INFLUENCE OF INNOVATION STRATEGIES ON COMPETITIVE ADVANTAGE AMONG FINTECH COMPANIES IN KENYA

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DECLARATION

I hereby declare that this research project is my original work and has not been presented in any other institution.

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This research project has been submitted for examination with my approval as the University supervisor.

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DEDICATION

This research project is dedicated to my parents Mrs.Jane Mochama and Mr. Dionysius Mochama who walked with me throughout my research work.

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ABBREVIATIONS AND ACRONYMS

GDP	Gross Domestic Product
DOI	Diffusion of Innovation
ICT	Information Communication and Technology
FenTech	Financial Technology

ABSTRACT

In strategic management theory and practice, innovation is deemed one of the core settings for competitive advantage and for success, thus a firm’s strategy for innovation is a significant component of developing long term strategies. Financial technology businesses are constantly inventing and upgrading their product offerings.The study's overarching goal was to examine the impact of innovation strategies on competitive advantage in Kenya's financial technology.Porter's theory of competitive advantage was combined with the diffusion of innovations theory to arrive at this result.A descriptive research approach was employed to examine the impact of innovation strategies on competitive advantage.The 91 financial technology businesses in Kenya were the intended audience for this research.The financial technology businesses' employees provided the information.This research used descriptive and regression analysis as well as correlational and regression methods.Technology and management innovation have an enormous impact on innovation strategies, but many financial technology businesses have adopted product, market, and process innovation at a lower level. The study established a positive relationship between competitive advantage and innovation strategies. It was concluded that product innovation, technological innovation, market innovation, management innovation and process innovation were positively related to competitive advantage. The study recommends that financial technology companies should invest in research and development with a view to improving the quality and diversity of their products.

CHAPTER ONE:

INTRODUCTION

1.1 Background of the Study

Long-term innovation strategies are critical in strategic management theory and practice. An essential setting for gaining a competitive edge and achieving success is innovation, according to Kralewski (2012). Innovation is the key driver of competitiveness, profitability, growth as well as value creation (Enkel,2009). Innovation strategies guide managers on how to use resources to achieve a company's innovation goals thereby creating value and building competitive advantage (Malek., Moradi, Mehdizade, & Dorostk. ,2013). Corporates focus on innovation in response to environmental changes and develop innovative skills to realize competitive advantage (Ionescu,, & Dumitru, 2015).

This study was guided by two theories namely; diffusion of innovations theory and porter’s theory of competitive advantage. Diffusion of Innovations Theory articulated by Rogers (1962) enunciates the spread of innovations in a populace and envisions the process of social change that characterizes the qualities of innovations and the factors that drive proliferation of innovations in a society. According to Michael Porter, the competition's extent and nature of the industry is determined by (Porter, 1985). The theory will be relevant to this study as it explains ways through which industries become competitive and thus help managers in developing competitive advantage.

Financial technology companies firms make use of new technology and innovation to compete in the market of traditional financial institutions and act as intermediations in financial services delivery. In Kenya, there are 91 Financial technology(Cámara, & Tuesta, 2014). Fintech firms in Kenya have been facing diverse challenges including new entrants into the industry, increased consumers demands and increasing demand for payment services. How responsive an organization is to the environment determines its success. Financial technology firms in Kenya have taken several ways to preserve their positions as a result of external developments having a direct or indirect impact on the company.

1.1.1 Innovation Strategies

According to Roger (1995), it is stated that innovation strategies is development of an idea, practice, or object that is considered as current by an intended user. The study of Eisenhardt and Martin (2015) states that innovation involves new product and service development which are considered to be innovation and is distinguished by its dynamic capability performance. Muradi, (2016) asserted that innovation strategies can also be considered as thinking beyond the obvious as it entails discovering new concepts, things, developments, improvements, and ideas so as to attain strategic advantages. Strategies for innovation identify long-term core business goals and determine resources and activities to achieve those goals (Urbancova, 2013).

Innovation strategies make it possible for companies to commit their limited resources for initiatives that have the greatest effect on performance (Fathali, 2016). The foremost task of an innovation strategy is to help make decisions about the manner in which resources should be used to achieve a company's innovation goals, and as a result create value improve business performance (Karlsson & Tavassoli, 2015). These strategies are also important for the economic growth of states as innovative businesses create new and nonexistent value by commercializing R&D results (Wang, Lin & Chu, 2011). Innovation strategies include process innovation, marketing innovation, management innovation, product innovations strategies and technological innovation strategies.

Process innovation refers to the development of a new or significantly upgraded production process through reengineering of operational practices or adoption of new equipment (Fathali, 2016).Marketing innovation approach entails substantial modifications in knowledge/innovation which are the sources of revealing new ideas. Management innovation focuses on implementing new organizational methods in a company's business practices and external relations. Product innovation denotes the systematic task process that draws on existing knowledge obtained through practical experience and research to create new products, equipment and materials (Auma,2014). Technological innovation strategies entail systems adoption such as ERP systems with provision of capabilities that give support and increase processes associated with production.

1.1.2 Competitive Advantage

The collection of actions, techniques, and abilities possessed by a firm in order to constantly deliver or provide its goods or services in a way that pleases its clients is referred to as its competitive advantage (Coyne, 2016). It may also be described as the capability of an enterprise to offer more competitive goods and services that meet consumer expectations (Garth et al.,2014). Porter (1985) submitted that the primary goal of a company's competitive strategy is to get deeper insights into a particular market and develop creative strategies of surpassing competition. The capacity of an organization to compete successfully is dependent on its ability to exploit both external and internal forces in creative and aggressive ways (Barney, 2011). Because it continuously outperforms and provides goods and services that consumers find satisfactory, a company has a competitive edge in the marketplace.

Companies with a competitive advantage consistently produce goods and services that meet the key purchasing criteria of the majority of market customers, according to Meihami & Meihami (2014). For a business to be successful in the long run, it must be able to provide consistently greater results and generate more profit. Moreover, it entails continual adjustment to environmental changes and an ability to thwart competitor efforts to replicate a firm's advantages. Researchers have determined that certain types of competitive advantage cannot be readily replicated, and this view has helped to build the idea of competitive advantage based on resources.

Differentiation emphasis, cost focus, cost leadership, and differentiation emphasis are the four components of competitive advantage (Stonehouse and Snowdon, 2007). According to Stone house et al., cost leadership is achieved when an organization commits to being the lowest-cost producer in its industry, while differentiation is achieved when an organization produces goods or services that are significantly better than competition and thus can charge premium prices (2007).

1.1.3 Financial Technology Companies in Kenya

Financial technology companies are financial technology firms that define and develop financial services in digital platforms. Therefore, Fintech companies comprise of companies that use innovation and new technology to compete in the market of traditional financial institutions and act as intermediations in financial services delivery. The African market contains all necessary circumstances promising to serve as a stable foundation for Fintech companies' growth and development of financial systems (McDowell, 2016). Mobile money services have been used in Kenya for eight years, allowing people to make P2P payments by simply texting. M-Pesa is leading the pack as Kenya's first mobile money provider. As a result of the current opportunities, there has been an increase in Financial Technology company startups, focusing on providing financial services in different segments and transforming the financial services provision sector to ensure inclusive growth.

Financial Technology companies have main role in the Kenyan economy and due to the rapid growth in this industry, Kenya is in the run to become one of the highest ranked mobile money economies globally by 2020. Financial Technology companies are facing a competitive world especially in payment technologies, lending, retail banking and SME banking, and the technology startups against the traditional factors (McDowell, 2016). However there exists a great potential for technological innovations in the finance sector. Sectors such as health care also use this technology to enhance their business process and inspire innovation. Financial Technology companies have cost effective operations thus will enjoy a competitive edge since they are cost effective and have fewer regulations as compared to the traditional finance sector. Financial Technologycompanies will pave way for more transparent and efficient operations through the digital innovation platform.

