Does Entrepreneur Innovativeness Moderate The Relationship Between Strategic Orientation And Financial Inclusion?

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Purpose - Although previous papers have attempted to explore the determinants of financial inclusion, few studies have interrogated the role of innovativeness in financial addition. This study examines the moderating role of entrepreneur innovativeness on the relationship between strategic orientation and financial inclusion.

Design/Methodology - We used two indicators to measure financial inclusion; digital financial inclusion scale and traditional financial inclusion scale. Three proxies were used to measure strategic orientation; learning orientation, market orientation, and technology orientation. Survey data obtained from 634 women entrepreneurs was used, and hypothesis was tested using moderated regression analysis.

Findings - The empirical results supported the hypothesis that innovative entrepreneur moderates the relationship between strategic orientation and financial inclusion. In particular, the results indicated that at higher levels of entrepreneur innovativeness, learning orientation has a stronger effect on financial inclusion. Similarly, the results also indicated that at high levels of entrepreneur innovativeness, technology orientation affects financial inclusion. In contrast with the other findings showing positive moderating effect, at higher levels of entrepreneur innovativeness, the impact of market orientation on financial inclusion is low.

Practical Implications - The findings are useful to the government and practitioners for designing policies and training programs geared to increasing the level of financial inclusion among women Small and Medium Enterprises.
Introduction

A review of the literature reveals an increasing emphasis on the importance of financial inclusion, particularly in emerging economies, because it is viewed as a catalyst for economic development (Sethi & Acharya, 2018; Sharma, 2016). More importantly, it has been argued to be an enabler to achieving the Sustainable Development Goals (SDGs) (Klapper, El-Zoghbi, & Hess, 2016). Financial inclusion has been defined as the degree of access and usage of quality financial services among households and firms (Zins & Weill, 2016). It is characterized by the following dimensions: penetration, availability, and usage of financial services by all populations (Mindra, Moya, Zuze, & Kodongo, 2017).

In an attempt to improve financial inclusion rates, there has been a massive expansion of financial institution network especially in rural areas (Lenka & Barik, 2018). However, despite the increase, there is still evidence of financial exclusion (Mindra et al., 2017; Zins & Weill, 2016), particularly in Small and Medium Enterprises (SMEs) (Beck & Demirgüç-Kunt, 2006). In his research in Sub-Saharan Africa, Chikalipah (2017) found that about three-quarters of the adult population do not have formal bank accounts, save informally, and often employ simple methods to manage their finances and plan for the future. Focusing on SME's, Udell (2015) documented that despite increased shortage due to lack of funds, SME's posted fewer chances to use financial services as compared to large firms as a result of voluntary exclusion. The behaviour is more pronounced in women owned SME’s despite financial institutions making financial services largely accessible to both genders (Kairiza, Kiprono, & Magadzire, 2017).

While the low usage of formal financial services among SME’s has been attributed to various constraints such as low literacy levels and cultural and religious factors (Abdu, Buba, Adamu, & Muhammad, 2015) scholars have established that personal preferences and individual characteristics play a crucial role in making decisions to use informal financial services (Adomako, Danso, & Ofori Damoah, 2016; Martínez, Hidalgo, & Tuesta, 2013; Peachey & Roe, 2004). Drawing from resource dependency theories, decision-makers pursue strategies depending on their orientation (Nienhüser, 2008). In this regard, the strategic direction of entrepreneurs has been found to determine the ability of firms to be financially included (Aminu & Shariff, 2015). Different strategic orientations such as market orientation, learning orientation, and technology orientation (Ho, Plewa, & Lu, 2016) have been used to explain firm outcomes (Laukkanen, Nagy, Hirvonen, Reijonen, & Pasanen, 2013) including being financially included.

With the current technological dynamism that has sparked a turnaround in the financial sector, there is a consensus that innovativeness plays a vital role in enhancing the access and use of formal financial services. Innovativeness, which entails embracing new ideas in the environment, provides an entrepreneur with a platform to effectively manage operations and access resources from the environment (Staniewski, Nowacki, & Awruk, 2016). The emergence of fintech has provided a promising vehicle for tackling financial exclusion (Salampasis & Mention, 2018). Entrepreneurs who have adopted mobile money services conveniently transact, make payments and receive payments at any time (Burns, 2015). Notably, digital loans have enabled women entrepreneurs who were previously constrained by need of collaterals to conveniently access loans (Kusimba, 2018). As such, it is evident that innovativeness is crucial to enhancing financial inclusion. On this account, the study proposes that innovativeness moderates the relationship between strategic orientation and financial inclusion.

The Kenyan Context

Kenya envisions an increase in financial inclusion by 2030 (GoK, 2007). Correspondingly, financial sector deepening (FSD) has partnered with Central Bank of Kenya to undertake continuous research, monitor, and measure the level of financial inclusion in Kenya. According to the 2019 FinAccess Household Survey (FSD, 2019), the number of adults who are financially included has significantly increased from 75.3% in 2016 to 82.9...
in 2019. This places Kenya among the top 30 developing countries to embrace financial inclusion. However, the usage of financial services in Kenya is higher in men than in women with the statistics showing that 86% of men and 80% of women are financially included (FSD, 2019).

Notably, technology dynamism in Kenya has tremendously transformed the financial services sector (Salampasis & Mention, 2018). Through mobile financial services, the country has significant progress in increasing the use of financial services among a wider population. The first Mobile financial services popularly known as Mpesa was launched in April 2007 (Burns, 2015) by cellular mobile service provider, Safaricom. A couple of years later, other mobile service providers, Airtel money, Orange Money, Equitel money, Mobikash, Tangaza came into the market increasing the presence of digital financial revolution in Kenya. So far, Mpesa has accounted for more than 79.4% of increase in the number of persons accessing formal financial services compared to 71.4% in 2016 (FSD, 2019). As such, Safaricom has partnered with financial institutions through which individuals can deposit or withdraw money to the accounts using Mpesa as a channel of transfer. Additionally, Agency banking has also become popular financial product in Kenya, through which banks deliver their deposit and withdrawal services through vendors located in vendor stores (Barasa & Mwirigi, 2013).

