The assertions with the most noteworthy methods were "budgeting" (mean = 3.72) and "Simplified security" (mean = 3.62). The statement with the most reduced mean (2.33) was "Voice control" and "Interface driven by you" (mean (2.96).

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	22.458 ^a	15	.096
Likelihood Ratio	22.047	15	.107
N of Valid Cases	183		

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
mobile banking app	Between Groups	.311	2	.155	.471	.625
	Within Groups	58.695	178	.330		
	Total	59.006	180			
digitally confident	Between Groups	.555	2	.278	2.644	.074
	Within Groups	18.786	179	.105		
	Total	19.341	181			
managing your money	Between Groups	3.524	2	1.762	2.470	.087
	Within Groups	127.668	179	.713		
	Total	131.192	181			
financial data	Between Groups	.644	2	.322	1.662	.193
	Within Groups	34.696	179	.194		
	Total	35.341	181			

Descriptive Statistics							
	N	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
features below of a mobile banking app	178	4.20	.910	-1.094	.182	1.087	.362
features below of a mobile banking app	177	3.89	1.025	-.647	.183	-.294	.363

Statement	Mean	Std. Deviation
[Simplified security (Touch ID/Face ID)]	3.62	1.255
[Real-time push 2tifications]	3.50	1.285
[Budgeting]	3.72	1.066
[Connect all bank accounts in one place]	3.49	1.312
[Connect all your bank accounts in one place]	3.06	1.109
[Create personal saving goal and see progress/2tifications]	3.44	.691
[Voice control - voice-enabled features on mobile or smartwatch]	2.33	1.262
[Interface driven by you - create and configure the look of your banking app]	2.96	.999
[Scenario planning - tell the app what your goal is and let it plan for you]	3.11	.881
[Switch and Save - switch to cheaper TV, mobile, utilities, insurance]	3.07	.929
[Real time 2tification helping you avoid overdrafts, so you never miss a payment]	3.50	.710
[Document uploading (bills, receipts) - Keep your documents along with transactions]	3.46	.688
[Automated budgeting based on your spending behavior]	3.30	.886

Table 19: Factor analysis

The factors /key use intentions of open banking seem to fairly have different views from the sample. Research shows that this shows that people ae not yet really aware of the key value proposition that Open banking can offer to the financial system.

5.4 Conclusion

5.4.1 Limitations of the Research

Use was made from the convenience sample, which has the implication of not mirroring the entire population under examination. The examination just reviewed respondents in one metropolitan area, especially the Nairobi, Kenya. This circumstance impacts on the representativeness of the outcomes. Additionally, respondents during this examination (Urban financial buyers in Nairobi) were preferable taught over the overall population during this frontier country, which influences the mean TR scores acquired. These aspects related with the respondents make it hard to supply the discoveries to the population. This cross-sectional exploration is geographically restricted to the setting of the Kenyan economy, and further investigations are often led in future on the 'real use' and 'client value' of open banking in Kenya once open financial innovation is actualized. The reasonable system of this examination could be stretched by researchers, for instance, Government Policy and Regulation, 'consumer loyalty', 'open financial help quality' and 'client steadfastness' to explore the presentation of open banking and fabricate a more powerful model. Comparable investigations could be through with regards to other economies to seek out the impact of segment and socio-social factors on the client conduct and use aim of open banking. Near investigations to grasp the client conduct between the created and arising economies with regards to open banking may likewise be directed to assemble significant bits of data later

5.4.2 Further exploration

As demonstrated within the constraints, a more extensive investigation during Kenya to include more rural zones is predicted to decide if this TR score are often viewed as precise across the frontier nation. Growing this examination to different cities and centers would give more exact outcomes. It might assist with having other subsequent examinations to contrast the sample selected in this study. There exist numerous different examinations on various financial advancements, for instance, traditional banking, web banking; notwithstanding, this is often the first examination on the customer conduct to explore the use goal for the open Banking innovation which is new with regards to a nation like Kenya (Guhr et al., 2013; Shin and Lee, 2014; Martens) Technology awareness among consumers has been recognized as being basic within the appreciation of the foremost recent innovations, while likewise affecting on the doorway and responsibility for based items and administrations. During this quantitative investigation, the innovation nature of Kenya about financial products was resolved, and a TR score of two .53 was gotten. The ramifications of the TR scores acquired demonstrates the shifting degrees of technological innovation in Kenya and thus the possession and allure of claiming different innovation-based items and administrations. These discoveries show the difficulties for firms and corporations engaged with this area in their undertaking to support the utilization and utilization of innovation especially Open Banking technologies, however they likewise demonstrate manners by which associations can fuse the TR of their clients into their showcasing methodologies.

5.4.3 Implications

This research concludes that banking consumers and the financial system as whole in Kenya have the aim to utilize open financial innovation; in any case, buyers feel unreliable and tenacity to standard financial systems, the connection among PCV and UTN indicates that the population is generally stick stuck on the traditional model. Managers should prepare their firms/companies to cause them to possess a way of safety and form techniques to expand the apparent consumer esteem and diminish the tenacity of purchasers towards conventional banking. This investigation experimentally approves the directing variable 'SKT to Open banking' within the customary Factor examination model to contemplate the consumers goals and attitude towards open banking. It adds to the present writing by formulating a model with informative ability to feature and add to conversation of Open Banking advancements in Kenya. Its important to note that the CBK has incorporated a drive towards open technologies in the new 2021-2022 strategy (Appendix 2). They intend to bring all the key stakeholders together and approach it from a regulation perspective. This can be the start of a deeper, more intentional conversation about Open banking.

