

# Entrepreneurial Orientation, Micro, Small and Medium Enterprise Growth and the Moderating Role of Environmental Factors in the Manufacturing Sector in Nairobi County, Kenya

John K. Mosonik

Loice C. Maru

Joyce K. Komen

Moi University  
Kenya

## Abstract

*The growth and survival rate of Micro, Small and Medium-sized Enterprises (MSMEs) in Kenya has been one of the major concerns of the policy makers, practitioners and scholars. Whereas entrepreneurial orientation (EO) has been identified to underpin MSME growth, several studies on entrepreneurial orientation-growth nexus have provided mixed results based on the aggregated one-dimensional measure of EO. While some report a significant association, some report no significance. The mixed findings imply that the relationship between EO and growth is not linear, pointing to other causal factors either internal or external to the enterprise. Against this backdrop, this study set out to assess the effect of entrepreneurial orientation on the growth of manufacturing sector MSMEs in Nairobi County, Kenya and the moderating role of environmental factors. Anchored on the contingency fit view, the economic theory of entrepreneurship and the life cycle theory the study adopted a positivist approach, employing the explanatory research design of a cross sectional nature. With a target population of 98,607 firms, a stratified sample of 384 MSMEs from the manufacturing sector in Nairobi County was drawn. Data was collected by use of structured questionnaires and analysed by both descriptive and inferential statistics including Pearson correlation and regression analyses. The study controlled for both age and sub-sector, as they have been previously found to affect firm growth. Results indicate that entrepreneurial orientation has a significant effect on MSME growth ( $\beta = .139, p = .012 < .05$ ). The study also found that environmental factors significantly moderate the relationship between entrepreneurial orientation and MSME growth ( $\beta = .0092, p = .040 < .05$ ; LLCI = .0004; ULCI = .0180). The study concludes that environmental factors significantly influence the extent to which entrepreneurially oriented owners/managers in the manufacturing sector steer their enterprises towards growth. It is recommended that MSME owners/managers innovate, take risks and stay proactive in their businesses in order to grow. MSMEs are also advised to adopt competitive strategies to navigate the competitive business environment in the manufacturing sector. It is further recommended that the government provides an enabling policy environment and business support to foster growth among MSMEs.*

**Key Words:** Entrepreneurial Orientation, Environmental Factors, MSME Growth

## 1.1 Introduction

Small business growth is a fundamental driver of wealth creation, employment creation, and economic growth and development in every economy around the world (Dziallas & Blind, 2019). It is closely related to the employment creation, and fast-growing firms create more job opportunities which are essential for the success of every economy (Dobbs & Hamilton, 2017). Further, the economic dynamics are related to the growth of the enterprise through taxation, contribution to an economy's Gross Domestic Product (GDP), innovation and technological change. As such, business growth has been widely considered among the most vital source of economic progression and a valuable measure of entrepreneurial success (Achtenhagen, Naldi, Melin, 2016; Neneh & van Zyl, 2014).

Growth among MSMEs is of particular importance to economic progression in both developed and developing economies, and has been credited for employment creation, driving innovation and contribution to GDP in both contexts (United Nations Development Programme (UNDP), 2018; Organization for Economic Co-operation and Development (OECD), 2017). Small business growth has been empirically measured in literature, in both qualitative and quantitative terms. Qualitatively, among the widely used measures of firm growth include innovation (Black, Burton & Johnson, 2009), value creation (Black et al., 2009), research and development (Kaczmarek, Byczkowska & Czyrka, 2016) and corporate social responsibility (Kaczmarek et al., 2016).

Small business growth has been measured quantitatively, using financial indicators including sales growth, number of employees, annual turnover, market share, value of assets, average return on net assets, production capacity and gross profit growth (Pearce & Robinson, 2017; Achtenhagen et al., 2016). Owing to their ease of measurement and as better predictors and indicators of business sustainability (Pearce & Robinson, 2017; Achtenhagen, Naldi &

Melin, 2016), the present study adopted the quantitative measures of MSME growth, including sales growth, number of employers, market share, value of assets, production capacity and gross profit growth.

Entrepreneurship refers to the concept of developing and managing a business venture in order to gain profit by taking several risks in the corporate world (Vu, 2017). The entrepreneurial function implies the discovery, assessment and exploitation of opportunities, in other words, new products, services or production processes; new strategies and organizational forms and new markets for products and inputs that did not previously exist (Slater & Narver, 2010). Entrepreneurship has also been discussed in terms of product entry, that is the introduction of new products to an existing market, and market entry which is the distribution and delivery of goods or services to a new target market (Li & Atuahene-Gima, 2017).

In contrast to large corporations where growth is largely attributed to organizational strategy and firm-level entrepreneurship, growth among MSMEs is largely tied to the owner/manager entrepreneurial orientation (EO) owing to their decision-making autonomy and direct involvement in day-to-day business operation (Neneh & van Zyl, 2017). In addition, owners/managers in MSMEs are in direct touch with both the market and the products/services. Accordingly, a cross-section of studies empirically establishes that one way of fostering MSME growth is by enhancing their level of entrepreneurial orientation (EO) (Mensah, 2017; Neneh & van Zyl, 2017; Bergthaler *et al.*, 2015; Neneh & Smit, 2013).

Various scholars have provided a number of definitions for the concept of EO. Miller (1983) defined EO as a strategic orientation capturing specific entrepreneurial aspects of decision-making styles, methods and practices. Covin and Slevin (1989) refined the definition by stating that EO measures the extent to which “top managers are inclined to take business-related risks, to favour change and innovation in order to obtain a competitive advantage for their firm, and to compete aggressively with other firms.” according to Lumpkin and Dess (2001), an entrepreneurial orientation “refers to the processes, practices, and decision making activities”, that lead to the essential act of entrepreneurship, involving intentions and actions.

In its novel conceptualization by Miller (1983), EO consisted of three dimensions: innovativeness, proactiveness and risk propensity. According to Miller (1983), firms that engage in product market innovation, undertake somewhat risky ventures, and are usually first to come up with ‘proactive’ innovations beating competitors to the punch can be described as being entrepreneurially oriented. Lumpkin and Dess (1996) later advanced the conceptualization of EO to include competitive aggression and autonomy. There have however been some concerns over the distinctiveness between proactiveness and competitive aggressiveness (Covin & Slevin, 1989). Consequently, a number of studies (Osoro, 2012; Neneh, Zyl & Noordwyk, 2016; Neneh & Zyl, 2017; Etim, Adabu & Ogar, 2017) have conceptualized EO as per Miller (1983) while others (Yamoah, 2016; Waithaka, 2016) have adopted all the five dimensions as per Lumpkin and Dess (1996).

The dimensionality of the concept of EO is equally a subject of debate among scholars. While some studies have argued that EO is best viewed as a multidimensional construct (Lumpkin & Dess, 2001) because each EO construct may occur in different combinations, consequently, each representing different and independent aspects of the EO construct (George, 2006), others have held that the dimensions of EO is more suited as a unidimensional concept (Covin & Slevin, 1991; Knight, 1997; Miller, 1983). In view of the foregoing concerns over distinctiveness in the conceptualization of EO by Lumpkin and Dess (2001), this study adopts the original conceptualization by Miller (1983). According to Miller (1983) an organization has EO when it is concurrently risk taking, innovative and proactive. The study also adopts the unidimensional approach, as it has been found in empirical literature, that aggregating the three dimensions with equal weights enables the assessment of the overall level of a firm’s EO (Saeed *et al.*, 2014; Covin & Slevin, 1989). This has also been successfully adopted in a number of extant related studies (Neneh & van Zyl, 2017; Mensah, 2017; Bergthaler *et al.*, 2015; Neneh & Smit, 2013).

In their quest to grow, among the key impediments among MSMEs are factors outside the business’s control, especially the environment in which it operates (Chachar, De Vita, Parveen & Chachar, 2018). The prospects are much better when the business enjoys such favourable conditions as increased demand for its products and services, access to a qualified workforce, fair competition, enabling policy environment, among others (Casillas & Moreno, 2016). At the same time, by default or by accident, changes and adjustments in the policy, regulatory and institutional framework have not always empowered MSMEs (Bergthaler *et al.*, 2015).

The United Nations Conference on Trade and Development Report (UNCTAD) (2012) highlights that the unleashing of entrepreneurship requires an environment that enables the entrepreneur to create, operate, manage, and, if necessary, close a business, within a context where compliance with the rule of law governing disclosure, licensing and registration procedures, and the protection of physical and intellectual property, are guaranteed. Accordingly, the Organization for Economic Cooperation and Development (OECD) (2017), government business support services are paramount important for the development of MSMEs.

Further, a survey of MSMEs in developing countries carried out by the World Bank (2010) found that competition represents a risk for survival for individual enterprises. The study also found that although competition represents high risk, it is the one which pushes MSMEs towards higher productivity which actually results in their growth and development. Against this backdrop, the present study presupposed that environmental factors, as indicated by policy factors, competition and business support services has an indirect effect on the association between EO and enterprise growth.

The growth of MSMEs has been directly associated with the growth and development of many developed and developing countries globally, including the United States of America (USA), China, India, South Korea, Malaysia, Taiwan and Thailand among a host of other OECD countries whose MSME contribution to employment ranges from 60-70% and over 50% of GDP (OECD, 2017). MSMEs in such countries further consist of over 98% of businesses. In South East Asian countries, about 90% of industrial establishments are under MSMEs (United Nations Industrial Development Organization (UNIDO), 2018). In the European Union (EU), MSMEs constitute 99.8% of all businesses as well as employ 76 million people representing 67.4% of total employment (EU, 2017).

In emerging economies, MSMEs contribute at least 45% of total employment and 33% of Gross Domestic Product (GDP) (OECD, 2017). In Ghana, the MSME sector is the most dominant form of business in Ghana as they account for up to 92% of businesses in the economy, contributing 49% of the country's GDP (UNIDO, 2018). In Nigeria, it was estimated that in 2016, MSMEs, accounted for 90% of existing businesses and provided about 85% of manufacturing employment (Olokundun, Moses, Iyiola, Ibidunni & Amaihian, 2017). In Nigeria, MSMEs account for 96% of businesses, and contribute 48% of national GDP and 84% of employment (PriceWaterhouseCoopers (PWC), 2020).