The untapped financial market in Kenya is still large, which provides an opportunity for the thirty eight Financial Technology companies to venture in. However, the increasing number of companies in the industry, globalization, financial innovations development by commercial banks (Pesapal) and the increasing customer demands has led to a higher level of competition for profitability and market share. For the company to remain competitive in the Kenya market, it needs to adopt strategies that will counter the changing business environment (Shehada & Farmbry 2010).

1.2 Research Problem

Businesses that are expanding into international markets need to have strong innovation plans in place to succeed. Using these strategies, businesses may cultivate a culture of continual innovation and new product development, providing them an advantage in the marketplace.

Firms must adapt to their consumers in order to maintain a long-term connection. In a constantly changing and unpredictable world, innovation is essential for development and success (Muradi, 2011). Innovation is looking at company processes and operations from a different viewpoint, having forethought, being ready to take risks, and being adaptable. However, despite being innovative, competitive advantage is difficult to realize as companies are exposed to the global and industry competition (Cingula & Veselica, 2010). In addition, innovation is deemed risky, costly and the possibilities of being successful are considered very small which dampens the ability of enterprises especially the small firms (Tavassoli & Karlsson, 2015).

The Financial Technology industry comprises of companies that use innovation and new technology to compete in the market of traditional financial institutions and act as intermediations in financial services delivery. Financial Technology companies major in the solving of financial problems by use of technology. However, these companies have majorly invested in new ways of lending money to consumers and news ways of making or receiving payments (Polasik & Piotrowski, 2016). Rapid change in technology in the payments sector has changed the trend in the usage of the traditional banking models, by increasing financial inclusion as well as efficiency and effectiveness in financial services delivery (Ankem, 2014).

Several studies have been done on the innovation strategies, locally and internationally. In Malaysia, Samad and Aziz (2016) explored how innovation affected competitive advantage of Malaysian foods processing SMEs. Using the regression technique, the study established that competitive advantage was positively enhanced by innovation. In Canada, Muzaffer (2009) conducted a research to investigate the role of technological innovation in determining the competitiveness and profitability of the firms. The research was based on a cross-sectional survey. He found out that technological innovation has to be successfully managed putting into consideration internal and external factors of a firm. In Ghana, Saliu (2015) evaluated the influence of innovative mobile banking services on the financial inclusivity and social-economic status of the mobile money dealers in Kumasi City, Ghana. The outcome of the study pointed to a significant effect of innovative mobile banking services on financial access, income levels, employment characteristics, general living standards and the social-economic status of the mobile money dealers in Kumasi City.

Locally, In Kenya, Dore (2018) assessed innovation strategies and their effects on competitive advantage of health care products manufacturing companies. A descriptive survey was adopted and data collected from 22 manufacturing firms Nairobi using questionnaires. The study established innovation strategies significantly influence competitive advantage. The research, on the other hand, concentrated on industrial enterprises. Kariuki (2017) examined the effect of Kenyan commercial banks' innovation strategy on their competitive advantage. A descriptive survey was adopted and questionnaires for used for data collection from managers of the 44 Kenyan commercial banks. It was found that market innovations positively affected the banks competitive advantage. In this investigation, commercial banks were the focus.Auma (2014) looked at the impact of innovation on the competitiveness of Kenyan horticulture processors and exporters. The regression results showed that marketing as well as production innovations significantly affected the sampled firms' competitive advantage.

The study, on the other hand, focused on industrial firms.Kariuki (2017) examined the impact of Kenyan commercial banks' innovation strategies on their competitive advantage. Contextually, the empirical studies reviewed focused on innovation strategies and competitive advantage in other contexts other than the Fintech companies Kenya. Thus, this research aims to fill in the gaps in our understanding about Fintech businesses in Kenya by identifying their innovation tactics. The research topic is: What is the effect of innovation strategies on the competitive advantage of Kenyan financial technology companies?

1.3 Research Objective

The purpose of the research was to investigate the influence of innovation activities on the competitive advantage of Kenyan financial technology enterprises.

1.4 Value of the Study

The findings of this study bolstered Porter's theory of competitive advantage as well as the diffusion of innovation theory. The study further added on to the on empirical evidence on innovation strategies, competitiveness and present an avenue for additional studies on the concept of innovation. It also adds to the previously existing body of knowledge of service industry academics by offering fresh information. It will inform the readers how to overcome innovation strategies challenges.

Second, the study findings shall be of importance to policymaking institutions in Kenya to develop strategic policies, which encouraged innovation by Financial Technology companies in Kenya. Various policy maker in the industry including Communication Authority of Kenya,Central bank of Kenya and relevant government bodies overseeing the operations of the Financial technology companies may use the study recommendations to develop strategies on innovative practices.

Finally, this study's findings had significance to the strategic management practice by giving recommendations on how to enhance innovative strategies and competitiveness. Managers had better understanding and appreciate the importance of innovation in a firm. It is important to note that financial technology is critical to achieving Kenya's Vision 2030 strategy and is a critical enable in the growth of the economy. Financial technology sector actually claims to have contributed 6% of Kenya's 2019 GDP (Alushula, 2020).

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter provides research on the link between innovation strategies and competitive advantage, relying on academic theories to achieve this purpose.

2.2 Theoretical Foundation

The study was anchored on these theories: diffusion of innovations theory and Porter`s theory of competitive advantage.

2.2.1 Diffusion of Innovations Theory

The Diffusion of Innovation (DOI) concept was created by Rogers (1962) and discusses how invention spreads over time amongst individuals in a collective system through particular channels (Murray, 2009). The DOI proposes five innovative features which either increase or decrease the acceptance of innovations, namely compatibility, trialability, relative advantage, complexity and observability (Perry 2006). Rogers created the categories of adapters that make up the continuum of innovation: innovators who are more the earliest adapters, the early adopters, early majority, late majority, and lastly laggards (MacVaugh & Schiavone, 2010).

The theory explains that innovation gradually spreads within a single market (user system) where potential users exchange information and views on new technologies via channels of communication (MacVaugh & Schiavone, 2010). The theory states that adoption of new technologies can be applied in three areas. The industry/market sector, which is the (macro) area for the introduction of new technologies. The second (meso) element that covers a set of relations that make up the social system into which potential adoptive innovators are placed. Finally, the individual (micro) aspect, the third analysis level that facilitates the understanding of the innovation process (Rambocas & Arjoon, 2012).

The relevance of this theory in the current context is that innovation has been a key player in the growth and expansion of the financial technology space it is indeed an appropriate time to study the strategies that companies in this sector have adopted. For an organization to achieve a competitive advantage, the five types of innovation will depend on the four dimensions of innovations. The theory has also been seen as limited in its view of the operating environment of organizations. Like other theories of the business cycle, this theory leaves out other factors that cause fluctuations in the business environment. Innovation is not the sole factor, rather is only one of the factors that cause fluctuations in the environment (Megha, 2016).

2.2.2 Porter's Theory of Competitive Advantage

One of the study's main assumptions is the notion of competitive advantage developed by Michael Porter in 1980. The source of competitive advantage varies from industry to industry, and even within industries, according to the theory of competition. Porters (1980) stated that an organization may establish an impregnable position in the market by working alone or in concert with other organizations in the same industry to outperform the competition (Thompson, Strickland, and Gamble, 2007). The competitive advantage concept was coined by Day in 1984. He said that a company's strategy might help it retain its market position.Competitive advantage was confirmed in 1984 by Porter who emphasized the four basic sorts of advantages that a business might have in order to maintain long-term sustainability.

Porter's Michael Generic competitive tactics include cost management, distinctiveness and emphasis. In cost management, a company becomes the low-cost manufacturer in its industry. This may involve achieving economy of scale, patented software, favoring access to raw resources and other considerations. If a business can achieve an overall cost lead and sustain it will be more than average manufacturer in its industry if it is able to manage prices at or near to average industries. (Porter, 1985).