Indeed, entrepreneurs are key users of mobile money transfer in terms of executing payments, savings in bank accounts, and even processing of loans. There is the convenience of access and use of financial services anywhere and anytime. However, to benefit from the financial innovation in the market, entrepreneurs have to decide to incorporate mobile financial services as part of their operations. Kenya is among the leading countries in the world that have adopted technology-driven financial systems, access to and usage of financial services largely depends on the ability of the entrepreneurs to put viable strategies to be financially included (Demirguc-Kunt, Klapper, Singer, Ansar, & Hess, 2018).

With sporadic changes in money transfer in Kenya, entrepreneurs ought to be strategic and innovative to benefit from the available financing opportunities. Indeed, the entrepreneurs in Kenya should be vital in terms of continuous learning, information seeking through market research, and focused on technology. The strategic dimensions allow entrepreneurs to tap into the new financing methods derived from mobile money transfers. Indeed, most commercial banks in Kenya undertake to lend to borrowers including SMEs, using Mobile applications and so entrepreneurs who are receptive to the new technologies are likely to be financially included. Therefore, the study sought to investigate whether entrepreneur’s innovativeness moderates the relationship between strategic orientation and financial inclusion among women-owned SMEs in Kenya.

**Literature Review**

In today’s dynamic business environment, firms that employ innovative strategies tend to have superior performance (Yildiz, Baştürk, & Boz, 2014). Wiklund and Shepherd (2005) argued that a high rate of innovativeness propels entrepreneurs to pursue new opportunities and to adopt new ways of doing things. Equally, entrepreneurs who value learning are market-oriented and technologically apt, are likely to be financially responsive particularly to innovative sources of financing. For example, such entrepreneurs are most likely to borrow funds from dynamic sources such as Mpesa, Mshwari, among others.

Therefore, there is the reason to believe that the ability of the entrepreneur to be innovative therein conceptualized as entrepreneur innovativeness is likely to moderate the relationship between strategic orientation of the entrepreneur and the ability to be financially included. In this regard, entrepreneurial innovativeness encourages the entrepreneur to use new technological advances in access to financial services. Hence, the objective of this study is to determine the moderating role of entrepreneur innovativeness in the relationship between strategic orientation and financial inclusion.
Entrepreneur Innovativeness

Innovation is recognized as a critical ingredient in firms’ competitiveness (Negassi, Lhuillery, Sattin, Hung, & Pratlong, 2019). Indeed, firms operating in a dynamic environment rely on innovativeness to survive and remain competitive (Chang & Webster, 2018). Hurley, Hult, and Knight (2005) define innovativeness as readiness and willingness to embrace new ideas, processes, products, and services. The availability and desire to innovate are driven by the individual attitude towards newness (Van de Vrande, De Jong, Vanhaverbeke, & De Rochemont, 2009). Schumpeter and Opie (1961) recognized range of alternatives that characterize innovativeness, such as; developing new products and services, developing new methods of production, identifying new markets, discovering new sources of supply, and developing new forms of organization. This perspective has given rise to the two broader facets of innovation; technology innovation and administration-related innovation (Damanpour & Evan, 1990; Han, Kim, & Srivastava, 1998).

Despite that organizational success is a total of both types of innovativeness, administration related innovativeness assumes a complementary view of innovation, which is consistent with strategic orientation of a firm (Damanpour & Evan, 1990). The administrative related innovativeness has widely been adopted by researchers such as Kirzner (2009), arguing that; it is through innovativeness that entrepreneurs devise solutions to business problems and challenges (Hult, Hurley, & Knight, 2004). Drawing from diffusion theory, entrepreneurs are driven by the need to acquire and implement new ideas in varying degrees. Innovativeness can either be a radical change or slow and fundamental change process. For instance, firms in retail industry adopt gradual introduction of new and more efficient business processes(Mansury & Love, 2008) Overall, innovativeness is viewed as means for changing the organization whether as response that occurs in its internal or external environment or as pre-emptive move take to influence the situation. The importance of innovation arises from increased global competition, new technological capabilities, changing customer demands and shortened product life cycles (Madrid- Guijarro, Garcia, & Van Auken, 2009). Therefore, innovativeness is integral to the success of firms.

Financial Inclusion

Globally, financial inclusion has become a topical issue evident by the number of developing countries committed to the Maya Declaration and the G-20 Financial Inclusion Plan (Triki & Faye, 2013). Empirical evidence shows that financial inclusion contributes to reduced income inequalities and poverty levels (Seshamani, 2018). Financial inclusion refers to all the initiatives that make quality financial services available, accessible and affordable to all the segments of the population (Demirgüç-Kunt & Klapper, 2012). However, despite the full range of policy initiatives in promoting financial inclusion, statistics show large part of society is still excluded (World Bank, 2014).This is because the availability of formal financial services does not necessarily increase usage (Serrao, Sequeira, & Varambally, 2013). Mindra et al. (2017) enumerated the overreliance on the supply side initiatives such as widening bank networks as the primary reason behind financial exclusion.