In Kenya, the share of private sector employment grew from 69.1 per cent MSMEs in 2017 to 69.5 per cent in 2018. Conversely, the informal sector accounted for 89.0 per cent representing 14.9 million persons in 2018 which was a 5.4 per cent increase from 83.6 per cent in 2017 (Kenya National Bureau of Statistics (KNBS), 2019). According to White, Boit & Maru (2013), MSMEs sector employs 6.4 Million Kenyans accounting for 84% of the total workforce in the Country; contributes 34.0% GDP. This is supported by the Micro and Small Enterprise Authority (MSEA) (2018) who reports that the MSME sector employs about 85 percent of the Kenyan workforce. Relative to other sub-sectors in the realm of MSMEs, the manufacturing sector has the highest potential to generate additional output and create jobs (Kenya Association of Manufacturers (KAM), 2019; OECD, 2017; Were, 2016). Kenya's manufacturing sector's contribution to GDP has however averaged at 10% in the last seven years (2008 to 2014), and has been on a declining trend, contributing 8.4% to GDP in 2017, falling short of the target set in the Medium-Term Plan (MTP) II (2012 - 2017) for the sector to grow by 8.7%. Manufacturing growth has also been marginal, as the sector only grew by 0.2% in 2017 (Kenya National Bureau of Statistics (KNBS), 2016; KAM, 2019). This implies that the share of manufacturing in GDP has been reducing over time. As a result, it can be argued that Kenya is going through premature de-industrialization in a context where manufacturing and industry are still relatively under-developed (Were, 2016; KAM, 2019).

The foregoing facts imply that MSME growth is an important indicator of a thriving economy for developed and developing countries (OECD, 2016). In this realization, the Government of Kenya has over the years instituted policies aimed at supporting the sector. These include Sessional Paper No 2 of 2005, the Private Sector Development Strategy (2006-2010), the MSMEs act of 2012, Part XII of the Procurement and Disposal Act of 2015 and Part V of the Local Content Bill (2016). Despite the support however, a majority of MSMEs either fail within three years of their establishment or stagnate in growth (Republic of Kenya, 2015; KNBS, 2016; Otieno & Kahonge, 2014). According to the National Micro and Small Enterprise baseline survey, 2018 (GoK, 2019) reports that while Kenya's MSMEs continue to create jobs and boost the country's GDP, they face a myriad of challenges that impede their growth. The survey reveals that only 38% of the businesses are expanding while 58% have stagnated in terms of both annual turnover and number of employees. According to the survey, more enterprises are most likely to close in their first three years of operation. Access to finance was ranked as the most common growth impediment to growth, followed by access to markets and pricing of products/services given high costs of production respectively. This is consistent with the African Development Bank (2020) who report in their African Economic Outlook, 2020, that as at the year ending, 2019, most African SMEs have a 77 per cent chance of stagnating while medium and large firms have 18 per cent and 5 per cent chances respectively. By contrast, firms that started out small had a 23 percent chance of growing into a medium or large firm, and firms that started out medium had a 13 percent chance of growing into a large firm.

Further, the Kenya Private Sector Alliance (KEPSA) (2020) conducted a Micro, Medium and Small Enterprises (MSME) Policy Index survey in 2019 which reports that current policies are unfavourable to business growth and as a result, they are stagnating enterprises. The survey showed that the overall MSME policy index stood at 3.0 out of 5, below the level of 4.0, which is the policymakers regard as to be ideal for growth. The Deloitte Kenya Economic Outlook, 2016 further notes that Kenyan SMEs are hindered by inadequate capital, limited market

access, poor infrastructure, inadequate knowledge and skills and rapid changes in technology, corruption and an unfavourable regulatory environment (Deloitte, 2017).

The foregoing reports imply that overall, it seems much easier for MSMEs in Kenya to shrink than to expand, pointing to an underlying growth challenge among MSMEs in the country. While EO has been identified in aforementioned studies to underpin MSME growth (Mensah, 2017; Neneh & van Zyl, 2017; Bergthaler *et al.*, 2015; Neneh & Smit, 2013), several studies on EO-growth nexus have provided mixed results based on the aggregated one-dimensional measure of EO. For example, Gurbuz and Aykol (2017), and Neneh and van Zyl (2017) have established that EO based on innovativeness, risk-taking and proactiveness, has a positive effect on both employment and sales growth. However, Moreno and Casillas (2018), and Slater and Narver (2010) fail to find any direct association between EO and sales growth.

The foregoing mixed findings imply that the relationship between EO and growth is not linear, pointing to other causal factors either internal or external to the enterprise. This is consistent with the anchoring theory, the Contingency Fit View, in which Lumpkin and Dess (1996) opines that for the most desirable outcome, EO needs to be aligned with many different contextual which can be divided between external (environmental) and internal (organizational) factors. Accordingly, environmental factors have studied previously and found to exhibit a significant moderating role between pertinent firm-specific factors and organizational outcomes (Gima & Li, 2016; Hussain, Khattak, Rizwan & Latif, 2013; Lumpkin & Dess, 2001). It is against this backdrop, that this study set out to assess the effect of entrepreneurial orientation on MSME growth, and the moderating role of environmental factors in the manufacturing sector in Nairobi County, Kenya.

## 2.0 Literature Review

Previous empirical studies on MSME growth are underpinned by a mix of theories, and of particular relevance to the question of the moderating role of environmental factors on the relationship between entrepreneurial orientation and growth of manufacturing sector MSMEs include the Contingency Fit View (Lumpkin & Dess, 1996), the Economic Theory of Entrepreneurship (Papanek, 1962; Harris, 1971), and the Life Cycle Theory (Churchill & Lewis, 1983).

Whereas the Contingency Fit View has been conceptualized in many different ways in EO literature, the essential idea behind contingency theory in the EO field as put forth by Lumpkin and Dess (1996) is that entrepreneurship needs to be aligned with context for best results. Lumpkin and Dess (1996) suggest that EO needs to be aligned with many different contextual factors and that these can be divided between environmental (external) and organizational (internal) factors, making the contingency fit view most ideal in underpinning the present study's conceptual factors, and the anchoring theory. This owes to the contextualization of environmental factors as external factors. The Contingency Fit view is therefore of relevance to this study as it underpins the entire conceptual model. The study adopts the theory to articulate the effect of EO on MSME growth as moderated by environmental factors as external.

The Economic Theory of Entrepreneurship on the other hand was proposed by Papanek (1962) who argue that economic incentives are the main forces for entrepreneurial activities in any country. Papanek (1962) asserts that entrepreneurship and economic growth will take place in those circumstances where particular economic conditions are in favour of the business environment. In tandem, Baumol (1993) argue that there are a lot of economic factors which promote or demote entrepreneurship in a country. These factors are fiscal and monetary policies, efficient economic policies, the availability of bank credit, supply for loan funds with a lower rate of interest, increased demand for consumer, goods marketing services, availability of productive resources, communication facilities, transportation facilities, infrastructure and state of equipment.

Later studies (Blanchard, Olivier & Kremer; 1997; Conley, Timothy & Udry, 1999.) adopting the economic theory of entrepreneurship recognize that government failures can be critically important but that they need to be, and often can be, explained; with appropriate institutional design, they can even be limited as well, that even without government failures, market failures are pervasive, especially in developing countries. The economic theory of entrepreneurship is a supporting theory in the study as it explains the constructs of the environmental factor as a moderator in the study. The theory was particularly employed to assess how government's regulatory and supportive policies interact with entrepreneurial orientation to affect MSME growth.

Coined by Churchill and Lewis (1983), the Life Cycle Theory opines that business has to start up and grow amidst crises and challenges, and finally mature and decline in a linear model. Churchill and Lewis (1983) point out, that only a part of the general firm life-cycle model is relevant to SMEs; in fact, firms either grow out of the SME size bracket during their development or stop growing, and remain SMEs or collapse. They further argue that both external and internal environmental factors influence the growth pattern of SMEs. Recent empirical research on life cycle stages have been based on large organisations or high technology firms (Hanks, Watson, Jansen & Chandler

1993; Kazanjian & Drazin 1990) while very few have been conducted on small and medium enterprises. However, there abound theoretical studies on small and medium enterprises life cycles.

The Life Cycle theory supports the study as it underpins the understanding of growth of manufacturing MSMEs in Kenya from their inception to their present growth levels. The study then sought to establish how the external (environmental factors) have influenced the growth pattern among the MSMEs.

### **2.1 Entrepreneurial Orientation and MSME Growth**

This section reviews extant empirical literature, pertinent to the association between entrepreneurial orientation and MSME growth. The review explores studies conducted from international, regional and the Kenyan context. In Indonesia, Kusumwardhani (2013) explores the role of entrepreneurial orientation in firm performance with reference to Indonesian SMEs in future industry in Central Java. The study adopts the EO definition by Lumpkin and Dess (1996) that it as “the methods, practices and decision-making styles managers use to act entrepreneurially” and measured the concept by the five dimensions including innovativeness, proactiveness, risk propensity, autonomy and competitive aggression and employed a mix of quantitative and qualitative approaches. Under quantitative approaches, the study employs exploratory and confirmatory factor analyses and structural equation modelling while content analysis is used for the qualitative data. Findings indicate that out of the five dimensions on EO studied, including innovativeness, proactiveness, risk propensity, autonomy and competitive aggression, only proactiveness has a positive and significant relationship with firm performance while the rest were also positive but not significantly related with firm performance.

In Vietnam, Vu (2017) studies the relationships between entrepreneurial orientation and firm performance with reference to the role of family involvement amongst small firms in Vietnam. The study adopts the EO definition by Lumpkin & Dess (1996) as “the processes, practices, and decision-making activities that lead to new entry”, and conceptualized the concept using one dimension that is risk-taking. Using a firm-level dataset of 170 Vietnamese small firms, the descriptive study confirms the direct effect of entrepreneurial orientation and the moderating effect of family culture, based on results from two hierarchical moderated regression models for firm outcomes and the owner-manager’s goal attainment. It is also found that found the power dimension of family involvement reduces the negative effect of the entrepreneurial risk-taking as the family pursues socioeconomic wealth preservation. Results from a structural equation modelling analysis further confirmed that turnover intentions are positively related to entrepreneurial intentions, but this effect is fully mediated by personal attitudes towards being an entrepreneur.