It is possible for a corporation to compete on the basis of its capacity to do things differently than its rivals.The low-cost strategy is based on the belief that a corporation may gain a competitive advantage by providing products or services at the lowest possible cost. A niche strategy is one that focuses on a certain product or service in a smaller market. All of these need significant attention to achieve a competitive edge (Papulova & Papulova, 2006; Porter, 2004).

This theory offers an appropriate framework for the analysis of telecom enterprises in Kenya's innovation strategies and competitive advantages.According to Barney (1991), the Five Forces Model's major flaw is that it just provides a list of factors that might be useful or unsuitable for a company. This tool, like other scenarios like the Swot Analysis framework, is just the beginning of a comprehensive examination of organisation's performance.

2.3 Innovation Strategies

According to the studies of Adriopoulos and Dawson (2009) it is argued that innovation can takes many forms but they are categorized into four innovation strategies as follows: strategies in product/ service innovation, process innovations, market innovations and organisational innovations. An innovation strategy in a firm is a plan to increase profit and market share through product and service innovations and this will depend on the best approach to be used in creating solution which must indicate whether it is product improvement or a disruptive or breakthrough innovation. Innovation strategies considered under this study include strategies in product, technological, marketing, management and process innovations.

Product innovation strategies involve idea creation, development and initiation of a satisfactory or management that is current in the market or has been wholly enhanced in connection to its features or applications. According to Tavassoli and Karlsson (2015) it is observed that product innovation strategies integrate analytical improvements in mechanical confirmation, division and substances, joined, or eases of use among different capacities. It is perceived that technological advance, constant change in customer tastes and preferences, shortening of item life cycles and expansion in competition rivalry drive Product innovation strategies. Product innovation offers an organization good potential protection from business competition and threats in the market. In the studies of Ngirigacha and Bwisa (2013) there is clear evidence provided that a significant and positive correlation exists between product innovation and performance in business enterprise.

According to Munyoroku (2014) it is observed that most firms succeed due to processes in operations which are efficient and the resultant increased investments in technologies that intensify firm internal efficiencies. Therefore it is noted that identification and exploration of new revenue opportunities and improvement of customer satisfaction through reliable delivery should be supported by adoption of technological innovation strategies. Technological innovation strategies entail systems adoption such as ERP systems with provision of capabilities that give support and increase processes associated with production. It is also observed in the study of Valacich and Schneider (2012) that systems should also give aid in improvement of firm activities by automating regular tasks such as in order management.

The study of Tavassoli and Karsson (2015) puts it that marketing innovation strategies entail putting into effect new methods and models of marketing that would greatly change product design, packaging, placement and pricing. Innovation strategies in marketing strive to meet needs of customers, new markets opening or positioning of the firm's product as new in the market to increase sales of the firm thus boosting income. Strategies in marketing innovation that are commonly developed by organizations include; strategies in market pricing, product offering, properties design, product placing and promotional activities. In the study of Hong (2015), it is stated that innovative marketing strategies spur improvement of brand connectivity and experiences with the customers and thus apply effect on brand marketing endeavours which position brands at the centre of customer perception.

Process innovation is in most cases focused on the way innovation is applied on the organization and execution process that results to development of new products or service. Process innovation encompasses customer services, strategic planning, employee assessment and project management(Tavassoli & Karlsson, 2015). Bharadwaj, Fahy and Varadarajan (2015) indicated that process innovation increases the capability of using advance technology during production process which allows organization to reduce their overhead and cost of production. Organizations which emphasize on process innovation and the greater capability to implement process innovation are in position to realize better business environment response and they are in best position to build more capabilities that is needed to achieve competitive advantage (Jimenez & Vall, 2011).

In management innovation strategies there is a mixture of process management innovation and change of management which refers to products, processes in business and innovations in organizations. There are a variety of internal and external elements that impact the selection of superior strategic innovation in strategic management innovations. Organizational and management ability plays a central role to nature innovation which also depends on the ability of organization to perform it rather than making changes to give it innovative radical approach

2.4 Determinants of competitive Advantage

Many academics have determined that certain kinds of competitive advantage cannot be readily copied, allowing the company to gain long-term advantages. As a result of this, the notion of resource-based competitive advantage and industrial organizations (IO) has grown over the last several years, resulting in the development of a sustainable competitive advantage (SCA). Consequently, the idea of competitive advantage is seen as having two components: the first is the concept of better performance as a relational metric in an industry, and the second is the notion of long-term viability.A company's above-average results may be seen as reasonable by comparing them to the industry's average, but the idea of longevity is not visible.

Peteraf, (2013) noted that the key competitive advantage indicators are presented as regards the cost of tangible asset. Porter (1996) claimed that competitive advantage is contingent upon three primary characteristics: distinctive characteristics, low cost, and concentration. Porter further stressed that competitive forces may be handled on the basis of the danger of replacements, strong and demanding consumers, new entry threats and competition, as well as dominant providers. In 2012, Barney and Hesterly expressed their view that there were two types of organizational competitiveness: temporary and sustained competitiveness.

Distinguishing a product from its competitors and the company's own product line is a key component of differentiation, which aims to make a product more appealing to target consumers by making it look unique from a comparable rival product and the company's own product mix (Kotler & Armstrong, 2012). It may also involve making minor changes to product packaging or advertising theme to position the product in the market (Chiliya,Herbst & Roberts,2009).The differentiation utilizes its unique competitive advantages such as design, expertise and experience to produce superior products for a specific market segment.

Focus entails concentrating on serving a few selected market segments well instead of going after the whole market (Kotler & Armstrong, 2012). Nichers target one or a few market sub segments. According to Davidson (2008), an organization that pursues this strategy must target a specific market niche in the industry. Focus can be highly profitable since the nicher knows its customers so well that it meets their needs better than competitors and builds a lot of skills and customer loyalty (Kotler & Armstrong2012).Nichers can charge substantial markup due to added value to customers thus gaining high net profit margins by charging premium prices(Kotler & Armstrong, 2012).The nicher needs to build competitive strategies to defend itself against major competitors when niche markets grow.

2.5 Innovation Strategies and Competitive Advantage

Ngugi (2015) researched innovations in mobile banking and competitive advantage in Kenya using a descriptive research methodology and secondary data between 2006 and 2014. He applied multiple regression to examine the association between competitive advantage and innovations in mobile banking and established that there's a positive linkage and that innovations in mobile banking services have resulted in the deepening of financial services in Kenya. The context of the study by Ngugi (2015) was banks thus contextual gap.

Kuncoro and Suriani (2018) examined how product innovation affected rabbit meat merchants' competitive advantage. Questionnaires were used for collection of data from 110 merchants where the Structural Equation Modelling with Partial Least Square were used for analysis. The findings documented that product innovation positively an significantly affected firms' competitiveness. Additionally, product innovation had a significant and direct influence on market driving while market driving significantly and positively influenced sustainable competitiveness. The study's context was rabbit meat merchants and fintech companies thus contextual gap.

Wambua and Datche (2017) use a Case Study of Equity Bank Mombasa County, Kenya to delve into the innovative factors that affect financial inclusivity in the banking industry with key focus on the perceived risk, user friendliness, trust and confidence and anti-money laundering requirements on innovative delivery channels. The descriptive survey research design with both qualitative and quantitative approaches was applied for the study. Data was analyzed using both correlation and descriptive analysis using the Statistical Package for Social Scientists (SPSS). The study established that innovated distribution channels are underutilized, banks rolling out new distribution channels including Agency banking, M-banking and E-Banking still have to make long queues in the banking halls especially at customer service and inquiry counters the existence of innovated channels. The study's context was case study of banks and analysis was carried out using quantitative tools thus contextual and methodological gaps.