In review of literature, there are individual underpinnings which influence individual’s ability to save, obtain credit facilities, make bank remittances and engage in insurance contracts with formal financial services (Martinez et al., 2013; Mindra et al., 2017; Okello Candiyi Bongomin, Ntayi, Munene, & Nabeta, 2016) identified individual preferences such as "personal reasons" were common reason why majority of individuals, notably among women were excluded. Similarly, Amatucci and Crawley (2011) explained that individual characteristics, such as lack of confidence and anxiety in dealing with financial matters had deprived women of the use of external finances. Therefore, to achieve balanced perspective of financial inclusion, individual underpinnings which constitute demand barriers of financial inclusion should be addressed.
Regarding demand-side financial inclusion, a measurement scale has been developed from a twofold perspective. On the one hand, inclusiveness is accounted for from the bank side, whereas, on the other hand, it is accounted for from the willingness of individuals to access financial services (Camara & Tuesta, 2014). Therefore, the three indicators: access, use, and quality of financial services are used to measure financial inclusion (Camara & Tuesta, 2014; Hannig & Jansen, 2010; Serrao et al., 2013). Access refers to physical existence of the financial institution and breadth of financial services that such institution provides. Use quotes to individual willingness to purchase one or more financial products and services whereas quality refers to the relevance of financial products or services to meet day in day needs of the individuals (World Bank, 2014).

**Strategic Orientation**

In recent years, strategic orientation has received significant attention among diverse scholars as an essential catalyst in the success of many organizations (Weber, Geneste, & Connell, 2015). Despite having received widespread attention in the literature, there is no universally accepted definition of strategic orientation. Narver and Slater (1990) defined it as directions implemented by the firm to create the proper behavior for continuous superior performance of the business. Gao, Zhou, and Yim (2007) defined it as the organization's guide to the direction a firm intends to pursue and a mechanism to monitor the activities to ensure efficiency and effectiveness.

The strategic orientation that a firm adopts is created mainly on the firm's philosophy, beliefs, and values (Noble, Sinha, & Kumar, 2002). In this study, strategic orientation is viewed as principles that direct and influence the activities of a firm and generate the behaviors intended to ensure the viability and survival of the firm. Even though strategic orientation has been found to play a critical role in management of firms, a few researchers have questioned its relevance in financial inclusion in small firms (Hudson, Smart, & Bourne, 2001). Charles, Ojera, and David (2015) argued that entrepreneurs generally adopt informal strategic mode since small business leaders are more focused on day-to-day operations, have less money to be spent on training and operate typically without management models, thus, may lack the desire to establish routine processes and procedures in their businesses.

However, it has been established that formal strategic management creates a strategic fit for all the substantial resources irrespective of the size. Based on resource-based theory, firms differ in performance depending on how their funds are organized. Strategic orientation of a firm is, thus, a key element with a bearing on the performance of the firm (Rubio & Aragón, 2009). Although, scholars have used different dimensions to conceptualize strategic orientation (Lee, Choi, & Kwak, 2014; Venkatraman, 1989) this study, is consistent with the previous studies which imagined strategic direction as integrative concept of learning orientation (Calantone, Cavusgil, & Zhao, 2002), market orientation (Kohli & Jaworski, 1990) and technology orientation (Zhou, Yim, & Tse, 2005).

Accordingly, learning orientation is defined as the systematic effort to influence the propensity of a firm to create, disseminate, and utilize knowledge (Calantone et al., 2002). Baker and Sinkula (1999) defined learning orientation as a mechanism that informs how a firm is organized to challenge the long-held assumptions in the market. Therefore, a learning-oriented entrepreneur can acquire knowledge on threats and opportunities in the market and uniquely position the firm to outshine such risks. Santos-Vijande, Sanzo-Perez, Alvarez-Gonzalez, and Vazquez-Casielles (2005) observed that learning is a priority over other resources because it enables an entrepreneur to re-align their values, beliefs, and actions in tandem with the business environment. A learning-oriented entrepreneur can detect any mismatch of the outcome with the expectations, which may result in corrective measures. Hence, the commitment to learning fosters a climate through which the firm treats learning as a continuous process. Firms require different knowledge and skills, and so they ought to continuously develop and appraise the knowledge and skills needed for organizational success (Gomezelj Omerzel & Antončič, 2008).
Market orientation is a set of behaviors and processes that creates customer value and satisfaction (Kohl & Jaworski, 1990). Market-oriented firms have excellent market information regarding the customers and competitors, which enables them to predict the requirements and changes accurately and to respond them swiftly and appropriately (Pelham, 1997). The dimensions of market orientation are based on different perspectives by different scholars, for instance, Kohli and Jaworski (1990) postulated that the aspects that constitute market orientation are based on market-driven behaviors and processes that include generation of market intelligence and intelligence dissemination.

Technology orientation is built on the idea that long term success of a firm depends on technological solutions (Gatignon & Xuereb, 1997). Kocak, Carsrud, and Oflazoglu (2017) defined technology orientation as firms' value system that promotes or advances the use of technology. Similarly, Hamilton and Asundi (2008) described it as an investment in equipment, which ultimately can lead to the firm's growth. Gatignon and Xuereb (1997) pointed out that technology orientation is a strategy guided by philosophy of "technological push" which leads firms to embrace technology emanating from the desires of customers to purchase technologically superior products (Zhou et al., 2005).

Technology benefits have been documented as increased interactivity, flexibility, cheap business transactions and improved inter-connection with business partners and customers (Berisha-Namani, 2009; Jin & Von Zedtwitz, 2008). All the benefits ultimately tie to improved qualities of the product and firm process. Halaç (2015) observed that firms adopt technology as a culture-based strategy based on the combination of capabilities and skills. The author proposed two dimensions of technology orientation: top management capability, which refers to entrepreneurs ability to ensure congruence among the competences (María Ruiz-Jiménez & del Mar Fuentes-Fuentes, 2013) and the technological capabilities relating to the functional skills reflected in technical activities upheld by the firm (Halaç, 2015).