In South Africa, Neneh and Zyl (2017) assesses in an explanatory study, entrepreneurial orientation and its impact on firm growth amongst SMEs in South Africa. The study adopts three dimensions of EO including innovativeness, proactiveness and risk-taking and defined the concept as the strategic processes, practices, and decisions that decision makers use when formulating the organizational purpose of the firm, and sustain its vision, in order to create a sustainable competitive advantage. Correlation, regression analysis and structural equation modelling analyses were performed to determine the relationships between the one-dimensional and multi-dimensional constructs of EO with firm growth. Using information from 285 SMEs, the results obtained indicate that while EO had a significant positive association with SME growth (employment and sales growth), most SMEs show a moderate level of EO. Also, following the EO dimensions, the findings established the emergence of proactive innovation (a combination of proactiveness and innovativeness) which showed a significant positive association on sales growth. Risk-taking was the only factor that showed a significant influence on employment and asset growth.

In Ghana, Yamoah (2016) adopts the EO definition by Lumpkin & Dess (1996) as “the processes, practices, and decision-making activities that lead to new entry” in his study on the influence of entrepreneurial orientation on the growth of SMEs in Ghana’s food processing sector. The study conceptualizes EO using all the five dimensions including proactiveness, competitive aggressiveness, innovativeness, risk-taking and autonomy. The study employs a survey research design using structured questionnaire while multiple regression and one tail test were used to analyze data. The study observes that even though SMEs in the food processing sector display some traits of entrepreneurial orientation, the business environment in which these firms fine themselves often acts as an impediment to their growth propensity. The findings also indicated that SMEs in the food processing sector often exhibits high levels of proactiveness and competitive aggressiveness whereas innovativeness, risk-taking and autonomy seem to be non-existent when the environment is unstable.

In Nigeria, Etim, Adabu and Ogar (2017) assess in a descriptive survey the influence of entrepreneurial orientation as survival strategy for small and medium enterprises. The study defines EO as an organizations willingness to innovate and rejuvenate its business position (innovativeness); to take risk by staking out its competitive position (risk taking); and to be more proactive than its competitors in seeking out new market place opportunities (proactiveness). A total of 150 SMEs were randomly selected from business industrial cluster in Lagos (South West) Nigeria and used for the study. A multivariate regression model is used to measure the variables of entrepreneurial orientation and network models on SME’s survival. The result reveals that the variables of

entrepreneurial orientation as measured by innovation, risk taking and pro-activeness have significant positive influence on SME's survival.

Both regression and correlation results indicated that entrepreneurial orientation variables have a positive influence on SME's survival. Innovation is the most significant with correlation coefficient of 0.915 elements of entrepreneurial orientation influencing SME's survival in Nigeria; while proactiveness is the most significant with correlation relationship of 43.3% combined strategies to influence the survival, profitability, growth and sustainability of SMEs.

In Kenya, Osoro (2012) examines entrepreneurial orientation effects on business performance of small and medium enterprises in information technology sector in Nairobi. The study defines EO as the process of pursuing and seizing opportunity along defined dimensions and adopted the three dimensions of innovativeness, pro-activeness and risk-taking propensity. This study adopts the descriptive survey design and utilized data from 160 randomly selected small and medium firms in the information and communications technology sector in Nairobi. Factor analysis, correlation and multiple regression analysis were conducted in testing the hypotheses. The study findings reveal that contextual factors did potentially shape entrepreneurial orientation and that certain entrepreneurial orientation dimensions and contextual factors were associated with entrepreneurial performance.

Muthee-Mwangi and Ngugi (2017) study the influence of entrepreneurial orientation on growth of micro and small enterprises in Kerugoya, Kenya. The study defines EO as a firm's strategic orientation, one which captures the specific entrepreneurial aspects of decision-making styles, methods, and practices and conceptualized it as comprising three dimensions namely; innovativeness, risk-taking and proactiveness. The research adopts a descriptive research design. The study targeted 1420 MSEs in Kerugoya town which are registered with Ministry of Trade of the Kirinyaga County. A multivariate regression model was applied to examine the influence of Entrepreneurial Orientation on growth of SMEs. The study finds that the dimensions of EO (innovativeness, risk taking, pro-activeness) and entrepreneurial managerial competence have a significant positive influence on growth of Micro and Small Enterprises.

Whereas the foregoing studies attempt to link the concepts of entrepreneurial orientation and MSME growth, results are mixed with regard to the various dimensions of entrepreneurial orientation and their effect on MSME growth. While some report a positive and significant relationship only between one or some of the dimensions and firm growth or performance, for instance proactiveness (Kusumwardhani, 2013; Yamoah, 2016) and Risk Taking (Neneh & Zyl, 2017), others report positive and significant relationships between all three dimensions and growth (Etim et al., 2017; Muthee-Mwangi & Ngugi, 2017; Waithaka, 2016). Also, none of the studies reviewed was specific to the entire manufacturing sector in Kenya. Against this backdrop, the present study set out to test the hypothesis that entrepreneurial orientation does not have a significant effect on MSME Growth ( $H_{01}$ ). Further, the conflicting findings point to other underlying factors either internal or external to the firm, that determine growth, other than EO. In line with the Contingency fit view (Lumpkin & Dess, 1996), this study thus sought to assess the moderating role of environmental factors (external) on the association between EO and MSME growth.

## **2.2 The Moderating Role of Environmental Factors**

Lumpkin and Dess (2001) study the linkage between two dimensions of entrepreneurial orientation (proactiveness and competitive aggressiveness) and firm performance and the moderating role of environment and industry life cycle. A field study was conducted in which 124 executives from 94 firms were surveyed. These were executives from non-affiliated, non-diversified firms who were actively involved in strategic decision making at the top level of the firm. All firms reporting had at least one respondent who was an owner. Findings show that in dynamic environments, characterized by rapid change and uncertainty, proactive firms had higher performance relative to competitively aggressive firms. In hostile environments, where competition is intense and resources are constrained, competitively aggressive firms had stronger performance. The findings suggest that these two different approaches to entrepreneurial decision making may have different effects on firm performance depending on the business and policy environments.

Hussain, Khattak, Rizwan and Latif (2013) investigate the impact of growth strategies suggested by Ansoff on firm's growth and moderating effect of market environment in fast food sector of Pakistan. Results reveal that all Ansoff growth strategies significantly contribute in firm's growth except diversification. Moreover, market environment does not moderate relationship between firm's growth and any of Ansoff growth strategies except market penetration. It is recommended that firm should avoid diversifying its business because it may reduce their growth. It is also recommended that firm should consider market environment before penetrating in market so that changes in customers' requirements may be fulfilled perfectly. It would definitely help firms to soar its growth.

Gima and Li (2016) investigate the effect of product innovation strategy on the performance of new technology ventures in China, it was found that the innovation-performance link was contingent on both environmental factors, including environmental turbulence and institutional support, and the relationship-based strategies of the ventures,

such as strategic alliances for product development and political networking. Our results suggest the need for simultaneous consideration of environment- and relationship-based strategy factors as moderators in the discourse on product innovation strategy among new technology ventures.

Bonsu (2016) examines the moderation role of competitive intensity on organizational capabilities (marketing and managerial) as a measure of business performance. Data was collected from 196 micro and small family business firms in Ghana. The hierarchical regression model was used to analyse the hypotheses of the study. The findings of the study indicate that, irrespective of the competitive intensity in the business environment, micro and small family businesses that adapt marketing and managerial capabilities will always outperform industry players. Thus, there is a direct relationship between organizational capabilities and organizational performance (financial and operational). This result was achieved after firm age, firm size and industry sector were used as control variables. The moderating interaction was insignificant therefore family businesses are being encouraged to enforce best marketing and managerial capabilities to achieve superior return on investments and return on sales.

Tajeddini and Mueller (2018) study the moderating effect of environmental dynamism on the relationship between a firm's entrepreneurial orientation and financial performance using a sample of 192 Swiss firms from several different industries. Seven typical control variables were utilized for this research including firm type, firm size, firm ownership, firm age, industry type and the years of experience of the respondent as well as the participant's background. To enhance scale purification, a Harman's ex post one-factor test was carried out to provide an additional check for common method variance. The hierarchical moderated regression analysis was performed. Results of this study suggest that for firms competing in a highly dynamic environment, the positive effect of an entrepreneurial orientation on financial performance is enhanced.

Atinc and Ocal (2014) investigate the possible moderating effects of environmental dynamism, environmental complexity, and environmental munificence on the relationships between changes in top management teams and board of directors and firm performance in the case of young entrepreneurial firms. The study controlled for demographic variables including age, education and firm size and performed a hierarchical linear regression. The results showed that the three dimensions of environment do not moderate the relationship between the rate of change in top management teams and firm performance. On the other hand, the negative relationship between the rate of change in board of directors and firm performance is exacerbated by environmental complexity and munificence.

Martin and Javalgi (2016) investigate the moderating role of competitive intensity on the relation between entrepreneurial orientation, marketing capabilities and performance with reference to Latin American International New Ventures (INVs). The study particularly investigated whether the degree to which EO and corresponding marketing capabilities vary under differing competitive intensities when enhancing performance. To test the hypotheses, the parsimonious structural model estimation procedure was used. The findings indicate that competitive intensity moderates the relationship between EO and marketing capabilities of INVs. If the competitive intensity is higher, EO becomes a key component for INVs to enhance marketing capabilities.

Jiao, Alon and Cui (2015) investigate the moderating effects of environmental dynamism on the relationship between dynamic capabilities strategy and new venture performance in an emerging economy, with reference to China. A total of 400 high-tech and knowledge intensive and other kind business firms in Yantz River Delta region in China were approached. The empirical results find that the coefficient for innovation strategy is positive and significant for dynamic capabilities. However, it also finds that the interaction term between innovation strategy and environmental dynamism is not significant in predicting dynamic capabilities. Therefore, an innovation strategy can build and upgrade dynamic capabilities in both stable and rapidly changing environments.