Saliu (2015) evaluated the influence of innovative mobile banking services on the financial inclusivity and social-economic status of the mobile money dealers in Kumasi City, Ghana. His study sample was 104 participants selected using the Statistical Package for Social Sciences (SPSS) from among the population of mobile money dealers in Ghana's Kumasi City. The outcome of the study pointed to a significant effect of innovative mobile banking services on financial access, income levels, employment characteristics, general living standards and the social-economic status of the mobile money dealers in Kumasi City. The study depicted a strongly positive correlation between innovative mobile banking and financial inclusivity. However, the study used quantitative tools for analysis and context was banking services making it impossible to generalize the finding to fintech companies.

In Kenya, Dore (2018) assessed innovation strategies and their effects on competitive advantage of health care products manufacturing companies. A descriptive survey was adopted and data collected from 22 manufacturing firms Nairobi using questionnaires. The regression model found that 88.0 percent of the variance in competitive advantage was accounted for by process, product, technology, and market innovations. The study concluded that innovation strategies significantly influence competitive advantage. The study however focused on manufacturing firms. Kariuki (2017) examined innovation strategy and its influence on competitive advantage of Kenyan commercial banking entities. A descriptive survey was adopted and questionnaires for used for data collection from managers of the 44 Kenyan commercial banks. Through the regression model, it was documented that both product and process innovations significantly affected the sampled banks competitive advantage. It was also found that market innovations positively affected the banks competitive advantage. This study however focused on commercial banks.

Samad and Aziz (2016) explored how innovation affected competitive advantage of Malaysian foods processing SMEs. The study sampled 220 firm using random sampling methods and questionnaires for collection of data. Using the regression technique, the study established that competitive advantage was positively enhanced by innovation. The context for this study was SMEs and also employed factor model as opposed to regression model. Analysis of innovation's influence on Kenyan horticulture processors and exporters was carried out by Auma (2014). Data was obtained via questionnaires from administrators of 49 firms and the multiple linear regression adapted for data analysis. The regression results showed that marketing as well as production innovations significantly affected the sampled firms' competitive advantage. The focus of the study was horticultural processing and export companies and quantitative tools were used for analysis.

There have been several studies on innovation strategies in Fintech sector but some of these were carried out in other parts of the world. The environment in the USA and other regions of the world are so different from Kenya and the findings cannot be applied in this context without further studies. An important component that was not addressed in these local research was how innovation initiatives impact company performance. Because of this, there is a vacuum in information that this research will attempt to fill.

CHAPTER THREE:

RESEARCH METHODOLOGY

3.1 Introduction

This chapter discussed the technique used to conduct the research. There is a lot of emphasis on design of research, population, data gathering methods, and data analysis. All the above are aimed at ensuring that the methods used are reliable and verify that collected data is unbiased for the research.

3.2 Research Design

Innovative techniques were examined using a descriptive research approach in this study.

To conduct this study, it is ideal to employ a descriptive research design since it is both exact and precise, as it requires the meticulous description of events in a thorough and well-planned way. The where, what, who, when, and how of occurrences were all pinpointed thanks to descriptive research methods. When applied to this study, the descriptive research design will be useful as it will help in the identification of the existing relationship between the independent variables (product, technological, marketing, management and process innovations and the main dependent variable in the study (competitive advantage).

3.3 Population of the Study

Kumar (2005) defines the population as the group, family, or electorate in the city from whom a small number of family members, students, or voters are chosen to reply to your inquiry.According to the CAK report, the study's target demographic will be 91 fintech businesses in Kenya (2019). The above research will use a census survey.

3.4 Data Collection

This study used both primary and secondary data.A systematic questionnaire was used to collect primary data.There are some closed-ended questions in the survey. The first portion included the company's fundamental information, while the second section provided the innovation plans, the third competitive advantage. The researcher used research assistant to issue questionnaires to various fintech companies in which the research assistant was to drop the questionnaire and come to collect later. Secondary data was collected for information relating to the various companies such as their published financial results.

3.5 Data Analysis

After data collection was complete, completed questionnaires were reevaluated to verify consistency.Numerous statistical techniques such as editing, tabulation, and coding were used to ensure that the data was error-free and to identify any outliers.Measures of central tendency (mean) and dispersion were used to analyse the data (variance and standard deviation).Pie charts and bar graphs were used to depict the data.To ascertain the association between the variables, the multiple linear regression model shown below was utilized.

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + e$$

Where:

Y = Competitive advantage

β_0 = Model`s constant β_1 to β_4 = Regression coefficients;

X_1= Product Innovation X_2= Technological Innovation X_3 = Market Innovation

X_4 = Management Innovation X_5 = Process Innovation

e = Error term.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND DISCUSSION

4.1 Introduction

The chapter includes statistical analyses and discussions of research findings on innovation strategies and competitive advantage.

4.2 Response Rate

A response rate of 57.142 percent was obtained from the 91 questionnaires that were sent out, with 52 of them being returned for data processing. The findings support Mugenda and Mugenda's (2013) assertion that rates higher than 50% are acceptable in analyses. Babbie (2010), on the other hand, finds a return rate of 60% to be acceptable, and a return rate of 70 to be exceptional. Analysis of the data revealed that the results were adequate.For this reason, data analysis was carried out after receiving a sufficient response rate.

4.3 Organizational Characteristics

This section is dedicated to firm's basic details. The data aided in comprehending the company' background details under consideration. It requested information on the company's time of operation, number of employees and ownership structure.

4.3.1 Period of operation

The duration of operation of the financial technology firm was given by respondents as specified in Table 4.1.

Table 4.1: Period of Operation

Years	Frequency	Percent
Less than 4 years	25	48.08
4-8 years	20	38.46
Above 8 years	7	13.46
Total	**52**	**100.0**

Source: Field Data (2021)

Table 4.1 depicts that most of financial technology firms have been in operation less than 4 years at 48.08%, between 4-8 years at 38.46 % lastly 13.46 % above 8 years. Most financial technology companies are new to Kenya's market, and financial technology itself is a relatively new idea in the country.

4.3.2 Number of Employees

The goal of the research was to figure out how many people work for financial technology firms. Table 4.2 depicts responses as gathered from respondents.

Table 4.2: Number of Employees

Employees	**Frequency**	**Percentage**
Less than 50	15	28.85
50 –100	25	48.81
Over 150	12	23.08
Total	**52**	**100.0**

Source: Field Data (2021)

Table 4.2 depicts that most of financial technology firms have employees between 50-100 at 48.81,followed by less than 50 at 28.85% lastly over 150 was 23.08%.This implies that most fintech sector players are able to operate on a small scale of staff.

4.3.3 Ownership Structure

The research's objective was to ascertain the ownership of financial technology enterprises. Table 4.2 depicts responses as gathered from respondents.

Table 4.3: Ownership Structure

Years	Frequency	Percent
Private	42	80.77
Publicly listed	10	19.23
Government owned	0	0
Total	**52**	**100.0**

Source: Field Data (2021)

Table 4.3 depicts most of financial technology firms are privately owned at 80.77%, followed by publicly listed at 19.23% and there is no financial technology firms owned by government. This implies that most financial technology firms are privately owned.

4.4 Innovation Strategies

The independent variables of this research were innovation strategies. It was essential to determine the opinions of respondents on their organization's innovation initiatives. The innovation methods have been assessed at a 5-point scale of Likert and the responses are required to either agree on "Not at all," "little degree" and "moderate degree" or “large degree”, "very large degree". For each question, the most favorable answer was given 5 points, followed by 4, 3, 2, and 1 for the least positive. This research utilized a mean value of 4.0-5.0 for large, 3.0-4.0 for moderate, 2.0-3.0 small, and 1.0-2.0 for did not agree. The financial technology firms innovation initiatives were evaluated using a total of 20 statements.

4.4.1 Product Innovation

The participants were provided with five statements on product innovation and asked to indicate their level of agreement with each statement. Table 4.4 depicts the outcome.