**Moderating Role of EI between Strategic Orientation and Financial Inclusion**

Innovativeness is defined as readiness and willingness to embrace newness (Van de Vrande et al., 2009). This characteristic is driven by an individual attitude towards achieving new products or processes. Existing literature documents positive contribution of innovativeness on business outcomes, such as firms' performance (Acar & Acar, 2012; Verhees & Meulenberg, 2004). According to Tajeddini (2010) innovativeness plays fundamental role in the formation and implementation of business strategies. Given that organizations operate in such a dynamic environment, innovative promotes the ability to acquire new information or resources in the background, thus enhance firms' capabilities (Staniewski et al., 2016).

Indeed, innovative ideas influence the firm to re-organize its strategic resources for improved or desired outcome. Among the desired firms results are the ability to access and use formal financial services. Researchers suggest that entrepreneurs, in addition to being strategic, should to continuously monitor the changes in external environment, particularly that which affect or influence the laid strategies of the firm (Spyropoulou, Katsikeas, Skarmeas, & Morgan, 2018). Therefore, the firm continually re-shapes its policy in response to the environment. It is a process that requires considerable financial resources to be invested. Atieno (2009) argued that internal funds are insufficient to support the continuous dynamism of a firm, with firms opting to rely on financial institutions for funding.

However, for eligibility of loans, the firm needs to show the evidence of future growth and organization of firm in totality (Calcagnini, Cole, Giombini, & Grandicelli, 2018). In this case, strategically oriented firms with knack of innovation have streamlined processes and are always considered to possess an intangible asset that reflects exponential growth in the future (Casson, Martin, & Nisar, 2008). They display trust in future growth and expansion and, therefore, financial institutions are willing to fund them (Block, Colombo, Cumming, & Vismara, 2018). On account of the enumerated importance of innovativeness, this study seeks to determine the
moderating role of entrepreneur innovativeness on the relationship between strategic orientation and access and use formal financial services.

Moderating Role of EI between Learning Orientation and Financial Inclusion

Entrepreneurs committed to learning continuously develop new knowledge that promotes access to critical resources. Learning involves acquisition of knowledge and skills necessary to facilitate access to new ways of doing things (Falk & Dierking, 2018). Okello Candiya Bongomin, Ntayi, Munene, and Malinga (2018) noted that entrepreneurs who are financially literate are exposed to various financing options. This is because learning places an entrepreneur on a knowledge path from which they acquire knowledge sufficient to make the appropriate financial choices. The information obtained is likely to influence their behaviors towards making financial decisions. Previous studies have recognized that knowledge acquisition in itself is not useful unless hinged with actions for successful outcomes. It has to be fostered and guided by other certain factors to create value for the users (Alegre & Chiva, 2008).

The argument is based on the fact that entrepreneurs characterized by openness to newness translate the acquired knowledge to meaningful financial choices (Hult et al., 2004). Because innovativeness promotes transparency and innovation, entrepreneurs who are innovative by nature and invest time and resources to learn both the organization and the environment are likely to be financially included. This reasoning is based on the fact that entrepreneurs who try new ways of doing things and take time to learn are expected to pursue new financing models, particularly innovative financial products. These financial products are currently offered on digital platforms as opposed to the traditional forms.

Therefore, the dynamic nature of the financial market requires the entrepreneur to have information and continuously learn and monitor the new developments. As such, innovative entrepreneurs who learn have a higher chance of adopting new financing approaches, thus increasing the likelihood of financial inclusion. In other words, entrepreneur innovativeness coupled with learning orientation is necessary ingredient to financial inclusion.

- Hypothesis 1: Entrepreneur innovativeness positively moderates the relationship between learning orientation and financial inclusion.

Moderating Role of EI between Marketing Orientation And Financial Inclusion

Given the importance of innovativeness, several studies have explored the role it plays on firm competitiveness (Akman & Yilmaz, 2008; Low, Chapman, & Sloan, 2007; Mahmoud, Blankson, Owusu-Frimpong, Nwankwo, & Trang, 2016; Tutar, Nart, & Bingöl, 2015). Among the factors that contribute to the competitiveness of the firm are the access and use of formal financial services. Existing literature supports the view that innovativeness influences firm's market orientation. Kohli and Jaworski (1990) define market orientation as a set of behaviors and processes that influences customer satisfaction. Slater and Narver (1994) argued that market-oriented entrepreneurs with commitment to innovation are more likely to achieve best outcomes available in the environment, including search for financial products.

This is because being innovative facilitates entrepreneurs to analyze market intelligence in a more precise way to identify superior ways to compete (Tutar et al., 2015), including exploring new funding models. Further, it escalates the rate at which a market-oriented entrepreneur pursues new opportunities such innovative sources of financing (Hult et al., 2004). Access and use of formal financial services provide market-oriented entrepreneurs with a competitive edge. Indeed, it is significant since these firms operate in a competitive environment characterized by limited external resources.

Market-oriented firms that uphold innovativeness adjust to the environmental situations better in quest of providing superior market value. Market orientation requires innovative responses to different market
conditions. Moreover, Akman and Yilmaz (2008) found that customer orientation a component of market orientation impacts innovative capability. Firms with higher capacity to innovate will be more successful in responding to their environments and developing new skills that will lead to competitive advantage. Indeed, market orientation is a crucial attribute in search of market information, and therefore, firms that are market-oriented are more likely to be financially included. Firms that are market-oriented and are innovative generally stand in a vantage point, particularly in search of firms' resources such as finances. Indeed, the current financial market is dynamic in the sense that new products are being developed, and therefore, for a firm to access and use such services, market orientation, and innovation is paramount.