Agyapong, Zamore and Mensah (2019) examine the moderating role of environmental dynamism on the link between strategy and performance. Based on a random sample of micro and small businesses (MSBs) in an emerging economy – Ghana, the study tests the applicability of the strategic fit paradigm, which assumes that positive organizational outcomes require a match between environment and strategy. Using confirmatory factor analysis and ordinary least squares regression techniques, the results show that MSBs pursuing low-cost strategy in a dynamic environment may have higher performance while those pursuing differentiation strategy in a dynamic environment may have lower performance.

In South Africa, Lekhanya (2016) assesses the determinants of survival and growth of small and medium enterprises in rural KwaZulu - Natal. The study conceptualizes environmental factors as politics and law, technology and competitive environment. The study is descriptive in design and sample for the study consisted of 150 owners/managers of SMEs. Data is analyzed by descriptive statistics, correlation, Chi-square test and multiple regression analysis. The research findings indicate that the size of the local market is very small for selling SMEs products; poor infrastructure has an impact on their business growth and lack of financial support as well as tough government regulations adversely affect SME growth.

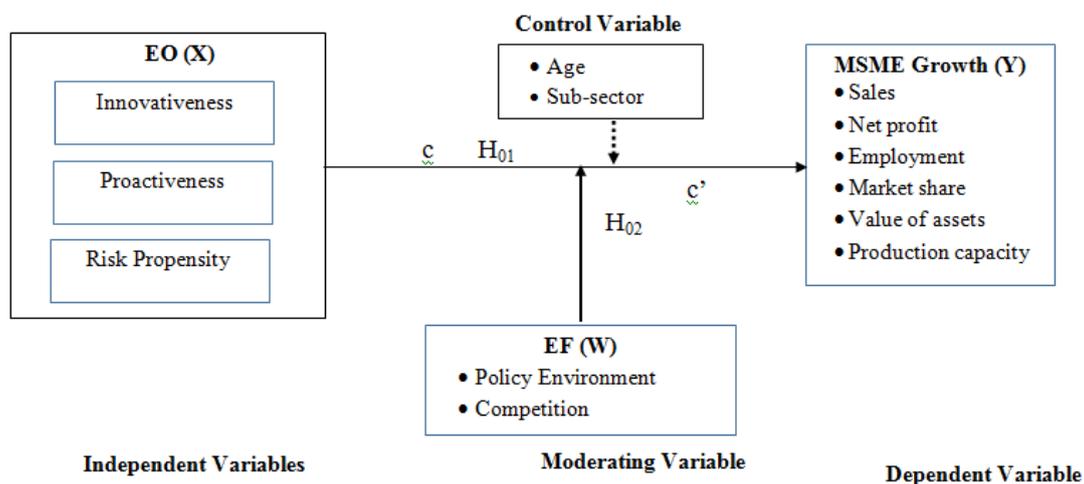
In Kenya, Simiyu, Namusonge and Sakwa (2016) conceptualize environmental factors as including government policy and regulations in a descriptive survey on the effect of government policy and regulations on the growth of entrepreneurial women micro and small enterprises in Trans Nzoia County, Kenya. Descriptive statistics, correlation analysis, Analysis of Variance (ANOVA) and linear regression analysis were used in the study.

The study found out that Government policy and regulations had statistically insignificant relationship with growth of women MSEs at 0.05 level of significance. It was recommended that the Government in conjunction with County Governments should accelerate technology upgrading, provision of modern business infrastructure and reduce bureaucratic regulatory regime to women Micro and Small Enterprises in order to spur their meaningful and faster growth.

The foregoing review reveals that none of the extant studies has explored environmental factors as a moderating variable in the relationship between entrepreneurial orientation and MSME growth. Further, none of the studies explored the relationship with reference to the manufacturing industry in Kenya, hence this study. Accordingly, the study set out to test the second hypothesis, that states that environmental factors do not significantly moderate the relationship between entrepreneurial orientation and MSME growth ( $H_{02}$ ).

### 2.3 Conceptual Framework

Based on the foregoing review, the presented study was anchored on the conceptual framework presented in Figure 1. The study conceptualizes a direct relationship between entrepreneurial orientation and MSME growth. The study then hypothesized a moderating effect of environmental factors on the relationship between entrepreneurial orientation and MSME growth.



**Figure 1 Conceptual Framework**

Source: Researcher (2020) as adopted from Hayes (2013)

### 3.0 Research Methodology

The study was anchored on the Positivism philosophy, as the data sought was purely quantitative and that quantitative approaches were used in data collection, analysis and hypothesis testing. Patton (2002) defined Positivism as entailing the communication with the real world, impartiality, objective reality, consistency, confirmability, explanation of regularities and dependability. The quantitative data used in the study include frequencies, percentages, measures of dispersion including standard deviations and measures of central tendencies including means as well as inferential coefficients and measures of statistical significance.

This study further adopted the explanatory research design of a cross sectional nature as it was considered the most suitable method for realizing the research objectives. Lee and Lim (2017) and Burns and Bush (2000) define an explanatory research design as one that attempts to connect ideas to understand cause and effect, as well as understand the interaction of concepts. As indicated by Lewis (2015), cross-sectional survey designs entail collecting a set of information for a sample at one point in time. The design was considered adequate as the study set out to assess the effect of entrepreneurial orientation on MSME growth, and the moderating role of environmental factors in the manufacturing sector in Nairobi County, Kenya.

The study was carried out in Nairobi City County, one of the 47 counties of Kenya. The smallest yet most populous of the counties, Nairobi County harbours the country’s capital and largest city. Nairobi City County is also the Commercial hub of East and Central Africa as well as the Industrial, transport and Communication center of the region and Kenya’s’ administration center. The Nairobi City County is the creation of the Constitution of Kenya

2010 and successor of the defunct City Council of Nairobi and is selected owing to its highest concentration of MSMEs (65%) across the country (KNBS, 2016; County Government of Nairobi, 2017). The study was particularly carried out across the county with a focus on nine (9) manufacturing zones within Nairobi County as per the NCC planning department formed the strata. These include Peri-Central Business District (CBD), Main Industrial Area, Dandora Industrial Zone, Kariobangi Industrial Zone, Mathare North, Baba Dogo, Zimmerman, Githurai 44 and 45 and Kahawa West.

The target population for this study included all manufacturing sector MSMEs in Nairobi County. There are 174,720 licensed manufacturing sector MSMEs in Kenya and 702,000 unlicensed (KNBS, 2016; KAM, 2018). In tandem with KAM (2018), the Nairobi City County (NCC) revenue department further enlists 98,607 licensed manufacturing sector MSMEs distributed across the county in different sub-sectors as tabulated in Table 1.

**Table 1: Target Population**

Sub-sector	Population	% Proportion
Textile and Apparels	46202	46.9
Food and Beverage	17011	17.3
Leather	8820	8.9
Timber	7455	7.6
Agriculture/Fresh Produce	4203	4.3
Automotive Parts	2941	3.0
Iron and Steel	4202	4.3
Chemicals and Pharmaceutical	4831	4.9
Paper and Paperboard	2942	3.0
<b>Total</b>	<b>98,607</b>	<b>100.0</b>

Source: NCC (2019)

To determine the sample size for the study, the Fisher (1983) sample size determination formula is employed. According to Fisher (1983), the size of a sample for a particular study can be calculated as follows:

$$n = \frac{Z^2 pq}{d^2}$$

Where n = the required sample size, when the target population is more than 10,000

Z = is standard normal deviate at the required confidence level (1.96) at 0.05

p = is the proportion of the target population estimated to have the characteristics being measured when one is not sure, so one takes middle ground (0.5)

q = 1-p

d is the level of statistical significance

$$\text{Therefore } n = \frac{1.96^2 \times 0.5 \times 0.5}{0.05^2} = 384$$

Since the target population is more than 10,000 (98,607), the study adopts the 384-sample size as determined by Fisher (1983). Employing the percentage proportion for each subsector as tabulated in Table 1, the sample population was distributed as indicated in Table 2.

**Table 2: Sample Size Distribution**

Sub-sector	Sample	% Proportion
Textile and Apparels	180	46.9
Food and Beverage	66	17.3
Leather	34	8.9
Timber	29	7.6
Agriculture/Fresh Produce	16	4.3
Automotive	11	3.0
Iron and Steel	16	4.3
Chemicals & Pharmaceutical	19	4.9
Paper and Paperboard	11	3.0
<b>Total</b>	<b>384</b>	<b>100.0</b>

Source: NCC (2019)

To reach the determined sample size, the study employed both the stratified and random sampling techniques, whereby nine (9) manufacturing zones within Nairobi County as per the NCC planning department formed the strata as presented in Table 3.

**Table 3: Manufacturing Zones (Strata)**

S/N	Areas Covered	Type of Development
1	Peri-CBD	Light industries
2	Main Industrial Area	Industries/Godowns
3	Dandora Industrial Zone	Light Industries/Godowns
4	Kariobangi Industrial Zone	Light Industries/Godowns
5	Mathare North	Light Industries/Godowns
6	Baba Dogo	Light Industries
7	Zimmerman	Light Industries
8	Githurai 44 and 45	Light Industries
9	Kahawa West	Light Industries

Source: NCC (2019)

The 384 MSMEs in each sub-sector were then proportionately divided by the nine (9) zones and the outcome adjusted depending on the availability of the sub-sector in the respective zones. To aid in this, the NCC Revenue Department further details the registered addresses for the manufacturing MSMEs, which also guided the study in locating respondents who were selected randomly. This is tabulated in Table 4.