Table4. 4: Product innovation

Statement	N	Mean	Std. dev
Your company's research and development efforts generate new information or address scientific or technological issues.	52	3.57	0.99
The company's goods are updated to meet changing client tastes and preferences.	52	3.73	1.06
The organization introduces new or significantly improved products.	52	4.18	0.95
The firm develops goods that may not be lucrative in the near term but will benefit the company in the long run.	52	3.40	1.05
Customers' tastes and preferences vary, therefore the company adjusts its offerings accordingly.	52	3.00	1.02
Composite mean	**52**	**3.57**	**1.01**

Source: Field Data (2021)

Organization introduces new or significantly improved products having a 4.18 as mean and a 0.95 as standard deviations as depicted in Table 4.4. Having a 3.73 as mean and a 1.06 as standard deviations, it was also discovered that the business adjusts its goods to suit changing consumer tastes and preferences. Research and development activities carried out by firms in order to generate new information or to address scientific or technological issues having a 3.57 as mean and a 0.99 as standard deviations as espoused by survey data. While the companies develop new goods that aren't immediately lucrative, their goal is to acquire a competitive edge in the long term, which is why they do it. Using this data, the average was 3.40, and the standard deviation was 1.05. In addition, issues having a 3.00 as mean and a 1.02 as standard deviations, the businesses modify their services to better represent changing consumer tastes and preferences.. Overall, the mean was 3.57 which implies that many financial technology firms embraced product innovation to moderate degree.

4.4.2 Technological Innovation

Technology innovation statements were provided to the participants and asked to indicate their level of agreement with each statement. Table 4.5 depicts the outcome.

Table 4.5: Technological Innovation

Statement	N	Mean	Std.dev
Creating new product placement methods	52	4.20	0.89
Increasing investment in innovative technology	52	4.30.	0.92
Automating routine tasks	52	3.52	1.08
Changing design properties	52	3.80	0.99
Adopting new innovative technology	52	4.11	1.10
Composite Statistics	**52**	**4.02**	**0.99**

Source: Field Data (2021)

A mean of 4.30, a standard deviation of 0.92, and a standard deviation of 1.10 are shown in Table 4.5, which demonstrates rising investment in innovative technology, establishing new product placement strategies, and adopting new innovative technology, respectively.With a mean 3.80 and a standard deviation of 0.99. Automating routine tasks with a 3.52 as mean and a 1.08 as standard deviations. Overall, the mean was 4.02, indicating that technical innovation has a significant impact on competitive advantage.

4.4.3 Market Innovation

Participants were asked to score their level of agreement with five assertions concerning market innovation.Table 4.6 shows the final result.

Table 4.6: Market Innovation

Statement	N	Mean	Std. Dev
The organization renovates the methods of promoting existing and/or new services provided.	52	4.11	1.17
The organization renews general marketing management activities.	52	3.34	1.19
The business renews distribution routes, but does not change the logistical procedures connected to product delivery.	52	3.73	0.98
The company is attempting to predict future industry trends to develop suitable tactics	52	3.23	1.07
The company seeks possibilities based on future consumer demands and develops solutions to fulfill these requirements.	52	3.90	0.89
Composite Statistics	**52**	**3.66**	**1.06**

Source: Field Data (2021)

Firms refresh methods used to promote current and/or new service provided by Mean 4.11 and std deviation 1.17. The companies are also looking for possibilities based on future requirements of the customers and are developing goods that can fulfill these demands, which show an average difference of 3.90 and 0.89. In addition, businesses refresh the distribution channels, but do not change logistical procedures linked to product delivery having a 3.73 as mean and a 0.98 as standard deviations. Renewing general marketing management activities had an average of 3.34 and a standard deviation 1.19. Finally, the companies attempt to predict future market trend in order to develop suitable strategies, having a 3.23 as mean and a 1.07 as standard deviations. Market innovation approach has been used by numerous financial technology companies to a modest degree, according to the overall mean of 3.66.

4.4.4 Management Innovation

Each of the five assertions on management innovation was given to the participants and they were asked to indicate their level of agreement with each statement.Table 4.7 shows the findings.

Table4.7: Management Innovation

Statement	N	Mean	Std Dev
The firm periodically changes its structure to enable team work	52	4.11	.504
The company promotes cooperation across various departments so as to speed up the invention process and get more feedback from the product	52	4.54	.505

released			
The firm has upgraded its administrative system	52	4.63	.547
The company uses analytical techniques to assist decision-making processes	52	4.23	.798
There is increasing investment in innovative technology	52	4.26	.611
Composite Statistics	**52**	**4.35**	**.652**

Source: Field Data (2021)

In regards to Table 4.7, the firms have upgraded their administrative system with a mean 4.63 and std deviation 0.547. The companies also promote cooperation across various departments to speed up innovation and to get more input on the product being released having a 4.54 as mean and a 0.505 as standard deviations. Investments in new technologies are rising, with a mean of 4.26 and a variation from 611. In addition to this, the company uses analytical techniques to assist decision-making having a 4.23 as mean and a 0.798 as standard deviations. Finally, companies are changing their structure regularly to allow teams to operate with a mean difference of 4.11 and 0.504. The overall mean was 4.35 which implies that many telecommunication providers embrace management strategy to a great extent.

4.4.5 Process Innovation

Five statements about process innovation were presented to the participants, and they were asked to indicate their degree of agreement. Table 4.8 shows the results of the study.

Table 4. 8: Process Innovation

Statement	**N**	**Mean**	**Std. dev**
The organization introduce new ways of producing services	52	4.18	0.95
The organization acquires existing know-how, copyrighted works, hence improved processes	52	3.00	1.02
The organization engage in acquisition of advanced equipment that result into better improvement process	52	3.57	0.99
The organization identifies in order remove non value adding activities	52	3.40	1.05
The organization has improved logistics, delivery or distribution.	52	3.73	1.06
Composite mean	**52**	**3.57**	**1.01**

Source: Field Data (2021)

The organization introduce new ways of producing services so 4.18 as mean and a 0.95 as standard deviations as depicted in Table 4.5. Having a 3.73 as mean and a 1.06 as standard deviations, the organization has improved logistics, delivery or distribution. The organization engage in acquisition of advanced equipment that result into better improvement process a 3.57 as mean and a 0.99 as standard deviations as espoused by survey data. Mean and standard deviation were 3.40 and 1.05 respectively, indicating that the company was able to identify non-value-adding activities. In addition, the organization acquires existing know-how, copyrighted works, hence improved processes having a 3.00 as mean and a 1.02 as standard deviations. The overall average was 3.57, which indicates that financial technology companies have adopted process innovation to a modest degree.

4.5 Competitive Advantage

Under this research, a firm competitive advantage was a dependent variable. The respondents' opinions on the competitive advantage of their company had to be established. Using a 5-point Likert scale, participants were asked whether they agreed that the competitive advantage was either "to a very big degree," "large degree," "medium degree," "small degree," or "no at all." The answer to each question which identified the highest favorable reaction for these activities was assigned 5 points, and then 4, 3, 2, and 1, correspondingly, to the least positive. The following analysis has been espoused to distinguish the extent: mean value of 4.0<50.0 to a large, a moderate extent of 3.0<4.0, a small extent of 2.0<3.0 and an average score of 1.0<2.0 to a small degree. Financial technology companies' competitive advantages were assessed using five statements.

4.5.1 Cost Leadership Strategy

The participants were furnished with five questions on Cost Leadership Strategy and prompted to indicate their degree of agreement with each of them as specified in Table 4.9.