Literature indicates that innovativeness involves willingness and readiness to embrace new concepts, ideas, and processes (Rhee, Park, & Lee, 2010). Some of the latest thoughts, ideas and methods are domiciled in the financial market. As such, firms that are market-oriented and are innovative are likely to be financially included. Indeed, financial products have become dynamic in the sense that new products are being rolled out regularly. These products are abundant in supply, and so firms that study the market to have a feel of what the market requires and innovative are likely to be financially included.

- Hypothesis 2: Entrepreneur innovativeness positively moderates the relationship between market orientation and financial inclusion.

Moderating Role of EI On between Technology Orientation And Financial Inclusion

Technology orientation is defined as a firms’ value system that promotes the adoption and use of technology (Kocak et al., 2017). Defined differently, technology orientation is a firms’ strategy directed towards embracing use of technology in organizational processes to achieve set objectives (Gatignon & Xuereb, 1997; Zhou et al., 2005). Indeed, firms with innovative entrepreneurs endeavor to devise solutions to solve business problems and challenges, which provide the basis for the survival and success of the firm (Hult et al., 2004). With this in mind, firms that are embracing technology and headed by innovative entrepreneurs are likely to pursue strategies that are technologically driven. Some of these technologically driven strategies include adoption of new processes, including dynamic financing methods.

Firms that have innovative entrepreneurs and embrace technology adopt new financing approaches, including mobile money technology. This adoption of mobile money technology exposes the firm to more and accessible avenues for funding. Research indicates that mobile money is more convenient and user-friendly as opposed to traditional funding approaches. Most conventional financing may require production of collaterals, guarantors among other requirements, which are not needed in the mobile lending models. The use of mobile financial services is the latest technology being adopted by most SMEs in Sub-Saharan Africa. Approximately 12% of adults have a mobile money account, and 45% rely on mobile phones for money transactions (Patwardhan, 2018). Digital financing has provided a platform for entrepreneurs to easily access and financial services (Okello Candiya Bongomin et al., 2018).

Therefore, it is presumed that firms that are innovative and have embraced technology as a strategy are likely to access funds for the firm, thus increasing financial inclusion. In other words, most financial transactions are technology-driven and, therefore, entrepreneurs who are risk-takers in terms of embracing new ways of doing things are likely to be financially included. It is more likely that innovative entrepreneur who appreciates technology may adopt digital financing, which is less costly, convenient and accessible (World Bank, 2014). Creative entrepreneurs operating in a technology-oriented firms encourage clients to transact through the use mobile money. They can then transfer the money from their phone to the bank at their convenience. Given this discussion, this study, therefore, hypothesizes that entrepreneur innovativeness moderates the relationship between technology orientation and financial inclusion.
- Hypothesis 3: Entrepreneur innovativeness positively moderates the relationship between technology orientation and financial inclusion.

**Conceptual Framework**
From the preceding discussion, the hypothesized relationships are as illustrated below as shown in figure 1. We controlled for firm performance, firm size, age of the firm, entrepreneur age, entrepreneur marital status and entrepreneur level of education.

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<th>Independent Variables</th>
<th>Moderator</th>
<th>Dependent Variable</th>
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<td>Learning Orientation</td>
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<td>Financial inclusion</td>
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<td>Market Orientation</td>
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<td>Technology Orientation</td>
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<td>Entrepreneur Innovativeness</td>
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**Control Variables**
- Entrepreneur Age
- Entrepreneur Marital Status
- Entrepreneur Level of Education
- Firm Size
- Firm Age

*Figure 1 - Research Model*

**Research Methodology**

**Sample**
To test the hypotheses, we surveyed to seek responses from women-owned entrepreneurs in Kenya. First, we developed a structured questionnaire based on existing measurement scales then modified to suit the context of the study. Using preliminary draft questionnaire, a pilot test was conducted on 60 SMEs to evaluate its relevance and efficacy in addressing study objectives. The survey was then revised utilizing the feedback from the pilot study. The target populations were spread across eight counties in Kenya and five different industry sectors namely food and beverage sector, manufacturing, service, information technology, and retail industry. Out of the 723 women SMEs that were supplied with questionnaires only 634 were used for analysis.

**Validity and Reliability**
Out of the 728 respondents presented with questionnaires, only 634, representing 87% respondents returned the questionnaires. According to Sekaran and Bougie (2016) a response rate of more than 30% is acceptable, and the researcher can carry out further analysis. After that, reliability and validity tests were performed to
establish validity and reliability of the instrument used. The use of existing measurement scales for the variables ensured content validity. To examine construct validity, explanatory factor analysis was conducted. The rule of the thumb is that all the variables should yield Eigenvalue more significant than 1 to be retained (Kaiser, 1960). The standardized estimates of the factor loadings ranged from 0.574 to 0.784 for entrepreneur innovativeness, 0.506 to 0.921 for financial inclusion, 0.546 to 0.796 for learning orientation, 0.547 to 0.818 for market orientation, and 0.833 to 0.887 for technology orientation.

Measurement of Variables

**Financial inclusion variable:** Financial inclusion is measure using the parameters of access and use of quality financial services, is assessed using two perspectives; digital financial inclusion (Koh, Phoon, & Ha, 2018; Ouma, Odongo, & Were, 2017; Zins & Weill, 2016) and traditional financial inclusion (Camara & Tuesta, 2014; Mindra & Moya, 2017; World Bank, 2014). Digital financial inclusion entails measuring the individual easiness to access mobile money agents, receive payments, and mobile money transfers (Bachas, Gertler, Higgins, & Seira, 2018; Ouma et al., 2017). In the same regard, traditional financial inclusion was measured using the parameters of access and use of quality financial services of financial institutions(Demirguc-Kunt et al., 2018; Mindra & Moya, 2017). We summated the measures of both the scales to create the financial inclusion indicator for this study.