**Table 4 Proportionate Sampling by Sub-sector and Zone**

Sub-sector	Zones									Total
	1	2	3	4	5	6	7	8	9	
Textile and Apparels	38	86	9	12	4	5	6	12	8	180
Food and Beverage	11	35	3	4	2	3	2	4	2	66
Leather	5	10	4	4	2	4	2	2	1	34
Timber	4	12	4	2	1	3	2	1	1	29
Agriculture/Fresh Produce	2	12	1	2	0	0	0	0	0	16
Automotive	0	11	0	0	0	0	0	0	0	11
Iron and Steel	2	14	0	0	0	0	0	0	0	16
Chemicals/ Pharmaceutical	0	19	0	0	0	0	0	0	0	19
Paper and Paperboard	0	11	0	0	0	0	0	0	0	11
<b>Total</b>	<b>62</b>	<b>210</b>	<b>20</b>	<b>24</b>	<b>9</b>	<b>15</b>	<b>12</b>	<b>18</b>	<b>12</b>	<b>384</b>

Source: Researcher (2019)

The study adopted proportionate sampling, whereby the number of MSMEs in a particular sub-sector reached in each zone was proportional to the total number of businesses registered in the zone, under that particular category. To identify the MSME to reach for response, businesses were randomly picked on a lottery basis whereby in every zone, all the enterprises under a particular subsector were itemized in form of numbers and the numbers, mixed up and picked.

Data was collected by use of structured questionnaires, which were favoured because as Dempsey (2003) argues, they are effective instruments for data collection enabling respondents to give much of their opinions relating to the study problem. The independent variable, Entrepreneurial Orientation was measured by 3 sub-scales including: Innovativeness, Risk propensity and Proactiveness. These are established measurement scales and are adopted as used in a number of previous studies including Osoro (2012), Neneh, Zyl and Noordwyk (2016); and Neneh and Zyl (2017). The moderating variable, Environmental Factors was measured by 2 sub-scales including Regulatory policies and Government support. These are adopted as used in previous studies including: Yusoff (2010), and Kyenze (2016).

The dependent variable, MSMEs growth was measured growth in value of assets, market share, production capacity, sales, profits, and number of employees and were adopted as used in previous studies including: Neneh and Zyl (2017); Davis *et al.* (2007); Haltiwanger *et al.* (2013); and Yamoah (2016). Throughout the hypothesis tests, the study controlled for both enterprise age and sub-sector, as they have been found in previous studies to influence firm growth (Haltiwanger *et al.*, 2010; Dixon and Rollin, 2012; Lawless, 2013; Criscuolo *et al.* 2014; Tajeddini & Mueller, 2018).

Both descriptive and inferential statistics were employed to analyse data and test the research hypothesis. Descriptive statistics in the form of frequencies, means standard deviations, and were utilized to analyse data obtained from the profile of the MSMEs to be surveyed. Inferential statistics include correlation analysis simple linear, hierarchical and multiple regression analyses. Analysis was done at 95% confidence level ( $p=0.05$ ). Prior to data analysis, the study performed reliability and validity tests with a view to determine the internal consistency in the data collection instruments as well as to check the suitability of the stated constructs. Both Cronbach's alpha coefficient and CFA were used to check for reliability and validity tests respectively. Factor analysis was further

used to explore the data for patterns and reduce the many sets of statements in the questionnaire to a more manageable number as well as group variables with similar characteristics. The study adopted Kaiser’s recommendation of Kaiser-Meyer-Olkin values greater than 0.5 as agreeable for factor analysis to be considered (Kumar, 2011).

The study first tested the simple direct effect of the independent variable on the dependent variable. The direct effect was employed in testing hypothesis 1, as depicted in Equation 1.

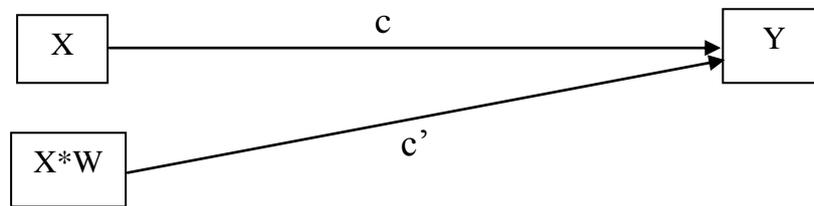
$$Y = \alpha_1 + cX + \epsilon_1 \dots \dots \dots (i)$$

Where: Y = MSME Growth;  $\alpha_1$  = Model constant; C = Beta coefficient of Entrepreneurial Orientation; X = Entrepreneurial Orientation;  $\epsilon_1$  = Error term

To check for moderation, the study adopted regression model 59 as developed by Hayes (2013). Accordingly, to test hypothesis 2 ( $H_{02}$ ), the study employed the PROCESS macro, a Statistical Package for Social Sciences (SPSS) plugin developed by Hayes (2013) to test the direct effect of an interaction between X and W on Y. Equation 2 was adopted in this regard.

$$Y = \alpha_2 + cX + c'X*W + \epsilon \dots \dots \dots (ii)$$

Where:  $\alpha_2$  = Constant of Model 2;  $c'$  = Coefficient of Entrepreneurial Orientation interacted with Environmental Factors; X = Entrepreneurial Orientation; W = Environmental Factors;  $\epsilon$  = Error term. The forgoing equations were operationalized as depicted in Figure 2.



**Figure 2: Operational Model**

Sour: Adopted from Hayes (2013)

**4.0 Results**

The study first performed a Pearson product moment correlation analysis to check for linearity of the association between the various variables explored in the study. To this end, Table 5 presents the Pearson correlations for the relationships between the composite variables including entrepreneurial orientation, environmental factors and MSME growth.

**Table 5: Correlation Analysis for Composite Variables**

		Growth	EO	EF
Growth	Pearson Correlation	1		
	Sig. (2-tailed)			
EO	Pearson Correlation	.160**	1	
	Sig. (2-tailed)	(.005)		
EF	Pearson Correlation	.157**	.263**	1
	Sig. (2-tailed)	(.005)	(.000)	

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

Source: Survey Data (2020)

From the findings, positive and significant correlation is seen between each pair of the variables, implying linear associations. Entrepreneurial orientation was positively correlated with MSME Growth at a correlation coefficient (r) of .160, which was significant at 95% confidence interval (p<.05).

Environmental factors were also positively correlated with MSME Growth at correlation coefficients of .157, which were significant at 90% confidence interval (p<.01).

**4.4.2 Effect of Entrepreneurial Orientation on MSME Growth**

The first hypothesis of the study stated that entrepreneurial orientation does not have a significant effect on MSME growth ( $H_{01}$ ). Adopting a unidimensional analysis, the variable, entrepreneurial orientation, was computed by addition of the three identified sub-scales, including innovativeness, risk propensity and proactiveness. To test the hypothesis, a simple linear regression analysis was performed in two (2) blocks and therefore 2 models. The first

model included a regression of the control variables, Age and Sub-sector against MSME growth. In the second model, the independent variable, EO was introduced. The results are summarized in Table 6.

**Table 6: Test Results for H<sub>01</sub>**

Variables	Model 1 (Age, Sub-sector)	Model 2 (Age, Sub-sector, EO)
Constant	18.847 (.000)	14.302 (.000)
<b>Independent Variables</b>		
Age	.205 (.000)**	.194 (.001)**
Sub-sector	.094 (.093)	.089 (.106)
EO		.139 (.012) *
R	.234	.272
R <sup>2</sup>	.055	.074
Adjusted R <sup>2</sup>	.048	.065
R <sup>2</sup> change	.055	.019
F Statistics	8.916 (0.000)	8.185 (0.000)

Dependent Variable: MSME Growth

Values of Standardized beta coefficients, with standard errors in Parenthesis \*P<.05, \*\*P<0.01 (2 tailed test)

Source: Survey Data (2020)

A correlation value (R) of .234 was recorded in Model 1 indicating a linear relationship between the control variables, Age and Sub-sector and MSME growth. An adjusted R Square of .048 was also recorded implying that only 4.8% of the variation in MSME growth is accounted for by Age and Sub-sector, while the remaining 95.2% is accounted for by other factors not included in this regression model. An F value of 8.916 was further revealed with a P value of .000 (<0.05) indicating that the adopted regression model is statistically significant and can be relied upon to make further inferences. Regression coefficients for Model 1 further revealed that only Age has a significant effect on MSME growth at 95% confidence level ( $\beta = .205, p = .000 < .05$ ) while sub-sector does not ( $\beta = .094, p = .093 > .05$ ).

Table 6 further reveals a correlation value (R) of .272 in Model 2 indicating a linear relationship between EO and MSME growth, controlling for both Age and Sub-sector. An adjusted R Square of .065 was also recorded implying that 6.5% of the variation in MSME growth is accounted for by EO, controlling for both Age and Sub-sector while the remaining 93.5% is accounted for by other factors not included in this regression model. An F value of 8.185 was also established in Model 2 with a P value of .000 (<0.05) indicating that the regression model is statistically significant and can be relied upon to make further inferences. The regression coefficients under Model 2 further revealed that controlling for both Age and Sub-sector, EO has a significant effect on MSME growth at 95% confidence level ( $\beta = .139, p = .012 < .05$ ). The null hypothesis that EO does not have a significant effect on MSME Growth (H<sub>01</sub>) is therefore rejected.

#### 4.4.3 Environmental Factors, Entrepreneurial Orientation and MSME Growth

The second hypothesis of the study stated that environmental factors do not significantly moderate the relationship between entrepreneurial orientation and MSME growth (H<sub>02</sub>). Further, both Model 59 based on Baron and Kenny (1986) and Hayes (2013) were also adopted to test the null hypotheses.

**Table 7: Test Results for H<sub>02</sub>**

Variables	Model (H <sub>02</sub> )
Constant	52.5904 (.0081)
<b>Independent Variables</b>	
Entrepreneurial Orientation	-.4885 (.065)
Environmental Factors	-.6352 (.059)
Int_1	.0092 (.040)*
Age	.7119 (.001)**
Subsect	.0431(.161)
F Statistics	6.4522
R	.3088
R <sup>2</sup>	.0954
R <sup>2</sup> Change	.0125 (.040)*
<b>x*w</b>	
LLCI	.0004
ULCI	.0180

Dependent Variable: MSME growth

Values of Standardized beta coefficients, with standard errors in Parenthesis \*P<.05, \*\*P<0.01 (2 tailed test)

Source: Survey Data (2020)

As presented in Table 7, the established correlation value (R) in the model was .3088, indicating a linear relationship among entrepreneurial orientation, environmental factors and MSME growth. An R Square value of .0954 was also recorded implying that 9.5% of the variation in MSME growth is accounted for by the direct effect of entrepreneurial orientation, and its interaction with environmental factors, while the remaining 90.5% is accounted for by other factors not included in this regression model. An R square change of .0125 was further established which was significant at 95% confidence level (.040<.05). A P value of .0000 was further established at 95% confidence level implying that the regression model adopted is statistically significant and can be relied upon to make further inferences.