Table 4.9: Cost Leadership

Statement	N	Mean	Std dev
The firm reduces its operational costs	52	4.63	0.487
The firm ensure tight controls for overhead costs	52	4.40	0.493
The company charges cheap pricing because of lower operating expenses and/or overhead costs	52	4.37	0.498
The company offers lower consumer pricing than our rivals	52	4.50	0.497
The firm adopts latest technology in our operations	52	4.40	0.456
Mean	**52**	**4.46**	**0.4862**

Source: Field Data (2021)

In relation to Table 4.9, organizations reduce their cost of operation having a 4.63 as mean and a 0.487 as standard deviations. The company offers lower consumer pricing than our rivals as shown by a mean of 4.50 and std deviation 0.497. Further, the organizations adopt the latest technologies in their operation having a 4.40 as mean and a

0.456 as standard deviations. The organizations also ensure that they have a tight control of their overhead cost having a 4.40 as mean and a 0.493 as standard deviations. A mean of 4.37 was found with a standard deviation of 0.498.The total mean was 4.46, indicating that many financial technology businesses heavily rely on cost leadership.

4.5.2 Focus Strategy

The participants were furnished with five questions on focus strategy and prompted demonstrate their degree of understanding. Table 4.10 depicts the outcome.

Table 4.10: Focus

Statement	N	Mean	Std dev
The company is only concerned with selling goods to a certain market segment.	52	4.30	0.456
We create innovative products and services to fulfill the demands of this niche market.	52	4.23	0.432
We've expanded our business to include areas where consumers live.	52	4.42	0.433
As a result of consumer demand, we modify our goods and services.	52	4.57	0.443
Mean	**52**	**4.38**	**0.440**

Source: Field Data (2021)

The businesses having a 4.57 as mean and a 0.443 as standard deviations in Table 4.10 alter their goods and services in response to their specialized consumer needs. The organizations also extend their business to locations where their customers come from as depicted having a 4.42 as mean and a 0.433 as standard deviations. Further, the organizations have a focus of selling their products to a particular market niche only having a 4.30 as mean and a 0.456 as standard deviations. Lastly, the firms innovate their products and services for this niche market having a 4.23 as mean and a 0.432 as standard deviations. The overall mean was 4.38 which implies that many financial technology firms embrace differentiation strategy to a great extent.

4.5.3 Differentiation Strategy

The participants were furnished with five statements about differentiation strategy and prompted to demonstrate their degree of understanding. Table 4.11depicts the outcome.

Table 4. 11: Differentiation

Statement	N	Mean	Std dev
Our business is strategically located	52	4.32	0.467
We have an edge over our rivals because of our reputation.	52	4.43	0.454
The firm offers suitable business timing (operating days/hours)	52	4.53	0.456
The firm offers superior customer service and support	52	4.23	0.467
Mean	**52**	**4.38**	**0.461**

Source: Field Data (2021)

Table 4.11 shows that organizations provide suitable business timing, with a mean of 4.53 and a standard deviation of 0.456.With a mean of 4.43 and a standard deviation of

0.454, the organizations also have a reputation that gives them an advantage over their competitors.A mean of 4.32 and a standard deviation of 0.467 show that the organizations have a strategic location for their businesses. Lastly, the firms offer superior customer service and support having a 4.23 as mean and a 0.467 as standard deviations. The overall mean was 4.38 which implies that many financial technology firms embrace differentiation strategy to a great extent. For the total competitive advantage, the standard deviation and mean of 0.462 and 4.40 respectively indicate that the competitive advantage was at a high extent.

4.6 Correlation Analysis

Analyses of correlation were done to determine the link between the research variables. Competitive advantage and innovation initiatives were therefore linked for the first time. Table 4.12 shows the results of the analysis in this scenario.

Table 4.12: Pearson Product-Moment Correlations Results for Study Variables

		p	**T**	**M**	**MN**	**PR**	**CA**
	Pearson Correlation	1					
P- Product	Sig. (2-tailed)						
	N	52					
T- Technological	Pearson Correlation	.454**	1				
	Sig. (2-tailed)	.01					

	N	52	52				
	Pearson Correlation	.534*	.431*	1			
M- Market	Sig. (2-tailed)	.05	.05				
	N	52	52	52			
	Pearson Correlation	.556**	.454*	.241*	1		
MN- Management	Sig. (2-tailed)	.01	.05	.05			
	N	52	52	52	52		
	Pearson Correlation	.885**	.273*	.314**	.235*	1	
PR-Process	Sig. (2-tailed)	.01	.05	.01	.05		
	N	52	52	52	52	52	
	Pearson Correlation	.793**	.653**	.648**	.478*	.623**	1
CA-Competitive advantage	Sig. (2-tailed)	.01	.01	.01	.05	.01	
	N	52	52	52	52	52	1

**. Correlation is significant at the 0.01 level (2-tailed).

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

Source: Field Data (2021)

Product is positively related to competitive advantage (r=0.793) as indicated in Table 4.12. The association between Technological and compitive advantage is 0.653, with a significance level of 0.01. A 0.648 Pearson correlation coefficient and a 0.05 level of significance associated managemen with competitive advantage. Finally, Process shows a 0.623 Pearson correlation and a 0.05 p-value with competitive advantage

4.7 Regression Analysis

The determination coefficient (r2) and the coefficient β were utilized in regression analysis to determine how innovation initiatives promote the competitive advantage of Fintech businesses. An attempt was made to determine how much of a competitive advantage might be attributable to five different predictor factors using multiple regression analysis (product innovation, technological innovation, market innovation, management innovation and process innovation).

4.6.1 Model Summary

The impact of predictor factors on dependent variables were examined using analysis of multiple regressions. Table 4.13 provides a summary of the model.

Table 4. 13: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.784	.614	.594	.467

a. Predictors: (Constant), Product Innovation, Technological Innovation, Market Innovation, Management Innovation And Process Innovation

Source: Field Data (2021)

In Table 4.13 at significance level of 0.005, the outcomes show that R and R^2 were 0.784 and 0.614 respectively. Using R=0.784, we may conclude that creative methods and competitive advantage are strongly linked.

Predictive variables may account for 61.4% of variance in competitive advantage, whilst non-predictive factors account for 38.6% of the variance in competitive advantage.

4.7.2 Goodness of Fit of the Model

For the data, the researcher utilized a suitable regression model and conducted an ANOVA. Using 4.14 to illustrate.

Table 4.14: ANOVA

Model		**Sum of Squares**	**Df**	**Mean Square**	**F**	**Sig.**
1	Regression	.234	5	.056	1.244	.015[b]
	Residual	1.223	46	.045		
	Total	1.143	51			

a. Dependent Variable: Competitive Advantage

b. Predictors: (Constant), Product Innovation, Technological Innovation, Market Innovation, Management Innovation And Process Innovation

Source: Field Data (2021)

Table 4.14 shows the ANOVA findings. At a 5% significance level, the f statistic is 1.244, according to the table in this chapter. A p value of 0.015 <0.05 shows statistical significance. According to this, innovation strategies have a role to play in forecastingcompetitive advantage. .

4.7.3 Model Regression Coefficients

The presentation in Table 4.15 shows significant values, t-statistics, standardized and unstandardized coefficients.

Table 4.15: Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B (β)	Std. Error	Beta (β)		
	(Constant)	.153	.756		.202	. 001
	Product	.123	.269	.157	.0.46	.000
	Technological	.226	.165	.187	1.37	.000
1	Market	.245	.156	.167	1.57	.000
	Management	.150	.215	.197	.69	.000
	Process	.215	.134	.134	1.60	.000

a. Dependent Variable: Competitive Advantage

The regression coefficients illustrated in Table 4.14 show that a relationship exists between innovation strategies and competitive advantage of financial technology firms.

Product innovation posted $p=0.000 < 0.05$, technological innovation posted $p=0.000 < 0.05$, Market innovation posted $p= 0.000 < 0.05$ and management posting $p=0.000 < 0.05$. Process innovation posted $p= 0.000 < 0.05$.This Significance test was conducted at alpha=0.05 in which the significance exists when p records a value < 0.05. The results show that the parameters of innovation strategies possess a significant with competitive advantage.