**Strategic orientation variables:** Learning orientation was measured using an instrument developed from the work of Calantone et al. (2002). We modified tool to capture the dimensions of commitment to learning, shared vision, and open-mindedness. Market orientation was measured based on the MKTOR scale drawn from the work of Lee et al. (2014) and Narver and Slater (1990). The instrument captures two dimensions; customer orientation and competitor orientation. The measure of technological direction was adopted from the work of (Gatignon & Xuereb, 1997) with items assessing a firm's proclivity in using state of the art technologies in their firms.

**Entrepreneur innovativeness:** In line with the study of Goldsmith, Freiden, and Eastman (1995), entrepreneur innovativeness was measured using a ten-item instrument on a 7 point Likert scale.

Control Variables: Firms’ performance was measured by a seven-point Likert scale instrument adapted from the work of Murphy and Callaway (2004). The firm age was measured by the number of years the enterprise has been in existence (Rhee et al., 2010). Consistent with Tarus and Sitienei (2015) firm size was measured by the number of employees in the organization.

The entrepreneur level of education was measured by an ordinal scale adapted from the work Zins and Weill (2016). Further, the marital status was measured form a scale drawn from the work of Mindra and Moya (2017). Entrepreneur age is presumed to play an essential role in predicting financial inclusion. The measurement scale adapted from the previous work (Ouma et al., 2017).

**Robustness Test**

Several statistical tests were performed before the data was analyzed. First, we carried out normality test. The Kolmogorov-Smirnov and Shapiro-Wilk test revealed a p>.05 indicating standard data. Secondly, a multicollinearity test showed tolerance values of more than 0.4 and VIF values of less than 3 for all the variables hence multicollinearity problem was ruled out. An analysis of heteroscedasticity using Levene test indicated p>.05, meaning variance of error terms were equal. Test of linearity revealed a significant p-value of 0.000 in the ANOVA F-statistic indicating the linearity of the data.

**Model Specification**

The general regression equation used in this study is of the form:
Y = α + βX + ε

Where Y is the dependent variable, α is the intercept of the equation, β is the coefficient, X are the predictor variables, and ε is the error term.

The regression equations for the three models in the study are as follows:

To regress for the controls, the following equation was estimated:

Financial inclusion= \[ \alpha + \beta (\text{Entrepreneur age}) + \beta(\text{Entrepreneur education level}) + \beta(\text{Firm size}) + \beta(\text{firm age}) + \beta(\text{financial performance}) + \beta(\text{Entrepreneur marital status}) + \epsilon \]  

To test the main effects of the model, the equation was estimated as follows:

Financial inclusion= \[ \alpha + \beta (\text{Entrepreneur age}) + \beta(\text{Entrepreneur education level}) + \beta(\text{Firm size}) + \beta(\text{firm age}) + \beta(\text{financial performance}) + \beta(\text{Entrepreneur marital status}) + \beta(\text{Learning orientation}) + \beta(\text{Market orientation}) + \beta(\text{Technology orientation}) + \epsilon \]  

To test the interaction effect in the regression equation, the model was estimated as follows:

Financial inclusion= \[ \alpha + \beta (\text{Entrepreneur age}) + \beta(\text{Entrepreneur education level}) + \beta(\text{Firm size}) + \beta(\text{firm age}) + \beta(\text{financial performance}) + \beta(\text{Entrepreneur marital status}) + \beta(\text{Learning orientation}) + \beta(\text{Market orientation}) + \beta(\text{Technology orientation}) + \beta(\text{Learning orientation * Entrepreneur innovativeness}) + \beta (\text{Market orientation} * \text{Entrepreneur innovativeness}) + \beta(\text{Technology orientation} * \text{Entrepreneur innovativeness}) + \epsilon \]  

Results

Univariate Analysis

Table 2 present the means, standard deviation values and bivariate correlations among the study variables. The results show all independent variables are positively correlated with financial inclusion (learning orientation \( r=.176; p<.01 \); market orientation \( r=.269; p<.01 \); technology orientation \( r=.411; p<.01 \)).

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>S.D</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial Inclusion</td>
<td>4.80</td>
<td>0.96</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Entrepreneur Age</td>
<td>1.68</td>
<td>0.87</td>
<td>-1.11**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Entrepreneur level of education</td>
<td>2.43</td>
<td>0.92</td>
<td>.14**</td>
<td>.09*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Firm age</td>
<td>3.27</td>
<td>1.61</td>
<td>.02</td>
<td>.37**</td>
<td>.08</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Firm size</td>
<td>1.28</td>
<td>0.66</td>
<td>.08</td>
<td>.09*</td>
<td>.00</td>
<td>.031</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial Performance</td>
<td>4.81</td>
<td>1.29</td>
<td>.33**</td>
<td>.16**</td>
<td>.07</td>
<td>.02</td>
<td>.10*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Entrepreneurial Marital status</td>
<td>1.52</td>
<td>0.71</td>
<td>.05</td>
<td>.20**</td>
<td>.10*</td>
<td>.19**</td>
<td>.06</td>
<td>.03</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Learning Orientation</td>
<td>5.48</td>
<td>0.91</td>
<td>.17**</td>
<td>.01</td>
<td>.02</td>
<td>.05</td>
<td>.00</td>
<td>.32**</td>
<td>.08</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Market Orientation</td>
<td>6.06</td>
<td>0.91</td>
<td>.27**</td>
<td>.01</td>
<td>.04</td>
<td>.01</td>
<td>.26**</td>
<td>.10**</td>
<td>.53**</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technology Orientation</td>
<td>4.59</td>
<td>1.81</td>
<td>.41**</td>
<td>.14**</td>
<td>.16**</td>
<td>.05</td>
<td>.02</td>
<td>.35**</td>
<td>.02</td>
<td>.17**</td>
<td>.22**</td>
<td>1</td>
</tr>
</tbody>
</table>

