



## Fintech Startups: What does the Future hold for Financial Institutions in Kenya?

Samuel Hakizimana<sup>1</sup>, Stephen Muathe<sup>2</sup>, Charity Wairimu Muraguri<sup>3</sup>, Victor Muithya<sup>4</sup>

<sup>1,2,4</sup> School of Business, Economics, and Tourism, Department of Business Administration, Kenyatta University

<sup>3</sup> School of Business, Economics, and Tourism, Department of Business Administration, Kenyatta University

### ABSTRACT

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Fintech startups play an important role, particularly where traditional financial institutions are unable to meet the growing need of the customers. Fintech startups combine IT and finance to develop financial services without the assistance of traditional financial institutions, but the sector is so fluid that startups must innovate continuously. This paper focused on Fintech Startups. The research was anchored on the balanced scorecard model, Schumpeter's theory of innovation, and the lean start-up framework. Existing secondary data on fintech start-ups was analysed. The findings indicated that Kenyan government regulations, user authentication, and Government bureaucracy remains a serious hindrance to the future of startups. However, with growth of Fintech startups in the country the future is promising and thus changing the land scape of the traditional financial institutions. The study recommends that the governments could allow Fintech startups to visionary new products and technology to meet underserved customer requirements while enforcing light regulations contact in the early phases. The tradition financial institutions should collaborate with the Fintech firms to strengthen their competitive edge and thus performance.

### KEYWORDS:

Fintech, Startup, Balanced Scorecard Model, Schumpeter's Theory of Innovation, Lean Start-up Framework, and Kenya

### 1.0 INTRODUCTION

For a start-up to remain competitive, innovation is inevitable (Shaughnessy, 2014). This is because the world of business has undergone a fundamental change as a result of internationalization and competitive dynamics. The consumer's demands, needs, and preferences for services and products from different firms are dynamic. These forces have influenced all businesses despite the sector and industry they belong to. The solution that many firms have put in place to endure viable in the marketplace is to critically examine their strategies (Mommen & Jilberto, 2017).

Otieno and Muathe (2022) revealed that innovative fintech startups play an important role, particularly where traditional financial institutions are unable to meet the needs at hand. Instead of depending on bettering competitor concepts. Domestic ideas that are unique are the most efficacious in expanding strategic edge. Technology and product

improvement innovation have been identified as significant factors influencing a startup's ability to compete. The assumption is that a business's aptitude to bring in fresh and easily imitated items or to bring new and minor improvements to current commodities, including the cellphone market, is correct.

Because the innovation process, process improvements, and the use of rival company innovation are insignificant, it is concluded that the innovativeness of creative fintech startups is centered on norms are established that leadership can integrate internally and over which they have direct authority, instead of depending on bettering competitor concepts. Domestic ideas that are unique are the most efficacious in expanding strategic edge. Thereby also, the engagement with the surroundings influences the influence of the business strategy and its implications on the profitability of startups (Ngigi, 2021). This is sustained by the "Schumpeter theory of innovation" which holds that an organization that wants to be competitive must be innovative. In the theory, Schumpeter (1934) noted that innovative firms are in a positive to establish new products and modify existing products and systems which helps to create more avenues for a competitive edge in a dynamic business environment (Chang, 2011).

*Corresponding Author: Samuel Hakizimana*

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Besides, the resource-based view theory suggested that firms leverage resources available to acquire and maintain a competitive advantage. The proponents of this theory noted that firms comprise bundles of intangible and tangible resources that aid a firm to have a competitive edge. However, having these resources at the firms' disposal is not enough to make a firm competitive. For an organization to be competitive, these resources must be rarely, imperfectly imitable, valuable, and without close substitutes (Barney, 1991; Penrose, 1959). According to Michael Porter's theory of strategic edge, the business in which a business organization continues to operate is defined by 5 influences, namely, the supplier's bargaining powers, barriers to new entry, buyers' bargaining power, and threats of substitute goods or services in the industry (Porter, 1979). Understanding this is crucial in establishing relevant innovative strategies to ensure growth and performance.

According to Bach *et al.* (2019), the association between modernization strategies and the startup's success has piqued the attention of decision-makers, scholars, and executives worldwide. The underlying principle is that firms should be encouraged to innovate to improve economic performance; increase sales, growth, and wages and create more jobs (Kemp *et al.*, 2015). Innovativeness is an important growth tool that helps to enter new markets, expand existing ones and offer a competitive edge to a company (Gunday, 2018).

Innovation strategy defines the work of invention and innovation and offers direction for the many innovation implementations; nevertheless, the effectiveness of innovation in facilitating firms to achieve their growth targets is frequently unclear, and raising revenue from technology is grossly inadequate if it's not controlled precisely (Oslo Manual, 2015). According to Kuratko (2015), Firms use innovation strategies to solve the problems they face while pursuing a comparative benefit.

Globally, innovation strategies have been one of the main focuses of businesses, with those that innovate constantly contributing to the growth of the economy. As such, it is not coincidental that countries like Japan, the USA, and other European Nations that are leading in investment in research and design or patent activity are the frontrunners on the economic growth ladder (Ahmed and Shepherd, 2012). In Turkey, research conducted by Karabulut (2015) indicated that the innovation strategy of Turkish manufacturing firms improved financial performance, growth and learning performance, customer performance, and internal business performance.

In Sweden, Karlsson and Tavassoli (2015) in their findings demonstrated that organizations that pick and can afford a sophisticated innovation strategy outperform organizations that choose not to innovate and those that adopt basic modernization approaches in terms of future productivity. In addition, it was found that not all complex strategies significantly affected the future productivity of a firm, but rather a few of them. Therefore, it is paramount that a firm

makes a purposeful choice of innovation strategy to adopt. In Nigeria, Talib and Kohar (2020), observations demonstrated a beneficial connection between entrepreneurial orientation and firm success. It was also established that this relationship is moderated by the education level of managers. The investigation carried out by Ikpe *et al.* (2021) new product development strategies and process technological capabilities have been revealed to have a beneficial effect on business performance.

Nakalembe *et al.* (2023) conducted their investigation on the start-up ecosystem in Kenya and noted that, during economic downturns, a comfortable situation and a concentrated system of laws will help start-ups reduce their risk net. Furthermore, Kenya's devolved governance system (county governments) sometimes adds additional tax levies and regulatory burdens to startups. According to the study conducted by Issau *et al.* (2021) in Ghana." The results revealed that the market innovation strategy significantly influences SMEs' performance in Ghana. However, an investigation also discovered that there is a negligible strong relationship between process entrepreneurial orientation and Innovation progress, and additionally between technology development and SMEs performance.

Despite its many obstacles, Kenya is one of the lower-middle-income countries that excel at innovation. The Ministry of Education, Science, and Technology, as well as the Ministry of Information and Communications Technology, were created to promote innovation and capacity building. The National Research Fund, Kenya National Innovation Agency, and the National Commission for Science, Technology, and Innovation were all established as a result of these ministries' establishment. Kenya Education Network is another important institution in the innovation ecosystem; it also functions as the National Research Network, facilitating the sharing of research and educational resources through a government-subsidized countrywide broadband network.