The linear model then stands to be;

$$Y=0.153+0.123X_1+0.226X_2+0.245X_3+0.150X_4+0.215X_5$$

As per the findings, when all other independent factors are held constantly, increasing the product innovation parameter in relation to innovation strategies by a single unit will result to a 0.123 change in competitive advantage, increasing technological innovation parameter in relation to innovation strategies by a single unit will result to a 0.226 change in competitive advantage, increasing market innovation parameter in relation to innovation strategies by a single unit will result to a 0.245 change in competitive advantage. Change in management innovation, increasing management innovation parameter in relation to competitive advantage by a single unit will result to a 0.150.Finally increasing process innovation in relation to innovation strategies by a single unit will result in a 0.215 change in competitive advantage of financial technology firms.

4.7 Discussion of Findings

Financial technology companies were assessed to have somewhat embraced product innovation. Furthermore, new or considerably enhanced goods are introduced, and products are changed to match changing client tastes and preferences by the firm.

is related to organization success as it enables organizations to acquire dominant position in a competitive market. According to the findings of Shejeroo (2016), businesses that embrace product innovation in order to guarantee successful execution of innovation strategies are consistent with this conclusion.

Competitive advantage is greatly influenced by technical innovation, according to research.Statements such as: growing investment in cutting-edge technology and devising new product placement methods support this idea. These results corroborate with Tavassoli and Karsson (2015) technological innovation strategies entail systems adoption such as ERP systems with provision of capabilities that give support and increase processes associated with production. It is also observed in the study of Valacich and Schneider (2012) that systems should also give aid in improvement of firm activities by automating regular tasks such as in order management.

It was found out that financial technology enterprises welcomed market innovation to modest degree. This was confirmed by the following claims, the organization renovates the techniques of advertising current and/or new services supplied and the corporation investigates possibilities based on future client wants and creates solutions to satisfy these requirements. Long-term success in business depends on a company's ability to innovate in the market (Ren et al., 2010). Market innovation is crucial since it enables firms to grab market opportunities and at the same time helps a form in meeting customer needs. The competitive edge of a firm has been shown to be significantly impacted by management innovation.

This was supported by the following statements: the business occasionally adjusts its structure to encourage teamwork, and the company fosters collaboration across many divisions in order to speed up the innovation process and get more feedback from the product delivered. These findings are consistent with Tan & Nasurdin, (2011) Efficient and efficient management effort, better connections with employees, greater job and workplace happiness and improved working environment accomplish management innovation.

Process innovation has only a limited impact on a company's competitive edge, according to research. This was substantiated by the following statements: the organization pioneered new methods of service production; and the organization enhanced logistics, delivery, and distribution. These results corroborate with Bharadwaj, Fahy and Varadarajan (2015) indicated that process innovation increases the capability of using advance technology during production process which allows organization to reduce their overhead and cost of production.

According to the findings, innovation tactics and competitive advantage have a favorable relationship. So as to discover how competitive advantage is impacted by innovation strategies across Kenyan fin tech companies, regression analysis was used. The determination coefficient was determined as an excellent match for the data, with R^2=0. 672, indicating that it is a reliable predictor. The statistical significance of the entire model of regression was shown by the p-value of 0.000 (0.05). These results back with a research by Dodgson, Gann, and Salter (2008), which looked at the importance of innovative strategies in gaining a competitive edge in banking sector of Brazil. The outcome indicated that innovation strategies improve operational efficiency, adaptability, pioneering potential, invention, and management capability, all of which are competitive advantages.

The results of the research also pertain to the diffusion of innovation (DOI) theory hypothesis, which refers innovation gradually spreads within a single market (user system) where potential users exchange information and views on new technologies via channels of communication (MacVaugh & Schiavone, 2010).The study also support Porter`s theoryof competitive advantage that an organization may establish an impregnable position in the market by working alone or in concert with other organizations in the same industry to outperform the competition.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter outlines the study's findings, conclusions, recommendations, and limitations, as well as the suggestions made by the researchers. This is done in accordance with the study's objective.

5.2 Summary of the Findings

Innovation tactics were used to improve the financial technology firm's competitive advantages in Kenya. It was found out that most of Kenyan financial technology firm having been in operation for less than 4 years and have less than 100 employees. Most of the financial technology firm are privately owned.

The influence of technological and managerial innovation strategies on innovation strategies was shown to be considerable. Technological innovation encompasses increasing investment in innovative technology and coming up with new product placement strategies. Management innovation is accomplished via the firm periodically changes its structure to enable team work and the company promotes cooperation across various departments so as to speed up the invention process and get more feedback from the product released

It was found out that many financial technology firm embraced product innovation, market innovation and process at moderate extent. Product innovation forces organization to innovate new products due to changing needs and demands of the market place.

Market innovation is crucial since it enables firms to grab market opportunities and at the same time helps a form in meeting customer needs. The organization engage in acquisition of advanced equipment that result into better improvement process.

A connection exists between competitive advantage and innovation strategies, according to the research results. The regression model used in this research was shown to be a decent predictor in the regression analysis. The models was statistical significance, as demonstrated in a variance analysis by p-value fewer than 0.05. There was statistical significance in product innovation, technical innovation, market innovation, management innovation, as well as process innovation.

5.3 Conclusion of the study

Majority of the financial technology firm under review have a solid experience in Innovation strategies and most of the firms are privately owned. Most of the financial technology firm have been in existence for longer than eight years and have less than 400 employees.

The study concludes that financial technology firm embraced product innovation, market innovation and process at moderate extent. This is due to Customers' preferences and tastes vary, therefore the company adjusts its goods accordingly. The business renews distribution routes, but does not change the logistical procedures connected to product delivery.

Researchers found that innovation tactics are influenced by both technical and managerial innovation methods. The companies promotes cooperation across various departments so as to speed up the invention process and get more feedback from the product released. There is increasing investment in innovative technology.

Furthermore, the research indicated that product innovation, technical innovation, market innovation, management innovation, process innovation, and competitive advantage are strongly linked.Using Porter's theory of competitive advantage, the study's results support the dissemination of innovations.

5.4 Recommendations

An organization's rules and processes should be intended to encourage a high degree of employee involvement, comprehension, and dedication to the organization's goals and objectives.Employees are critical in putting a plan into action.

Competitive advantage is significantly influenced by technical and managerial advancements, according to the findings of this study. As a result, managers of the financial technology firm are urged to innovate their products and service offerings on a regular basis. The financial technology firm should upscale resources in development and research so that their products are of a better quality and diversity.

In order to maintain a competitive edge, financial technology companies should set rules that support and strengthen platforms for product innovation. It is also necessary to make investments in new product creation; quality improvement; research and development; and training in creative product activities.

The report also suggests that the industry map out precisely which components of innovation strategies are crucial to their sector and spend extensively in those areas so as to remain competitive. In order to compete in the Kenyan market, financial technology companies need to implement structural changes.

5.5 Limitations of the study

One of difficulties was that mid-level management personnel were the target respondents for the research. Many were extremely busy and strained due to the pressure at work, therefore there was not enough time to answer the surveys when the researcher provided them with the questionnaire. To guarantee that the questionnaire was properly completed, the instrument validity was checked to make sure aims of investigation are clear, brief and addressed before distributing them by email.

The onset of covid 19 necessitating people working from home and maintaining social distance limited the interactions the researcher could have with the respondents. Follow up questions had to be done remotely via a phone call or zoom meetings. These limitations further made it harder to adequately validate some of the responses as would have been the case in face to face meetings.

The research also has a further disadvantage because it focuses solely on innovative tactics. However, other variables are extremely important in obtaining a company's competitive edge.

5.6 Implications of the study

Researchers in this study were interested in finding out how financial technology companies innovate and how this affects their competitive advantage. The study's results are essential the telecommunication providers as they can use the conclusions and recommendations to enhance their innovation strategies and ensure sustained competitive advantage.