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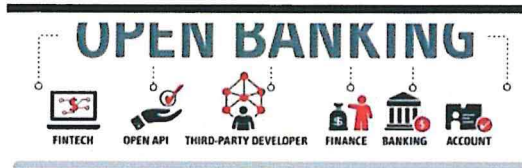
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APPENDICES

Appendix 1: The Research Questionnaire



FinTech and Open Banking in Kenya

Welcome!

My name is Kemuel Sabula, a 4th year student pursuing Bachelor of Business Science, Finance at Strathmore University. This study is done for academic purposes and submitted in partial fulfillment of the award of my Bachelor's degree. The objective of the study is to examine the intention to use Open Banking in Kenya.

What is Open Banking? Open banking is a framework that gives you control of the data banks and financial institutions hold on you. It's widely defined as banks to sharing customer data securely with third-party companies or mobile apps in real time with the help of open application interface platforms (APIs). This makes it tricky for you to find the best product or service and to switch to new products and services.

Your participation in this study is completely voluntary, your responses will be kept confidential, and the results from this survey will only be presented in aggregate form. I greatly appreciate your willingness to share your time by participating in this survey. I expect that it will only take 3-5 minutes to complete the questionnaire.

If you have any questions about this survey, please contact Kemuel Sabula:
kemuel.sabula@strathmore.edu 0727853703

* Required

1 Age

- 18-25 (post millennial)
- 26-35 Millennials (Gen Y)
- 36-54 (Gen X)
- 55-74 (Boomers)
- >75 (Builders)

2 Do you use a mobile banking app? *

- Yes
- No
- Rarely use the App

3 How many banks do you Bank in? *

- 1
- 2
- Greater than 2

4 How confident are you at managing your money? *

- Extremely confident
- Very confident
- Somewhat confident
- Not so confident
- Not at all confident

5 Do you feel safe sharing your financial data with other banks and financial firms (Regulated third parties)?

- Yes
- No

6 Have you heard about Open banking is? *

- Yes
- No
- Maybe

7 Do you prefer closed banking or open banking?

- Closed Banking
- Open Banking
- Not sure
- No preference

8 Which of the following aspects would concern you the most? (Choose 3) *

- Have my financial information shared with others
- Loss of funds
- Targeted with unwanted offers
- Identity theft
- payment error
- Sharing data with other parties without your consent
- use of data for purposes other than what I gave consent

9 Are you an early technology adopter or do you wait until it's established? *

- I adopt new technologies early
- I normally wait until it's established

10 What customer segment do you fall under?

- Employee
- Student
- Self Employed
- Retired

11 Do you consider yourself to be digitally confident or you would rather go to your local branch?

- I'm digitally confident
- I would prefer to go to my local branch

12 How important are the features below of a mobile banking app for you?

	Not at all important	Not so important	Somewhat important	Very important	Extremely important
Running balance and transactions history	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tracking monthly expenditure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Simplified security (Touch ID/Face ID)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Real-time push notifications	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Budgeting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Connect all bank accounts in one place	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

13 How likely would you be to use the following features in your mobile banking app?

	Not likely at all	Not likely	Likely	Very likely
Connect all your bank accounts in one place	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Create personal saving goal and see progress/notifications	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Voice control - voice-enabled features on mobile or smartwatch	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Interface driven by you - create and configure the look of your banking app	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Scenario planning - tell the app what your goal is and let it plan for you	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Switch and Save - Switch to cheaper TV, mobile, utilities, insurance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Real time notification helping you avoid overdrafts so you never miss a payment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Document uploading (bills, receipts) - Keep your documents along with transactions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Automated budgeting based on your spending behavior	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

14 What features are not offered on your mobile banking app that you would like to use?

Your answer:

Appendix 2: The CBK Extract

CBK will work to define standards for effective and appropriate API development and mandate robust but secure data portability in the market.

Vision principle	Strategic Initiatives	High-level KPI	Responsibility	Timeline
4. Choice	4.1 Fostering effective competition	Periodic market inquiry on competition completed	CBK with relevant MDAs	Long term
	4.2 Interoperability for choice	Effective interoperability completed	CBK	Medium term
	4.3 Open, standardized and secure APIs	Framework for APIs completed	CBK	Short term
	4.4 Encouraging market entry	Develop and implement standardized service charter for new entrants	CBK	Long term
		Authorising new payment solution(s) annually	CBK working with industry	Long term
	5.1 Open but secure APIs standards	Security review for application programme interface (APIs) completed	CBK	Medium term
	5.2 Regulatory framework for innovation	Regulatory framework for innovation	CBK	Medium term
5.3 Expanding innovation in government	Digitizing the back end of government service	CBK, National Treasury, MDAs and county governments	Medium term	
	Increase proportion of government services paid digitally	CBK, National Treasury, MDAs and county governments	Medium term	

Appendix 3: Fintech /Open Banking Landscape

In the European Union and the United Kingdom, PSD2 and the Open Banking Initiative are giving more control to the customer over personal account data. Digital banks such as N26 and Fidor, and digital lenders (eg, Klarna), are seeking to reinvent banking.