The findings from the study carried out by Nduati (2019) demonstrated that strategic innovation strategies, including product and market innovation strategies, significantly enhanced key business performance areas. Kahuthia and Gakenia (2018) researched the connection between innovation strategies and the success of Telkom Kenya Limited." The results revealed that process innovation positively influences performance. Process innovation helps the company to enhance the service and product quality services by using the equipment and technologies in a better way, which results in operational effectiveness and efficiency brand image improvement, market rank, and sales growth performance.

#### **1.1.1 Firm performance**

A business's effectiveness is the result of its business activity (Kotane and Kuzimina, 2017). According to Devinney and Yip (2009), it reflects the actual output of a business compared to the projected output. Therefore, it is a method of measuring what a firm has accomplished concerning its

objectives for a specific financial period. It is a standardization method that is employed to compare corporate performance. One distinguishing characteristic of the performance of a firm is that it does not only rely on profits and sales as performance indicators. Several methods are employed in measuring the firm's performance. The performance of SMEs is frequently measured using firm growth parameters such as sales, employees, assets, equity, and profits (Shepherd & Wiklund, 2009).

The most commonly used measure is financial performance. The financial performance focuses on the overall assessment of an organization's present financial position (Bernadin and Russel, 2009). Some of the financial measures include Return on Capital Employed (ROCE), Return on Investment (ROI), Return on Sales (ROS), Return on Equity (ROE), and Return on Assets (ROA) (Gormoma, 2014). Return on Investment evaluates the investment's efficiency or compares the efficiency of various investments. ROA points to the profit that is generated using the total asset employed. This implies that ROA gives an overview of management's efficiency in terms of generating profits using the firm's assets.

ROCE denotes the profitability of an institution's investments, whereas ROE is calculated by dividing average income by stakeholder equity. ROE and ROCE can be calculated using the financial accounts of the company (Gormoma, 2014). Whereas these metrics are employed to evaluate an organization's economic achievement, it is also prudent to employ non-financial measurements like dependability, operational efficiency, and service flexibility. This aids in the full determination of a firm's financial performance at a specified moment (Selvarajan, *et al.*, 2017). The most widely used performance measurement model, Kaplan's Balanced Scorecard (BSC) (Olsen, 2011), will be employed in this study. To accurately measure business performance, an effective performance measure should include both non-financial and financial information (Kaplana, 2009). Non-financial measurements influence how a firm performs in the future because they provide both internal and external information needed for a complete company evaluation. In other words, the firm may use non-financial indicators to measure consumer opinion, innovation, internal procedures, and learning to improve its long-term financial position (Olsen, 2011).

Firms that implemented the balanced scorecard method profited from increased competencies and improved knowledge, technology, leadership, and teamwork, among other things (Lesáková and Dubcová, 2016). Furthermore, when employed in a firm, the balanced scorecard approach provides strategic information in an organization setup. It also describes the strategic routes that will be followed in response to internal and external forces (Sharma & Djiaw, 2011). Consequently, the current study will employ the BSC model to collect financial information, such as profitability as measured by non-financial data and ROE like customer

perception, learning, and growth, as well as internal procedures.

### **1.1.2 Innovation Strategies**

Innovation is a major feature of the behaviour of entrepreneurs that have been closely associated with firm performance (Burke & Myers, 2007). It is one of the strategies that are adopted by different companies in various industries to create a market niche for their business. Firms innovate by adopting new management practices and technologies that help them to enhance performance (Johnson & Whittington, 2011). Innovation strategies; thus, entails penetration into new markets, redefining the existing market through values of commodities, and creating value for businesses (Gebauer & Truffer, 2012).

Consequently, with the ever-changing aspect of the globalized economy, there is continuous pressure on firms to innovate by establishing new products and services. Companies use different strategies to achieve their goals and objectives. A strategy refers to a collection of actions and decisions that are incorporated by the management in the daily activities of the business to complete superior performance and reasonable benefit over competitors in the market (Parthasarthy, 2007). There are different innovation strategies applied in businesses. However, because of their real significance in start-up businesses, new product development, innovativeness, new markets, and strategic organizational strategies will be used in this study.

Generally, a product innovation strategy refers to a master plan that is used to guide a business' new product efforts. Product innovation strategy is a component of the business strategy that specifically deals with new services and products. Thus, it is operational, action-specific strategies that entail defined objectives, deployment decisions, arenas of strategic focus as well as attack and entry plans. Establishing a product innovation strategy is hard work and involves many people more so the upper supervision of a business, but it is crucial for business success (Cooper & Edgett, 2009).

Innovation of a product is connecting technology and client competencies. Product innovation strategy alludes to the newness and significance of fresh goods presented in the marketplace on time. It is all about introducing into the market fresh and significantly enhanced goods or services (Drucker, 2014). Product innovation strategy entails frequently introducing valuable, greatly enhanced products or completely fresh products.

The process innovation strategy is an appealing and novel approach to organizational transformation and performance enhancement. It entails gradual improvements rather than drastic changes. Process innovation entails cutting out non-value-adding activities and employee empowerment and often lead to incremental or more than incremental, yet not dramatic improvement. It entails the total design of an end-to-end process and may offer a radical process and may provide radical process performance improvement (Saxena, 2009).

It should be noted that having a clear method for process innovation is very important. Process innovation does not happen in an offhand and casual manner. This process entails the pressures of daily operations, the creation of a vision, an understanding of the current process, and the comprehensive design of new processes and a company. Process innovation strategy is essentially composed of capabilities derived from access to and recombination of external knowledge sources as well as firm innovations that supplement and strengthen those innovative capabilities (Hervas & Boronat, 2014).

Influence the company strategy entails the enactment of fresh advertising techniques that include important deviations in the creation or product plan, advertising messages, pricing policies, or product endorsements (OECD, 2005). This type of entrepreneurial orientation is used to satisfy consumer requirements, enter new markets, or readjust a specific product to increase revenue. Besides the lines of the four Ps of advertising, developing selling strategies are inextricably linked to cosmetic packaging design properties, pricing structures, promotional strategies, and personal selling (Kotler, 1991).

Introducing an innovative organizational approach in a business's procedures, workplace organization, or costs and benefits associated is part of an organizational innovation strategy. Overall, institutional technologies have been demonstrated to enhance business efficiency by lowering transaction and administrative expenditures significantly. Boosting employee retention, lowering supply costs, and trying to gain access to unavailable assets (OECD, 2005). Thus, all clerical works to restore organizational mechanisms; procedures and routines; information sharing; teamwork promotion; collaboration; coordination; learning; and inventiveness (Gunday *et al.*, 2019)

### **1.1.3 Start-ups in Kenya**

Start-ups have become critical to the growth of the economic and labour market both in developed and developing nations like Kenya (OECD, 2015). However, no commonly accepted definition of the term "start-up" exists. Baumol (2015) noted that the difference between start-ups and large enterprises is primarily on their scale. Start-ups are more innovative and flexible, which is attributed to a small team of founders and their flat organizational structure (Grandori, 2013). Under highly uncertain conditions, start-ups are capable of reacting fast to changes in the market and technology (Spinelli & Timmons, 2012). They begin with elevated expenses and low revenue, so the majority of them focus on finding capital from a variety of sources, including investors (Salamzadeh & Kawamorita, 2015).