Level of significant \( *p<.05, **p<.01 \)

Multivariate Analysis

The hypotheses were tested using the moderated regression model. The results in Model 1 incorporated the control variables. The level of education (\( \beta=.121, p<.01 \)), firm performance (\( \beta=.277, p<.01 \)), and marital status (\( \beta=.162, p<.05 \)) were found to have a positive and significant effect on financial inclusion. Firm age (\( \beta=.001, p>.05 \)), Firm size (\( \beta=.085, p>.05 \)), and Entrepreneur age (\( \beta=-.076, p>.05 \)) were found to have not affected on the financial inclusion. Model 2 constituted of the predictor variables. Market orientation (\( \beta=.165, p<.01 \)) and
Technology orientation ($\beta=.158, p<.01$) were found to have a positive and significant relationship with financial inclusion. Learning orientation ($\beta=-.019, p>.05$) was found to have no significant effect on financial inclusion.

Table 2 - Regression Results

<table>
<thead>
<tr>
<th>Variables</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>3.375</td>
<td>2.311</td>
<td>2.306</td>
</tr>
<tr>
<td></td>
<td>(0.203)</td>
<td>(0.282)</td>
<td>(0.752)</td>
</tr>
<tr>
<td>Controls</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Entrepreneur age</td>
<td>-0.076</td>
<td>-0.056</td>
<td>-0.043</td>
</tr>
<tr>
<td></td>
<td>(0.045)</td>
<td>(0.042)</td>
<td>(0.041)</td>
</tr>
<tr>
<td>Entrepreneur level of education</td>
<td>0.121**</td>
<td>0.074*</td>
<td>0.078*</td>
</tr>
<tr>
<td></td>
<td>(0.039)</td>
<td>(0.037)</td>
<td>(0.036)</td>
</tr>
<tr>
<td>Firm size</td>
<td>0.085</td>
<td>0.093</td>
<td>0.108*</td>
</tr>
<tr>
<td></td>
<td>(0.055)</td>
<td>(0.052)</td>
<td>(0.050)</td>
</tr>
<tr>
<td>Firm age</td>
<td>0.001</td>
<td>0.006</td>
<td>0.012</td>
</tr>
<tr>
<td></td>
<td>(0.024)</td>
<td>(0.022)</td>
<td>(0.022)</td>
</tr>
<tr>
<td>Financial performance</td>
<td>0.227**</td>
<td>0.128**</td>
<td>0.084**</td>
</tr>
<tr>
<td></td>
<td>(0.028)</td>
<td>(0.029)</td>
<td>(0.029)</td>
</tr>
<tr>
<td>Marital status</td>
<td>0.162*</td>
<td>0.121</td>
<td>0.106</td>
</tr>
<tr>
<td></td>
<td>(0.074)</td>
<td>(0.070)</td>
<td>(0.067)</td>
</tr>
<tr>
<td>Predictors</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Learning orientation</td>
<td>-0.019</td>
<td>-0.513**</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.045)</td>
<td>(0.150)</td>
<td></td>
</tr>
<tr>
<td>Market orientation</td>
<td>0.165**</td>
<td>0.606**</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.044)</td>
<td>(0.135)</td>
<td></td>
</tr>
<tr>
<td>Technology orientation</td>
<td>0.158**</td>
<td>-0.058</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.020)</td>
<td>(0.078)</td>
<td></td>
</tr>
<tr>
<td>Moderator</td>
<td></td>
<td></td>
<td>0.223**</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(0.173)</td>
</tr>
<tr>
<td>Interactions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Learning orientation*Entrepreneur innovativeness</td>
<td>0.099**</td>
<td>(0.032)</td>
<td></td>
</tr>
<tr>
<td>Market orientation*Entrepreneur innovativeness</td>
<td>-0.110**</td>
<td>(0.030)</td>
<td></td>
</tr>
<tr>
<td>Technology orientation* Entrepreneur innovativeness</td>
<td>0.031*</td>
<td>(0.015)</td>
<td></td>
</tr>
<tr>
<td>R Square</td>
<td>0.133</td>
<td>0.242</td>
<td>0.309</td>
</tr>
<tr>
<td>Adjusted R Square</td>
<td>0.125</td>
<td>0.231</td>
<td>0.295</td>
</tr>
<tr>
<td>Std. Error of the Estimate</td>
<td>0.895</td>
<td>0.839</td>
<td>0.803</td>
</tr>
<tr>
<td>R Square Change</td>
<td>0.133</td>
<td>0.109</td>
<td>0.021</td>
</tr>
<tr>
<td>F-Statistic</td>
<td>16.032**</td>
<td>29.835**</td>
<td>6.166**</td>
</tr>
</tbody>
</table>

Notes: N = 634 for all models; unstandardized coefficients are reported; the figures in parenthesis are standard errors; level of significant *p<.05, **p<.01

In Model 3, we tested how entrepreneur innovativeness moderates the relationship between strategic orientation and financial inclusion. Hypothesis 1 proposed that entrepreneur innovativeness positively moderates the relationship between learning orientation and financial inclusion. The results support the hypothesis ($\beta=.099, p<.01$). What it means is that learning orientated entrepreneur, who is innovative, is likely to access and use quality financial services. Hypothesis 2 tested the moderating effect of entrepreneur innovativeness on market orientation-financial inclusion relationship. The findings indicate that the interaction between entrepreneur innovativeness and market orientation on financial inclusion is negative and significant ($\beta=-.110, p<.01$). Hypothesis 3 predicted a moderating effect of entrepreneur innovativeness on technology orientation-financial inclusion relationship. Our results support the link ($\beta=.031, p<.05$), implying that at higher levels of entrepreneur innovativeness, a technology-oriented entrepreneur is likely to financially included.
A more precise way to present interaction results is to plot them in graphs (Aiken, West, & Reno, 1991). The figures help in simplifying the interpretation of the complex nature of the interactions. Therefore, we used monographs to present the results of the interaction terms as presented in Figure 2, Figure 3 and Figure 4. The upward slope on the learning orientation and technology orientation graph shows a positive and significant effect.