The model further revealed that entrepreneurial orientation does not have a significant direct effect on MSME growth at 95% confidence level ( $\beta=-.4885, p=.065>.05$ ). The direct effect of environmental factors on MSME growth was also not significant at 95% confidence level ( $\beta=-.6352, p=.059>.05$ ). It was further established that controlling for Age ( $\beta = .7119, p = .001<.05$ ) and Sub-sector ( $\beta=.0431, p=.161>.05$ ) the interaction between entrepreneurial orientation and environmental factors was significant at 95% confidence level ( $\beta =.0092, p=.040<.05$ ) with both the lower limit (.0004) and the upper limit (.0180) above zero (0), indicating moderation. The null hypothesis that Environmental Factors do not significantly moderate the relationship between entrepreneurial orientation and MSME growth (H<sub>02</sub>) was therefore rejected.

### 5.0 Discussions

It can be deduced from the forgoing findings that a majority of MSME owners/managers surveyed are highly innovative. It is particularly notable that most owners/managers employ research and development and actively introduce improvements and innovations in their establishments. It can be deduced from the finding that a majority of MSME owners/managers surveyed have considerably high-risk appetite. Besides a strong tendency for high-risk business ideas, a majority of MSME owners/managers tend to act boldly in situations where risk is involved and consider the term “risk-taker” in their enterprises, as positive. It can further be deduced from the foregoing finding that a majority of MSME owners/managers surveyed are proactive in nature. Most owners/managers are particularly found to cultivate a culture of continuously monitoring market trends with a view to anticipate future business needs as well as a tendency to initiate actions in their respective businesses that competitors respond to.

The null hypothesis that EO does not have a significant effect on MSME Growth (H<sub>01</sub>) is rejected. This implies that owners/managers’ who are entrepreneurially oriented, that is innovative, with high-risk appetite and proactive, are more likely to experience growth in their MSMEs as opposed to owners/managers who are not.

Innovativeness among manufacturing sector MSMEs entail introduction of new products or changing existing ones, processes involved in production and operations as well as marketing. Accordingly, innovative MSME owners/managers tend to introduce new products or improve existing ones; implement a new or enhanced manufacturing or distribution process; introduce new ways of coordinating internal process and inspiring employees to innovate; and employ innovative marketing strategies which entail learning and tracking changes in consumer preferences in order to create value as well as how selected markets are attended to. The foregoing lead to improvements in business performance and operational efficiencies and increased sales and expansion which ultimately results in MSME growth.

It can also be deduced from the findings that risk taking owners/managers are more likely to experience growth in their MSMEs as opposed to risk-averse owners/managers. Risk taking owners/managers are willing to engage in relatively high levels of risk-taking behaviour which enables their MSMEs to seize profitable opportunities in the face of uncertainty which leads to long term profitability and eventual growth. Risk taking owners/managers are also able to collaborate with competitors to share resources, and implicitly collude to deal with competitive uncertainties in their environment. Through their interaction with business ties, managers are exposed to information concerning other enterprises' policies and practices, which they often emulate in their own businesses. Thus, risk taking results in managerial networking relationships and ties with top managers of other firms enabling MSMEs' secure access to information, resources, and knowledge that are used to improve performance and therefore grow.

The findings are further of the implication that proactive owners/managers are more likely to experience growth in their MSMEs as opposed to non-proactive owners/managers. Proactive owners/managers often scout for market opportunities and utilize local raw materials to produce unique goods and services that meet broad market needs or demands. Owners/managers with high proactivity also seek to track the changing consumer tastes and preferences in order to alter their production and marketing practices with a view to create a niche and access markets at the expense of non-proactive owners/managers hence growth.

Similarly, in a study by Etim et al. (2012), the variables of entrepreneurial orientation as measured by innovation, risk taking and pro-activeness have significant positive influence on SME's survival. It can be deduced from the findings that MSMEs whose owners/managers are entrepreneurially oriented, that is, are highly innovative, risk taking and proactive, are more likely to achieve growth in their enterprises compared to MSMEs owners/managers who are not entrepreneurially oriented. Deschryvere (2014) also reported a positive association between entrepreneurial orientation as measured by innovation, risk taking and pro-activeness and sales growth.

Conversely however, Moreno and Casillas (2018) established that entrepreneurial orientation as measured by innovation, risk taking and pro-activeness does not have a significant relationship with sales growth. Similar contrasting results were found by Naldi, Nordqvist, Sjöberg and Wiklund (2007), Hughes and Morgan (2017) and Rauch, Wiklund, Lumpkin and Frese (2009) and Gurbuz and Aykol (2017) and Slater and Narver (2010). This can be attributed to differences in the industries studied, measures adopted for MSME growth and the methodology adopted. Whereas this study focused on the manufacturing sector and measured employment growth, Naldi *et al.* (2007) focused on family businesses and measured growth by profitability while Hughes and Morgan (2017) studies firms only at the embryonic stage, that is less than 5 years old. On their part, Rauch *et al.* (2009) assessed both small and large firms taking a desktop review design.

It can also be deduced from the foregoing finding that a majority of MSME owners/managers consider the policy environment quite unfavourable. A majority are particularly dissatisfied with business licensing requirements, taxation and the awarding of government funds including Uwezo fund, Youth Enterprise Development Fund, Women Enterprise Fund and the Constituency Development Fund. The findings further imply that a majority of MSMEs in the country enjoy government support services largely to a moderate extent. Whereas some MSMEs have for instance benefitted from improved access to appropriate information and technology as well as improved access to markets courtesy of government, a considerable number struggle due to lack of export promotion incentives, investment promotion incentives and to some extent government-initiated training. It can be deduced from the foregoing finding that the market environment for MSMEs in the manufacturing sector in the country is highly competitive. To cope with the competition, MSMEs have to constantly improve their marketing methods; invest adequately in innovation in order to remain globally competitive as well as constantly improve their product process, to stay ahead of competition.

The null hypothesis that environmental Factors do not significantly moderate the relationship between entrepreneurial orientation and MSME growth ( $H_{02}$ ) was rejected. The finding implies that environmental factors are likely to accelerate the extent to which owners/managers innovate, take risk and seek out opportunities, leading to growth. MSME owners/managers seek to respond to dynamic environmental factors including changing policy and regulatory environments, increased competition and limited government support services by innovating with a view to grow.

These include developing innovative strategies aimed at increasing both quality and quantity of produced goods, developing lean production systems and practices reduce production costs and overheads, and acquiring skilled labor to enhance productivity which results in improved profitability and MSME growth.

The findings also imply that with increased unaffordability and uncertainty of both the policy and market environments, the need to develop strategies for purposes of business survival and growth increases among MSME owners/managers. They are particularly prompted to take calculated risks by harnessing the limited resources at their disposal including finances, equipment, technology, knowledge and human resources by deploying them into venturing into producing new products and new markets as well as experimenting new production process and operations with a view to realize business survival and growth.

The findings further imply that the dynamic policy and business environments motivate proactive MSME owners/managers to anticipate future market needs based on the trends in policy formulations, competitor action and customer preferences. This puts them at a vantage position to adopt apt operational and production practices in anticipation of environmental changes, develop products in response to changing consumer preferences as well as establish forward-looking customer relationships with a view to foster business growth.

The findings agree with Distanont and Khongmalai (2018) whose results also showed that rapid technology changes impact on innovative leadership ability to acquire up-to-date technology advancement. Similarly, Tohidi and Jabbari (2017) found that competition among firms influences innovation. This is due to innovation being a strategic tool that is necessary for improvement, creation and sustainability of the business. Therefore, although manufacturing SMEs have limited capital to instigate huge innovations, they are forced by competitors to rapidly innovate in some way in order to maintain their sustainability and have a strong competitive advantage.

Accordingly, Aragón-Correa and Sharma (2016) aver that uncertainty and risk in a business environment, changed regulatory environments, information asymmetry between a client and a firm, and managerially perceived uncertainty, complexity, and hostility in a general business environment are among the deterrent factors towards risk taking by entrepreneurs, which in the end have implications on their business performance. Li and Atuahene-Gima (2017) conversely argue that in an uncertain business environment, managers are motivated to explore for outside knowledge from stakeholders, shape administrative structures and processes to foster strategic proactivity, enable an identification of opportunities, and experiment with innovative ways to cope with unanticipated environmental futures in consultation with stakeholders. Therefore, they are more likely to take risks by developing and deploying their capabilities to generate an environmental strategy that will help them anticipate and respond, rather than react.

The foregoing finding is however contrary to expectation, as reported by GoK (2019), Kepsa (2019) and AFDB (2020). The disparity may be attributed to a number of factors, including the localization of the study to Nairobi county vis-a-vis the entire country as is the case in the reports, the limited sample size vis-a-vis the entire population in the country, the focus on the manufacturing sector, among others.

## **6.0 Conclusions and Recommendations**

It is concluded from the foregoing findings that a majority of MSME owners/managers surveyed are highly innovative as most owners/managers employ research and development and actively introduce improvements and innovations in their establishments. A majority of MSME owners/managers surveyed also have considerably high-risk appetite. Besides a strong tendency for high-risk business ideas, a majority of MSME owners/managers tend to act boldly in situations where risk is involved. It can also be deduced from the foregoing finding that a majority of MSME owners/managers surveyed are proactive in nature. Most owners/managers are particularly found to cultivate a culture of continuously monitoring market trends with a view to anticipate future business needs.