Generally, start-ups are seen as startups founded by one or more business owners to produce or supply an item for which they consider there to be a commercial market. They consist of a startup's company or venture that seeks to find, create, and justify a business model that is scalable (Baldrige & Curry, 2022). Katila and Piezunka (2012) noted that start-ups are new businesses to expand beyond their founder. Start-ups

face a lot of uncertainty at the beginning (Schmitt, 2018), and have a high failure rate, but a small percentage of them succeed and become influential (Griffith, 2014). In this thesis, start-ups will refer to those companies in their early stage of operation and comprise between one and one hundred employees.

The business climate for startups and SMEs has become incredibly hard. To provide ideal market conditions for businesses, clear roles between the two governance structures are required (Muathe *et al.*, 2022). In Kenya, start-ups are typically in the early or developmental stages, requiring substantially lower investments than the investor's minimum requirement (Bastion, 2013). As a result of this disparity, early-stage start-ups rely on their savings as well as family and friends for seed capital (Intellectap, 2016). Angel investors are becoming more prevalent in Kenya. Venture capitalists and angel investors invest in less than 10% of startups (Omidyar, 2013). Most of the Kenyan entrepreneurs (70 percent) earn \$2,900 or less on monthly basis, implying that the entrepreneurs involved are not able to work full-time on their businesses (GSMA, 2014). Many Kenyan start-ups often conduct their meeting or even work from coffee shops due to a lack of space and finance. Such areas frequently experience limited Wi-Fi connectivity, and the inevitable noisy surroundings distract the entrepreneurs (Gathege & Moraa, 2013).

According to an iHub study, many Kenyan entrepreneurs do not possess the appropriate presentation skills and the basic business expertise required (Guthega & Moraa, 2013). They usually fail because of inadequate soft and managerial skills, as well as deficiencies in the financing, track records, and team structure. According to Bastion (2013), most start-ups in their early stages do not have an effective sales and marketing strategy as well as intellectual property knowledge.

### **1.2 Statement of Problem**

The most common problem among start-ups in Kenya is failing in their first-year operation. On the global scene, failure is also common among start-ups between the second- and five-year cooperation, with 70 percent of them being in this category across all sectors of the economy. In Kenya, it is estimated that 90 percent of start-ups fail about 10 percent of them do not see their second birthday (Mbogoh, 2021).

Some of the reasons for the failure are high competition, declining income, losses due to higher operating costs, a tough economic environment, a lack of resilience by entrepreneurs, and faulty business decisions and strategies. This implies that most start-ups are not in a position to enter the market and grow over the years. Gunday *et al* (2019) noted that modernization is a critical instrument in a business's growth strategy for the entry into new markets, improving its market share, and gaining a competitive edge.

The choice of innovative strategies is critical for the success of start-ups. This is because it significantly influences a start-up's performance. According to Longenecker (2006), failure to plan, strategize, misappropriation of funds, and the lack of

an appropriate management team are some of the reasons for small business failures, which can be caused by a lack of strategy or poor strategy choice. Therefore, innovation strategies by start-ups are critical for survival, competition, and performance in the market. Empirical studies over the years have proved this.

Karabulut (2015) in his studied found that the innovation strategy of Turkish manufacturing firms improved financial performance, centered firm success, customer performance, and knowledge, and increase growth. Mohammed (2020) investigated the relationship between both creativeness and enterprise success in Nigeria and discovered a strong association between technology and firm performance. Karanja and Gakenia (2018) researched “the correlation between innovation strategies and the success of Telkom Kenya Limited.” The findings revealed that continuous improvement has a beneficial effect on achievement. Although the importance of innovation strategies in the entry and progress of start-ups in the Kenya market, there is a scarcity of empirical studies on the influence of invention approaches on the success of manufacturing start-ups; hence, the need to stop the gap by studying the influence of invention strategies on the achievement of manufacturing start-ups using start-ups in Nairobi City County.

### **1.3 Objective of the study**

#### **1.3.1 General Objective**

The key objective of the study was to analyse the effect of Fintech Start-ups on the future of Financial Institutions in Kenya

#### **1.3.2 Specific objective**

- a) To examine the effect of Fintech product innovation strategy on future of Financial Institutions in Kenya.
- b) To assess the effects of Fintech process innovation strategy on future of Financial Institutions in Kenya.
- c) To establish the effect of Fintech market innovation strategy future of Financial Institutions in Kenya.
- d) To analyse the effect of Fintech organization innovation strategy future of Financial Institutions in Kenya.

## **2.0 LITERATURE REVIEW**

### **2.1 Theoretical Literature Review**

In this section, the researcher evaluates the literature on relevant theories based on the study variables. The aim is to

bring out the link between existing theories on innovation strategies and firm performance and understand the extent to which such theories have been studied and help in developing a new hypothesis to be tested in the study. This study will be anchored on the balanced scorecard model, Schumpeter's theory of innovation, and the learn start-up framework.

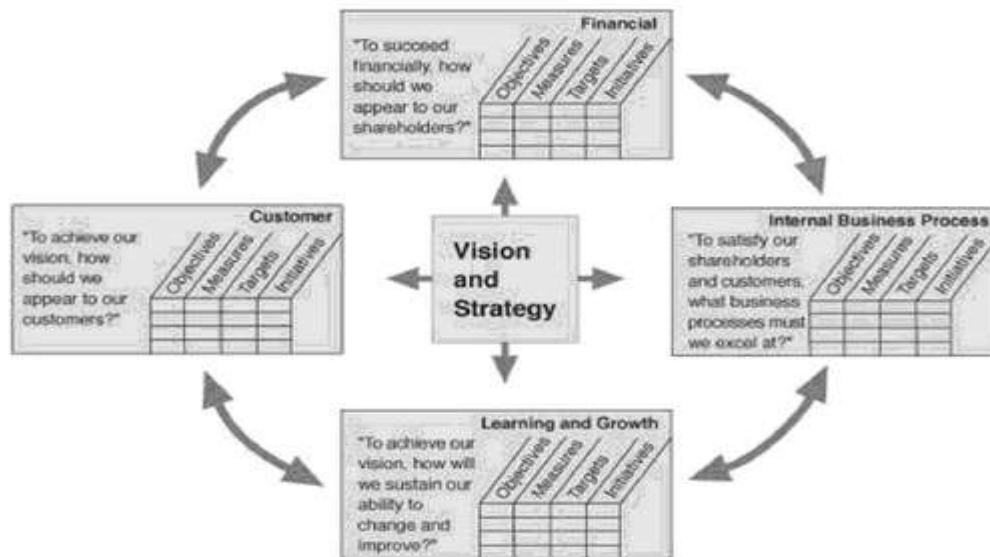
#### **2.2.1 Balanced Scorecard Model**

The proponent of the BSM are Robert Kaplan and David Norton back in 1996. According to the model, non-economic and economic measures should be included in the computer network for people employed at all levels of the organization. Senior executives must grasp the causes of long-term financial performance, while front-line staff needs to be conscious of the financial implications of their actions and decisions.