This information will allow policy-makers, trainers, consultants and institutions to design strategic initiatives, tools and actions which will encourage innovation by financial technology firms. The outcomes of study point out the strategies used by a fintech market leader thus other firms can adopt these or develop strategies on innovative practices which is in line with our findings.

Finally, the findings of the study further add on the empirical evidence on innovation strategies, competitiveness and the fintech sector and presents an avenue for additional studies on the concept of innovation.

5.7 Suggestions for Further Studies

This research is a cross-sectional study using a quantitative method. It simply recorded the views and impressions of participants. It was determined that cross-sectional study was the most efficient way to address these concerns given the time and money restrictions. Therefore, comparable research on the basis of qualitative methods such as interviews is necessary.

Further, this study only focused on fintech sector. This leaves gaps in the effect of innovative strategies on other sectors such as airline companies, large-scale farms, manufacturing firms, motor firms amongst others. Further investigation is needed on the impact of innovation initiatives on industry competitiveness.

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APPENDICES

Appendix I: Introduction Letter

April 2021

Masters Student- MBA

University of Nairobi

<u>RE: REQUEST FOR RESEARCH DATA</u>

I am a student at the University of Nairobi where I am undertaking a degree in Masters of Business Administration. I am obliged to present a research in my course work evaluation on **"INNOVATION STRATEGIES AND COMPETITIVE ADVANTAGE AMONG FINTECH COMPANIES".** To do so, your company is chosen to produce the necessary data for this research. This information is used only for academic purposes and your identity is not included in the report. The findings of the research will be used to you upon request.

Your participation and help would be greatly appreciated.

Thank you in advance.

Emily Mochama

Masters Student – Researcher

University of Nairobi

Appendix II: Questionnaire

The information gathered from this survey is meant for academic purposes only and is utilized in part for the implementation of a Masters Research project to assess the effects of Fintech Companies in Nairobi Kenya on innovation and competitive advantage in Kenya." All submitted information will be handled with maximum privacy. There are 6 parts.

Please choose the most suitable option.

1. In which of Fintech companies do you work? (Enter below)

____

2. For how long has the company been in operation? (Tick one)

Lessothano4oyears [ ]

4-8 years [ ]

Above 8 years [ ]

3. How many employees are there in your organization (tick one)

Less than 400 [ ]

401 - 1000 [ ]

Above 1,000 [ ]

4. What is the ownership structure of your company? (tick one)

Private [ ]

Publicly listed [ ]

Government owned [ ]

Section Two: Innovation Strategies

To what degree do you agree with the following assertions about your company's innovation strategies? Use the scale below to help you.: 1- No extent, 2- Little extent,o3- Moderate extent, 4-Great Extent, 5- Very great Extent.

Product innovation	**1**	**2**	**3**	**4**	**5**
The organization introduces new or significantly improved products.					
Customers' preferences and tastes vary, therefore the company adjusts its goods accordingly.					
Your company's research and development efforts generate new information or address scientific or technological issues.					
Customers' tastes and preferences vary, therefore the company adjusts its offerings accordingly.					
The firm develops goods that may not be lucrative in the near term but will benefit the company in the long run.					

Technological Innovation	**1**	**2**	**3**	**4**	**5**
Coming up with new product placement strategies					
Automating routine tasks					
Increasing investment in innovative technology					
Adopting new innovative technology					
Changing design properties					
Market Innovation	**1**	**2**	**3**	**4**	**5**
The organization renovates the methods of promoting existing and/or new services provided.					
The business renews distribution routes, but does not change the logistical procedures connected to product delivery.					
The organization renews general marketing management activities.					
The company seeks possibilities based on future consumer demands and develops solutions to fulfill these requirements.					
The company is attempting to predict future industry					

trends to develop suitable tactics					
Management Innovation	**1**	**2**	**3**	**4**	**5**
The firm periodically changes its structure to enable team work					
The company promotes cooperation across various departments so as to speed up the invention process and get more feedback from the product released					
The company uses analytical techniques to assist decision-making processes					
The firm has upgraded its administrative system					
There is increasing investment in innovative technology					
Process Innovation	**1**	**2**	**3**	**4**	**5**
The organization introduce new ways of producing srvices					
The organization has improved logistics, delivery or distribution.					
The organization engage in acquisition of advanced equipment that result into better improvement process					

The organization acquires existingknow-how, copyrighted works,hence improved processes					
The organization identifies in order remove non value adding activities.					

Section 3: Competitive Advantage

1. To what degree do you agree with the following assertions about your company's competitive advantage? Use the following scale: 1- No extent, 2- Little extent,3- Moderate extent, 4-Great Extent, 5- Very great Extent.

Cost leadership	1	2	3	4	5
The firm reduces its operational costs					
The firm ensure tight controls for overhead costs					
The company charges cheap pricing because of lower operating expenses and/or overhead costs					
The company offers lower consumer pricing than our					

rivals					
The firm adopts latest technology in our operations					
Differentiation	1	2	3	4	5
Our business is strategically located					
We have an edge over our rivals because of our reputation.					
The firm offers suitable business timing (operating days/hours)					
The firm offers superior customer service and support					
Focus	1	2	3	4	5
The company is only concerned with selling goods to a certain market segment.					
We develop new goods and services to meet the needs of this specific market segment.					
We've expanded our business to include areas where consumers live.					
As a result of consumer demand, we modify our goods and services.					

Appendix III: List of Financial technology Companies in Nairobi Kenya

1. 19. Impala Pay
2. 3G Direct Pay Group
3. Abacus
4. Afri Kash
5. Afrigroups
6. Afya Plan
7. Alliance Premium Services Limited
8. Alternative Circle
9. Amica Savings & Credit Cooperative Society
10. Bamba Pos
11. BitPesa
12. Bitsoko
13. BlockchainCybertech Limited
14. Branch
15. CA Payments
16. Caytree Partners
17. Cellulant
18. ChamaPesa
19. Chamasoft
20. Chase Iman
21. Cherehani Africa
22. Chura Limited

23. Circle Group Savings and Investment
24. CoinBox
25. Digiduka
26. Direct Pay Online
27. Direct Pay Online Group
28. Eastpesa
29. Eclectics International Limited
30. ESacco
31. FarmDrive.
32. Funtrench Limited
33. Ifarm360
34. ImpalaCoin
35. iNuka Pap
36. inVenture
37. Kanjwa
38. Kenya Commercial Bank Group
39. Kiba
40. Kocela
41. Kopo Kopo
42. Kwanji
43. Lelapa Fund
44. Lipa Card
45. Loniwa

46. M-Changa
47. Mobile Decisioning
48. Moripesh
49. M-Pesa
50. Musoni
51. myNGOVO
52. Netguardians Africa
53. OCharge
54. Once Sync Limited
55. Orion ImageCapital Communication
56. Packline Systems
57. Paysap
58. Paytree
59. PesaBot
60. PesaGuide
61. PesaKit
62. PesaPal
63. Pesatalk
64. Pezesha
65. Professional Digital Systems Limited
66. Quoxient Ltd
67. Ranis Capital
68. Regalia International (k) Ltd

69. RePay Africa
70. Ryanada Limited
71. Saada
72. Safepay Solutions Limited(LipaSpot)
73. Savekubwa
74. Shield
75. Sokohela
76. Superfluid Labs
77. Tala
78. Tanda
79. TangazoLetu Limited
80. The Kueq Limited
81. Tulaa
82. Turaco
83. Umati Capital
84. umba
85. Valuraha
86. WayaWaya
87. Zanifu
88. Zege Technologies
89. Zenka
90. Zipwallet
91. Zoa Tech Limited

Source:https://www.fintech.coffee/research/56

https://urbankenyans.com/fintech-companies

https://irishtechnews.ie/38-fintech-companies-in-kenya-to-look-out-for-in-2017/