The slope in the graph in Figure 2 indicates that at high levels of entrepreneur innovativeness, learning orientation has a stronger effect on financial inclusion, while at low levels of entrepreneur innovativeness, learning orientation has a more moderate impact on financial inclusion.

![Figure 2 - Moderating effect of entrepreneur innovativeness on market orientation-Financial inclusion relationship](image2)

The graph in Figure 3 indicates that entrepreneur innovativeness negatively moderates the relationship between market orientation and financial inclusion. The slope on the chart shows that at high levels of entrepreneur innovativeness, the effect of market orientation on financial inclusion is low and slopes downwards. The downward slope is an indication of negative relationship.

The graph in Figure 4 presents the moderating effects of entrepreneur innovativeness on the relationship between technology orientation and financial inclusion. The results indicate that at high levels of entrepreneur innovativeness, there is a stronger effect of market orientation on financial inclusion. Similarly, at low levels of entrepreneur innovativeness, technology orientation has little impact on financial inclusion.

![Figure 4 - Moderating effect of entrepreneur innovativeness on learning orientation-Financial inclusion relationship](image4)
Discussion

The goal of this paper was to explore the moderating effect of entrepreneur innovativeness on the relationship between strategic orientation and financial inclusion. The results of our study provided support to all the hypotheses. The results indicate that learning-oriented entrepreneur is likely to access and use formal financial services, mainly when the entrepreneur is innovative. This is so because innovativeness coupled with learning enhances the capacity to adopt new processes, ideas, and knowledge, which is symptomatic of the dynamic formal financial services. For instance, mobile banking, which is quite prevalent in the financial sector requires openness to learning and an innovative mind. According to Hult et al. (2004), entrepreneurs characterized by openness to education and embrace newness translate the acquired knowledge to meaningful financial choices.

Further, innovative environment stimulates a learning-oriented entrepreneur into receptivity of new ideas such as new sources of funding. Being creative with an orientation to learn helps to discover or get in-depth understanding of different financing models. Therefore, given that most financial institutions are encouraging digital financing, innovativeness is a significant moderator between learning orientation and financial inclusion.

The results provided an exciting finding that entrepreneur innovativeness negatively moderates the relationship between marketing orientation and financial inclusion. This necessarily implies that innovative entrepreneur who is also market-oriented may place more emphasis on customer and competitor strategies to the exclusion of access and use of formal financial services. We argue that innovative entrepreneurs with market focus may not emphasize on the need to seek external funding and other financial services. Such entrepreneurs are focused on how to address new ideas in the market to suit customer needs and gain competitive advantage. The entrepreneurs place importance on non-financial ways to attract and retain customers and remain more productive such as efficient and quality customer services. Therefore, innovative entrepreneurs, who are also driven by market needs are less likely to be financially included.

Indeed, as we postulated that technology-oriented entrepreneur is likely to access and use formal financial services. The results are consistent with the literature that use of technology deepens financial inclusion (Donovan, 2012). The use of technology coupled with innovative entrepreneur is likely to increase the likelihood of financial inclusion, mainly because the financial services that are in place border primarily on the use of technology. For instance, in Kenya, the use of Mpesa and other forms of money transfer services used to access finances for the firm (Tarus & Sitienei, 2015), thrives in an environment replete with innovations. As it stands currently, most formal financial services are technology-based. Therefore, innovative entrepreneurs who are technologically skilled have easiness in accessing financial services. Digital financial services such as mobile money and online banking provide a platform for entrepreneurs who are open to newness and appreciate the use of technology to transact conveniently. They are more likely to access saving and online credit facilities such as M-Akiba and Mshwari respectively. Therefore, the study supports the view that technologically oriented entrepreneurs are likely to be financially included, mainly when they are innovative.

Practical Implications

Previous studies have primarily examined the impact of financial institutions, yet few factors are known that underpin financial inclusion from an individual/ demand-side perspective. As noted by Mindra and Moya (2017), among the factors that determine the level of financial inclusion are individual-based. In this regard, this study fills a significant gap in understanding the role innovativeness play on entrepreneurs’ strategic decisions in promoting the access and use of formal financial resources. The implication of the study highlights the importance of developing a more integrated approach to studying the effects of strategic orientation on financial inclusion via entrepreneur innovativeness.

The study has several practical and theoretical implications. From a theoretical perspective, the study highlights the importance of developing a more integrated approach to investigating financial inclusion. Through
examining the effect of strategic orientation on financial inclusion, the findings offer strong support to the conceptual model providing initial benchmark on the role of entrepreneurs’ beliefs, values, and strategy attributes in increasing the access and usage of formal financial services. It stimulates more discussion to interdisciplinary approach exploring the drivers of financial inclusion more especially from demand-side perspective. From a practical and policy perspective, the findings from this study can be useful to the government and practitioners on strategic determinants useful in promoting financial inclusion. The Government of Kenya has invested enormous resources into SME's growth. Hence, this finding is appropriate for designing policies and training programs geared toward increasing the level of financial inclusion among women SMEs.

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**References**