The BSM measures and goals are more than a scattershot gathering of monetary and monetary success factors. The aims and metrics are developed through a top-down process guided by the enterprise's vision and purpose. The BSM should translate the business's strategy and mission into tangible measures and objectives (Kaplan & Norton, 1996).

The metrics reflect a balance of the outside metrics for clients and investors as well as internal metrics for major company procedures, advancement, learning, and growth. Initiatives that drive future success, outcomes, and results from previous efforts are typically balanced. It is also balanced between objectives, the prepared show of the measures are somehow judgmental, and easily quantifiable outcomes measures (Kaplan & Norton, 1996).

A balanced scorecard is useful in collecting critical information, identifying factors that help or inhibit corporate success, and outlining innovative strategies for business growth and expansion. As a result, provides managers with a wide-ranging structure for translating the firm's visualization and scheme into a continuous set of achievement indicators (Akram & Prayitno, 2018). Kaplan and Norton (1996) advocated for an approach to the business from four angles: the consumer's opinion of assessment, the internal management argument of interpretation, the entrepreneurialism and acquiring knowledge point of view, and the budgetary point of view as shown in Figure 2.1.



**Figure 1: Balanced Scorecard model**  
**Source: (Kaplan & Norton, 1996).**

The financial measures are based on the company’s economic trend, and so describe the operation’s monetary results (Valdez, et al, 2017). These serve as the foundation for the shareholders’ retention and investment decisions. The more the firm’s ability to respond to queries about how to attract and keep more investors, the more balanced scorecard-strategic intelligence is directed toward accomplishing corporate goals.

A balanced scorecard-business intelligence system provides shareholders with efficient financial data, promoting greater investment and improved performance (Malgwi & Dahiru, 2014). The balanced scorecard model allows for the comparison of past operations to planned outcomes and the application of the results to create competitive objectives.

The viewpoint on development and learning emphasizes the importance of helping to improve skills and developing an edifying mind-set linked to personal excellence for the firm’s expansion and growth. This also provides answers on how decision-makers may be induced to operate more strategically, to pro-actively innovate, and the types of company practices that should be adopted to strengthen policy-making functionality (Kuosa, 2014). It serves as a road map for strategy implementation, execution, monitoring, control, and policy formulation (Camilleri & Jayantilal, 2021).

The internal business processes perspective helps in supporting the strategic plans. This perspective focuses on the efficacy of managers in their product development efforts. A company’s innovation processes allow it to create new goods, processes, and services (Anh & Doan, 2014). The customer’s perspective requires excellent intelligence procedures within the organization that can handle and use the evidence to successfully forecast and answer to upcoming developments and prospects. It offers a company with viable data about its business environment so that it may predict, and establish

suitable strategies that will produce commerce value for consumers, and promote forthcoming progress and performance (Marchand, 2007).

This model is relevant in the proposed study as it will inform about the non-financial and financial performance measurement as well as about strategic management which is crucial for start-up innovations. However, the balanced scorecard model has been criticized for failing to acknowledge the potential of the whole system in the organization, for its immobility, rigidity, and inadequacy for external innovation (Gomes & Romao, 2013).

### 2.2.2 Schumpeter's Theory of Innovation

The proponent of Schumpeter’s theory of innovation is Schumpeter back in 1934. The theory holds that entrepreneurs may use innovation for greater profits; however, High profits will attract imitators, minimizing the firm’s excessive profits (Schumpeter, 1934). Therefore, Schumpeter argued that business innovation is the main reason for increased investments that results in business fluctuations. Through innovation, new products are established in the marketplace, which is simulated by others as an outcome of supernormal revenues. However, this does not imply that innovation is not good for businesses.

Schumpeter (1934) argued that entrepreneurs play a crucial role in developing a novel, untried and untested idea. In support of this, Abramowitz (1956) and Solow (1957), Innovation is critical to a future economy. As far as per capita income is concerned. An innovation strategy becomes effective in affirm when it meets the ever-changing customers, wants, preferences, and needs (Anderson & Potocnik, 2014).

Muathe (2010), the theory has been criticized on various grounds. First, it has been criticized for being based more on sociological factors as opposed to economic factors, which makes it difficult and unavailing to conduct an objective

evaluation of the theory in terms of business cycles. Second, it has been criticized for being similar to the over-investment theory with the only difference being concerning the cause of investment variation when there is a stable equilibrium in the economy. Finally, the theory leaves out other important factors that also affect the fluctuations in economic activities. Despite its shortcomings, the theory is widely accepted and applied in the modern economy.

The investigation dealt with the connection between business strategy and start up effectiveness. First, a theoretical literature review was conducted on theories related to the variables under investigation, such as the balanced scorecard model, Schumpeter's theory of innovation, and the lean start-up framework. "According to the measuring performance models, both monetary and non-monetary measures must be integral to the data framework for workers at all managerial members. According to Schumpeter's innovation theory, start-up development is the predominant reason for higher investments, which causes a variety of risks. Different innovations are developed in the business through technology, which is imitated by others as a result of abnormal profits. The learn start-up framework, on the other hand, contends that entrepreneurs must have an outward-looking mind-set to learn. This implies that entrepreneurs need to establish hypotheses concerning the main elements of their start-up, test the hypothesis, and adapt the initial; concepts until a time when they establish a viable business model to minimize risks in the business creation process.

Different scholars have applied Schumpeter's theory of innovation. For instance, Nelson and winter (1977) used it to explain the way organizations may gain competitiveness. Aghion, Blundel, Griffin, Howitt, and Prantl (2009) employed the theory to assess the correlation between innovation and employee productivity in an organization setup. More recently, Muathe (2020) used the Schumpeter theory of innovation to investigate entrepreneurship in the sense of government. The theory is relevant in this study since start-ups that offer similar products need to modernize to familiarize fresh goods in the marketplace, innovate their marketing, and processes to remain relevant in the market that is to some extent dynamic in terms of new types of products in terms of designs. Therefore, innovation will come in handy