The study further concludes that a majority of MSME owners/managers consider the policy environment quite unfavourable. A majority are particularly dissatisfied with business licensing requirements, taxation and the awarding of government funds. It can also be deduced that a majority of MSMEs in the country enjoy government support services largely to a moderate extent. Whereas some MSMEs have for instance benefitted from improved access to appropriate information and technology as well as improved access to markets courtesy of government, a considerable number struggle due to lack of export promotion incentives and investment promotion incentives. The study also concludes that the market environment for MSMEs in the manufacturing sector in the country is highly competitive. To cope with the competition, MSMEs have to constantly improve their marketing methods; invest adequately in innovation in order to remain globally competitive as well as constantly improve their product process, to stay ahead of competition.

The study is further of the conclusion that entrepreneurial orientation has a significant effect on MSME growth. The findings make a significant contribution to the body of knowledge in Kenya with regard to the direct effect of entrepreneurial orientation from a unidimensional conceptualization on MSME growth with specific reference to MSMEs in the manufacturing sector in Nairobi County, Kenya.

More specifically, the study demonstrates that innovative owners/managers are more likely to experience growth in their MSMEs as opposed to non-innovative owners/managers. Risk taking owners/managers are also more likely to experience growth in their MSMEs as opposed to risk-averse owners/managers. Risk taking owners/managers are willing to engage in relatively high levels of risk-taking behaviour which enables their MSMEs to seize profitable opportunities in the face of uncertainty which leads to long term profitability and eventual growth. Proactive owners/managers are similarly more likely to experience growth in their MSMEs as opposed to non-proactive owners/managers. Proactive owners/managers often scout for market opportunities and utilize local raw materials to produce unique goods and services that meet broad market needs or demands.

As such, this study validates findings in previous related studies in the extant literature that entrepreneurial orientation (Muthee-Mwangi & Ngugi, 2017; Etim *et al.*, 2017; Neneh & Zyl, 2017; Waithaka, 2016; Deschryvere, 2014) has a positive and significant effect on MSME growth. The study however contrasts extant studies that report either no significant or negative effect of entrepreneurial orientation (Hughes & Morgan, 2017; Yamoah, 2016; Yamoah, 2016; Kusumwardhani, 2013; Kusumwardhani, 2013; Naldi *et al.*, 2007) on MSME growth. The study finally validates the proposed conceptual framework with respect the direct relationship between entrepreneurial orientation, and MSME growth.

The study further concludes that environmental factors have a significant moderating effect on the relationship between entrepreneurial orientation and MSME growth. The findings are also of significant contribution to empirical literature internationally, regionally and locally in Kenya with respect to the moderating effect of environmental factors on the relationship between entrepreneurial orientation and MSME growth. The study particularly provides evidence to suggest that environmental factors are likely to accelerate the extent to which owners/managers innovate leading to growth. It is shown in this regard that MSME owners/managers seek to respond to dynamic environmental factors including changing policy and regulatory environments, increased competition and limited government support services by innovating with a view to grow.

The study further demonstrates that environmental factors are likely to accelerate the degree to which owners/managers take risks leading to growth. With increased unaffordability and uncertainty of both the policy and market environments, the need to develop strategies for purposes of business survival and growth increases among MSME owners/managers. The study findings also show that environmental factors are more likely to accelerate the proactivity of owners/managers leading to growth. The dynamic policy and business environments motivate proactive MSME owners/managers to anticipate future market needs based on the trends in policy formulations, competitor action and customer preferences. The findings also lead to the validation of the proposed conceptual framework with regard to the moderating effect of environmental factors on the relationship between innovativeness, risk propensity and proactiveness and MSME growth.

In light of the foregoing findings, it is recommended that MSME owners/managers ought to develop, implement and inspire, risk taking and proactivity in their businesses to realize growth. This should involve significantly improving their products, processes, marketing and organizational methods and coming up with completely new products, processes, marketing and organizational methods. MSMEs can further consider improving their current products in terms of technical specifications, material used, user friendliness, functionality, in terms of shape, weight and design. They can also improve on the technology used in their processes, improve on process efficiency in production and delivery and consider use of better production techniques. In addition, they may consider implementing significant changes in product design, packaging, placement (explore new markets) promotion, pricing and marketing methods.

It is also recommended that the government through the legislature formulates policies in consultation with MSME owners/managers with a view to incorporate their experiences and informed opinions. As established in the study, MSMEs have the potential to initiate minor technical and technological innovations to suit their circumstances but for them to fully develop and use this potential, they need specific policy measures to ensure that technology services, education, finance and infrastructure are provided. As such, policy enhancement in revitalizing the SME sector should not be only government engineered, but all the stakeholders in development should take frontline.

The study also recommends that business ecosystems and infrastructure be supported and enhanced to encourage and stimulate growth ambition among manufacturing sector MSMEs in the country. This includes, but is not limited to: The support of the private sector and the opportunity for expanded scale and impact through the establishment of public-private partnerships to deliver world-class business support to manufacturing sector MSMEs; practical and impactful business education for manufacturing sector MSMEs with the aim of providing MSMEs with the appetite to internationalize and innovate; as well as the need to ensure that there are a wide range of accessible support programmes both within government and in the private sector to businesses with a desire to grow.

Equally, an effective and transparent regulatory environment is key for entrepreneurship and MSME development at all stages of the business life cycle, including entry, investment and expansion, transfer and exit. Reducing the regulatory burden on manufacturing sector MSMEs in the country can facilitate their participation in the formal economy, help improve their productivity and competitiveness, and enhance their participation in and benefits from a globally integrated economy.

## References

- Achtenhagen, L.; Naldi, L.; Melin, L. (2016). Business Growth Do: Practitioners and Scholars Really Talk About the Same Thing? *Entrep. Theory Pract.* 34: 289–316.
- Agyapong, A., Zamore, S. & Mensah, H. (2019). Strategy and Performance: Does Environmental Dynamism Matter? *Journal of African Business*, 9(2): 1-38
- Aragón-Correa, J.A., & Sharma, S. (2016). A contingent resource-based view of proactive corporate environmental strategy. *Academy of Management Review*, 28: 71–88.
- Atinc, G. & Ocal, Y. (2014). The Moderating Effect of Organizational Environment on Post-IPO Corporate Governance Changes and Firm Performance Relationship. *Journal of Leadership & Organizational Studies*, 10(3): 1-13
- Baumol, W. J. (1993). Formal Entrepreneurship Theory in Economics: Existence and Bounds. *Journal of Business Venturing*, 8: 197-210.
- Black, E. L., Burton, F. G. & Johnson, P. M. (2009). Qualitative Factors as Determinants of Continued Success: An Examination of eBusiness Entrepreneurial Firms Using the NewVenture Template, *The Journal of Entrepreneurial Finance*, 13 (2): 76-102.
- Bonsu, S. (2016). Effect of Organizational Capabilities on Performance of Micro and Small Family Businesses in Ghana: The Moderating Role of Environmental Characteristics. *Africa Journal of Management*, 6(1): 312-339
- Casillas, J. C., & Moreno, A. M. (2016). The relationship between entrepreneurial orientation and growth: the moderating role of family involvement. *Entrepreneurship and Regional Development*, 22(3–4): 265–291.
- Chachar, A.A. De Vita, C.F., Parveen S., Chachar, Z.A. (2018). The Impact of Cultural Factors on the Growth of Small and Medium Enterprises in Hyderabad, Sindh, *International Journal of Science and Research (IJSR)*, 2 (1):83-86.
- Churchill, N.C., Lewis V.L., (1983). The five stages of small business growth. *Harvard Business Review*, 61(3): 30-50
- Collis, D. J., & Montgomery, C. A. (2014). *Corporate Strategy: A Resource based Approach*, McGraw-Hill/Irwin
- Covin, J. & Slevin, D. (1989). Strategic management of small firms in hostile and benign environments. *Strategic Management Journal*, 10: 75-87
- Distanont, A., & Khongmalai, O. (2018). The role of innovation in creating advantage. *Kasetsart Journal of Social Sciences*, 8(1): 1-7.
- Dobbs, M., & Hamilton, R. T. (2017). Small Business Growth: Recent Evidence and New Directions. *International Journal of Entrepreneurial Behaviour & Research*, 13(5): 296-322.
- Dvir, D., Segev, E., & Shenhar, A. (2016). Technology's varying impact on the success of strategic business units within the Miles and Snow typology. *Strategic Management Journal*, 14(2): 157–165.
- Dziallas, M. & Blind, K. (2019). Innovation indicators throughout the innovation process: An extensive literature analysis. *Technovation*, 80(4): 3–29
- Etim, J. J., Adabu, M. U & Ogar, C. A. (2017). Influence of Entrepreneurial Orientation as Survival Strategy for Small and Medium Enterprises: the Nigeria Experience. *International Journal of Economics, Commerce and Management*, 5(8): 502-518
- Gima, K. A. & Li, H. (2016). Product Innovation Strategy and performance of new technology ventures in China. *Academy of Management Journal*, 44: 1123-1134
- Government of Kenya (2011). Vision 2030: Medium Term Plan (MTP) II (2012 - 2017). Government Printer: Nairobi.
- Gurbuz, G., & Aykol, S. (2017). Entrepreneurial management, entrepreneurial orientation and Turkish small firm growth. *Management Research News*, 32(4), 321-336.
- Harris, J. (1971). Nigerian entrepreneurship in industry in P. K i l b y (ed.). *Entrepreneurship and Economic Development*. New York: The Free Press.
- Hayes, A. F. (2009). Beyond Baron and Kenny: Statistical mediation analysis in the new millennium. *Communication Monographs*. 76 (4): 408–420.
- Hrebiniak, J.G. (2017): Entrepreneurial Versus Conservative Firms: A Comparison of Strategies and Performance, *Journal of Management Studies* 28 (5): 439–462
- Hughes, M., & Morgan, R. E. (2017). Deconstructing the relationship between entrepreneurial orientation and business performance at the embryonic stage of firm growth. *Industrial Marketing Management*, 36: 651-661.