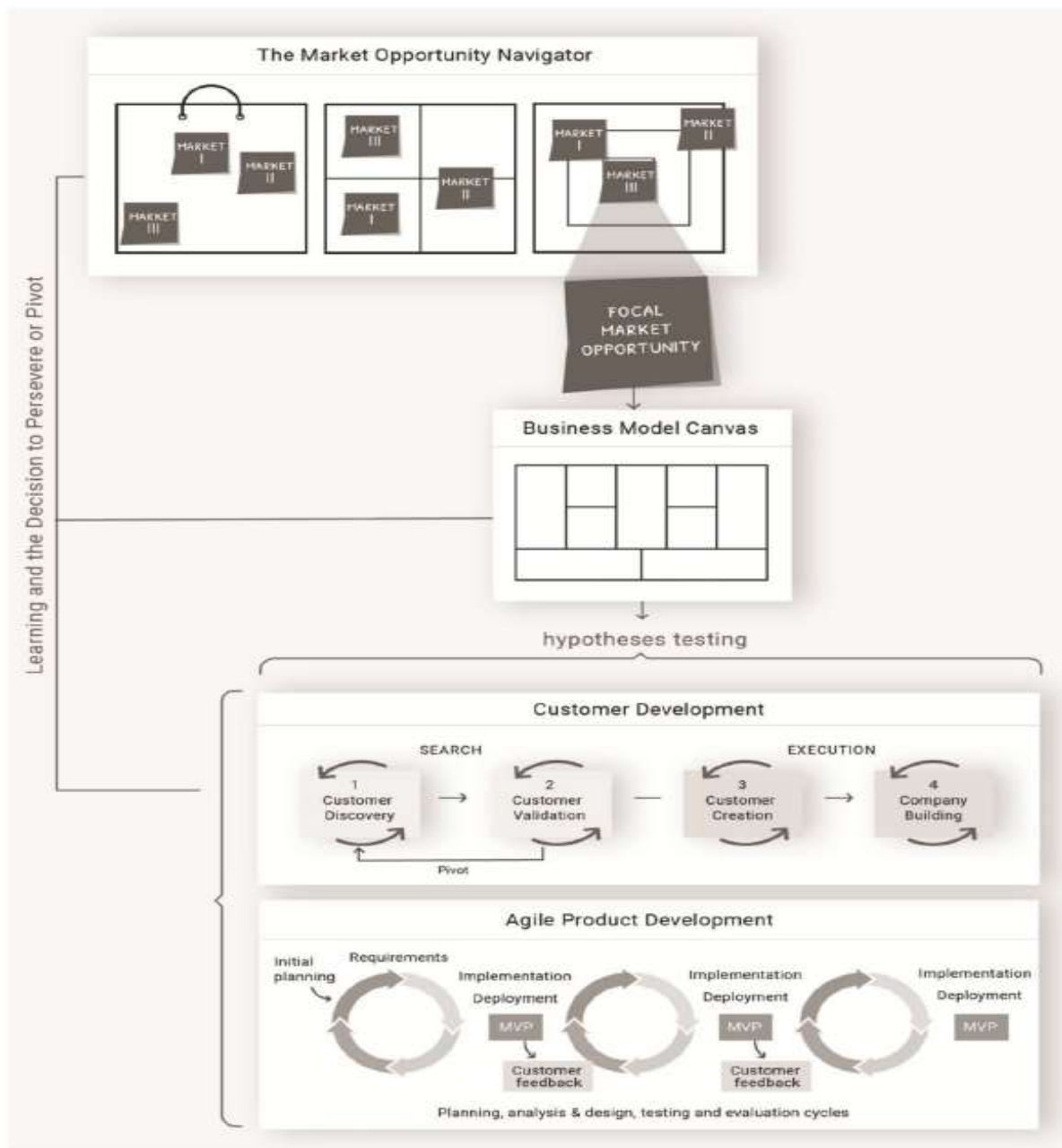
for start-ups to differentiate their product feature to be competitive and remain in business. It will thus be useful in examining the link between development strategies and the growth of start-ups.

### **2.2.3 Lean Start-up Framework**

The proponents of the lean start-up outline are Osterwalder (Pigneur, 2010). By blank (2013), to reduce the risk of the process of starting a business. Therefore, the framework proposes that entrepreneurs need to adopt an outward-looking learning mind-set. This implies that entrepreneurs need to establish theories concerning the main elements of their start-up, test the hypothesis, and adapt the initial; concepts until a time when they establish a viable business model. To achieve this, Blank (2013) proposes a group of tools, that is, agile engineering, customer development, as well as the most valuable person (MVP) to assist entrepreneurs to achieve their search, learning, and the process of validation.

In their contribution, Osterwalder and Pigneur (2010) proposed another tool known as the "business model canvas" that is meant to help business people in designing their trade exemplary, advance, and check hypotheses about their business in terms of its viability and profitability. On his part. Ries (2011) argued that the lean start-up approach assists entrepreneurs to adjust constantly using the loop. As such, an entrepreneur should be able to tell if and when to make a sharp turn, which he described as a pivot, or if an entrepreneur needs to persevere along the current path.

Gruber and Tal (2017) added the Market Opportunity Navigator (MON) tool to the lean start-up framework. This was an important addition to the framework since as Blank (2019) noted, the customer development, business model canvas, and agile engineering tools were meant to help entrepreneurs rapidly establish the market or product fit within a market and the way to pivot in case the hypotheses turn to be incorrect. However, these tools could not assist them to figure out where they should commence their search for new business. Fortunately, the MON introduced by Gruber and Tal (2017) helps to do exactly that. This tool offers a wide lens for entrepreneurs to establish various prospective markets for their modernization before they increase their enterprise model. The lean start-up framework is made up of 5 blocks as shown in Figure 2.1



**Figure 2: Building Blocks of the Lean Start-up Framework**  
 Source: (Gruber & Tal, 2017)

The five dimensions of the lean business approach are addressed further below.

**a) Finding and Prioritizing Market Opportunities**

Market opportunities comprise the domain in which entrepreneurs aim to achieve viability, create value, and compete (Gruber, MacMillan & Thompson, 2013). Therefore, establishing and prioritizing the market opportunities significantly determine the chances for a start-up's success. While entrepreneurs are frequently overconfident about the feasibility of the initially specified market, they frequently have to restart their operations in a different market area (Blank, 2019). Studies have shown that over 70 percent of start-ups end up doing such target market pivot (Gruber & Haan, 2012). Yet it has been proved that the start-ups that explore many market opportunities before

settling on the market exploit lay a good foundation for their performance (Gruber, MacMillan, & Thompson, 2008).

Therefore, although learn learning aims at establishing the way to play as a new venture, entrepreneurs are also required to have a wider-lens viewpoint that enables them to conduct a global or distant search for the area to venture. Thus, the model proposes that entrepreneurs should find and prioritize market opportunities. In the lean startup approach, the MON provides a crucial learning layer as it helps entrepreneurs not only to identify various market opportunities but also in selecting the most viable and promising starting position (Gruber & Tal, 2017).

**b) Designing Business Models**

In the entrepreneurial learning journey, designing a start-up's business model is a major stepping stone. Most of the



characteristics are premised on assumptions; therefore, business models offer a framework that helps in formulating hypotheses about venture creation and growth. The designing of the model presents a "leap of faith" since the enterprisers are required to come up with several assumptions concerning if a potential consumer problem could be solved using a commodity that gives value to consumers and if a new business that generates value can be founded (Osterwalder & Pigneur, 2010). Entrepreneurs take a risk and use the lean start-up framework to validate the learning process to swiftly test concepts and adjust or drastically change their intended models (Blank, 2013).

**c) Validated Learning**

The model of the initial start-up is created on sequences of propositions that must be evaluated and validated. (Blank, 2013). The BMC has nine major components of start-ups that are subject to the validation process (Osterwalder & Pigneur, 2010). Ries (2011) defines it as "the procedures of indicating experimental measurements that a group has revealed insights about a business's current and upcoming visions." To build profitable new ventures in the face of tremendous uncertainty, entrepreneurs must transform their assumptions into realities. According to Ries (2011), the fundamental technique for verified learning is for entrepreneurs to openly declare the assumptions of their business models and then verify these ideas through experiments.

**d) Building Minimum Viable Products**

An experiment, according to the lean start-up framework, "Exceeds the scope of a theoretical investigation; it is additionally the initial product" (Ries, 2011), that is created via the process of agile product development. To test hypotheses, entrepreneurs are required to develop their initial product. For innovators, the main issues are the energy and time they must invest in developing the initial product to test the hypothesis. It goes beyond the field of view of research; it is also the first product" (Ries, 2011).

Consequently, any characteristic introduced to the most valuable person (MVP) that does not help to learn is regarded as a waste of time and money. Even though there are certain disadvantages to developing and testing hypotheses using an MVP, such as legal problems, competition fears, morale impact, and branding risks (Ries, 2011), the general view is that MVPs are critical to the success of a fresh organization.

**e) Persevere or Pivot with Course of Action**

Entrepreneurs acquire verified learning through generating assumptions or hypotheses, testing them with experiments, and utilizing the outcomes to generate new hypotheses, particularly through agile product development processes and customer development. However, according to Gavetti and Levinthal, (2000), this trial-and-error learning is more localized and gradual. While entrepreneurs can continue to take incremental measures to strengthen their company's current model. They might very well discover that certain incremental improvements are not making sufficient progress in the venture, prompting them to pivot.

A pivot is a "scheduled change in leadership aimed at testing a new basic supposition about the commodity, strategic plan, and economic expansion motor." according to the lean start-up process (Ries, 2011). A good pivot will enable a business to build a viable business model that is repeatable allowing businesses to thrive (Blank & Dorf, 2012). The second difference to pivoting is to continue with the present solution. The main dilemma for entrepreneurs is whether to pivot or persevere, which a difficult choice is given the uncertainty. The lean start-up framework advocates for Setting learning goals as generates for amassing knowledge to choose persevere-or-pivot, according to the lean start-up framework, has advantages since these milestones challenge the assumptions made clear by the entrepreneur at the outset of the start-up process (Blank, 2013).

It is worth mentioning that the performance implication of several of the framework's basic blocks, such as business model canvas and identifying market opportunities have been tested. However, the framework's overall performance implications have not been investigated, but a critical step in that direction has been taken, with results demonstrating that a scientific method of developing a start-up, which is consistent with most lean start-up framework's discussed features; hence, the resulting in more successful start-ups than an approach that is based on activities that are not guided and the intuition of the entrepreneurs because the lean start-up method reduces the likelihood of failure. Furthermore, Dogrultan and Berman (2012) discovered that a learning-focused, agile strategy for company formation leads to considerably more successful ventures when investigating web-based firms. Therefore, the lean start-up framework is relevant for the current study on innovation strategies and start-up performance as it informs the study on the best approach to ensure that start-ups succeed.

**2.3 Empirical Literature**

**2.3.1 Fintech product innovation strategy and Future of Financial Institutions**

Product creativity involves the introduction of new items to the marketplace based on client expectations and consumer expectations (Notaro & Spada, 2016). Snihur and Wiklund (2019) described product innovation as product commercialization to conform to the consumer's needs and expectations. According to Crook (2016), product innovation enables dynamic organizations to capitalize on being the first to meet the wants of customers.

Product innovations may be achieved via new combinations or applications of the already available technology. As a complex process, it is driven by changing the requirements of consumers, shorter product life cycles, and more global competition (Acquah & Hamidu, 2021). Thus, to be successful, there is a need for significant engagement in the firm, as well as the interaction between firms and their suppliers and customers (Akova & Payzin, 1998).

OECD (2005) Technological advancement, according to the dictionary, is well-defined as "the emergence of commodities

that has not previously been offered or markedly increased concerning its attributes or intentional efficiency". The enhancement could be concerning materials specifications, technical elements, user-friendliness, built-in software, and other functional features. On the other hand, where a product design change is not accompanied by significant changes in functional characteristics or its intended use, such change is not considered an innovation. According to Boachie (2015), product innovation can also be related to changes in activities by a business to deliver its core product while ensuring that it is alluring to its customers. Various empirical studies have been conducted across the world.

Atalay and Sarvan (2013) studied the association between product modernization and business success." The study was done in 113 organizations that operate in the Turkish automotive industry among the top-level management. The researchers used questionnaires for data collection while the SPSS was employed in data analysis. According to the findings, the new product has a substantial beneficial effect on company profitability. Sidek and Rosli (2013) conducted research in Malaysia on the influence of innovation on SMEs' success. The study was done among 284 respondents from SEMs in the textile and clothing, wood-based industries, and beverage and food industries in Malaysia. Data collection was done using a predetermined questionnaire, while analyses were done using hierarchical regression analysis. The outcome established a positive significant correlation between product innovation and firm performance.

Abazi (2019) studied "the influence of merchandise creativity on company efficiency in transition economies." They used Business Environment Enterprise Performance Surveys in a multi-stage empirical analysis. To evaluate the relationship between product innovation and performance, the Crepon-Duguet-Mairesse (CDM) model, a four-stage approach, was used. The findings revealed that new product has a beneficial influence on firm success in macroeconomic variables.

Forkuoh (2016) noted that the structural equation model and firm-level data were used in the study. Product innovation was divided into three categories (developing new products, introducing new products, and improving current products), and performance metrics used included the firm's total sales and employee growth. Data was collected from 400 SME owners in Ghana using survey approaches. Structured questionnaires were employed in collecting detailed information from a sample of SME owner-managers on product design and firm performance issues. A structural equation model and principal component analysis where factor analysis was the extraction approach utilized to analyze the data collected and assess the association in the stated brands in the suggested research model. The result revealed that all three factors were positively correlated with the performance of firms, but the development of new products had the greatest effect, indicating that product innovation strategy, particularly introducing new products positively influences firm performance.

In Kenya, Karanja (2014) applied research in the research. The primary data was gathered using an interview guide and secondary data was collected using published reports. The findings showed revealed a positive correlation between product innovation strategy and startup performance. The research by Ngirigacha and Bwisa (2013) revealed a positive correlation between firm performance and product innovation. Soi (2016) applied descriptive research in the study and sampling was done using stratified random sampling techniques. The targeted population was 276 managers and 3 main layers in the Kenyan telecommunication sector. The collection of data was done using questionnaires and analysis was done using Microsoft Office Excel and SPSS. The study found a link between product creativity and corporate success.

### **2.3.2 Fintech Process Innovation Strategy and Future of Financial Institutions**

Continuous improvement is a type of development that is motivated by internal operational objectives (Bergfors & Larsson, 2009). It entails increasing the efficacy and productivity with whereby a firm performs. Thus, process innovation is considered the newest internal process or an improvement method that is aimed at achieving the greatest performance in an organization. It entails the adoption of enhanced production or establishing new methods of delivery that may entail chain techniques, equipment, and software (Omachonu & Einspruch, 2010). By Mohne and Raymond (2010), process innovation is the combination of methods of production and significant advancements in supporting operations like accounting, maintenance, computing, and purchasing. The firm may create current innovations either domestically or with the assistance of another business (Polder *et al.*, 2010). Organizations typically use process innovation to create novel changes and products in the process of creating new products (Adner & Levinthal, 2001). Various empirical studies on way modernization and business success.