- Hussain, S. Khattak, J., Rizwan, A., & Latif, A. (2013). ANSOFF matrix, environment, and growth- An interactive triangle. *Management and Administrative Sciences Review*, 2(2): 196–206.
- Jiao, H., Alon, I. & Cui, Y. (2015). The moderating effects of environmental dynamism on the relationship between dynamic capabilities strategy and new venture performance in an emerging economy. *Journal of Enterprising Communities*, 5(2): 1-13
- Jones, J. (2018). Training, Development, and Business Growth: A study of Australian Manufacturing Small-Medium Sized Enterprises. *Asia Pacific Journal of Human Resources*, 42 (1), 96-121
- Kaczmarek, A., Byczkowska, M. & Czyrka, K. (2016). Qualitative and Quantitative Criteria to Determine the Size of Enterprises and Specificity of SMEs' Operations. *Journal of Small Business & Enterprise Development*, 15(3): 15-28
- KAM (2018). Ten policy priority for transforming manufacturing and creating jobs in Kenya.
- KAM (2019). Manufacturing Priority Agenda. Sparking Kenya's Industrial Transformation for job Creation
- Karadal, H. & Saygin, M. (2017). An Investigation of the relationship between social loafing and organizational citizenship behavior. *Procedia-Social and Behavioral Sciences*, 99, 206-215
- Kenya Nation Bureau of Statistics. (2016). Kenya Economic Survey, 2015. Available at <http://www.knbs.or.ke>
- Kenya Nation Bureau of Statistics. (2019). Kenya Economic Survey, 2018. Available at <http://www.knbs.or.ke>
- KIPPRRA (2018). Kenya Economic Report 2018: Sustaining Kenya's economic development by deepening and expanding economic integration in the region
- Kyenze, G. M. (2016). *Factors Influencing Performance of Small-Scale Business in Kenya: A Case of Tawa Sub-County*, Makueni County, Kenya. Unpublished Thesis, University of Nairobi
- Le Roux, I., & Bengesi, M. K. (2014). Dimensions of entrepreneurial orientation and small and medium enterprise performance in emerging economies. *Development Southern Africa*, 31(4), 606-624
- Lekhanya, L. M. (2016). *Determinants of survival and growth of small and medium enterprises in rural KwaZulu – Natal*. Unpublished PhD Thesis, University of the Western Cape
- Lewrickb, U., Mohlera, L. & Wedera, R. (2014). When firms and industries matter: understanding the sources of productivity growth. *BIS Working Papers No 469*. Available at [www.bis.org](http://www.bis.org). Accessed on 3<sup>rd</sup> November, 2020
- Li, H. & Atuahene-Gima, K. (2017). Product innovation strategy and the performance of new technology ventures in China. *Academy of Management Journal*, 44: 1123–1135.
- Liedholm, C. & D. Mead, (2017). *Small Enterprises and Economic Development: The Dynamic Role of Micro and Small Enterprises*. London; Routledge
- Lumpkin, G. T., and Dess, G. G. (2005). Linking two dimensions of entrepreneurial orientation to firm performance: the moderating role of environment and industry life cycle, *Journal of Business Venturing*, Vol. 17, pp.429-451
- Lumpkin, G.T. and Dess, G.G., (1996). Clarifying the entrepreneurial orientation construct and linking it performance, *Academy of Management Review* 21 (1), 135–172.
- Lumpkin, GT, Dess, GG (2001) Linking two dimensions of entrepreneurial orientation to firm performance: The moderating role of environment and industry life cycle. *Journal of Business Venturing*, 16(5): 429–451.
- Magableh, I., & AL-Mahrouq, M. (2017). *Small and Medium Enterprises (SMEs): Concepts, Characteristics, Importance, Merits and Obstacles*. (A paper prepared at Small Enterprises: an Effective Tool to Address Poverty Forum). Yarmouk University Jordan
- Martin, S. L. & Javalgi, R. G. (2016) Entrepreneurial orientation, marketing capabilities and performance: The Moderating role of Competitive Intensity on Latin American International New Ventures, *Journal of Business Research*, 12(5): 1-12
- Miller, D., & Friesen, P. H. (1982). Innovation in conservative and entrepreneurial firms: two models of strategic momentum. *Strategic Management Journal*, 3(1): 1-26
- Miller, D., (1983). The correlates of entrepreneurship in three types of firms, *Management Science* 29 (7):770–791.
- Moreno, A. M., & Casillas, J. C. (2018). Entrepreneurial orientation and growth of SMEs: A causal model. *Entrepreneurship Theory and Practice*, 32(3): 507-528.
- Mwangi, M. M. A & Ngugi, K. (2014). Influence of Entrepreneurial Orientation on Growth of Micro and Small Enterprises in Kerugoya, Kenya. *European Journal of Business Management*, 1 (11), 417-438.
- Naldi, L., Nordqvist, M., Sjöberg, K., & Wiklund, J. (2007). Entrepreneurial Orientation, Risk Taking, and Performance in Family Firms. *Family Business Review*, 20(1), 33–47.
- Neneh, B. N., & Smit, A.V.A. (2013). Will promoting more typical SME start-ups increase job creation in South Africa? *African Journal of Business management*, 7(31): 3043-3051
- Neneh, B. N., Van Zyl, J. H., & Van Noordwyk, A. (2016). Gender Differences in Entrepreneurial Orientation and Performance: Evidence from South Africa. Conference paper submitted at the Southern African Institute for Management Scientists (SAIMS), 4-7 September 2016, Pretoria, South Africa.
- OECD (2016). *Job creation and local economic development*, OECD Publishing, Paris

- OECD (2017). *Small, Medium, Strong. Trends in SME Performance and Business Conditions*, OECD Publishing, Paris.
- Olokundun, M.A., Moses, C.L., Iyiola, O.O., Ibidunni, A.S. & Amaihian, A.B. (2017) Perceptions of students on entrepreneurship curriculum contents and openmindedness: Implications for business idea generation of Nigerian University students, *Acad. Entrep. J*, 23 (2): 1–10
- Osoro, W. N. (2012). Entrepreneurial Orientation Effects on Business Performance of Small and Medium Enterprises in Information Technology Sector in Nairobi. Unpublished PhD Thesis, Jomo Kenyatta University of Agriculture and Technology
- Papanek, G. (1962). The development of entrepreneurship. *American Economic Review*, Vol. L I I .
- Pearce, J.A. & Robinson, R.B. (2017). *Strategic Management: Formulation and Implementation of Competitive Strategy*, 8th ed.; McGraw-Hill Inc.: Boston, MA, USA.
- Price, D.P., Stoica, M., & Boncella, R. J. (2016). The relationship between innovation, knowledge and performance in family and non-family firms: An analysis of SMEs. *Journal of Innovation and Entrepreneurship*, 2 (14): 1-20.
- PWC (2020). Nigeria MSME Survey: Assessing current market conditions and business growth prospects. Available at <https://www.pwc.com/ng/en/events/nigeria-sme-survey.html#:~:text=In%20South%20Africa%2C%20SMEs%20account,businesses%20and%2084%25%20of%20employment.> Accessed on 18<sup>th</sup> January 2020
- Rauch, A., Wiklund, J., Lumpkin, G. T., & Frese, M. (2009). Entrepreneurial orientation and business performance: an assessment of past research and suggestions for the future. *Entrepreneurship Theory and Practice*, 33(3): 761–787.
- Simiyu, F., Namusonge, G.S. & Sakwa, M. (2016). Effect of Government Policy and Regulations on the Growth of Entrepreneurial Women Micro and Small Enterprises in Trans Nzoia County, Kenya. *International Journal of Research in Business Studies and Management*, 3(10): 12-26
- Slater, M. & Narver, J. C. (2010). The positive effect of a market orientation on business profitability: a balanced replication. *J Bus Res*, 48:69–73
- Tajeddini, K. & Mueller, S. (2018). Moderating Effect of Environmental Dynamism on the Relationship between a Firm's Entrepreneurial Orientation and Financial Performance. *Entrepreneurship Research Journal*.
- Tohidi, H., & Jabbari, M.M. (2017). Innovation as a success key for organizations. *Procedia Technology*, 10(4): 560- 564.
- UNIDO (2018). Industrial Development Report, 2018. Vienna, Austria.
- United Nations Conference on Trade and Development (2012). Improving the Competitiveness of SMEs through Enhancing Productive Capacity. Proceedings of Four Expert Meetings. United Nations, New York and Geneva.
- United Nations Development Programme (UNDP), (2018). Sustainable Development Goals. Available at [www.undp.org/sustainable-development-goals](http://www.undp.org/sustainable-development-goals). Accessed on 24<sup>th</sup> April 2019
- Venkatraman N. (1989). Strategic orientation of business enterprises: the construct, dimensionality, and measurement. *Management Science* 35(8): 942–962.
- Vu, H. N. (2017). The Relationships between Entrepreneurial Orientation and Firm Performance: the role of family involvement amongst Small Firms in Vietnam. PhD Thesis, Massey University, Albany New Zealand
- Waithaka, R.W (2016). *Relationship Between entrepreneurial orientation and performance of small and medium enterprises in the agro-based manufacturing sector in Kenya*. Unpublished Phd Thesis, Jomo Kenyatta University of Agriculture and Technology
- Walobwa, N. D., Ngugi, J. K. & Chepkulei, B. (2013). Effect of the type of innovation on the growth of small and medium enterprises in Kenya: a case of garment enterprises in Jericho, Nairobi. *European Journal of Management Sciences and Economics*, 1(2), 49-57.
- Were, A. (2016). Manufacturing in Kenya: Features, challenges and Opportunities. A scoping exercise. Supporting Economic Transformation.
- World Bank (2015). *Enterprise surveys: Kenya country highlights 2013*. Enterprise surveys country highlights. Washington, DC: World Bank Group.  
<http://documents.worldbank.org/curated/en/141781468048839839/Enterprise-surveys-Kenya-country-highlights-2013>
- Yamoah, E. E. (2016). *Influence of Entrepreneurial Orientation on the Growth of SMEs in Ghana's Food Processing Sector*. Unpublished Masters Thesis, University of Ghana
- Yoon, H. (2017). The Performance Effects of Entrepreneurial Orientation: Evidence from South Korean Start-ups. *International Journal of Arts and Commerce*, 1(4): 248-254.
- Yusoff, M.H. & Yaacob, M.R (2010). The Government Business Support Services in Malaysia: The Evolution and Challenges in the New Economic Model. *International Journal of Business and Management*, 5 (9): 60:71