Varis and Littunen (2010) noted that the investigation adopted a quantitative study and postal questionnaires were used to collect data. They were distributed among a sample of 1,282 entrepreneurs of SMEs. According to the study results, improvement innovation has a significant connection with the success of small and medium-sized enterprises. Ar and Baki (2011) looked into the connection respectively SMEs' achievement and the process of innovation in Turkey. Data was collected from 270 SME supervisors in Turkey. The findings demonstrated a significant beneficial connection between continuous improvement and Turkish SMEs' effectiveness.

Raja and Wei (2014), in Pakistan's service sector, the partnership between proposed technique innovation and the performance of firms was investigated. Data was gathered from 157 service firms that offer a wide range of services. The data was analyzed using a variety of inferential and descriptive statistical techniques. The observations showed

an important positive connection between ongoing improvement and entrepreneurial success in Pakistan's hospitality sector.

Akpoviro and Olalekan (2019) looked into the impact of process innovation on business outcomes in Nigeria. The survey method was used in the study, with 114 employees from a significant telecommunications company in Lagos serving as participants. The research hypothesis was analysed and tested using Statistical Package for the Social Sciences (SPSS). The results showed a significant beneficial connection between process inventiveness and business effectiveness. In Kenya, Nyamoita (2015) adopted a descriptive research design. The author used secondary data for the years between 2005 to 2014 for the KPLC. The data were analysed and interpreted using descriptive and inferential statistical techniques. According to the findings, there is a major beneficial connection between workflow innovation and financial outlook. Karanja (2014) investigated the "effects of business strategy on competitive advantages in the United Bank of Africa" in his study. The author investigated the relationship between process innovation and company success in this study. The findings revealed a positive relationship between continuous improvement and business strategy. In a study of the impact of product innovation strategies on organizational effectiveness in Kenya's telecommunications sector. Furthermore, Soi (2016) demonstrated that workflow strategy implementation has a direct effect on business success.

Njogu (2014) conducted research among a sample size of 180 registered enterprises in the manufacturing industry in Nairobi. The questionnaire was used to collect while regression statistical tools and descriptive analysis were done while the demonstration of data was done using tables. The research results showed an important beneficial significant relationship between innovative technology and SME profitability.

### **2.3.3 Fintech Market Innovation Strategy and Future Financial Institutions**

Sales promotion is the execution of a great advertising strategy that comprises meaningful changes in product containers or design, positioning strategy, product cost, or endorsement. (OECD, 2005). Advertising innovations aim to better meet the demand of the customer, establish new markets, or reposition an organization's product on the market to increase sales. According to Kotler (1991) product pricing strategies, package design qualities, promotion, and placement activities are all firmly associated with marketing innovations within the four Ps of marketing.

Corporate entrepreneurship seeks to increase revenue, and customer base, and develop new markets. It is distinct from other methodologies in that it utilizes a novel business strategy that the company hadn't attempted before. Marketing innovation is perceived as an appealing technique in the marketplace since it emphasizes low-risk product

modification, design, and extension changes and so gives a quick innovative solution (Naidoo, 2010).

Anafarta and Sarvanc (2013) considered "the correlation between modernization and success of Turkish firms." The research was carried out among 113 top-level management of the organization in the automotive sector. Questionnaires were used to collect data, and SPSS was used for analysis. The results showed a significant positive correlation between marketing invention and the success of Turkish firms.

Raja and Wei (2014) examined the link between advertising innovation and business growth in Pakistan's service sector. The information came from 157 service sector businesses providing a wide range of services. The research data was analysed using various inferential and descriptive statistical methods. The study results showed a significant favourable connection between advertising creativity and company efficiency in Pakistan because it creates a better image for the corporation's enterprises.

Various empirical literature reviewed across the world suggests that produce modernization has a major positive significant connection with the success of firms (Atalay *et al.*, 2013). Most of these studies were carried out outside Kenya. The studies examined the connection between innovation and the accomplishment of various businesses. Therefore, there is none of the studies focused on the performance of start-ups. As a result, this study will fill a void by examining the relationship between product innovation and the performance of manufacturing start-ups in Kenya. The empirical studies on the relationship between procedure invention strategy and business results that have been reviewed indicate that there is a beneficial and important connection between process industrialization strategy and business success Akpoviro & Olalekan, 2019). The focus of these studies was on the way process innovation has affected the performance of SMEs, service sector firms, government parastatals, telecommunication firms, and financial institution, with none focusing on the way process innovation affect start-ups. This research, will thus, seek to fill this gap by studying the correlation between process innovation and manufacturing start-ups in Kenya.

Rosli and Sidek (2013) studied "the impact of the invention on the business's performance in Malaysia's manufacturing sector." They conducted their study among 284 respondents from SMEs in the clothing and textile, food and beverage, and wood-based industries. Data collection was done using a predetermined questionnaire, while analyses were done through hierarchical regression analysis. According to the observations, entrepreneurial orientation has no significant impact on organizational performance. Senguo and Kilango (2015) looked into the correlation between Vodacom's advertising innovation strategy and the company's financial performance and performance in terms of improving customer satisfaction in Tanzania. Secondary data from previous empirical literature, the Tanzania Communications Regulatory Authority (TCRA), and company websites were

used in the study. The analysis indicated a link between business strategy tactics and company achievement.

Njeri (2017) examined the "influence of attracting the customer strategy on financial results in Safaricom Kenya Limited." The investigation utilized a descriptive research design. Safaricom Kenya Limited employees were sampled using random stratified sampling. Data were collected using questionnaires, and descriptive statistics, correlation, and regression analysis were used in data analysis. The results indicated an important beneficial significant relation between market innovation and Safaricom Kenya Limited's performance. In addition, Mugo (2015) studied "the correlation between market innovation and the progress of the enterprises in the Wine industry in Kenya." The researcher used a descriptive study design. To acquire primary data, a self-administered questionnaire was used. The consequences presented that market innovation influenced firm success as it allows the firms to market their product via different media channels, urgently address customer complaints, deliver products as per client's order, and enable the firms to enter new markets which enhances their competition in the market.

#### **2.3.4 Fintech Organizational Innovation Strategy and Future Financial Institutions**

The application of the production process in business decisions is a crucial component of entrepreneurial orientation and external relator factory organizations. It tends to enhance organizational performance through the reduction of transaction and administrative costs; having access to assets that are non-tradable, enhancing job satisfaction, or reduction in costs of supplies (OECD, 2005). Introducing procedures for classifying information by creating catalogs of top performs and programs learned so that they may be shared with others is an excellent example; introducing employee training programs to enhance employee development, ensure their retention, as well as establishing a supplier development program. As a direct consequence, methods focused on market intention are strongly intertwined with all administration attempts at updating arrangements, practices, structures, and pathways to promote cooperation, collaboration, partnership, intelligence gathering, acquiring knowledge, and entrepreneurship.

Camisón and López (2014) conducted research in Spain on the partnership respectively company culture and technology advancements, as well as their effects on successful entrepreneurship. The study sampled 144 Spanish conduct of the business and analysed the collected information using a system of structural equation modelling using partial least squares. The research discovered a link between firm inventiveness and an entrepreneur's success. Atalaya and Sarvanc (2013) investigated the relationship between innovation and firm performance in Turkey. The survey included 113 top-level managers from the Turkish automotive industry. Surveys were employed to gather data, and SPSS was used to analyse the results. There was no evidence of a positive relationship between overall

organizational creativity and business efficiency, according to the findings.

The reviewed literature on the association between market innovation strategy and enterprise success suggests there exists a constructive correlation between market invention and business growth (Atalaya *et al.*, 2013). These studies focused on SMEs and other established organizations with none addressing the inspiration of market invention on the success of start-ups. Therefore, the current study will fill the gap by assessing the correlation between market innovation and the performance of start-ups in Kenya. An empirical literature review of the correlation between organizational innovation and firm performance suggested an important constructive correlation between organizational invention and business success (Acquah & Mensah, 2015). However, the inspiration for organization-wide innovation on the effectiveness of production start-ups was not addressed in any of the studies. As a result, the current study will try to link this knowledge gap by investigating the relationship between entrepreneurial orientation and start up achievement in Kenya.

Alamirhoor and Brege (2013) conducted research in Iran on the "connection between organizational creativity and efficiency among enterprises. The research discovered a connection between business entrepreneurial and business success. Noruzy *et al.* (2013) examined the connection between creativeness and the efficiency of industrial firms. 280 senior executive and administrative level managers from 106 Iranian entrepreneurs were used by the researchers. Structured equation modelling was used to analyse the data. Organizational innovation seems to have a beneficial effect on the success of Iranian businesses, based on the study results.

Mensah and Acquah (2015) examined the relationship between organizational creativity and business success in Ghana. A Survey Research design was used for the study. A straightforward random sampling procedure was employed. Using self-administered questionnaires, data were collected from 243 SME owner-managers in Ghana's Sekondi Takoradi Metropolis. According to the conclusions, there is a substantial connection between managerial innovation and business performance in Ghana.

### **3.0 RESEARCH CONTEXT AND METHODOLOGY**

The research Context focused on innovative fintech start-ups in Kenya. The information was obtained from existing secondary sources, which included publications from world-wide and local entities like the World Bank and African local authority orders working to identify reviews by searching for publications about innovative fintech start-ups on Academic Databases and other relevant online libraries. According to Zheng *et al.* (2011), extraneous exploration is a comprehensive, systematic, and logical process with technical and examination parts that can be used in a variety of applications. As a result, a desk review was used

extensively in the study to gather available studies, evaluate secondary sources, and formulate findings and recommendations.

#### **4.0 FINDINGS AND DISCUSSION**

Kenyan government initiatives, user authentication, and regulations Government bureaucracy remains a serious hindrance to the future hold for start-ups required (Muathe *et al.*, 2022). Based on current conditions, there are ambiguous political decisions mingled with temporary start-ups funding program interventionism efforts. Existing measures can be found in a variety of agencies and ministries, sometimes with illogical priorities and at different points of operation. During difficult economic times, a hospitable climate and concentrated legal frameworks might help Financial Institutions lower their risk net. Furthermore, Kenya's decentralized governance system (county governments) occasionally imposes additional tax levies and regulatory burdens on the future hold for financial institutions and start-ups (Nakalembe *et al.*, 2023). This framework has also resulted in the national and county governments duplicating roles, legislation, and implementation. However, with the ability of Fintech Start-ups to innovate this makes them more attracting to small businesses as opposite to established financial institutions and thus slowly pushing them out of business.

#### **5.0 CONCLUSION**

Based on the results, it is recognized that fintech start-ups play a significant part, particularly where traditional financial institutions are unable to come across the needs at hand. Fintech start-ups merge IT and financial management to create financial services without the help of traditional banks, but the sector is so interactive that businesses must constantly innovate. The planning process and continuous improvement innovation have been identified as important variables impacting a Fintech start-up's ability to compete. As a direct consequence, the supposition that a start-up's ability to introduce innovative and universally recognizable products or to introduce fresh and minor changes to existing products, such as the mobile phone market, is correct. Technological advancements have the possible to change world-wide sponsorship by building it more comprehensive, decentralized, and democratic. According to a McKinsey report, Fintech advancements have the potential to bring digital banking to 1.6 billion people in developing markets and increase the volume of loans extended to customers and companies by \$2.1 trillion by 2025. Fintech's most valuable asset is its agility, which can be used to utilize interconnection and government policies to make funds more accessible. This is critical for the future of finance even though encompassing financial services is inextricably linked to long-term wealth creation. Effective financial assimilation regulatory policy, on the other hand, necessitates striking a relevant regulatory balance: one that strives to promote creative thinking and

development in manufacturing entrants and technological advances while also attempting to clarify governance standards and create policies to ensure consistency and the lowest amount of widespread security as those areas grow.

M-PESA was successful in accomplishing this in Kenya by capitalizing on the government's established mobile phone penetration. This assisted in clearing up governmental bureaucracy, allowing the service to convincingly pursue an aggressive growth strategy. It is now available to nearly 90% of the demography, paving the way for a massive expansion of the availability of money and financial products. The world of innovative fintech Start-ups on the future of Financial Institutions is rapidly changing; consumers demand more personalized offerings that boost convenience while maintaining security. Building on the concept of financial inclusion, we predict that the next big thing in Innovative Fintech Start-ups will be "connectivity inclusion." Fintech Start-ups entails being connected through smartphones, wearables, and across all radio waves. It combines social and financial inclusion. Connectivity inclusion can be made feasible through the adoption of new and innovative technology that incorporates social networks while lowering expenses. In order for the global economy to thrive sustainably, inclusion is essential.

Finally, Fintech solutions have helped future traditional banks to enhance efficiency, cut costs, and provide better client experiences. Banks also use fintech solutions like artificial intelligence and block chain to provide more secure transactions and personalized services to its consumers. Moreover, FinTech innovations are built on the foundation of delivering value for specific users. A mobile payment gateway, for example, adds value to online merchants. The adoption of digital banking facilitates the value chain of open banking services.

#### **5.1 POLICY RECOMMENDATIONS**

Fintech's most valuable asset is its agility, which can be used to utilize interconnection and clear up governmental bureaucracy policies to make funds more accessible. This is critical for the future hold for financial institutions. Connectivity inclusion can be made feasible through the adoption of new and innovative technology that incorporates social networks while lowering expenses. Moreover, the future of the tradition financial institutions depends on collaboration with the Fintech firms to strengthen their competitive edge and thus performance.

#### **5.2 LIMITATIONS AND RECOMMENDATIONS FOR FUTURE RESEARCH**

The authors of this study used a qualitative approach to review currently accessible secondary data sources on Fintech Start-ups and it was a desktop review paper. Potential researchers should keep the study's limitations in mind. There the results should be used with caution. However future

research should consider using primary data to validate these results

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